Environmental Cooperation within the SAARC Framework

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By

R.K.SANAYAIMA SINGH

Department of International Relations
School of Social Sciences

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DECLARATION

I hereby declare that the dissertation entitled "Environmental Cooperation

within the SAARC Framework" submitted to Sikkim University in partial

fulfillment of the requirements for the degree of Master of Philosophy is my original

work. This dissertation has not been submitted for any other degree of this university

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R. K. Sanayaima Singh

Registration No: 15/M.Phil/INR/05

Roll No: 15MPIR08

The Department recommends that this dissertation be placed before

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Dr. Manish

Head of the Department

Mr. Ph. Newton Singh **Supervisor**

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This is to certify that the dissertation entitled "Environmental

Cooperation within the SAARC Framework" submitted to Sikkim

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International Relations, embodies the result of bona fide research work

carried out by R.K SANAYAIMA Singh under my guidance and

supervision. No part of the dissertation is submitted for any other degrees,

diploma, associate- ship and fellowship. All the assistance and help

received during the course of investigation have been deeply

acknowledged by him.

Mr. Ph. Newton Singh

Supervisor

Department of International Relations

School of Social Sciences

Sikkim University

Place: Gangtok

Date: 06.02.2017

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"Environmental Cooperation within the SAARC Framework"

Submitted by R.K.Sanayaima Singh under the supervision of Mr. Ph. Newton Singh of the Department of International Relations, School of Social Sciences, Sikkim University, Gangtok 737102, INDIA

Signature of the Candidate

Counter signed by the Supervisor

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R.K. SANAYAIMA SINGH

Abbreviations

ADB: ASIAN DEVELOPMENT BANK

ADPC: ASIA DISASTER PREPARENEDNESS CENTRE (ADPC)

AEO: AFRICA ENVIRONMENT OUTLOOK

APEC: ASIA PACIFIC ECONOMIC COOPERATION

ASEAN: ASSOCIATION FOR SOUTHEAST ASIAN NATIONS

AU: AFRICAN UNION

BBC: BRITISH BROADCASTING COOPERATION

CANSA: CLIMATE ACTION NETWORK SOUTH ASIA

CDM: CLEAN DEVELOPMENT MECHANISM

CEC: COMMITEE ON ECONOMIC COPERATION

CEE: CENTRE FOR ENVIRONMENT EDUCATION

CENTO: CENTRAL TREATY ORGANISATION

CFC: CHLOROFLURO CARBON

CMC: COOPERATIVE MONITORING CENTRE

CSE: CENTRE FOR SCIENCE AND ENVIRONMENT

DA: DEVELOPMENT ALTERNATIVES

EC: EUROPEAN COMMUNITIES

ECSC: EUROPEAN COAL AND STEEL COMMUNITY

EEC: EUROPEAN ECONOMIC COMMUNITY

EU: EUROPEAN UNION

FAO: FOOD AND AGRICULTURE ORGANISATION

GDP: GROSS DOMESTIC PRODUCT

GPA: GLOBAL PROGRAMME OF ACTION

ICCR: INDIAN COUNCIL FOR CULTURAL RELATIONS

ICIMOD: INTERNATIONAL CENTRE FOR INTEGRATED MOUNTAIN

IGO: INTER GOVERMENTAL ORGANISATION

IIT: INDIAN INSTITUTE OF TECHNOLOGY

INGO: INTERNATIONAL NON GOVERMENTAL ORGANISATION

IOM: INTERNATIONAL ORGANISATION FOR MIGRATION

IOR: INDIAN OCEAN RIM

ISACPA: SOUTH ASIAN COMMISSION ON POVERTY ALLEVIATION

LDCs: LEAST DVELOPMENT COUNTRIES

MNC: MULTI NATIONAL COMPANY

NAFTA: NORTH AMERICAN FREE TRADE AGREEMENT

NATO: NORTH AMERICA TREATY ORGANISATION

NWFP: NORTH WEST FRONTIER PROVINCE

RIPA: RESTRUCTURED INTEGRATED PROGRAMEE OF ACTION

SAARC: SOUTH ASIA ASSOCIATION FOR REGIONAL COOPERATION

SMRC: SAARC METEOROLOGICAL RESEARCH CENTRE

SACEP: SOUTH ASIA CO-OPERATIVE ENVIRONMENTAL

PROGRAMME

SACRTF: SOUTH ASIAN CORAL REEF TASK FORCE

SADC: SOUTHERN AFRICAN DEVELOPMENT COMMUNITY

SAEC: SOUTH ASIA ECONOMIC COOPERATION

SAEO: SOUTH ASIA ENVIROMENTAL OUTLOOK

SAEU: SOUTH ASIAN ECONOMIC UNION

SAFTA: SOUTH ASIA FREE TRADE AGREEMENT

SAPTA: SOUTH ASIA PREFENRENTIAL TRADE AGREEMENT

SAU: SOUTH ASIAN UNIVERSITY

SAWAN: SOUTH ASIAN WATER ANALYSIS NETWORKS

SAYEN: SOUTH ASIA YOUTH ENVIRONMENT NETWORKS

SCZM: COASTAL ZONE MANAGEMENT CENTRE

SDGs: SOUTH ASIA DEVELOPMENT GOALS

SDMC: SAARC DESASTER MANAGEMENT CENTRE

SEATO: SOUTHEAST ASIA TREATY ORGANISATION

SFC: SAARC FORESTRY CENTRE

SIPA: SAARC INTEGRATED PROGRAMEE OF ACTION

SAAP: SOUTH ASIA SEAS PROGRAMEE

TMS: TRADE MANUFACTURE AND SERVICES

UN: UNITED NATIONS

UNEP: UNITED NATIONS ECONOMIC PROGRAMME

UNEP: UNITED NATIONS ECONOMIC PROGRAMME

UNFCCC: UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE

CHANGE (UNFCCC)

UNISDR: UNITED NATIONS INTERNATIONAL STRATEGY ON

DISASTER

US: UNITED STATES

Introduction

Environmental degradation and its challenges are among the immediate threats affecting all over this earth. The very existence of living being more specifically the human race's survival is under great threat, and the need to address this challenge requires multiple cooperation and collective responses from the countries across the world. Various international bodies and various regional bodies are also working at multiple levels to address environmental challenges. When we talk about environmental problems, South Asia is not an exception. This region which is home to one fifth of the world's population has been experiencing massive deforestation, population pressure on land, degradation of fertile land, air pollution, and drinking water shortage etc. In this regard, the role of SAARC (South Asian Association for Regional Cooperation) as a regional platform of South Asia is very important to combat environmental problems in the region. Having said this, the need for common cooperation from SAARC countries related to environmental problems is also a vital roadmap to address the ongoing deadlock within the SAARC countries. Hence a collective cooperation among the SAARC countries in response to common environmental issues in South Asia would serve two concerns: a collective engagement for common future of South Asia toward solving and mitigating some of the core persisting environmental problems and it would also act as an amicable area to work together among the SAARC countries keeping aside their disputed deadlock and differences.

Both environmental problems in South Asia and the lack of common meeting ground for South Asia's cooperation through SAARC is very much evident. The eight member countries of SAARC occupy less than 4.5 million Sq. Km. but host over 1.6 billion people (SAEO 2014). This makes South Asia one of the most densely populated regions of the world. Added to this problem, this region also witnesses vast exploitation of natural resources, hazardous dumping of waste materials, excessive use of fertilizer and various other man-made exploitations. Compounded with these, South Asian region also witnesses ineffective environmental management and practical programme to address the

immediate and future course of environmental threats. The problem is getting worst in recent time; cases like environmental related human migration have also been recorded. For instance, many argued that out of various factors related to Bangladeshi migration, the environmental caused migration is also a factor as Bangladesh faces acute land shortage and population explosion compounded with frequent flood leading to loss of vast liveable land inundated by flooding rivers in monsoon season. The region of South Asia is also confronted with unsustainable rapid urbanisation, industrialisation which even led to acid rain. The case of environmental problems and shared fate and shared vulnerability in South Asia can be well illustrated by analysing the rivers connecting the South Asian countries. For instance, the Indus river system consisting of 6 rivers have shared water sources both for Pakistan and India. There are 54 shared rivers between India and Bangladesh (Global Voices 2012). By looking at this scenario any river water contamination or degradation would lead to shared agony among the South Asian countries.

This region also lacks in enforcing effective pollution control mechanisms. The South Asian countries are reeling under sharp increase of temperature and air pollution. In a recent case (2016), India's capital Delhi region has experienced the hazardous air pollution touching an alarming level where the authority was compelled to enforce the odd-even formula to cut down the number of automobile plying on roads. Urban areas in South Asia witness an alarming increase of pollution related health crisis like water borne diseases, respiratory diseases, cancer etc. On the other hand, the shortage of food in South Asia is pushing for rapid assault on environmental resources, food shortage in turn increase pressure on land, leading to a common phenomenon of agricultural encroachment towards forest causing massive forest deforestation. Food shortage also causes increase in using pesticide and chemical fertilizer to meet the ever increasing demand. The above mentioned environmental problems are just a few cases, various others environmental related problems have been confronting South Asia at an alarming pace and it is most likely to increase in near future if proper intervention is not made in time.

In this juncture, there is the need for reliable and accountable regional cooperation in South Asia. Here, SAARC can play an important role to address environmental concerns in South Asia. Established in 1985 and currently consisting eight member countries of South Asia, SAARC region covers only 3 percent of the world's area but it has the population around 1.6 billion. This framework for regional cooperation in South Asia was initiated by late Ziaur Rahman, the then President of Bangladesh. Some of the main objectives of this regional organisation are to enhance South Asia's economic and geopolitical dimension and to promote equitable welfare in South Asian population and also to improve the quality of life in this region. Members of SAARC had already incorporated and discussed the environmental issues in 2008 during the 15th SAARC Conference in Dhaka. The member countries agreed to engage collectively for environmental concern specifically on impact of climate change around Hindu Kush Himalayas. The 16th SAARC Conference in Bhutan in 2010 marking the 25th years of SAARC establishment devoted toward climate change and its measures to minimize the problems. The conference ended with 37 point of declaration with slogan TOWARD A GREEN AND HAPPY SAARC. This conference also made declaration of environmental concerns focusing on water management and conservation and also pledged to develop cooperative projects at regional level in terms of exchange of best practices and knowledge, capacity building and transfer of eco-friendly technology.

In 1997, SAARC members' environmental ministers agreed to form environmental action plan that set out various measures for regional cooperation. In 2004 Islamabad Declaration, the head of the states agreed to undertake and reinforce regional cooperation for the conservation of water resources and environmental pollution prevention and control and also well preparedness to deal with natural calamities. Taking into account the shared understanding of environmental problems in South Asia, SAARC has established number of centres including the SAARC Forestry Centre in Thimbu, the SAARC Disaster Management Centre in New Delhi, the SAARC Meteorological Centre in Dhaka, and the SAARC Coastal Management Centre in Maldives. The other initiatives like SACEP were also operationalised from 1982 by SAARC Secretariat ministers in Colombo. Its objective included promotion of mutually beneficial cooperation, exchange

of knowledge and expertise, financing and implementation of environmental projects. Under this initiative various programmes and projects were launched in the areas of environmental education, environmental legislation, bio diversity, air pollution protection and management of the coastal environment. It was also assigned for the implementation of major regional programmes like the South Asian Seas Programmes, South Asian Biodiversity Clearing House Mechanism, and South Asian Coral Reef Task Force, South Asia Network for Security and Climate Change and environmental partnership for expanding waste management services of local authorities.

However, how far the findings and recommendations from these various programmes and project are actually translated in action is a big question. Except for a few commendable works by SAARC, the journey of SAARC toward a meaningful regional cooperation has been marked by problems. By and large, SAARC faced with tremendous hurdles and differences among the SAARC countries, the current and future destiny of SAARC is at great risk, and therefore finding an amicable issues and areas where all members could participate is urgent. Their pledge to fight for the poverty, unemployment, national security, environmental problems and measure to response globalisation are more in papers and conference rather than converting into significant impact.

Core goals and objectives of SAARC in term of strengthening relationship and cooperation in various aspects of social, economic, cultural, scientific, technological and political disputes are either in slow pace or almost in standstill. Various factors and differences have been the major hindrances towards fruitful cooperation of SAARC. Many argue that there is a lack of trust and understanding among the member states and argued that SAARC member states are not equal partners as there are huge variation in their economy and other power relations. Political tension between the India and Pakistan is also a major setback for SAARC. More often member states placed their national interests foremost keeping less space for cooperative space. However the role of SAARC is very much imminent for a collective regional cooperation in South Asia which has been historically coupled with common values, misery, shared geographical connectivity, share cultural affinity, share threats etc.

In nutshell, this research work studies the need for addressing environmental problems in South Asia as a medium to ease the deadlock within SAARC. It serves to address two important issues in South Asia: bring a collective consciousness and action plan on the deteriorating environmental problems in South Asia and on the other hand finding a mutual agreeable ground to make the members countries participate and engage constantly with each other with the possibility to spill over their cooperation in other spheres to bring a fruitful regional organisation.

Survey of Literature

For my proposed work of research, various sets of literature were reviewed which deal with environmental problems in South Asia. Literature which deals with SAARC, policies and programmes launched by SAARC with regard to their environmental related responses were also reviewed. While reviewing the literature related to environmental problems in South Asia, it was observed that there is tremendous threat to the survival of human and living beings in South Asia. Literature on SAARC also suggests that the functioning of SAARC is not up to the expectation as a regional body. From the analysis of literature for my research, it is found that there is a gap and vacuum of a systematic work forging together these two sets of problems in South Asia i.e. operationalising environmental engagement from SAARC in South Asia so that it serves to engage with various problems related to environmental challenges in this region, at the same time translating this engagement as a platform to bring together all the member countries to constantly engage themselves towards a successful realisation of regional cooperation.

In Kishor C. Dash(2008) book; *Regionalism In South Asia Negotiating Cooperation*, *Institutional Structures*, cited Ernst Haas's following observation that growth of regional cooperation among the developing countries appears to have been guided by an "ideology of pragmatic anti dependency" which seeks to promote regional interdependence among the developing countries without delinking them from the global system." This suggests that growth of regionalism in other part of world other than the North were aimed to ease

the dependency on North by strengthening their regional bargaining power in global label.

The question on how does the consciousness of a pan Asia emerged is mentioned in the book *The Evolution of Regionalism in Asia* edited by Heriberth Dieter (Camroux 2007), He emphasised from the era of European imperialism to have a sense of an essentialized Europe being juxtaposed with an idealized Asia whereby In the latter half of the nineteenth century and early twentieth century, intellectuals in China, Japan and India began to present a vision of Europe (and the West) as an entity and Asian as different entity. This book mainly focuses on East Asian experiences though it gives insights on broader aspect of Asian regionalism tracing back with its historical experiences.

An article 'Interstate Conflicts and Regionalism in South Asia: Prospects and Challenges' written jointly by Zahid Shahab Ahmed and Stuti Bhatnagar (2008) traces the consciousness of SAARC through the realisation on various shared aspects within the South Asian countries. "Richness in material and human resources has warranted a constant interaction between countries in South Asia and the outside world. South Asian states have also been aware of their geopolitical advantages and the need to integrate into a regional force. Efforts were made early to create institutional mechanisms for regional integration to enable the fostering of a common regional identity and a cooperative growth strategy making optimum use of inter-regional trade and social and political development. A culmination of such an understanding was the creation of the South Asian Association for Regional Cooperation (SAARC)". In the same article, it outlines the intention and purpose of SAARC as "created in 1985, SAARC follows the principles of social and economic matters; decisions by consensus; and non-discussion on contentious bilateral issues. According to the SAARC Charter (1985), member states are 'desirous of peace, stability, amity and progress in the region through strict adherence to the principles of the United Nations Charter and Non Alignment, particularly respect for the principles of sovereign equality, territorial integrity, national independence, non-use of force and non-interference in the internal affairs of other States and peaceful settlement of all disputes'. This Charter was signed by Heads of states of Bangladesh,

Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka in 1985 in Dhaka. Over the years, SAARC has attempted to address several regional concerns, for instance drug and human trafficking, economic cooperation among South Asian states and the forging of a South Asian social identity and most recently efforts have been made to tackle the menace of terrorism in the region.

Among the various observations made in literature regarding the SAARC, the book written by Kishor C. Dash (2008) mentioned above also illustrates an important observation while analysing the domestic support of SAARC. This book argues that in South Asia, regional cooperation policy essentially remains a foreign policy issue and is thus an issue in elite politics. Issues of regional cooperation policy are largely beyond the immediate concern of mass citizens and do not involve large number of people. South Asian mass publics are, thus, generally uninformed and unconcerned about regional cooperation. This dimension unfolded a different kind of issues in SAARC cooperation. This elitist nature could be counted as a hampering factor for realising full regional cooperation in South Asia unlike the European case of European Union in which mass peoples' consciousness have been visible.

Apart from this, other factors are also responsible as hurdle or obstacle toward the path in realising regional cooperation in South Asia. In an article written by Irum Shaheen (2013), South Asian Association for Regional Cooperation (SAARC): Its Role, Hurdles and Prospects, it listed some of the main hurdles concerning SAARC cooperation: (1) differences between India and Pakistan (2) Inter-state disputes in South Asia. One of the major hurdles in the way of cooperation among the SAARC members is the mistrust, mutual security perceptions and hostility. All the members of this organization feel in one way or another threat to their political, economic and territorial stability from the neighbouring countries (3) fear of Indian domination (4) unstable financial condition of the members countries (5) asymmetry between India and other Member countries. There is economic, technological and demographic imbalance between India and other member countries of SAARC. India being larger in size, economy and possessing high technological infrastructure dominates other members. India accounts for more than three

quarters of the regional GDP and technological infrastructure and two third of the global exports of the region (6) exclusion of contentious issues from SAARC Charter. The Charter of SAARC itself has some self-imposed anomalies as its Charter has the provision of not discussing the contentious and bilateral disputes. On the one hand, it asks for increased cooperation and exchanges and on the other hand, avoids negotiations on bilateral disputes (7) different political systems. All the South Asian countries are having different kinds of political systems which are also the reason for the failure of SAARC. South Asia has not been a strong democratic region (8) Lack of People to People Contacts. The contact of the people with the Association is less as well as with the people of the member countries.

Owing to various factors, SAARC cooperation has not achieved what as a regional body is supposed to. With exception of a few cases, this regional cooperation has not been able to translate into meaningful cooperation since 1985, and cooperation in economic and political realms have not been successful in this critical point of SAARC's journey.

There are numerous literature written on environmental problems and challenges in and around South Asia. The then General Secretary of United Nation made a statement highlighting the importance of collective effort to engage in environmental challenges "safeguarding the environment is a crosscutting United Nations' activity. It is a guiding principle of all our work in support of sustainable development. It is an essential component of poverty eradication and one of the foundations of peace and security." (Africa Environment Outlook 2006) The nexus between peace and environmental engagement is very much important. This is very common to most of the developing regions like Africa or South Asia where environmental related migration and other form of disturbance frequently occur.

A valuable insight for environmental problems in South Asia was published in a report: South Asia Environmental Outlook 2014 prepared jointly by SAARC, United Nation Economic Programme (UNEP) and Development Alternatives (DA). The following general findings related to environmental challenges confronting South Asia are broadly discussed (SAEO 2014).

Afghanistan: Deforestation; soil erosion; desertification; urban air pollution; access to water and sanitation; deteriorated water quality; loss of biodiversity.

Bangladesh: Air quality deterioration; localized water shortages; land degradation and soil erosion; forest and agricultural land conversion; solid waste generation and disposal; localized water pollution in urban areas; climate change; glacial melting.

Bhutan: Air quality deterioration; localized water shortages; land degradation and soil erosion; land (forest and agricultural) conversion solid waste generation and disposal; localized water pollution in urban areas; climate change; glacial melting.

India: Deforestation and land degradation; desertification; soil erosion; forest and agricultural land covers conversion; urban air pollution; water pollution; arsenic contamination in some groundwater segments; loss of biodiversity; climate change and sea-level rise; glacial melting.

Maldives Air pollution: water (ground and marine) pollution; waste generation; sea-level rise; coral reef bleaching.

Nepal: Forest depletion and land degradation; air pollution; waste generation; climate change.

Pakistan: Deforestation; desertification; water pollution; loss of biodiversity; climate change; air pollution.

Sri Lanka: Land degradation; deforestation; waste generation; air pollution; loss of biodiversity; climate change

By analysing broad environmental problems in South Asia, most of the problems are common. Therefore mitigating and engaging these problems also need a common platform. In an article *Environmental Issues and SAARC* written by U.C Jha(2004) highlighted the need for SAARC to increase their role concerning environmental challenges in South Asia: "the forum of SAARC must be fully exploited to deal with the common problem of environment degradation. The concept of information sharing, technical support, financial assistance and training could be utilised to fight the environmental degradation jointly".

Framework of Analysis

This research work explores a general conceptual framework of regionalism to understand the broad general approaches that deal with regionalism/regional integration. The main emphasis is to illustrate and study the general framework and theoretical discussion that deals broad regionalism/regional cooperation/regional integration. It acknowledges the complexity to deal with regional cooperation/regionalism and regional integration. Regional cooperation and regional awareness has become an important phenomenon in the world from the last couple of decades. This increasing awareness on regionalism simultaneously occurred with the rise of increasing globalisation. In the midst of globalisation, the space for regional arrangement is often questioned; quite often the relevance of regional organisation in the era of universalism and nation state is examined at both the levels of literature and in practicality, but a close look at the regional organisation hint us that like those global institutions, regional organisation also aims to provide peace, economic stability, promote democracy, seek rigorous endeavour in any possible cooperation. One may question that those cooperation in the regional level is in limited space, but such question lacks proper analysis on the relevance of regional organisation. The best answer to such doubt is that regional organisation and arrangement may operate in limited space but the rational advantageous is the fact that such regional organisation better understand the region specific aspiration (but there is increasing expansion of regional organisation's function). The realisation for regional

cooperation though originated in the Western Europe, is now spread across all the part of globe.

In the study of regionalism, one of the most complex areas is how to define the region. Despite various literature and writings on regionalism, there is no clear cut definition on how to delineate the boundary of any given region. The safest way is to remain in the general understanding that region is constructed, perceived and not a static entity. So far there are two major waves of regionalism: the first wave is considered to be the regional awareness in the early 1950s in Western Europe. The major reason for regional awareness and aspiration to establish the regional cooperation in Europe was greatly fuelled by the experiences of two world wars. During the world war, Europe was the major centre of episode. After the end of the world war, people of Europe especially the policy maker and intellect felt the need for collective regional platform to foster the peace and security. In support, many theorists and intellectuals explore the possible way out to put conducive theoretical backbone to substantiate the regional arrangement in Europe. In their search for the root cause of war and instability in the world, majority of regional planner and theorist agreed that rise of hyper nationalism and lack of cooperation was the main reasons for war. So they realised that in order to increase the trust and mutual interdependence, the states in Europe need to increase cooperation, they firmly believe that fair and transnational institution could provides beneficial to all the members states. There are theories that support the cooperation and collective engagement. One of the prominent upholders of cooperation so far comes from the liberal theoretical tradition. They firmly believe that human being are good and rational entity, these positive faculty of human being when applied to state which is run by the human being, often seeks for peace and harmony, therefore they believe positive outcomes from the cooperation.

Throughout the history of regional cooperation and regional integration, two major conceptual approaches; supranational and intergovernmental approaches compete with one another. From a broad general understanding, supranational approaches aim at restraining the sovereignty of nation-states through the establishment of institutions. This idea is well reflected in many of the early liberal theoretical traditions such as

functionalism, the supranational approach subscribe to the idea that through the international or transnational institution, state's uncontrolled power can be put on check and balance. The sources of motivation for such idea emerged while in search for peace and harmony in the world. They believe that establishment of international or transnational decisions making body could act as a fair party that could provide the prosperity and could act as an arbitrary party to solve the conflict and differences.

Intergovernmental approach emphasises the important roles played by sovereign nationoperation international state for smooth of and regional cooperation. Intergovernmentalists subscribe to the idea that cooperation can be progress in such arrangements where nation states retain their original control and power equally among the cooperating states. In such arrangement, cooperating states could enjoy their power without any fear for infringement from the established institution. In such context, they believe cooperating states could peacefully explore the common interest that could be put for cooperation without affecting the sovereign authority of contracting states.

Regional cooperation is an open-ended process, having multiple ways and areas, whereby contracting states (or possibly other non-state actors in collaboration) within a given or agreed geographical area cooperate together for mutual benefit, such area of cooperation could be economic, trade, environmental cooperation, and social welfare, security etc where the cooperating states covered various areas which they deemed suitable for that given region in the larger interest of all the contracting members. On the others hand, regional integration refers to a deeper process, whereby the contracting member states sacrifice or entrust some original autonomy or power to a supranational body or institution. The contracting states sacrifice some forms of autonomy, as they move toward the deeper integration process; they pass over some extent of autonomy to a mutually established body, in return this body function in the interest of all the contracting states. In general case, this regional body enjoy some extent of autonomy. For instance in the case of European Union, it enjoys considerable autonomy over the regulation and in setting the rules in the area of visa and common currency. The medium

of such integration are conducted in the field of political integration and economic integration.

Attempt to define the clear cut demarcation on regional cooperation, regional integration, and regionalism is complex and contested because the level of application and usage are often varied based on the uniqueness and speciality of various regions. The argument of this study stand with the perspective that regional integration/cooperation/regionalism carries a positive notion and practices that seek to enhance and provide mutual benefit to all the contracting members which agree to come together. The outcome may be varied and different according to one region to another region, at the same time there is no consensus on which area of integration or cooperation should come first. When the same logic is applied at different regions, for instance the economic logic of European Union is applied at others region the outcome may be different from one region to another region. In short, regional cooperation and integration can be treated as a process that exhibit the positive desire of the given region where they seek to come together for mutual benefit, to reduce the conflicts, and to shape the collective regional fate. Historically such phenomena have been witnessed in the form of alliance, pacts, league and union.

The significant initiative of regional cooperation accelerated after the end of Second World War and became more advanced after the end of cold war. Analyses on the experiences of regionalism suggest that regionalism in South Asia and in Europe are very different in practices and understanding. As witnessed in European case, the economic integration has, to an extent, able to bring states together despite political differences, whereas in the case of developing countries, for instance, in South Asia, the political differences continue to overshadow the economic cooperation. The concept of regionalism began from Europe but it is not feasible to fit the same model and practices on Asia, Africa, Latin America or elsewhere as various distinctive patterns and forms of regionalism have emerged and continue to develop their own particular paths across the world, influenced by regional interactions and specific regional issues. Also, external interaction and factors such as political and economic instabilities at global arena, increasing globalisation, and security threats (both external and internal) shape the

various distinct and peculiar regionalism across globe based on how particular region see or perceive the competitions.

Defining regionalism is not easy as the values, meaning, evolution and practices are widely varied and different from one region's experience from another's experience. However, regionalism, broadly can be defined as the spirit that highlight areas where states pursue and endeavour toward collective growth and prosperity, to foster the regional aspiration, mitigating the challenges the region face through economic, cultural, social and political cooperation and engagement. The concept and practical area of regionalism is beyond the national boundary but not on a universal level. Regionalism in general describes the process of states entering into a regional agreement or understanding, in order to achieve specific goals through enhancing regional cooperation. Regionalism is also an expression of a common sense of identity to harness collective growth and development in that region. According to W.P. Scott, regionalism is an approach to study the behaviour that emphasizes the geographical region as the unit of analysis, stressing the relationship between man and his immediate physical environment. Economic, social and cultural organisations are analysed in terms of their interrelationships and functions within the geographical region. Marshall E. Dimock considered regionalism "as a clustering of environment, economic, social and governmental factors to such an extent that a distinct consciousness of separate identity within the whole, a need for autonomous planning, a manifestation of cultural peculiarities and a desire for administrative freedom, are theoretically recognised and actually put into effect. Regionalism is something which remains to be realized and further developed, as well as a phenomenon which has already appeared and taken form. In one sense, and perhaps the best one, regionalism is a way of life, it is a self-conscious process" (Nitisha 2016).

Regional cooperation has become an important and widely spread phenomenon in the increasingly globalised and interdependence world. The most remarkable case of regional integration and cooperation has rooted in the Western Europe especially from European Union (EU). The process of European cooperation and integration began in the early

1950s with the foundation of the European coal and steel community (ECSC) after the signing of the Treaty of Paris in early 1951 by the six founding states; Belgium, France, Germany, Italy, Luxembourg and the Netherlands. Since then European integration process has been ongoing with milestone achievement from common energy agreements, common agricultural policies in 1962, cooperating for foreign policies from 1970, starting a European Monetary system in 1979, In 1986 the Single European Act is signed. This treaty agreed to increase the free flow of trade across European region and aims to create the 'Single Market' by 1992 and further integration of 21 states, making it a remarkable case of regional integration so far.

However analyses on the experiences of regionalism suggest that regionalism in South Asia and in Europe are very different in practices and understanding. As witnessed in European case, the economic integration has, to an extent, able to bring states together despite political differences, whereas in the case of developing countries, for instance, in South Asia, the political differences continue to overshadow the economic cooperation and larger integration. The concept of regionalism began from Europe but the same model is not feasible to fit on others regions, as witnessed, the practices and function of regional cooperation/integration in Asia, Africa, Latin America or elsewhere appears in various distinctive patterns and forms that continue to develop their own distinctive paths, shaped and influenced by different regional interactions, specific regional issues and distinctive regional aspirations. Moreover due to external interaction and external factors such as political and economic instabilities at global arena, increasing globalisation and security threats (both external and internal) shaped the various distinctive and peculiar regionalism across world based on how particular region see or perceive the competitions and cooperation. (Acharya & Johnston 2007) reflect that the constituting features and performance of regional organizations around the world is marked by diversity. Taking the instance of Europe, it is argued that the European regional grouping tend to be more heavily institutionalized and intrusive, especially in terms of their approach to issues that affect state sovereignty of the contracting members (such as human rights). Yet, European regional grouping lack many aspects such as inclusiveness and flexibility in decision-making as compared to Asia and Africa.

Comparatively Asian institutions, acquired uniqueness in terms of their decision making norms and approach to socialization however the sceptical part in the case of Asia and Africa is generally on effectiveness in managing security dilemmas and the economic vulnerabilities of their region. Significant explanation of why variations occurred in institutional efficacy and performance between European and other regionalisms was largely because of a range of political, social, and administrative factors in which institutions were designed (Acharya & Johnston 2007 p 8).

According to Andrew Hurrell 'regionalism' can be understood in 'five different categories': (1) regionalisation (autonomous economic process based on market force); (2) regional awareness and identity; (3) regional interstate co-operation; (4) state-promoted regional integration, and (5) regional cohesion (Andrew Hurrel 1997:39-45).

The nature and characteristic of regionalism are varied across the various regions in the world, at some region a simple integration followed generally in the form of reducing or eliminating barriers to trade and commodities flow at limited extend, at some regional case the level are more advance as the form of integration is more deeper. In most cases of various region, Integration and regional cooperation not only pertain to economic sphere, but also it covers a wide range of fields and spheres including social, culture, political etc. Political factors play very important role in realisation of regional cooperation; the shared perception of political region, common internal and external threats, domestic constraint and challenges, and shared politico-administrative characteristic of a region shaped the evolution of regional realisation. On the other hand culture also plays a crucial role while shaping the nature of regionalism, perception of being part of shared identity and affinity in a region. Acharya (1997) highlights how the ASEAN states constructed their sense of regional identity through the elaboration of key ideas and processes described as "the Asian way". As mentioned above Regionalisms has proliferated, from the remarkable regionalisation and regional integration in Europe since the 1950s, to a new worldwide resurgence. The late 1980s witnessed the revival of European integration with the Single European Act such resurrection and rise of regionalism not only confined to Europe alone, At various part of the world, regional and

sub-regional body and institution arose such as Association for Southeast Asian Nations (ASEAN), The North American Free Trade Agreement (NAFTA), African Union (AU), Mercosur (Comisión Sectorial para el Mercado Comúndel Sur) in Latin America, Asia pacific economic cooperation in 1989, the Southern African Development Community (SADC), South Asian regional Cooperation (SAARC) etc.

What is Region?

Defining region is always problematic and complex; there is no standard scheme wherein the definition of a region can fit for all. Conventionally, region constitutes political region, geographical region, cultural region, economic region, security region. But region does not represent a clear cut representation or in another word in a given region there might be various overlapping constituting features of regions for instance European Union region touch the characteristic of economic, political, geographical features which ultimately gives the blurred and no clear cut answer as to which feature should be benchmark to constitute a European region in a similar case of South Asian Association for Regional Cooperation (SAARC), the constituting features of South Asian as a Region cover various constituting feature or element, this region is influenced and shaped by centuries long shared cultural traditions, geographical proximity, shared history, economic aspect and social aspect that this region are inseparable. In the very beginning European Union was more of an economic region but over the time European Union enrolled into political identity too. Moreover the geographical identity of European Union witnessed change, for instance the Britain and Greek which was part of the European exit from Union. Such aspect highlights the transformative and temporant nature of what is to be constituted as region. So the contemporary regionalisation took various stages. Björn Hettne & Fredrik Söderbaum (1998) illustrate the process of regionalisation that is described in terms of increasing levels of 'regionness', i.e. the process whereby a geographical region is transformed from a passive object to a subject with capacity to articulate the interests of the emerging region. This articulation of a region undergoes at At the first level or in the 'pre-regional' stage, the potential region three levels. constitutes a geographical and social unit, delimited by more or less natural physical

barriers and marked by ecological characteristics: 'Europe from the Atlantic to the Ural, Central Asia; or the Indian subcontinent. This level can be referred to as a 'proto region', or a 'pre-regional zone'. The region as social system implies ever widening translocal relations between human groups, which in an early phase may be based on symbolic kinship bonds rather than trust and contract relations. The social relations may thus very well be hostile and completely lacking in cooperation. The second level is the stage where the crucial regionalisation process takes place, which could start with either 'formal', intergovernmental regional cooperation/state promoted regional integration or 'informal', spontaneous, market- and society-induced processes of regionalisation, in any of the cultural, economic, political or military fields, or in several of them at the same time. It is in fact this multidimensionality that defines the new regionalism. The more organised region could be called the 'formal region', the third level of regionness, in this level, the region act as a subject with a distinct identity, with more institutionalised actors capability, legitimacy and structure of decision-making in relation with a more or less responsive regional civil society, transcending the old state borders'.

Proposing a multipurpose typology of region, Louise Fawcett (2004) assessed the definition of region wherein definition includes state-based as well as non-state-based regions and regions of varying size and composition. He argued that the Commonwealth states may form a region, or the Islamic countries may form a region; in a different way, so do the 'South' and different southern groupings and coalitions may form a region. Moreover the non state actor may also form regional type of group, for Examples non-state actors operating in a given region may comes up with peasant, labour or environmental groups in Africa or in any other region of the world. Another key dimension of understanding the study of region can take the perspective on how the physical–functional distinction is operated. Physical regions, according to Raimo Vyrynen (2003), refer to territorial and military, spaces controlled primarily by states, whereas the functional regions are defined by non-territorial factors, in this dimension Culture, economic forces and the social forces are counted which often fit under the purview of non-state actors. The main components which made the realisation of functional regions may be economy, environment, and culture. On the others hand the

physical aspect of region is usually created by state in their orientation toward the realisation of region. The functional regions is driven by complex interplay of sub national and transnational elements of economic concern, cultural affinity, and environmental concern or in those areas where state have less control. In any regionalisation, there is interplay of both physical and functional aspects.

Regionalism and Regionalization

Regionalism is generally equated with the sentiment, consciousness or policy and programme in a given region whereas Regionalisation generally consists of both regionalism process and translation into practice of such consciousness and programme. So in simple understanding regionalism is a level where the mental sentiment or policy that exist before the regionalisation, for any regionalisation to be achieve, the level of regionalism must nurture or exist and when this idea/consciousness or policy (regionalism) that develop in a given area got mature or reached to a level where it formally translated into practical action then such level is equated with the regionalisation.

Söderbaum (2003 eds.) defined regionalism as a set of Ideas, Identities and Ideologies related to a regional project, and regionalisation is defined as the process of regional interaction creating a regional space or the outcome after the regionalism as cited in (Tarling 2006). Morten Boas and Helge Hveem defined regionalism as the body of ideas and goals laid down for the regional project on the other hand regionalisation defined as an active pursuit of a strategy, aimed at creating a regional system in a specific area as cited in (Tarling 2006).

Old and New Regionalism

Regionalism can be generally defined as old regionalism (first wave) and new regionalism (new wave), each characterised by its own debates and its practices. The first wave lasted from the end of Second World War until the end cold war of the 1980s. Old

regionalism was comprehensively rooted from the initial stages of European regionalism of 1950s. Old regionalism was born and flourished after the bitter experience of World Wars and hyper nationalism which create distrust and enmity in the world. It root ground of growth was in Europe, especially in the formation of the European Communities. This post war resurrection of regionalism is not in the similar line with those pact, protectionalism, mercantilism and alliances. The idea of this post war regionalism was to provide mutual cooperation, to create trust and to create the peace and harmony. The post-War regionalism expert viewed the nation-state as the problem rather than the solution as they believe that the devastating wars and economic protectionalism was because of the hyper nationalism and extreme self centric logic of state which fail to see the benefit of cooperation. Effort at other region in this first wave was mainly on the line of European experience with limited success; integration in first wave was crippled by the economic crises in 1980s. This wave of regionalism was largely seen based on regional security and economic concern after the devastating world war and various economic crises and trade and market protectionalism across the world. It is argued that theoretically old regionalism is debate between supranational and intergovernmental approaches.

Generally, supranational approaches aim at restraining the sovereignty of nation-states by means of establishing institutions and decision-making bodies to supersede and override the sovereign authority of nation-states. This stands in contrast to intergovernmental approaches, which emphasise the centrality of sovereignty and the nation-state within the context of international and regional cooperation" Jens-Uwe-Wunderlict (2007). The first wave of regionalism aims was to contain war to established peace and harmony in the world. The situation of world immediately after the end of world war was marked by chaos and fear in the world. Thinkers, policy maker and people in large were in constant search for the way to deter the war and conflict in the future, in such time; regional arrangement was among the prominent means to create trust and cooperation in the world especially initiated in the western Europe. However Old regionalism was able to achieved limited success because of its formal and rigid in nature as well as most of the old regionalism was influenced by cold war politics. The design and institution formation in

the old regionalism was often imposed from above, in another word most of the old regionalism architectures believes the once the working institution or body is established then the cooperation and integration would inevitably followed.

One of the important features to describe and explain the integration was the concept of deep and shallow integration especially in the economic sense; many experts on regionalism put the old regionalism under the purview of shallow integration because generally in the case of old regionalism the economic cooperation and integration was very much limited where it could only reduced barriers in trade and commodities into limited extend. The first 20 to 30 years after World War II can be seen as a period characterized by shallow integration (International food Policy Research Institute 2004). The first wave of regional organisation are for instances Warsaw, CENTO, SEATO, NATO.

New Regionalism

To define new regionalism from old regionalism clearly carried problems as they exhibits both continuities and similarities between new and old regionalism, For instance, many regional organizations in new regionalism era were initiated during the era of old regionalism and then restructure in the 1980s and 1990s, with renewed structure to comply the changes in the world. Moreover there are various traces and elements of old regionalism presence in those regional setting of new regionalism However, various changes are reflected in new regionalisms as it has been able to reach out worldwide, the new regional phenomenon was extended to Asia, Africa, Latin America and Eastern Europe rapidly. Moreover comparatively, Scope and dynamic of new regionalism spread at multiple arenas unlike the old regionalism which generally centred on preferential trade arrangements and rigid cooperation, the scope and arenas of new regionalism has been widen with the dramatic increase in the number of regional trade agreements in various regions of the world, in the new regional arrangement there is less influence and controlled by the superpowers unlike the old regionalism which was largely controlled and influence by the super power blogs in their interest. In addition to the above changes,

in the new regionalism there is spectacular rise of more multi-dimensional and pluralistic type of regionalism, unlike the old regionalism which was primarily focus on trading schemes or security cooperation but in the new regionalism there are more wide varied areas of cooperation and engagement such as Environmental engagement, Cooperation in the health sector, terrorism, piracy, education, and various others fields and sectors which were not so important in the old regional arrangements. Moreover there is strong presence of the civil society and non state actors in the new regionalization (Söderbaum 2015).

As compared to old regionalism which began from 1950s's European experience which was slowed down by 1970s, the era of new regionalism which began by 1980s is emerging and transforming. This emerging new wave of regionalism is also witnessed in a rapidly liberalising economy in the developing countries as the end of bipolar cold war changes the global structure; it consequently brought major changes in regional configuration which gave more vibrant fertile ground for regional arrangement in the developing countries. The existing regional organisation too reflects the changes. The regionalisation in new wave is informed greatly by regional's spontaneous outcome of intense urge and desire to tackle the multifaceted challenges ranging from instable volatile global economy, new security issues concern, environmental challenges, threat from non-state actors, challenges from emerging political issues beyond the super power rivalry, challenges from the distorted global economy distributions and challenges from new political configuration in the world. Drivers for new regionalism are mainly generated out of multipolar and interdependent of global political and economic configuration. Rise and consolidation of regional arrangement is not only pertain to the newly emerges regional organisations and institutions, but it is very much reflected on European Union, ASEAN and NAFTA which was already presence from the old regionalism period, the responsible factors for such impact even on these regional organisations was largely because of the structural transformation of world order after the end of cold war and later due to decline of US hegemony; combine with this, changes on the world economic order. After the end of cold war, the form of international interaction reflected transforming from the state centric international interaction toward a more

interdependence and complex interaction, catalyse by rise of International Institutions, INGO, MNC, and Global Civil Society. The mode of changes in new regionalism is a complex process as interaction at the level of interregional and intra-regional are interrelated for instance as witnessed in the case of SAARC (also witnessed at other regional body) the scheme of inviting observers from other regional body, more over the trade flow from one region to another region marked a Sharpe increase, in addition to these there is also witnessed of Sharpe increase in the inter-regional cooperation and collaboration across the world. The key evident of complex and wide interaction is seen through north-north interaction, north south interaction and also south-south interaction for instance Indian Ocean Rim (IOR), Asia-Pacific Economic Cooperation, the increasing engage of EU in eastern Europe and in Latin America. On the economic sphere the new regionalism accommodates diverse model of market economy that suit the given regional dynamic for example in the case of SAARC, intra regional trading arrangement was designed such as the preferential trading arrangement wherein the contracting members agreed to specified the items of trade which the members countries agreed upon. New regionalism attracted various institutions and organisations working at different level and sectors. Andrew Hurrel (1995) outlines, four important characteristics of the 'new regionalism. First, there is the emergence of North/South regionalism, such as NAFTA, but relevant to developments in both Europe and Asia. Second, there is the wide variation in the level of institutionalization of regionalism, with many regional groupings consciously avoiding the institutional and bureaucratic structures of traditional international organizations and of the regionalist model represented by the EU earlier. A third feature of the new regionalism is its multi-dimensional characters; The dividing line between economic and political regionalism becomes ever harder to draw as the new regionalism is fed both by the end of the Cold War and the decentralization or regionalization of security concerns, and by developments in the global economy. Finally, and forming part of a broader resurgence of questions of identity and belonging, many parts of the world have seen a marked increase in regional awareness or regional consciousness".

Hettne argued that new regionalism is not dependent on Spillover for its survival or success, as instead the policy objectives of the region are set out explicitly at the outset. Further core features claimed for new regionalism are that unlike its predecessor(s) it is both global in scope (rather than effectively limited to Europe), based on economic openness/neoliberalism rather than protectionism, independent of superpower politics, and shaped voluntarily by actors from the bottom-up rather than imposed by foreign powers or cultivated by actors at the new centre" (Hettne 2002; Söderbaum 2003). Some of the importance new regional body are ASEAN, NAFTA, and APEC etc.

Theoretical Background of Regionalism/Regional Integration

One of the most profound contribution for regional cooperation and integration is provides by the liberal theoretical traditions, various branch and liberal theoretical approaches provides the positive aspect of cooperation among the states and organisation. Liberalism which is the product of European enlightenment believes on premises that human nature is good and with these natural conditions, people can improve the moral and material conditions. Aggression, war injustice, inequality are therefore product of distorted social institution and lack of cooperation so they can be mitigated or eliminated through collective or multilateral cooperation and institutional reform. Traces of liberalism are found in the seventeenth-century Grotian tradition, eighteenth-century enlightenment, and nineteenth-century political and economic liberalism and twentieth century Wilsonian idealism. They believe that through cooperation, mutual benefits, peace and stability can be achieved. Liberal holds that international cooperation through institution reduces the conflict and could reach a peaceful world order. The early liberal scholars were also regarded as idealist and they were occupied on the possibilities of ending the misery of war. Liberal thinkers in the inter war period were deeply interested in those sphere which would promote cooperative peaceful relations among states to create just and peaceful international order, such effort gave rise to the institution like League of Nation. This liberal enterprise firmly believe that respect for the rule of law and creation of stable institutions could provide some form of peaceful international order and could create conducive atmosphere for peace and security in the world. This liberal

doctrine was highly dominating the academic circle because of its concern for solution for peace. However the popularity of idealism was sharply decline at the failure of The League of Nations to act as a body for resolving differences peacefully, its failure to prevent inter-state conflict, Rise of Protected economy, the Great Depression and the outbreak of World War Two accentuate the decline of liberal tradition. However liberal theory renews with many new strands in 1970s for example pluralism, world society approaches, transnationalism, liberal internationalism, neo-liberal institutionalism. In the 1970s a liberal strands took importance interest of multinational corporations (MNCs), organisations (NGOs), international pressure non-governmental intergovernmental organizations (IGOs), which the liberal provide significance deliberation at the onset of globalisation. These renew liberal literature in 1970s, 1980s provide much importance insight on rise of interdependence, economic liberalisation and rise of numerous international institutes.

Liberal believes in absolute gain where economic interdependence and cooperation such as free trade would ease the conflict whereby it would integrate individual and states everywhere. In 1957 Karl Deutsch and his colleagues claimed that increased trade, democracy, and participation in international organisation reduced the chances of war Rosenau and Durfee (2000 p 36-37), Deutsch's group distinguished two kinds of peace and cooperation processes based on this observation. One process leads to amalgamated security communities wherein once-independent political entities actually combine to form a single political unit". This, for example, happened with the thirteen states of the United States between 1776 and 1787. The other process leads to a *pluralistic* security community. In this case, the independent political entities retain their sovereign independence but have a vanishingly small chance of warring with one another example the USA and Canada security community another pluralistic community is that of European Union". Liberal institutionalism and interdependent argued that Free trade and the removal of barriers to trade enhance regional economic integration in Europe as conflict between states would be reduced by creating a common interest in trade and economic collaboration among members of the European region. This would encourage Europe to resolve their differences through cooperation within a commonly agreed

economic and political framework for their mutual benefit instead of military means (Rosenau and Durfee (2000).

Functionalism

Functionalism is rooted on liberal economic logic. Functionalism theory is one of the foremost theoretical works which influence the early regional integration process, specifically the creation of European coal and steel community in Europe. Built on the line of liberal tradition it aims to bring peace and prosperity in the war-torn Europe through the cooperation beyond the national boundary of state, it theoretically challenges realism's anarchical system and state centric approach in the analysis of international relations. Mainly developed by Romanian theorist David Mitrany largely influenced by liberal writers including Immanuel Kant, functionalist proposed to establish transnational functional body with the help of modern technical experts, industries and communication. Mitrany's means of selection of the functional international organisation is through a natural selection, which can bind together those interests which are common, where they are common, and to the extent to which they are common. This functional activity would be selected specifically and organized separately each according to its nature, to the conditions under which it has to operate, and to the needs of the moment (Mitrany 1966 p.104-105). This selected different functional activities is assigned to specific technical expert. Functional integration would be pragmatic, technocratic, and flexible; and at the end it would deliberately blur distinctions between national and international, public and private, and political and non-political. When there is increase in functional agencies, national divisions would become less and less important. Under such scheme the method for coordinating various functional agencies would depend on the degree of development of international functional organisation, in order to operationalised this functional agencies according to Mitrany rest on four stages: first degree or stage is Within the same group of functions starting from the coordination either simply for technical purposes or for wider functional ends, and this would be the first stage toward a wider integration. The second stage rest on the coordination of several groups of functional agencies For instance the communications agencies, this May not only work out some means of acting

together in the distribution of orders for rolling stock, ships, etc., but they should work in through any agencies that may have come, into Being for controlling materials and production. Next stage is the coordination of such working functional agencies with any international planning agencies, this would present a third stage, like the international investment board or international development commission as an advisory organ can see how such a development commission might help to guide the growth of functional agencies into the most desirable channel, and could watch their inter-relations and their repercussions. Coordination of such a general functional agencies may in some cases amount almost to arbitration of differences between functional agencies, regional boards or councils like those of the Pan-American Union might be used to adjust or arbitrate regional differences. On the fourth stage Mitrany stressed that international action must have some overall political authority above it. Besides the fact that such a comprehensive authority is now not a practical possibility, it is the central view of the functional approach that such an authority is not essential for our greatest and real immediate needs. Thus the proposed function by mitrany could be organized through the agreement, given specifically in each case, of the national governments chiefly interested, with the grant of the requisite powers and resources whereas it is clear, to emphasize the previous point, which they could not allow such organizations simply to be prescribed by some universal authority, even if it existed. Mitrany's vision was more globally oriented and centred on investing in functionally constituted international agencies, implying a functional reallocation of authority and jurisdiction away from the national level the aim was to create a network of functional organisations performing specific tasks and transcending national boundaries. As the number of these agencies increased, governments would find their room for independent action restricted since they would come to depend on these agencies for their own functioning. In addition, the international institutions and agencies would provide a framework for a complex socialisation process for political, social and economic decision-makers, undermining their loyalties to particular nation-states (wunderlich 2007).

Under such a framework, the function determines the executive instrument suitable for its particular activity and the question of wider integration into other sectors arises (known

as functional spillover). In other words, the functionalist school of thought represented by Mitrany sees integration as a global process with its own intrinsic dynamics. States start to cooperate in specific limited areas creating new functional institutions. Once that is done, pressures arise demanding more cooperation and coordination in other sectors. In Mitrany's functionalist vision there is a clear distinction between political cooperation on the one side and functional cooperation on the other. It combines elements of cosmopolitanism in a clear way to overcome communitarian divisions in world politics by 'gradually undermining state sovereignty by encouraging technical co-operation in specific policy areas across state boundaries (2007).

Functionalism's fundamental focus was to redundant people from loyalty toward nationstate for positive cooperation beyond the national boundary, through transnational organisation they believes that it could increase the welfare reward to the people beyond the reward people could reaped from nation-state. Functionalists shared a belief that cooperation in the realms of low politics (socio-economic realms) could mitigate the political differences of states. As amount of cooperation increase beyond national boundary successfully it will spill over to others areas like onto political, cultural, security, domestic decision, etc.

Neo Functionalism

The theoretical emergence of neo-functionalism surfaced in the 1950s and 1960s. The core methodology that they took to explain and study the integration is in the wider context of behaviouralism and its positivist tenets. Taking the path of positivist school, Neo-functionalist inclines for rigorous and precise empirical analysis over the study on integration. Neo-functionalism followed the positivist methodologies that operate on the conviction based on testable and verifiable hypotheses, regularity, explanatory power, and parsimony and predictive. Neo-functionalism is a theory of political integration and market integration within a specific region formed by those States who have taken a formal decision to integrate with special focus on European integration. Their main concern concentrated as to how an intergovernmental organization could develop into a

quasi-federal body with the capacity to establish shared rules and legislation on the political realms. Neo-functionalism accounts for the migration of rule-making authority from national governments to the European Union. (Diez2009 p.45.46)¹ highlighted that "Amongst the earlier theories of regional integration, neo functionalism theory was first formulated in the late 1950s and early 1960s, mainly through the work of Ernst Haas and Leon Lindberg in response to the establishment of the European Coal and Steel Community and the European Economic Community, The theory was at its prime until the mid-1960s, Like functionalism, neo-functionalism emphasizes the mechanisms of technocratic Decision-making, incremental change and learning processes. However, the theory has departed significantly from Mitrany's functionalism Whereas functionalists held that form, scope, and purpose of an organization was determined by the task that it was designed to fulfil, neo-functionalists attached considerable importance to the autonomous influence of supranational institutions and the emerging role of organized interests. While the functionalist did not limit integration to any territorial area, the neofunctionalist gave it a specifically regional focus. Moreover, where Mitrany attached importance to changes in popular support, neo-functionalists privilege changes in elite attitudes" (Diez2009).

Neo Liberal Institutionalism

By 1970s world politics has experienced decline of US hegemony. This important change in world politic gave rise the new interest of international institution and its role in new world order. This important transformation in world led to the rise of Neo-liberal Institutionalists. Robert Keohane a leading neoliberal, asserted that "avoiding military conflict in Europe after the Cold War depends greatly on whether the next decade is characterized by a continuous pattern of institutionalized cooperation" (Mohammed 2006). Theories of neo liberal institutionalism pay more attention upon environment and economic issues; they see economic cooperation is key feature of world politics. Neo

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¹ Wiener Antje and Diez Thomas (2009), European Integration Theory, New York: Oxford University Press

liberals are concerned on how state benefit from cooperation, they believe in absolute gain as cooperation operate through interdependence and any relative exploitation by one side lead to affect the whole However unlike the classical liberalism which oppose the realist assumptions, neoliberal share many assumptions with the neo realist, though in a different degree, they also share same approach generally Neorealism and neoliberal share similar methodology, epistemology and ontology. Both the thought generally focus on the international system: neoliberal institutionalism explains why states cooperate and neorealist focused more on why they reluctant to cooperate with each other. Neoliberal Institutionalists explain that States are interested in cooperating through fair institutions that can deliver absolute gains and profitable arrangements to all. Neoliberals show more concern as to how a state benefits overall (absolute gain), as opposed to neorealist assumption to how a state will benefit in comparison to others (relative gain), neoliberal argued that since state are rational actor they would choose the path that benefits to all, more over because of the interdependence nature of international relations, they would choose absolute gains to be made from an agreement or cooperation which could brought potential longer-term gains for all. Though neoliberal institutionalists agreed that states seek their own interests, yet they believe that the benefits from mutual cooperation are far greater than from not cooperating. Neoliberal argued that in order to perform fair and absolute gain from cooperation among the states they must rely on fair and stable institution; this Institutions provide a coordinating mechanism to help states capture potential gains from cooperation. Also cooperation through institutions provides an arbitrary body that is able to provide states with information and mechanism for mutual benefit. On the concert of anarchy in international relations, neoliberalism responds to the neorealist conception of the international anarchy system, while neoliberal does not contest or deny anarchy in international relations but they argued that the projection of anarchy by neorealist is exaggeration. Neo liberal institutionalism argued that other concerns such as globalisation, interdependence international society and rise of international institutions undermine force of international anarchy.

Transactionalist

This approach is mainly propounded by Karl Wolfgang Deutsch, a social and political scientist. Transactionalism believes that an increase in communication can create a security community; such community according to Transactionalist operate in cultural exchange, flow of tourism, political interaction and consultation, media interaction etc which is more conducive medium to foster integration. Transactionalist does not emphasise on the need for formal functional Institution or established body for integration rather social integration is prime (Eilstrup-Sangiovanni,m 2006, p.32). The foremost advocate of this position, Karl Deutsch, contended that integration has two dimensions (Eilstrup-Sangiovanni, 2006 p 29); the first is a process of social integration involving increased of interaction, communication, movement and contact between peoples. The outcome of this, Deutsch suggested, would be the establishment of 'Security Communities' between peoples where the concept of war as a means of settling disputes between peoples would not be necessary. The second stage that could follow from this is political integration (Eilstrup-Sangiovanni, 2006, p.30). The significance outcome is that after establishing the social base of integration it might then be feasible to build political structures. Deutsch warned against building political structures before the requisite social base being established. He suggested that moving too quickly to develop a political solution could actually increase the likelihood of conflict (Eilstrup-Sangiovanni, 2006, p.30).

Overview of the Study

Rationale

Despite having many commonalities and shared miseries among the South Asian countries, there is always lack of strong common platform to engage and to prosper together in this region. When SAARC was formally established in 1985 many were hopeful and expected from this body that it could fulfil many aspirations of this region however after a long pace of it journey confronted with many differences and reluctance

nature from its members countries, made SAARC a body of fewer success outnumbered by various failures, many policy makers and intellectuals are suggesting numerous reason for its failure and also suggest many possible mechanisms to strengthen the existing body, on the another side of misery to South Asia is the environmental problems in this region and need for speedy collective intervention from the South Asian countries, this effort to mitigate and to ease environmental challenges in South Asia is not feasible or not a volume of work for one single country unless they come together and work collectively. As most of the core environmental issues in this region is trans-border and also effect more or less to each one of this region's countries because of geographical proximity, similar pattern of economic and social behaviour etc. The rationale to choose this research area is to engage both of these problems simultaneously and find out a common possible space for SAARC cooperation.

Scope

The scope of this research is limited to SAARC and environmental challenges in South Asia with exception to some areas of general theoretical works on regionalism. The reason for need to study general theoretical study is to provide insights for this research proposed. For SAARC case, this research studies the historical evolution, main phases of SAARC journey, its objective, challenges, it commitment toward environmental concern and other core areas. On the environmental related realms of this research it will limit and centre on the general environmental challenges and problems in South Asia. This research deals with major environmental concern consisting broadly the core areas where all the members states of SAARC are facing with lesser emphasis on particular member country as this research paper perceive environmental problems in South Asia as a core threat affecting all member countries. Core to this research work will be the emphasis on how to forge together two issues of SAARC's limited space for cooperation and environmental challenges in South Asia. Providing environmental challenges as an urgent call for all the members of SAARC to engage rigorously and compromise on their differences for commitment toward collective cooperation strengthening the existing body at the same time it also serve the purpose of healing the fundamental problems of

environment in South Asia. This research scope therefore will concentrate on South Asia's two core issues of problems and challenges for SAARC's projection and it function as regional body responsible to looks after the south Asia at the same time how to ease and engage the emerging environmental challenges in south Asia forging these issues together in which engaging environment challenges in south as a platform for all SAARC countries to actively participate in SAARC cooperation hence to accelerate the cooperation to serve two goals.

Research Questions

- What are the core environmental issues in SAARC region?
- How far can a common environmental agenda for SAARC ease the differences among the SAARC countries?

Research Objectives

- To identify the core environmental problems in South Asia.
- To examine SAARC's institutional mechanisms for addressing environmental problems.
- To check whether there can be a meaningful cooperation on environmental issues despite the differences among the SAARC countries.

Research Methodology

The research study follows an analytical and descriptive method. It uses secondary literature including articles in refereed- journals, books, news report, e-resources for data collection. The researcher also collected documents, statements, report, and each country's data.

Chapterisation

Introduction: This section highlights theoretical writings and general theory of regionalism, regional cooperation and regional integration. It also provides the overview of the study. The rationale and scope of the study, the objectives and the research questions are also highlighted in this section.

Chapter I: SAARC: Historical Account, Problems and Challenges: This chapter examines the origin of SAARC, its historical context exploring its main objectives and broad journey of SAARC as a regional body. This chapter also highlights problems and hurdle in the functioning of SAARC.

Chapter II: Environment as Major Issue in South Asia: This chapter studies the major environmental issues confronting the SAARC countries as whole. The chapter treats major issues of environment which affect two or more countries in general.

Chapter III: Engaging Environmental Issue: Towards a Common Agenda for SAARC.

This chapter focuses on SAARC's institutional mechanisms and initiatives regarding the environmental issues in SAARC region, examine the existing mechanisms and how far it is effective to confront the environmental issues, its future plan and critical analysis of SAARC role and its prospect to deal with these issues.

This chapter also examines and explores the prospects and possibility of environment issues providing a common agenda for SAARC cooperation. This chapter addresses how far environmental cooperation can possibly spill over to other spheres of cooperation. Most of the regional cooperation is mainly centred on the political and economic cooperation, so this chapter explores the prospect and limitation on cooperation based on environment and how far it is suitable to South Asian region.

Conclusion: This section sums up the study and tries to provide answers to the research questions posed.

Chapter I

SAARC: Historical Account, Problems and Challenges

Late 1980s turned out to be experimental uprising of a new regional wave in South Asia. The shared historical tradition with rich socio and cultural ties, various common natural resources, shared ecological circle of mountains, ocean and rivers collectively make the South Asian region. This region is also home to aged old civilization. The region exhibits a close geographical region with various commonalities and shared entities. All the states of this region experienced the British colonial rule and its exploitation. India, Pakistan, Bangladesh and Sri Lanka were under British imperial rule. Though Afghanistan was not under direct rule but it was reduced as a buffer state between British imperialist and the former Czarist Russia. On top of these, the South Asian region constitute a shared coherent environmental region with a conjoint ecological cycle of shared rivers, ocean and mountain system.

The South Asian Association for Regional Cooperation (SAARC) emerged in 1985, amid uncertain and challenges from various issues and problems ranging from colonial exploitation, flaw in democratic distributions, slow economic growth, high illiteracy, and rapid high population and uneven and instable political situations in South Asia. The foremost formal initiative to establish a regional organisation in the South Asia was initiated by then president of Bangladesh Ziaur Rahman, after such initiative, the regional organisation which later named SAARC was formally established in 1985, during its first Summit in Dhaka, Bangladesh (Sharma 2002, Dwivedi 2008, Das 2008). Prior to its formal establishment, the idea of regional cooperation in South Asia was discussed in at least three conferences; the Asian Relations Conference in New Delhi in April 1947, the Baguio Conference in the Philippines in May 1950, and the Colombo Powers Conference in April 1954²(Malik 1993). Originally established by seven countries comprising Nepal, Pakistan, Sri Lanka, India, Maldives, Bangladesh and Bhutan, the main objectives of this

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²Hafeez Malik, (1993) *Dilemmas of National Security and Cooperation in India and Pakistan*, New York: St. Martin's Press. cited in Muhammad Jamshed Iqbal (2006), "SAARC: Origin, Growth, Potential and Achievements" *Pakistan Journal of History & Culture*, Vol.XXVII/2:p 131

regional organisation are promoting peace, stability, amity and progress in the region through strict adherence to the principles of the United Nations Charter and non-alignment, particularly respect for the principles of sovereign equality, territorial integrity, national independence, no use of force and non-interference in the internal affairs of the other states and peaceful settlement of all dispute (Secretariat 1985).

Since its inception, SAARC has been trying to address several regional concerns, grievance and endeavours to harness regional potential in various areas which are deem beneficial to all the member countries. For instance, SAARC attempted to establish economic cooperation under the initiative of South Asian Economic Cooperation (SAEC) in 1993. The SAARC member countries agreed to ensure greater benefit through economic cooperation by signing the South Asia preferential trade agreement in 1993. Under this initiative, member countries agreed to accelerate the cooperation enabling preference trade and concession on the mutually agreed areas of trade and commerce. More recently, SAARC attempted to bring the member countries under the framework of free trade under South Asian free trade Agreement (SAFTA). The Objectives of SAARC are multifaceted and areas of cooperation comprises of various sectors and areas. The charter provided for a standing committee and a number of technical committee as to expand cooperation including formulation of programmes and preparation of project in various sectors (Gupta 2002). In august 1983, The foreign ministers of South Asian states at a first meeting in New Delhi, adopted the Declaration on South Asian Association for Regional Cooperation (SAARC), the Seven leaders representing the Seven states of SAARC, agreed for cooperation in the five areas namely; (1) Agriculture and Rural Development (2) Science and Technology, Telecommunications and Meteorology (3) Transport (4) Human Resources Development and (5) Health and Population Activities (Dwivedi 2008). At present SAARC has increased the areas of cooperation up to 16 areas comprising of agriculture and rural development, biotechnology, culture, economic and trade, education, energy, environment, finance, funding mechanism, information, communication and media, people to people contact, poverty alleviation, science and technology, security aspects, social development and tourism.

"South Asia": The Evolving Concept of South Asia

The notion of 'South Asia' as a region is generally shaped through two approach first the top-down construction of a series of political and economic institutions, second the notion of south Asia shaped through bottom-up construction encourage by sentiment of belonging, generally expressed in the form of practices and in mental consciousness. Exhibition of mention broad characteristic of South Asia can be describes first cultural identity, expressed with it distinct 'civilizations' this aspect of stimulating the mental and emotional affinity clearly exhibits in the case of south Asia, for instance the affinity between the Bangladesh and the India's state west Bengal served a sufficient account, though this part is today politically separated by the demarcated state boundary but the aspects of collective emotional and mental belonging continued to exist, one cannot deny the emotional and historical linkages between Pakistan and India, specially the peoples of this part shattered by partition and modern erection of political fence, the linkage among the Sri Lankan Tamil and Indian Tamil is well known fact, many literature and mythology belief express the centuries old historical linkages between Sinhalese and modern Indian part of Bengal and Odisha (Chowdhury 2016)³. Second is the role of British colonization, laid the foundations for a mental and structural representation of the region in the world, through its administrative convenient, through its unification policies, helped in evolving the idea of south Asia, unintentionally or intentionally. Third is 'South Asia', has been characterized by a tragic history that witnessed British

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³ "Many Researches have shown that the Sinhalese, the majority population of Sri Lankan might very well have descended from inhabitants of ancient East India. According to the "Mahavamsa", arguably the greatest chronicle of Sri Lanka, narrates an episode that marks the origin of the Sinhalese people. As per the mythological record, the foundation stone of the Sinhalese community was laid by King Vijaya who had travelled there from North-West India in 543 BC and founded the first Sinhalese town by the name of Tambapani. One of the murals at the Ajanta caves carries an elaborate depiction of King Vijaya's travel to the Sinhalese town". Appear in Indian express: Adrija Roychowdhury, "Yes, the Sinhalese have their origins in Bengal, Odisha" [http://indianexpress.com] accessed on 29 December 2016 URL: http://indianexpress.com/article/research/yes-the-sinhalese-have-their-origins-in-bengal-odisha/

colonisation and partitions attributing the shared grief of 'region'. Fourth is the role of natural contagious geographical aspect, making intra regional flow of people.

Working Structure of SAARC

The Council

The real decision making power rest in the hand of the heads of states called the Council. This council represented by the heads of the government of the member countries is crafted in the top structure. The council is the apex policy making body and they meet once in 2 years.

Council of Ministers

This is the second tier of organisational structure of SAARC. It is represented by Foreign Minister of the respective countries it generally assist the council. *The Council of Ministers*, comprising the foreign ministers of member states, meets twice a year and may meet in extraordinary session as and when necessary to formulate policies, review progress, decide upon new areas of cooperation, and establish additional mechanisms to carry out SAARC's activities (Dash 2008).

Other functional branches of SAARC are standing committee, technical committee, actions committee and secretariat (details are outline in the subsequent section).

Charter of SAARC

Desirous of promoting peace, stability, amity and progress in the region through strict adherence to the principles of the UNITED NATIONS CHARTER and NON-ALIGNMENT, particularly respect for the principles of sovereign equality, territorial integrity, national independence, non-use of force and non-interference in the internal affairs of other States and peaceful settlement of all disputes.

- 2. Conscious of an increasingly interdependent world, the objectives of peace, freedom, social justice and economic prosperity are best achieved in the SOUTH ASIAN region by fostering mutual understanding, good neighbourly relations and meaningful cooperation among the Member States which are bound by ties of history and culture.
- 3. Aware of the common problems, interests and aspirations of the peoples of SOUTH ASIA and the need for joint action and enhanced cooperation within their respective political and economic systems and cultural traditions.
- 4. Convinced that regional cooperation among the countries of SOUTH ASIA is mutually beneficial, desirable and necessary for promoting the welfare and improving the quality of life of the peoples of the region.
- 5. Convinced further that economic, social and technical cooperation among the countries of SOUTH ASIA would contribute significantly to national and collective self-reliance.
- 6. Recognising that increased cooperation, contacts and exchanges among the countries of the region will contribute to the promotion of friendship and understanding among their peoples.
- 7. Recalling the DECLARATION signed by their Foreign Ministers in NEW DELHI on August 2, 1983 and noting the progress achieved in regional cooperation.
- 8. Reaffirming their determination to promote such cooperation within an institutional framework.

OBJECTIVES

The objectives of the SAARC are:

Article I

- a) To promote the welfare of the peoples of SOUTH ASIA and to improve their quality of life;
- b) To accelerate economic growth, social progress and cultural development in the region and to provide all individuals the opportunity to live in dignity and to realise their full potentials.
- c) To promote and strengthen collective self-reliance among the countries of South Asia.
- (d) To contribute to mutual trust, understanding and appreciation of one another's problems;
- e) To promote active collaboration and mutual assistance in the economic, social, cultural, technical and scientific fields.
- f) To strengthen cooperation with other developing countries;
- g) To strengthen cooperation among themselves in international forums on matters of common interests; and
- h) To cooperate with international and regional organisations with similar aims and purposes.

Article II

Principles of SAARC

- 1. Cooperation within the framework of the ASSOCIATION shall be based on respect for the principles of sovereign equality, territorial integrity, political independence, noninterference in the internal affairs of other States and mutual benefit.
- 2. Such cooperation shall not be a substitute for bilateral and multilateral cooperation but shall complement them.
- 3. Such cooperation shall not be inconsistent with bilateral and multilateral obligations.

Article III

Meetings of the Heads of State or Government

The Heads of State or Government shall meet once a year or more often as and when considered necessary by the Member States.

Article IV

Council of Ministers

- 1. A Council of Ministers consisting of the Foreign Ministers of the Member States shall be established with the following functions:
- (a) Formulation of the policies of the ASSOCIATION.
- (b) Review of the progress of cooperation under the ASSOCIATION.
- (c) Decision on new areas of cooperation.
- (d) Establishment of additional mechanism under the ASSOCIATION as deemed necessary.

- (e) Decision on other matters of general interest to the ASSOCIATION.
- 2. The Council of Ministers shall meet twice a year. Extraordinary session of the Council may be held by agreement among the Member States.

Article V

Standing Committee

- 1. The Standing Committee comprising the Foreign Secretaries shall have the following functions:
- (a) Overall monitoring and coordination of programme of cooperation.
- (b) Approval of projects and programmes, and the modalities of their financing.
- (c) Determination of inter-sectoral priorities.
- (d) Mobilisation of regional and external resources.
- (E) Identification of new areas of cooperation based on appropriate studies.
- 2. The Standing Committee shall meet as often as deemed necessary.
- 3. The Standing Committee shall submit periodic reports to the Council of Ministers and make reference to it as and when necessary for decisions on policy matters.

Article VI

Technical Committees

- 1. Technical Committees comprising representatives of Member States shall be responsible for the implementation, coordination and monitoring of the programmes in their respective areas of cooperation.
- (a) Determination of the potential and the scope of regional cooperation in agreed areas.

- (b) Formulation of programmes and preparation of projects.
- (c) Determination of financial implications of sectoral programmes.
- (d) Formulation of recommendations regarding apportionment of costs.
- (e) Implementation and coordination of sectoral programmes.
- (f) Monitoring of progress in implementation.
- 3. The Technical Committees shall submit periodic reports to the Standing Committee.
- 4. The Chairmanship of the Technical Committees shall normally rotate among Member States in alphabetical order every two years.
- 5. The Technical Committees may, inter-alia, use the following mechanisms and modalities, if and when considered necessary:
- A) Meetings of heads of national technical agencies.
- (b) Meetings of experts in specific fields.
- (c) Contact amongst recognised centres of excellence in the region.

Article VII

Action Committees

The Standing Committee may set up Action Committees comprising Member States concerned with implementation of projects involving more than two but not all Member States.

Article VIII

Secretariat

There shall be a Secretariat of the ASSOCIATION.

Article IX

Financial Arrangements

- 1. The contribution of each Member State towards financing of the activities of the ASSOCIATION shall be voluntary.
- (2) Each Technical Committee shall make recommendations for the apportionment of costs of implementing the programmes proposed by it.
- (3) In case sufficient financial resources cannot be mobilised within the region for funding activities of the ASSOCIATION, external financing from appropriate sources may be mobilised with the approval of or by the Standing Committee.

Article X

General Provisions

- 1. Decisions at all levels shall be taken on the basis of unanimity.
- 2. Bilateral and contentious issues shall be excluded from the deliberations.

SAARC Areas of Cooperation

Since its inception, SAARC identifies various core issues and areas of cooperation, some of the important areas of cooperation are discussed below:

Cooperation in the field of Science & Technology

Motivation to cooperation in the field of Science and Technology can be traces back from the SAARC Chapter. Taking the importance of Science and Technology in the South Asian region, SAARC has established a Technical Committee on Science and Technology. This committee focus on important key areas which include strengthening Scientific and Technological co-operation across the region; sharing of Scientific and Technological expertise; Joint research and development and Industrial application of higher Technology. The First Meeting of the Ministers of Science and Technology held in New Delhi on 2008, finalized five-year (2008-2013) Science and Technology plan which include (I) Cooperation in the field of Science & Technology; (ii) Standardization and Laboratory Testing; (iii) Themes for Cooperation; and (iv) Project Development. Various initiatives like seminar on issues such as Renewable Energy, Solid Waste Management, Safe Drinking Water and Rain Water Harvesting was also organised(Dwivedi 2008; SAARC Secretariat 2009 b).

Cooperation in the field of Biotechnology (Dwivedi 2008; SAARC secretariat 2009c)

Cooperation in the field of biotechnology was under the Technical Committee of Science and Technology till 2004, then it was handed over to a working group under the restructured integrated programme of action (RIPA), key programme for cooperation under the Biotechnology include (I) Medical Biotechnology (ii) Agricultural Biotechnology (iii) Environmental Biotechnology (iv) Vaccine Production (v) Nanobiotechnology (vi) Bio-fertilizer and Bio-gas (vii) Plant Tissue Culture (viii) Genetically Modified Organisms and bio-safety (ix) Marker Assisted Selection (x) Bioinformatics (xi) Animal Biotechnology (xii) Genomics and Proteomics (xiii) Nano-biotechnology (xiv) RNA interference technology platform (xv) Stem cell research (xvi) Industrial biotechnology (xvi) Marine Biotechnology(Dwivedi 2008; SAARC Secretariat 2009c).

Cooperation in the field of Education

Education is one of crucial sector in south Asia, since from inception; leaders of the SAARC felt the important of Education sector to achieve the social and economic development in the region. Cooperation in the Education area formally started in 1989 with the establishment of Technical Committee. In 1998, the SAARC leaders decided to include Education in the agreed areas of Cooperation and a Technical Committee was formed to deal the challenges and development of Education in the region. This Technical Committee was re-organized in 1992. The further re-structuring of the SAARC Integrated Programme of Action (SIPA) in 1999 resulted in the creation of the Technical Committee on Human Resource Development. This was reconstituted in January 2004 to deal with matters pertaining to Education, Skill Development, Arts, Culture and Sports. In an important achievement SAARC in the sector of education, it has successfully established the South Asian University (SAU) The First Academic Session of SAU commenced on 26 August 2010. In the recent past, the Governments of India and Bangladesh have offered scholarships, i.e. in the academic years 2008 - 2011. The scholarships have been offered in the following manner: (I) Nepal: MBBS, Masters Degree in Rural Development (ii). India: Indian Council for Cultural Relations (ICCR) scholarships in the fields of Biosciences, Social Sciences, Architecture, Languages, Commerce and Business Administration, etc (iii). Bangladesh offered 01 chair, 04 fellowship and 10 scholarships under various disciplines (Dwivedi 2008; SAARC Secretariat 2009 d).

Economic Cooperation: From SAPTA to SAFTA

Economic cooperation is one of the core areas of cooperation of SAARC. Cooperation in the area of economy and trade is the main objective mentioned in the SAARC charter from its inception. Cooperation in the important area of economic and trade was started following the study on trade, manufactures and services (TMS) which was completed in the June 1991. Subsequently a Committee on Economic Cooperation (CEC) was formed comprising Commerce/Trade Secretaries of the SAARC Member States to formulate and to oversee the implementation of specific measures, policies and programmes within the

SAARC framework to increase regional cooperation in the field of trade and economic area. After the creation of the CEC, regional economic cooperation was formally institutionalized.

In 1993 April, an Inter-Governmental group has formulated an agreement to established the SAARC Preferential Trading Agreement (SAPTA) and this agreement came in force on the December 1995. The key principles of this agreement are: overall reciprocity and mutuality of advantages so as to provides benefit equitably to all the Contracting States, by taking into account their respective level of Economic and Industrial development, the pattern of their external trade, and trade and tariff policies and systems; negotiation of tariff reform step by step, improved and extended in successive stages through periodic reviews; recognition of the special needs of the Least Developed Contracting States and agreement on concrete preferential measures in their favour; and inclusion of all products, manufactures and commodities in their raw, semi-processed and processed forms.

The main focus in the preferential Free Trade Agreement is in their emphasis on reciprocity from the trading blog which implies serving the beneficial interest of all the contracting members' states in the SAPTA. Another important feature of SAPTA is their emphasis on least Development Countries (LDCs) like Bhutan, Nepal, Maldives and Bangladesh. SAPTA's special recognition for these countries is to diminish the fear of trade imbalance from the major economy in south Asia. The working model was to give more concession on the tariff and non tariff to the imports from these LDCs in south Asia.

After South Asia preferential Free Trade Agreement was signed, in a subsequent transition, SAARC leaders resolved to formulate South Asian Free Trade Area (SAFTA). The formal SAFTA Agreement was signed on 6th January 2004 during the Twelfth SAARC Summit held in Islamabad, Pakistan with significant aims towards a Customs Union, Common Market and Economic Union. The main focus of SAFTA are: promoting and increasing Trade and Economic cooperation by eliminating barriers in trade in the

South Asian region, it also aims to promote those conditions to create fair competition in the Free Trade area in this region, so that through such initiatives, members countries could achieve equitable benefits out of the agreed framework of free trade (Gupta 2002; Dwivedi 2008; Secretariat 2009 e).

Poverty Alleviation

The South Asian region has been reeling under the Poverty since from long time despite of their economic growth, among the key task for SAARC since from its inception has been fighting the poverty in this region. Recognising the important for the SAARC platform to address the wide spread problems of poverty in most part of south Asia, in its 6th Summit 1991 resolved to address the alleviation of poverty in South Asia, wherein the leaders of SAARC established an Independent South Asian Commission on Poverty Alleviation (ISACPA). This commission conducted an independent study on poverty experiences of each of the member states in the south Asia, based on the finding from the study, the commission recommended strong conceptual framework to alleviate poverty. This recommendation was submitted to the 7th SAARC Summit. The eight SAARC Summit (1995) New Delhi approved the establishment of the three tier mechanism to address the poverty in the South Asia.

The Ministerial Meeting in New Delhi in 1996 directed the member states of SAARC to create nodal agencies which would work as networking channel to exchange the information and experience on the poverty alleviation in the region. The Eleventh SAARC Summit reconstituted the Independent South Asian Commission on Poverty Alleviation (ISACPA). To strengthen the poverty alleviation endeavour, the SAARC Finance/Planning Ministers, on April 2002 at Islamabad prepared a "Plan of Action on Poverty Alleviation. Some of the key points and emphasis in the Plan of Action are as follows: (1) Good Governance through improved Public sector Management and delivery System, particularly in areas that affects the poor people (2) to provides Sound Macro-Economic (3) To Enrich the concept of Human Development through adoption of Bhutan's Philosophy of promoting 'Gross National Happiness' through equitable Socio-

Economic Development (4) To enhance Combating poverty through promotion of Employment in Small and Medium Enterprises, Micro-Finance Institutions and Tourism sector (5) Expanding social safety nets through schemes targeting the poorest and the most vulnerable by introducing Old Age benefits, Disability Benefits and Benefits on the Death of the Primary Bread Earner.

While marking SAARC Decade on Poverty Alleviation (2006-2015), SAARC Secretaries held the first meeting on August 2006 in Colombo, the said meeting stressed the need for policy prioritization for better utilization of the budgetary resources to help in alleviating the poverty from the region. They agreed to increase effort such as; (1) to deepen propoor orientation of growth process; (2) to enhance investment in human capital; (3) to increase investment in infrastructure; and (4) to improve service delivery mechanism (Dwivedi 2008; Secretariat 2009)

SAARC Development Goals

In a response to tackle the poverty and its challenges in the South Asian region, the Twelfth SAARC Summit in Islamabad held on January 2004, directed the Independent South Asian Commission on Poverty Alleviation (ISACPA) to prepared "a comprehensive Blue-Print SAARC Development Goals for the next five years in the areas of poverty alleviation, education, health, and environment. Subsequently ISACPA Report recommended 22 priority goals to constitute the SAARC Development Goals for the period of 2007-2012 in the mandated areas of livelihood, health, education and environment. Of these, 8 Goals pertain to livelihood, 4 to health, 4 to education and 6 to environment.

⁴ Central Statistics Office Ministry of Statistics and Programme Implementation Government of India (2015), SAARC Development Goals – India Country Report, India Country Report Statistical Appraisal, New Delhi

Core Areas of SAARC Development Goals (SDGs) are given below:

Livelihood SDGs: Under the Livelihood SAARC Development Goals, many important areas of developmental goal are demarcated which include (1) Eradication of Hunger and Poverty (2) Halve within 2010 the proportion of people in Poverty (as per National Poverty Lines) (3) Ensure adequate nutrition and dietary improvement for the poor (4) Ensuring a robust pro-poor growth process (5) Strengthening connectivity of poorer regions (6) Reducing social and Institutional vulnerabilities of the poor, women and children (7) Ensuring access to affordable Justice (8) Ensuring effective participation of the poor and of women in Anti-Poverty Policies and Programmes.

Health SDGs: The health goals are grouped into three: reproductive health and health-care, hygiene and nutrition. The SAARC development goals in the area of health include (1) Maternal health (2) child health (3) Affordable health-care (4) Improved hygiene and Public health.

Education SDGs: Important areas of SAARC Development Goals in the Education sector includes (1) Access to Primary community school for all children, boys and girls alike (2) Completion of Primary Education cycle (3) Universal Functional Literacy (4) Quality Education at Primary, Secondary and Vocational levels ((Secretariat 2009f; Dwivedi 2008, India Country Report 2015).

The fourth Primary Goals of SDGs is in the area of Environment (details are in the following chapter 3).

Constraints and Obstacles in SAARC Cooperation

Envisioning to achieve various regional aspiration, South Asian Association for Regional Cooperation (SAARC) was formed at the time when the world was on the midst of uncertainty from the prolong cold war rivalry. The fate of the South Asian region was also in the midst of deciding moments, in term of expanding population, increased

challenges posed by environment, economic instability, and influences from big power, poverty, illiteracy, ethnic tension, health, political instability in the South Asian region etc. In this context of high uncertainty the South Asian states realised the need to come together to mitigate and address the challenges and fulfil the aspiration of South Asian region. They realised that the challenges and grievances which the region confronted could be better understood and addressed by the peoples of this region. However right from the inception of SAARC, various obstacles and hurdles have been confronted in the realisation of meaningful cooperation. Expert observers on SAARC viewed that this regional body is mainly successful in paper with less laudable achievement so far. Experts are sceptical to consider SAARC as a regional organisation compared to other regional organisation. The head of the Konrad- Adenauer-Stiftung's, SAARC Regional Project Head viewed that "although this Regional Association is of many years' standing, having existed at least as long as Mercosur and NAFTA, can it be deemed to be equally successful? In the eyes of the world it has enjoyed comparatively few real successes since it was founded in 1985" (Konrad- Adenauer-Stiftung's SAARC Regional Project (2011). SAARC cooperation so far is sluggish at its important areas. Expert on SAARC often stressed that discrepancy in SAARC cooperation started even from its charter itself as any attempt to bring dialogue on the SAARC regional platform on the bilateral issue has already shunned as the charter itself forbid to discuss any bilateral political issue. Exclusion of contentious issues from SAARC Charter itself can be considered as selfimposed anomalies. On the one hand, it asks for increased cooperation and exchanges and on the other hand, avoids negotiations on bilateral disputes .It further stressed that SAARC's charter which made decisions to be taken unanimously is quite difficult to achieve in the case of south Asia so the charter itself denies the true purpose of the organization" (Shaheen 2013).

Equal and fair treatment of all the member state's problem and issues is key driver to the successful construction of regional bloc, however in the case of SAARC the issues and agenda are largely dictated by India and Pakistan's choices and bilateral relations. Most often cancellation of Summit has been largely because of the hostility between the two states. Consequently the smaller states have lost faith in the long run. The bitter political

differences in South Asia have always constituted a major impediment toward meaningful cooperation. Though no regional organisation is free from differences among the member states however when these differences crossed beyond the limit then it affect over the proper functioning of Organisation and this situation is happening in the case of SAARC. The interstate conflict and mistrust poses a big impediment in SAARC cooperation. Both Pakistan and India the major player in SAARC have remained hostile neighbours since from the days of Partition. This difference between the countries even reached to the social psyche and their mindset. Suspicion and trust deficit between the two countries is going to linger even in the coming decades. Prime issue like the Kashmir dispute is not going to ease any time soon.

Any likely positive prediction on India Pakistan bilateral relationship in near decades could at any time turn out to be wrong prediction. The strain in their relationship is even embroiled in the sport, as witnessed, both the countries has withheld playing tour cricket matches. As of 2014, SAARC has failed to hold 11 Annual Summits since its establishment mainly due to political reasons. South Asian region is one of the volatile and delicate regions because of Inter-state conflict and difference. Interstate relations are quite often hampered by bilateral differences among the south Asian states.

Bilateral difference between India and Sri Lanka has also witnessed uncertain situation at many times largely because of the Tamil-Sinhalese civil war in 1980s. Apart from the interstate conflict, there is a concern for structural imbalance, particularly out of the fear of Indian hegemony, often made the smaller states in SAARC to seek the external help to maintain a check and balance status in the South Asian region that has often come up at SAARC regional Cooperation forums. Ahmed and Bhatnagar (2008) and Dash (2008) argued that "the fear was the motivation of member states in becoming a part of SAARC body in the beginning; Nepal joined SAARC with the hope for getting opportunities to voice its most important concerns, most of which are related to India. Also Nepal wanted multilateral cooperation rather than a bilateral arrangement with India, especially in water-related conflicts. Bangladesh had serious concerns of sharing Ganges water with India, therefore Bangladeshi hoped to seek solutions in the SAARC platform to address

the Ganges water issues and similar issues through the SAARC platform. To assert their bargain and negotiation power, military and civilian rulers, Bangladesh have often sought external help from the United States, the United Nations, and member countries of the Organization of Islamic Conferences (OIC) to resolve the differences with India. During the early 1980s, Sri Lanka was initially hesitant to join SAARC, considering its greater and favourable economic ties with South East Asian Nations. However, Sri Lanka's internal conflict compelled her to join SAARC with the hope of getting help from SAARC as a multilateral platform. Pakistan joined SAARC to further strengthen its ties with other South Asian states, which would, in the long run, help to counter India's influence in the region' (Dash 2008).

In the set up for regional organisation the role of hegemon or big state that can command and have the will to lead, often plays an important role. For instances in EU, Germany played an important role in strengthening the European Regional Organisation, also in the case of NAFTA, the US played a crucial role. So when it comes to south Asian regional setup, India position as a dominant state, bestowed with strategic geographical position, dominant position in terms of its economy, size, and GDP, population, and military capability, stable political rule has been hopeful hegemon that could command the organisation. However despite its dominant position in South Asia, India could not translate to lead the SAARC toward a successful regional organisation.

There is the persistence fear of Indo-centric phobia in the region . The bilateral issues in South Asia often hamper the progress in SAARC cooperation. This is not only the case of India and Pakistan. The case of Nepal and India relationship, which is considered to be friendly, cannot be taken for granted, despite the fact that both states signed a peace and friendship treaty back in 1950s, the relationships of these two states can shift into unpredictable situation. The recent turmoil in Nepal in the run-up to the amendment in the Nepali constitution, and the follow-up Madhesi movement in Nepal has led both the countries to uneasy relations for months. In most of the cases the bilateral issues in South Asia is not only in the diplomatic level but very much rooted in the domestic configuration. The promise of maintaining peace and stability in the South Asian region

through SAARC by sidelining the bilateral contentious issues has not able to foster peace and progress.

Ethnic politics in South Asian region is one of the most complex issues as South Asia is home to one of the world's most ethnically and linguistically diverse region. In most of the South Asian states, cross border ethnic ties is quite common, in which ethnic communities in all states of South Asia have close affiliation with their kinship ethnic group in neighbouring states. This aspect of ethnic relations in South Asia has also poses negative implications on SAARC's progress directly or indirectly. As a common phenomenon in South Asia, ethnic conflicts in one state tend to seek support from the same ethnic groups in neighbouring state, which ultimately led to the rise of cross border ethnic sub nationalism in South Asia. For instance, the Madhesi movement in Nepal, the Tamil issues in Sri Lanka. In many cases, blame game is quite common resulting into a severe diplomatic strain wherein South Asian states blame one another for assisting separatist movements or blame for instability on its soil. Since from the partition, India have been accusing Pakistan for encouraging separatist movements in Kashmir and Punjab, while Pakistan also blames India for the separatist movements in Pakistan's Sindh Province and North west frontier province (NWFP). Sri Lankan Government too blames India for its support of the Tamil rebels. Bangladesh blamed India for assisting separatist movement in the Chittagong Hill tract, while India accused Bangladesh of supporting Insurgent groups in India's North Eastern states. These blame and counter blame consequently severe the effort to maintain peaceful cooperation in SAARC region. Important observation is that confidence building deficit in South Asian region is not only pertaining to Inter- government level, antagonism and mistrust is also present on People to People relations in this region. Despite the tall claims and declaration during its Summits for fostering the People-People contact in SAARC region, no significant improvement is visible.

One of the important common platforms of regional integration and cooperation in the world is in the area of economic and trade. Economic cooperation and trade liberalisation in South Asian region is one of the earliest promises that the member states have

unanimously taken. However, SAARC has failed to transform into a free trade and economic integration. Most of the South Asian states conduct their trade agreement through bilateral level rather than through common channel of SAARC platform. Trade between India and Pakistan is most often held hostage due to political rivalry. Cooperation in economic sector through SAARC framework and agreement has little achievement. In 1995 New Delhi SAARC Summit, the member states agreed to establish South Asian Preferential Trade Agreement (SAPTA), under this economic cooperation, the member states agreed to permit selective set of goods and commodities that can be traded freely in any of the member states in a unanimously agreed import duty however this flow of selective concession trade and commerce items has less impact to transform into major changes in the sphere of economic cooperation in SAARC. Traded commodities in South Asia show that India's export and import baskets are highly diversified as compared to smaller countries of this region. Also India's scale of production is comparatively high because of its vast domestic market and partially to meet the export. Except for India and to some extent Pakistan, other South Asian countries export primary commodities and labour intensive manufactured goods. As a result complementarities trade could not be developed Nanda & Bhattacharjya 2011p 256-257).

In 2016, SAARC Finance Ministers' Conference in Islamabad which was called to discuss important issues including the regional economic integration and South Asian Economic Union (SAEU) was less fruitful as India's Finance Minister has not attended due to diplomatic strain between India and Pakistan. Beside these long chains of obstacle there is another vital problem in south Asia related to poor connectivity, despite of their advantages for geographical proximity, the South Asian region faces major poor connectivity, which ultimately hampered in Regional economic cooperation.

Thus, despite various similarities and shared entities among the south Asian region plus the region's peculiar advantage for early realisation of regionalization, SAARC couldn't transform toward building a formal regional organisation. Various situations and differently situated circumstance held responsible for lack of fostering regionalization in

south Asia; prolonged ethnic polarisation by colonial forces through the divide and rule policy has impinges all over south Asia, creating a mistrust among one another across the region which led to hamper toward building confident among one another, Most of this region's states was reeling from the post colonial restructure in multiple dimensions ranging from socio-political factors, almost all the state in the early post colonial south Asia was in deep scar to formalised a stable political establishment. There is immense structural asymmetry in terms of Population, Economy and Military might which the major state India and Pakistan enjoyed, also the matter of concerns for smaller states in south Asia was in terms of geographical areas in south Asia, this region is often considered as Indo-centric as India is at the centre of the South Asian system, sharing frontiers with every country in the region. While all the countries in South Asia share borders with India, none of them shares borders with one other except for Pakistan and Afghanistan It occupies over 3,288,000 square kilometres, which is four times larger than the next big state in South Asia –Pakistan(Dash 2008).

This asymmetric structure in south Asia made the smaller states fear from the formal cooperation as they are sceptical from the dominant states especially India and Pakistan. The economic disparities relations in south Asia is also importance parameter of obstacle in the realisation formal cooperation, apart from the discussed above, SAARC members have Sharp disparities in per capital, disparities in growth rate. Many of the core issues from the long time are still persist such as mass poverty, constant food shortage, wide disparities, under utilization of resources which make the pattern of development in south Asia plunged under development (Sharma 2002). A core concern that has been engulfing in south Asia is that the smaller states could not convince the promising beneficial angle from cooperation. The international situations such as super power rivalry had directly or indirectly hampered in realisation of south Asian regional organisation, during the cold war two major states; India and Pakistan was inclined toward the two super power. Such contexts made the region less conducive in the larger realisation of regional progress.

Conclusion

The impressive rise of regional cooperation/regional awareness in the post 1980s which also marks the period for end of cold has been one of the most important developments in the world. On the other side there was significant rise of globalisation that constantly challenges the regional policy makers. Renewed and newly established regional cooperation and regional awareness was seen especially in the case of Europe, Asia, Middle East and Africa. Such resurrection of regional cooperation and regionalism mark a massive shift from the previous periods (1950s-1960s periods). Such rise of regional cooperation and renewed interest in the regional arrangement in the late 1980s is linked to various factors and development in the world. End of the cold war and comparative changes in the super power rivalry in the late 1980s combined with the disintegration of Soviet Union set the conducive and favourable atmosphere to freely concentrate in the regional cooperation especially to those states previously chained by the super power rivalry. Beside this development, renewed interest in the regional cooperation was accentuated by the increasing situation of interdependence and rapid globalisation. Regional planners realised the importance of cooperation to tap the potential of mutual interdependence. Such developmental led to the change on regional trade and economic policy. Such surge in the regional awareness reached out to the far flung region which was not so interested earlier. In the developing South Asia the regional planners were keen to develop and harness the emerging potentials. However right from the beginning, regional planner in South Asia foresaw that creation of regional platform is not going to be an easy task. The atmosphere in which South Asia Association for Regional Cooperation (SAARC) was established was not much in the line of mutual interest, though one cannot deny the fact that regional planner at that period understood the challenges this region faces, the challenges to tackle the emerging issues such as economic, health trade, education, environment etc. They also understood the prospect from the fair regional arrangement. Unlike the Europe case, states in South Asia have been deeply rooted in the line of colonial configuration, the same ethnic divide, the same religious tension, similar political differences which continued to cripple even in 1980s (which many of such similar trends are continued even today). The South Asian

Association for Regional Cooperation (SAARC) from its inception has seen confronting with various challenges. Though the aspiration of this region to have a regional organisation was fulfilled in 1985, concerns remained as to how far this regional organisation can come along. Many experts on regional arrangement view that despite the naturally given advantages such as geographical proximity, cultural and social affinity that dated from centuries, this Organisation has not able to fully tap the opportunity. Widely agreed assessment on SAARC gives the clear view of slow and ineffective functioning. Sources for such obstacles and inefficiency come from within the member states as well as from the institutional flaw. Key areas of constraint include their lack of commitment to the institutions, mistrust and sense of insecurity from one another, over emphasis on the bilateral differences. On the other hand, some of the key sources of constraint originated from the SAARC institution itself, the vital guiding component of this institution is the charter that outlines the overall principle and objective. This charter right from the beginning forbids discussing or entertaining the bilateral issues of member states. Since the charter clearly took away the opportunity for dialogue in the regional platform, the future prospect for addressing this core issue in the regional level remain uncertain. In addition to this, it is argued that most of the decision and policy made by the SAARC are non-enforceable as they often use the terms such as 'recommended', 'suggested'. So far most of their decisions are not mandatory and not abiding in nature which makes the respondents least bothered or in most of the case it failed to translate into actions.

A close examination of SAARC constraint and impediment hinted that the problems mostly emanated from the political set up in South Asia, say for example in the case of India and Pakistan, the political elites often projected the big fear of cross border military threat. Such over creation of fear from the neighbouring state, subsume and supersede the real challenges that this region confront. The matter of fact is that South Asian states see the potential from the cooperation in the region but they cannot channelize the proper way in which it can be translated into action. They generally fail to commit whole heartedly wherein they mix the approach of both the engagement for bilateral and SAARC together. However the speculation on why South Asian state resolved to

cooperate in the 1980s remained complex. It is not to deny the series of effort made since the 1950s when this region was formally structured after the colonial exit and formal initiative from the then President of Bangladesh Ziaur Rahman. The possible and most likely reasons and motivations could be external factors such as change in the world political configuration in the 1980s, especially the reconfigurations of super power rivalry. It is also important to note that 1970s and 1980s witnessed an acute balance of payment crisis in the world and South Asian countries were not an exception. Besides, there was strong pressure for opening domestic markets of South Asian states to integrate in the larger capitalist economy that had rapidly spread all over the world; there was overall new development and change in the political leadership in the South Asian countries that encourage the democratic ethos of accommodative policy and rational decisions.

It is worth notable to reflect that the proposal to formally establish SAARC came from the smaller states. Their motivation could be understood from the line of containing major power in the South Asia, all the smaller states of South Asia (though they have differences and self interest) were more enthusiastic and keen for regional cooperation as compared to Pakistan and India. This hinted us that the complex set of interests among the South Asian states was clearly exhibited. Many experts on SAARC view that the initial attempt by General Ziaur Rahman who came to power in a military coup after overthrowing elected civilian ruler of Sheikh Mujibur Rahman was to establish the legitimacy of his regime both from the domestic and from external. On the other hand major states like India and Pakistan were more sceptical to SAARC establishment earlier because of the fear of curtaining their dominant position in the region. India's scepticism was partly from the fear that smaller states with together might bargain the bilateral issues through the institutionalised SAARC platform. In fact this is the reason why India wanted to agree to join the SAARC on the following changes: to make SAARC institutional decision body in the line of unanimity at all aspects, exclusion of bilateral and contentious issues from the discussion and deliberation formally in the SAARC platform. Pakistan also felt the similar scepticism on the SAARC, their main concern was the fear for Indian domination, they viewed that through functional operationalisation of SAARC; India could stand on the advantageous position such as free trade and market access as they viewed that India's enormous trading volume could minimise their trading capability. In brief, since its inception the motivation and interest are largely dictated by the individual self interest of the respective states. Members state lack in the collective genuine interest for cooperation.

Many experts view that the announced policy and programme are unable to translate into actions. Lack of time bound promises over numbered the real success. Although South Asian states have progressed in many aspects in social and economic condition, such progresses are made through the endeavour of individual state. Another impediment is the huge gap in the connectivity in this region; this reference of connectivity is not only concerned to the physical connectivity. SAARC need focus on how to bring emotional and mental integration. Role of civil society is very much important. So far the involvement of civil society in the SAARC platform is negligible. The future course of SAARC will largely depend on how the eight countries respond to the multiple issues.

Chapter II

Environmental Challenge as Major Issue in South Asia

Often regarded as the commonwealth of the planet, the natural environment consists of "Abiotic" components such as Sunlight, Water, Air, Precipitation, Weather, Climate etc and the "Biotic" living components includes Human Being, Animals, Plants, Microbes, Organism etc. However, human being's uncontrolled greed, ever increasing population, massive deforestation, excessive use of modern technology have caused tremendous Pollution, Degradation and Depletion of Environment in an unprecedented degree. Etymologically the word Environment came from the French word "Environ" which mean "Encircle". The existence of environment is not static as it changes from time to time and from one place to another but from the very recent time since from the last nearly 200 years, rapid industrialisation followed by human population expansion have increased activities of environment exploitation. Sudden massive distortion of natural balance of environment has caused tremendous threats to all living creatures as many of these creatures cannot adapt to its sudden change which led to extinction of numerous creatures. South Asia is not an exception but rather this region is facing tremendous effects of environmental problems. This region according to World Bank (2013 a) is home to approximately 1.67 billion populations, growing at the rate of 1.31 percent per annum, with limited space of only 4.8 percent of the world's total land area. Because of its physical size and proportion, the region often is called a "Subcontinent".

This region is a great landmass bounded by towering mountain ranges of Mount Everest and vast water body of the Indian Ocean. This region which is reeling under various problems such as political unrest, ethnic unrest, boundary dispute, alarming poor and illiteracy rate, economic disparity etc is also seriously confronted by environmental related issues. Such issues needs for collective effort to address, whether states want it or not, environmental issues cannot be taken as granted because environmental issues affect its Population, hampered Development, create Conflicts in nutshell the very existence of this planet depends on natural environment. Such issues and challenges are equally important for South Asian region too, because all the states in this region are still in the

developing stages, millions of South Asian depends directly or indirectly on the environment every day. On the other side due to lack of knowledge and other compelling circumstance millions of South Asian is seriously vulnerable from the environmental degradation and related harmful impacts. Such challenges could only be tackling through collective efforts. The south Asian states is comparatively slow in addressing the environmental issues largely because of its necessity to maintain the momentums of economic growth, to maintain the productions, but the situation of environmental issues in south Asia is from multiples dimensions the any delay would causes tremendous undesirables impact. In the regional level SAARC has taken up the environmental issues from its inception; however there is lack of coordination and commitment from the members' states. Environmental issues in south Asia needs urgent and collective action among the states, apart from addressing the core issues of environment in the South Asian region, The engagement in problems and issues of environment at the regional level of SAARC has many advantages over other contentious issue like political dispute, economic asymmetry, ethnic dispute, disarmament etc. the comparative advantages is because of the fact that it is least contentious area and also the issues and problems is matter of concerns for all the members.

This chapter deals the main environmental related problem and how far it affects the south Asian region in general. This chapter argues that since environmental issue is aggravating in alarming degree affecting all the member countries of SAARC, so there is potential/most feasible atmosphere where member countries could collectively cooperate in this least contentious but seriously affecting issue. Cooperation in this area have the potential to subdue other contentious issues in south Asia whereby SAARC's model of cooperation have the potential for an inspirational alternative type of regional cooperation (as most of the regional cooperation centred around economic and political regionalism). Environmental issues become a serious issue of this region in the recent past, the issues of economic stagnant, migration, direct threat to human existence, threat to sources of livelihood; serious health complication, displacement etc are more or less interlinked with environmental problems. The core environmental issues of South Asian region are generally climate change, water scarcity and fresh water degradation, deforestation and

biodiversity loss, land degradation, depletion of marine life, atmospheric pollution, shortage of drinking water, frequent flood and drought, rise of temperature, glacial melt etc.

Environmental Ethic

Whether we realised or we fail to realised, we the human being owed our everyday life to nature and it environment, from the birth till death we depends on environment for our very existence. Ever imagine being without air, without water. We often bother less that our very existence depends on environment. Nature provides us all the necessary things that we need from the material needs to emotional needs. The natural ethical and moral question is that; don't we have any moral and ethical responsibility toward the environment for supporting and sustaining every fraction of second in our life. Our biggest mistake so far is our inability to appreciate and acknowledge the eternal generosity of environment, our greed for materials satisfaction and our ever increasing wants always make us blind from our moral and ethical obligation, which we owed to the environment. In order to understand the human environment relations and to help us in understanding our obligation toward the environment, we must understand environmental ethics distinction between instrumental value (serving as a means) and intrinsic value (Stanford 2015). In a simple equation our understanding of the relations between environment and human being in the light of instrumental value is that we valued environment as means to further some other end (our needs) whereas the our understanding in the light of intrinsic value of relations between human and environment is that we valued the environment as ends (essential itself) regardless of whether they are also useful as means to other ends. For instance, trees have instrumental value for human being as we use them in various ways, so use of tree is a means to survival for the human being, this is what we normally think and do, when we talk of conservation of environment we often see the reason from the view of environment as our needs. However, it is most often failed to understand that trees have value as ends in themselves. The things that we get from environment has it value and it has own right independently of prospects for serving the ends of human needs. It is important to understand

environment's possession of intrinsic value; such understanding would automatically bring obligation and moral duty on the part of human being to protect it or at least refrain from damaging its value.

While thinking about the future of environments and its issues, People have always had uncertain and mix feelings about the future. This may be partly because of our inability to tackle the present issues itself, partly because of our main concerns on the present, but what we need to understand is that what we do in the present will have great impact on the future. We may be there at that future or we may not be there but our obligation is not just for our self, as we have the responsibility of our present at the same ways we also have the responsibility for the future, this is the reason why we need to spend our time in order to prepared the plan and action, not only for our own personal related future but also for the our descendants human and others living being's live. Our present intervention and thoughtful actions will have a profound impact on our future generations.

We have in present, the capacity and moral duty to affect the lives of future generations in many ways. Our actions in the present generations will have a negative and positive impact on the future generation directly or indirectly. Many of the consequences of our actions on the environment may not be reflected in the nears times or even many of our present action will take years to surface, but one thing for sure is that our actions in relation to the environment will definitely have consequences in the future. for instance, in a given situation in which forest are clear for the establishment of industrial plan, this action may not bear the consequences for some years, we may not sure of what kind of consequences that may occur in the future but it will definitely have the consequences at any time in the future, those consequences could be global warming, rise of temperature, drought, glacial melting, or many others environmental consequences which the generations in coming will face. It is important to understand that the present environmental issues and problems is not the outcome of previous day or previous one years but this is the cumulative consequences of years and century long past deed. So learning from the past and present, for the sake of our generation in coming, our vision

and action should focus to limit the severity of its effects by curbing excessive intervention in the environment. We ourselves in present time already experiencing the consequences of global warming, threatening the very existence of our life every day, measured to tackle need perhaps for generations, for these to be reversed.

Our right steps or a right action produce huge impacts. Our attempt to bring the light for future people may be small or negligible in quantity but that same attempt when combine with the actions of others to the same causes could make a valuable significant difference for future. Because our every right and good intended attempt for the future carry profound moral worth.

As we take the responsibility for future generations, it is important to understand on how significant it is when we collectively do something good for our future generation in regard to environment. It is very much important to bear in our mind and heart that our collective effort in any form is our responsibility and our obligation.

In the region of South Asia, human relation with nature and its environment is not just the material benefit that we get. People of South Asian region, since from the past has a sacred spiritual bonding with the environment. We have seen in many part of South Asian region where people, still continues to follow the tradition of worshiping the natural environment. For many, environment is also a cultural asset, we have came across various environment related protest and people opposition to protect the natural environment which they have the ancestral, cultural and spiritual affinity. "In India, and many others part of south Asia (as also practices in others part of world) various communities and group practice different forms of nature worship since from the time immemorial⁵. In this tradition generally peoples considered forest, mountains, rivers, lakes and other natural asset as the spiritual sources as well as life-giving natural resources, also known as sacred groves. Groves are rich heritage of south Asia and hold an important role in religious and socio-cultural life in various pat of south Asia. According to a book; sacred groves in India, there are estimated 23,018 sacred groves in

⁵ Many oral story substantiate this argument

India (Sacred groves in India 2007). In the recent past peoples' movement and protest for environment protection has increased because of the increase in the environmental exploitation for building Dams, Factory, Industry, Mining and other human activities, the environmental issues at various point of time has seen translating in the form of resistance. Various movement and protest were aimed at protection of forest, mountain, rivers, lakes from the exploitative deforestation, and mining, building Dams, river contamination and exploitation of environmental space which are worshiped or regarded as local deity or ancestral place. Apart from mentioned above reasons, there are also others reasons for people resistance such as many of the resistance is against the building of Dams in the seismic zone. Appiko movement, Narmada Bachao Andolan, the Tipaimuk Dams movement in North East India, the Silence Valley movement in Nilgiris Plateau, the Teesta movement in Sikkim, Niyamgiri movement, protest against the Coca Cola Plant in Plachimada are some of the peoples' resistance against the exploitation of natural environment in India (Clear IAS 2016).

In the neighbouring Himalayan state Nepal, various protest and movement were occurred to protect forest, protest against the building of dams, some of the environmental movement in Nepal are Protest against the Kali Gandaki Hydroelectric project, protest against the building of Dams on the river Koshi in the Himalayan foothill that threaten like downstream flood. In Bangladesh widespread protest and clashes witness against the Rampal coal-fired power plant near the Sunderbans a world heritage site in Bangladesh which is also the world's largest Mangrove Forest. In 2006 large numbers of people protest in the Phulbari Sub-District in Bangladesh against the open-pit coal mining project which threaten the homes, agriculture land and divert water to the mining. In 2016 fishermen and environmental activist protest against the controversial Colombo Port City Project, which could displaced about 50,000 families. some of the other environmental movement include the resistant against the building of Kothmale Hydro Electricity Power Station, Eppawala movement against the privatisation of mines, protest against the Venigros gloves factory in Nadungamuva that pollute the water sources. Internally displaced people in Santhosapuram in Sri Lanka protest against the Sampur coal power plant that threatens the livelihood and environment of the surrounding areas. In 2015

several environmentalist groups in Sri Lanka protest against the deforestation of the Wilpattu national park.

Major environmental problems confronted by countries in south Asia are briefly provided below based on the handbook report published by South Asia Cooperation for Environment Programme:

Bangladesh: Bangladesh faced many environment related issues like population density and poverty; unplanned human settlement; unplanned urbanization and industrialization; increasing population density; natural disasters (cyclones, flood etc.); global warming; faecal pollution; forest depletion; loss of habitat or endangered species; declining fish catch; shortage of drinking water; sea level rise; solid waste management; water pollution, urban air pollution, ground water pollution; chemical and hazardous waste management; lack of environmental capacity building; environmental education (Handbook on National Environmental Legislation and Institution in South Asia 2002). Bhutan: Bhutan faces the problems like insufficient human resources; insufficient to implement comprehensive environmental strategy; limited area for agriculture; high fuel wood consumption; emerging urban development problems; environmental education; poverty alleviation; coastal pollution (Handbook on National Environmental Legislation and Institution in South Asia 2002).

India: The major problems facing India are air pollution; water pollution, land degradation; solid waste management; hazardous waste; bio medical waste, loss of biodiversity; conservation of natural resources; forest depletion; environmental education; ground water pollution; poverty alleviation; rapid urbanization; industrial pollution prevention and control; clean technology; urban environmental issues (Handbook on National Environmental Legislation and Institution in South Asia 2002).

Maldives: Maldives has environmental related problems like coral and sand mining; waste management; institutional relationships; poverty alleviation through capacity building of committees gender and social structure; local resource mobilization;

expenditure for poverty alleviation, transparency and accountability; legal framework for decentralization; enforcement and compliance of legislation; land resources; coral reefs; sea level rise; population density; marine resources; marine biodiversity; environment education; capacity building(Handbook on National Environmental Legislation and Institution in South Asia 2002).

Nepal: Environmental problems facing Nepal are forest depletion, land degradation; soil degradation; water pollution, air pollution; inadequate capacity for management of environment; loss of biodiversity; rapid urbanization; industrial waste; landslides; lack of agricultural land; vehicular pollution; indoor pollution; environment education; environment capacity building(Handbook on National Environmental Legislation and Institution in South Asia 2002).

Environmental Problems in South Asia

Water scarcity and depletion of fresh water

The river system is interlinked in South Asia. Some of the world's largest river systems are found in the region, forming the cultural and economic backbone of South Asia. The Ganga, Indus and Brahmaputra rivers are the three major river basins of the region. They support rich ecosystems that support major source of irrigation, consumption etc. The Indus originates in China and flows to Pakistan. It travels a distance of 3,180 km before it drains into the sea. The Ganga-Brahmaputra river system originates partly in Bhutan, China and Nepal and flow to Bangladesh and India. Ganga has an economic, social and cultural importance for the people of Bangladesh and India. Originating in the Central Himalayas, the Ganga stretches for about 2,525 km and the Brahmaputra, the third great Himalayan River stretches for about 2,900 km flowing through China, India and Bangladesh. Many minor rivers that originate from the Himalayas and drain into the Bay of Bengal flow through Bangladesh, Bhutan, Nepal and India (SAEO 2014).

Many of the South Asian river system have rigorously depleted its water volume and fish resources. Once a water-affluent region, South Asia is rapidly becoming water-poor due to phenomenal population growth in nearly all countries coupled with unplanned Urbanisation. Other contributory factors are the unsustainable share; 90-95 percent of water is consumed by Agriculture, poor Governance and mismanagement of water infrastructure, insufficient storage, and wasteful irrigation methods. Except Bhutan and Nepal, per capita availability of water in South Asia is less than the world average (Kakakhel 2012)⁶. Lack of fresh water in South Asia becomes a problem. In an UNEP supported publication⁷ prepared by Asian Institute of Technology found that the South Asian countries (Afghanistan; Bangladesh; Bhutan; India; Iran; Maldives; Nepal; Pakistan; Sri Lanka) which is home to about one-fourth of the world's population, contains about 4.5 per cent (1,945 billion m3) of the world's annual renewable water resources (43,659 billion m3). Except for Bhutan and Nepal, the per capita water availability in the region is less than the world average, with water use in this region being limited mainly to the agriculture sector.

This region with various transboundary river system supported by numerous lake and others forms of water reservoir have seen a serious problem of usable fresh water. Factors for depletion or scarcity of water in this region arose from pressure from Industrialisation, rapid Urbanisation, and high population growth, uneven rainfall due to climate change, lack of systematic water harvesting technique, high consumption of water in agriculture sector remains important factors for putting pressure on water resources.

Climate Change and Environmental Problems

Climate change is the major component of environmental related challenges. Climate change (though it is a global phenomenon) is a major concern in South Asia. Climate change and it related issues such as global warming is a phenomenon caused due to

⁷ United Nation Environment Programme (2008), Fresh Water Threat South Asia, ISBN:978-92-807-2949-8, Nairobi

increase of green house gases in the atmosphere excessively beyond the desirable limit, for instance 0.03 % carbon dioxide in atmosphere is desirable however beyond this level causes undesirable environmental threat (KBC-Nano Environmental Issues). Increase in the presence of Green house gases is largely caused by excessive use of fossil fuels, large scale deforestation and increase of emission from ever increasing motors vehicles. Global warming is also caused from the emission of CFC (Chlorofluro Carbon) from cold storage, refrigerators etc. emission of nitrous oxide due to use of nitrogenous fertilizer and increase of deforestation have led to escalation of heat in the earth atmosphere through absorbing undesirable volume of heat. As the atmospheric temperature increase the existence of plants and animals are threatened, numerous aquatic plants and animals are depleted or either extinct. Increase of temperature evaporates the earth's water surface which led to imbalance rainfall causing unprecedented flood. Destructive flood in South Asia occurred almost every year. Unprecedented rainfall makes Bangladesh more vulnerable for environmental related migration and overall impact on socio-economy of the country. In a report compiled by International Organisation for Migration (IOM 2016) It highlighted that Bangladesh's vulnerability to climate change and environmental degradation is manifested all over the country. Southern Bangladesh is subject to cyclones and storm surge, salinity intrusion, coastal erosion, riverbank erosion water logging, and potential sea level rise; the northern part is vulnerable mainly to droughts, riverine floods and flash floods. While these environmental events make traditional occupations in agriculture difficult, the study observed a simultaneous trend in increasing labour migration, which is in fact considered causes by Bangladesh's transition to a middle-income economy. The report analyses taking four Districts of Bangladesh, vulnerable to specific environmental problems and representing high rates of outmigration. In the same report (which analyse taking into three countries (Bangladesh, Maldives and Nepal) it highlighted that Maldives is exposed to different vulnerabilities with regard to climate change. The northern islands have the greatest exposure to sudden onset disasters such as surge hazards and cyclones; earthquakes, tsunamis, thunder storms, flash floods and heavy rain, and prolonged dry periods have also been recorded in the recent years. However, the low elevation of the islands makes them most vulnerable to slow onset disasters, such as coastal erosion, sea-level rise, salinity intrusion, rising

temperatures, changing rainfall and drought patterns, sea surface temperature rise, and change in monsoon patterns. There is a concern that sea level rise will make land inhabitable, making migration necessary. In Nepal, it is observed that Nepal which is geographically diverse country with three key ecosystems — mountains, hills and the Terai/plain are also vulnerable to climate change because of rapidly melting glaciers, resulting in the danger of glacial lake outbursts and degradation of Agricultural land on which two thirds of the population base their livelihoods.

Population Explosion and Environmental Issues in South Asia

Population explosion is common to all the Developing Countries; the case of population explosion in South Asia is an alarming concern. High growth of population in the Developing South Asian countries has tremendous pressure on Land, Fresh Water, Forest, Clean Air, Climate, Ocean resources. Rapid increase of population growth in South Asia and increase in the Demand for Natural resources have become a serious concern on security of South Asian; it is believed that environmental security concern may become the most serious security issue if the human community do not intervene in time. There is an inter-linkage between economic growth and pressure on environment. As the South Asian countries are gearing up to accelerate their economic growth, therefore it is going to bear more burden on the uses of natural resources and also returns waste to nature.

Environmental Problems and Food Issues in South Asia

Climate change will affect food security in all of its four dimensions; availability, accessibility, utilization and stability (Selvaraju 2011). Climate change and its related outcome pose serious challenges to the food security in South Asia. As experienced every years, flood, intense cyclone, drought, rise in temperature bring direct or indirect risk and challenges to the food security in South Asia. Climate change put tremendous impact on cropping and yield pattern and on climatic based Agriculture crops in South Asia. Other than this, climate change consequently affects on livestock rearing and production,

pasture and fishing resources in South Asia. This region which is already threatened from hunger and shortage of require food, malnutrition and poverty is likely to face more challenges in the coming decades. It would also have an impact on the health and productivity of Forests, the incidence of Pests and diseases, Biodiversity and Ecosystems. Agricultural productivity is mainly dependent on the aspect of climate so there is a strong link between, climate and food availability. South Asia countries are likely to face extreme challenges of food insecurity in the coming decades. The production of food is likely to short fall of requirement (Jha 2004) citing the report of FAO (1998) it stressed that, an estimated 400-500 tonnes of food grain are likely to require in India by 2050 and about 200 million tonnes would be need in other South Asian countries. This huge requirement of food in South Asia would tremendously put pressure in environment in the coming decades.

Land and Environment in South Asia

Population growth, rapid urbanisation and industrialisation have tremendous pressure on agriculture land, forest land. According to South Asia Environment Outlook (SAEO 2014) South Asia faces various problem of land degradation in the form of reduction or loss of biological or economic productivity and complexity of rain-fed cropland, irrigated cropland, pasture and forest. The major reasons for land degradation are the increasing pressure due to changing climate patterns; over-exploitation of natural resources; poor farming practices; inappropriate irrigation; and land pollution including industrial waste and mining tailings".

SAARC Agriculture Centre Report (2011)⁸ indicated that South Asian countries suffer from various kind of land degradation. The report estimated that 42 % of its land is affected with various kind of degradation. Fifty percent area of the dry lands faces the threat of desertification. As many as 63 million hectares of rainfed cropland and 16

⁸ SAARC Agriculture Centre (2011),Strategies for Arresting Land Degradation in South Asian Countries, Dhaka, Bangladesh

million hectares of irrigated land have been lost due to desertification, especially in Pakistan and India. The report estimated that loss and negative impact due to desertification is equivalent to seven percent of the regions' combined agricultural gross domestic product'.

Broad statistical estimation of land degradation and its related problems in SAARC region are given below based on the SAARC Statistical Data Book (2006-2007):

- This statistical data reveal that Water erosion and chemical degradation are the most devastating land degradation factors in the SAARC region. Soil Erosion risk is at highest in Bhutan,53 percent of the total area, followed by 42 percent in Sri Lanka, 31 percent in Nepal, 29 percent in India, 15% in Bangladesh and 13 percent in Pakistan. Soil salinity problem in Pakistan is 20 percent of the total area, 8 percent in India and 6 percent in Bangladesh.
- Land percentage in terms of poor fertility and physical properties in the region stand at 24 percent in Pakistan, 21 percent in Nepal, 13 percent in Bhutan, 10 percent in Sri Lanka and 9 percent in India. This report also highlighted that Soil fertility decline due to organic matter depletion is a growing problem in all countries of this region".

Global Policy Forum (2017) estimated that due to land degradation, South Asia loss \$ 10 billion annually.

In an overall view India has experienced successful economic growth from the 1990s onward after series of economic liberalisation; one of the key drivers of economic growth in India is Green Revolution, after the implementation of green revolution India witnessed sharp increase of yields and production. However the prolong pressures on land to meet the ever increasing demand has led to unwanted impact on land, largely due to the practices of unsustainable and uncontrolled farming that ultimately affected the quality of land and health of human due to excessive use of pesticide and chemical fertilizer. In a view expressed by agricultural and soil expert at a seminar organised by

Food and Agriculture Organisation in Delhi, it is estimated that a third of India's soil is degraded (The Hindu 2015). This seminar also cited the alarming figure from Council of Agricultural Research (2010) that in India out of the total geographical area of 328.73 mha, about 120.40 mha is affected by various levels of land degradation.

The case of Bangladesh is also challenging as this country is an intensive agricultural land in South Asia. Bangladesh's high growth of population and its limited land will worsen more in the coming years. Bangladesh is the second most densely populated countries in the world (Global perspective). Land holding ratio in this country stand at average 950 persons per square kilometre and this country is prone to various environmental damage. Land pressure in Bangladesh is largely because of high population, erosion of land due to flood, use of Agrochemicals, combined with improper irrigation to meet the demand etc.

In Bhutan, soil erosion affects the forest and grazing lands mostly in southern Bhutan. In term of usage of chemical fertilizer and pesticide, Bhutan which is less population has recorded increased over the years. According to the 2006 National Report of MAIL, as highlighted in Afghanistan's National Communication to CBD (SAEO 2014), 75 percent of the country's area in the northern, western and southern regions is affected by desertification (SAEO 2014).

Deforestation and Changing Forest Resources in South Asia

Forest is the important component of natural resources in South Asia. It regulates the climate change, reduce the air pollution and directly or indirectly help in sustaining millions of people. It is home to numbers of wildlife and other living being that thrive and settle in the forest, it also helps in stabilizing the soil and water resources, control flood and landslide. With the increase of population, uncheck exploitation of forest for commercial usage and others developmental related activity has severely affected the forest resources in south Asia. Due to deforestation in South Asia, severe environmental problems emerged such as decrease in rainfall, soil erosion, human migration, effect on

climate, decrease water reserve in ground and stream sources, extinct of flora and fauna, threaten to the livelihood of many forest dweller.

Based on a study by team of researchers from IIT Bombay by using the satellite data for two time periods 1980-1990 and 2000 to 2010 (The Hindu 2016) found that in India due to deforestation, there is a reduction of 20 percent green cover in Northeast India, and reduction of 100-200 mm of summer monsoon rainfall in north and central part of India, the same finding also mentioned that 1-2 mm of rainfall per day is reduced during the end of the monsoon in the Ganga basin and Northeast India. In the case of Afghanistan, this war torn country has been severely affected by land degradation. According to a Global Assessment of Soil Degradation (GLASOD), 16 percent of the land area of the country is severely affected due to anthropogenic activities (NEPA 2008) and barren land occupies one-third of the total land area and Soil fertility has also decreased due to poor agricultural practices in Afghanistan.

According to an Online Portal (Afghanistan Online) it highlighted that only 2 % of Afghanistan is cover by forest and it warn that if there is lack of intervention then forest cover is likely to disappear in near future from Afghanistan(Abdulla Qazi (2009),. In a similar finding an online portal NPR.org also quoted Wali Modaqiq Deputy director of Afghanistan's environmental protection agency's revelation that forest cover in Afghanistan is only 2 percent (Sean Carberry & Sultan Faizy(2013).

The Himalayan state Nepal is also largely dependent on land fertility; natural water resources and agriculture, therefore any depletion in the natural resources adversely affect its people. There are two factors that causes deforestation in Nepal, first due to conversion of trees cover land to cropland, increase of resettlement and infrastructure development and second massive cutting down of biomass to meet the energy demand. Over grazing, forest fire and timber demand (Gaan 2000).

This mountainous agrarian state recorded depletion of forest cover every year. Nepal's forest and shrub coverage together is around 5.83 million ha, which is 39.6 percent of the

total land area of the country based on the finding report prepared by 'National Forest Inventory' mentioned in (Asia-Pacific Forestry Sector Outlook Study II) which was carried out in the early nineties in Nepal. According to this forest inventory report, the rate of forest area in Nepal has decreased by 1.7 percent per annum during 1978/79 to 1994, whereas the rate of Forest and Shrub depletion was 0.5% per annum during the same period. In another the recent studies from 20 Terai districts revealed that the rate of forest cover change was at an annual rate of 0.06% during 1990/91 to 2000/2001.

Air Pollution

Rapid Urbanisation, Industrialisation and its release of harmful exhaust, burning of fossil fuels, use of farming chemical, etc are common causes of air pollution in South Asia, major cities of South Asia specially major Indian cities, Dhaka, Karachi and Lahore experienced air pollution. In addition to this South Asia witnessed a Sharpe increase in the ownership of vehicles. South Asia Environment Outlook (SAEO 2014) report highlighted that the largest number of motor vehicles are found in India and Pakistan; the total number of registered motor vehicles in India has increased by approximately 65 percent in the decade 2001-2012. Motor vehicles registered in Pakistan in 2011 were 9,080,437 (PBS 2012). The number of vehicles in Bhutan also increased from 35,703 in 2007 to 62,697 in 2011 (NSB 2012).

Bangladesh which is poorest among the countries in South Asia is often affected by the dust pollution which poses a serious threat to the 14 million residents of Dhaka. In 2012 on average, the dust particle level in Dhaka's air is reported to be more than that of Beijing and around seven times higher than the existing level in Singapore as reported by BBC Asia news. In the case of India with it enormous economy and high population plus its growing Urbanisation increase air pollution, every year, Indian Cities and Urban area are engulfed in dangerous air pollution level. According to a recent report in Times of India (2017) citing the report prepared by Green Peace India 2017, reported that an estimated 1.2 million deaths are reported every year due to Air pollution in India.

A phenomenon known as Asian brown cloud or Indian Ocean Brown Cloud create havoc to the air quality in most of the South Asian region caused by airborne particles and pollutants from wood fires, fires in post-harvest field, cars combustion, and factories etc(SAEO 2014) Consequences from this air pollution include decreases in monsoon rainfall in the affected areas, increase the intensity of cyclone in Arabian Sea, decline in agricultural yields, and increase health problems like respiratory and cardiovascular diseases(SAEO 2014).

Sea Rise and Vulnerabilities in South Asia

A recent report on risk and challenges from rise of sea level published by the Global Environmental Outlook: Regional Assessments stressed that in India nearly 40 million people are likely to be at risk from rising sea levels, followed by another densely populated south Asian country, Bangladesh with estimated 25 million. In South Asia, rise in the sea level tremendously affected the island nation Maldives as its main sources of economy come from tourism accounting nearly 28% of GDP and more than 60% of foreign exchange receipts. As the risk and negative impact from sea rise and coastal risk increase the tourism industry is in great threat as this island nation largely depends on condition of physical and geographic factors.

According to a World Bank (2013) press release Bangladesh will be among the most affected countries in South Asia by an expected 2°C rise in the world's average temperatures in the next decades, increase in the temperature, rising sea levels and destructive cyclones threatened directly or indirectly on the food production yield, livelihood and settlement and challenges in fighting poverty in South Asia.

Hazardous Waste Dumping in South Asia

The rapid rise in the Industrialisation and Urbanisation produce tonnes of hazardous waste. The potential impact from the unsystematic waste dumping may cause threat to the health of human life and other living being due to prolong exposure to the toxin and

contaminated waste material. Such Exposure with the hazardous waste causes physical injury, or other health impacts, damage and loss to Property, severe threat to the ecosystems, and environmental resources in the affected areas.

Solid waste generation and disposal has emerged as a major environmental problem in South Asia due to poor legislation and poor implementation of law, particularly in the urban areas. Uncollected dumping of solid waste has emerged as a major environmental problem in most of cities and urban area in South Asia. This region witnessed rapid urbanization and increase in settlement, rapid increase in consumption patterns which has pushed the existing sewerage system in South Asia inadequate.

Many studies find that major highly populated countries including India, Pakistan and Bangladesh continue facing problems in sanitation. According to the census of 2011, an estimated 53.1 percent of the households in India do not have a toilet (India Water Portal 2012) Low level of awareness and poor civic sense are the key factors causing increased waste generation. At a workshop held in Delhi on April 2016 Centre for Science and Environment (CSE) director Sunita Narain said that 78% of sewage generated in India remained untreated and disposed of in rivers, groundwater and lakes(Down To Earth 2016). Similar situation is also facing in Bangladesh, Nepal and Pakistan. This problem is more alarming amongst the slum dwellers of Pakistan, India and Bangladesh. In an article by Farahnaz Zahidi of Tribune Express, it highlighted that almost 5.2 million people including four million children die each year from the waste-related disease in Pakistan (Farahnaz Zahidi 2014). The same article cited Pakistan's environment ministry report which highlighted that Pakistan generates about 20 million tonnes of solid waste annually, but waste management in Pakistan remain poor". In an article appeared in Dawn a popular daily in Pakistan in 2009 mentioned that Pakistan received 500,000 used computers each year and more than 60 percent of these dumped computers are exposed to toxic fume which contaminated the soil and ground water' (DAWN 2009). In Bangladesh Unsystematic management of waste threaten river and health of people. The Dhaka Tribune (2015) reported that "the river Shitalakhya, a tributary of Brahmaputra became almost dead due to dumping of industrial waste and chemical, the report mentioned that

hundreds of factories situated near the river dumped garment factory waste, polythene, dying chemical printing chemical, fertiliser and cement factory waste affecting thousands of farmers along the river. Reuters took the reference of the World Bank study in which it is found that the four major rivers near Dhaka the capital of Bangladesh- the Buriganga, Shitalakhya, Turag and Balu River are dumped with 1.5 million cubic metres of waste water every day from nearly 7,000 industrial units".

Conclusion

The world is constantly engaging to tackle the crucial emerging challenges for protection and management of natural environment through numbers of approaches at the state, regional and at the world level. There is no doubt that the global community have recognised protection and enhancement of environment as one of the crucial tasks for economic growth; to provide social progress and to maintain peace and security in the world. World have witnessed dramatic depletion and distortion of environmental resources from the last two century onward. The advance in the modern technology and growth of industries enhance the life of human beings. However this progress and development are brought at the expense of exploitation of natural resources. Every human intervention in the natural eco-system has produced profound impact on the coming generation. The advancement of technology so far has little concerns on the environment, enormous advance in science and technology could not provide the desire remedy to tackle the issues. Most of the technical invention to ease the burden on environment lacks the visionary principles, human react mostly when the problems drastically affect on them.

Such lack of genuine long time vision put the world in a situation where we react and address when the issues become serious. The recognition to address the environment issues of the world needs collective tasks but such collective tasks must not fall into the hypocrisy. As we all know that the developed states mostly the West is the part of world that has produced some of the remarkable technical inventory and innovation, but the biggest irony at the closer look found that the richest 500 million people of the world

which is just 7 percent of the total global population, create 50 percent of global carbon emissions, while the poorest 50 percent of the total world population are responsible for just 7 percent of the total carbon emissions (The Guardian 2011, based on the report prepared by Stephen Pacala, Director of the Princeton Environment Institute).

While the initiatives to tackle the environmental problems in the developing countries are confronted with various challenges, the degree of dependence on natural resources and its importance is wide and complex in the region like the South Asia. The question on the environment and it relations in the South Asia is not just the development concerns, it penetrates deep inside into various issues, majority of the south Asian states still depend on forest and other natural resources for their basic needs. Their relation is for basic requirement to sustain the living. Most of the major environmental degradation that comes from other factors such as industries, dams, automobile emission and urban pollution which they have little responsible, affect tremendously on them directly. Industries, factories are opened up in the environmental fragile areas simply because of the availability of natural resources and chief labour but the major long term effect occurred in those natural ecology which large numbers of south Asia states considered as the basic support. For them forest and natural resources are not just the commodity but also carry the cultural and historical significance. As the South Asian states gear up their economic expansion and rapid urbanisation, the question on how to balance the two significant challenges to meet the development goals and at the same times how to address the environmental issues. Key problem area in this context is that South Asian states lack the political commitment to tackle the issues coupled with the lack of technical backup.

The SAARC region comprises of eight members states (Pakistan, India, Bangladesh, Sri Lanka, Maldives, Nepal, Afghanistan and Bhutan). Almost all the eight states share directly or indirectly proximate boundaries. This proximity and shared geographical position of eight states on this region put them into the shared vulnerability from the environmental problems and issues. This widespread physical convergent also generates various difference and conflicts over the shared natural resources and environmental

problems. On the other hand this shared ecological unit of South Asia inevitably entrusted them the responsibility to take care of the fragile environment. The question of environmental protection in South Asia implies that its economy and its larger developmental concerns are largely dependent on the natural resources. Taking this importance, the SAARC members recognised the need for environmental cooperation from the early phase of SAARC.

Policy makers of the member states of SAARC, at its various meeting and Summits since early period, have recognised the need to enhance and intensify regional cooperation to protect the rich eco-systems of the South Asian region including the recognition of the importance of natural resources for their development aims. So far SAARC's key decision tasks are entrusted on SAARC Environment Ministers and the Technical Committee on Environment and to its environmental related centres.

Chapter III

Engaging Environmental Issue: Towards a Common Agenda for SAARC

This chapter deals the core research area of this research work, in which it examines and explores the prospects and possibility of environment issues being the common agenda for SAARC cooperation. This chapter addresses the core question and problems on how far environmental cooperation can possibly provide the space to other sphere of cooperation. Most of the regional cooperation is mainly centred on the political and economic cooperation; therefore this chapter explores the major constraint in these areas of cooperation vis a vis the prospect and limitation on cooperation based on environment and how far it is suitable to South Asian region. To deduce the main core issues of this research work this chapter uses the finding and viewpoints discussed in the previous chapters. Some of the important outcomes from the above chapters are worthwhile to analyse in this chapter; as this research work take the stand that the regional integration or cooperation in the case of SAARC is required to see from different perspectives. This research work affirms with the argument that any over simplified fitting of European experience on the South Asian case may distort the whole distinctness of SAARC study. But this doesn't mean to denounce for a comparative study of various regional formation experiences. In fact comparative and analytical study of different regional configuration enhance in better understanding of SAARC. Important experiences of Europe' regional integration case particularly their comparative success in the economic integration as compared to South Asian's experience provide us the space to analyse and study on why the SAARC case has less success in the economic cooperation.

This research work stand on the argument that if European experience of integration or regional cooperation which is mainly based on the economic driving forces is the dominant narrative of integration in the world then it would have positive impact on the SAARC case too because since early stage (still an important target) the emphasis and target in the SAARC formation has been largely on the economic concern. Though these two regions are marked with sharp differences in various aspects, important observation

is that both these regions have similar fundament economic logic i.e. 'global capitalist market forces' notable fact is that south Asian region is fast moving toward the maturity level of capitalist economy. The central Argument of this research work in this point is that when all the South Asian states despite of their ardent desire to expand their economy, have failed and reluctant to cooperate in the economic aspect of regional cooperation within the SAARC framework, then is there any common space where they can engage more meaningfully. These research works stand with the perspective and argument that an alternate model of cooperation in South Asia is possible, to take this argument further increase Cooperation in the aspect of environment related issues is likely to yield more progress in the South Asian region. This stand of argument and perspective do not deny the important and its relevance of the economic cooperation in South Asia. Important conviction is that a promising narrative of regional cooperation on environment is likely to surface most likely when the South Asian states increase their engagement in the SAARC platform.

The massive economic growth from the last two centuries has brought tremendous changes in the whole concert of human history. The fast pace advance in the science and technology changes brought tremendous advancement never before in the human history however of late the human race has realised the limitation and constraint to limitless economic and technological expansion. Whole world began to realise that the extent to which economic and technological activities impacts on natural environments is also threatening the same human race who were in illusion from the sort period achievement out of economic and technological explosion. However, the manner in which various region reacts and response to this realization remain a matter of variation because of the varied interest and unavoidable constraint for example the call for carbon reduction attract more concern in the low lying countries like Maldives however the expected response from the major economy countries of the world remain adamant because of the concerns for it repercussion effect on economic growth. The problems emanate from the dilemma between the economic developments on one side and on the other hand the environmental issue becomes a big concern in developing countries such as South Asian state are struggling to enhance economic development and on the other side to address

the increasing deteriorative environment. More serious concerns for South Asian region is that in order to achieve the projected economic and technological growth it has to exploits more natural resources in the coming decades but how to maintain a balance is a big hurdle and challenges. As of current situation the response and the call for environment conservation remained disappointment. In this junction this research work argued that SAARC's platform could served a better opportunity to tackle the environmental issues, any attempt to address the environmental concern in the level of individual state is not going to yield positive outcome because environment issues need common response. The matter of disappointment in the case of South Asia is that most often the matter of environmental issues is put in the narrative of international agencies. Most of the attempt for understanding the environment issues in South Asia took the dominant conventional parameter. The need of the South Asia in tacking environmental problems is that it cannot be taken into granted in the hands of dominant narrative like north-south negotiation, although this negotiation is significance but South Asian states must act from inside instead of waiting on the outcomes of North-South negotiation.

Most often in attempt to see the environment and natural resources disputes, the South Asian states interpret in the light of political angle for instance both Pakistan and India treat the issue of Indus water sharing more from a political angle rather than giving important on the question of livelihood and possible environment problems affective millions of people irrespective of political boundary. A responsible regional attempt could provide a respite from the self-seeking approaches however doubt is that whether the SAARC will come forward in such a call. Answer for such doubt is complex however if the South Asian states have the will and commitment then it can make the SAARC forum a conducive platform to address such aspiration and need. The simple reason on why the environmental cooperation is more feasible in the SAARC platform is because of the simple reason that as compared to economic and political cooperation (which is the dominant area of cooperation in various regions), environmental cooperation is the least

contentious issues in the South Asia⁹. Cooperation in environmental issues is most likely to produce various positive outcomes in South Asia. Successful environmental cooperation shall definitely served the larger mass especially in the case of south Asia as chapter 2 highlighted that environmental issues directly affected the common masses. Increase cooperation in environmental related issues served more to those marginalised and less voice common masses especially women, old and children .this view is very much relevance in the case of South Asia because this region's social and cultural norms exhibit patriarchal orientation apart from this women in this region give inequitable roles and task, accessed less natural resources which make them more vulnerable from the environmental issues, for instance in the case of drinking water scarcity, women have to take extra effort to arrange the drinking water, this may sound strange but the fact is that majority of South Asian patriarchal population largely entrust the tasks of household chore to the women and task like making availability of drinking water is generally entrusted on them. In a similar case, any drastic change of climate, during the drought, flood and famine, women are most likely to suffer. When we discuss the environmental issues and it possible impacts, it stretch at various sphere and areas. As discussed in the previous chapters, environmental problems often led to generate various issues and concerns which are very much common to South Asia. Many of the Political issues in South Asia in many cases are more or less related to environmental and its resources constraint factors; the Indo-Bangladesh water scarcity causes the river water conflict between the neighbouring countries. The cause for such differences is that India and Bangladesh are locked into differences on water diversion, industrial pollution, deforestation and others upstream activities such as dams construction that ultimately create the differences.

In addition to this dispute between India and Bangladesh also include territorial dispute caused by shifting of landmass due to change of river course during the flood. Such shift in river course and landmass resulted into deformation of demarcated boundary which led

⁹ At this point this research work don't rule out the presence of differences in the environmental problems, but the point is that as compared with the economic and political cooperation, environmental cooperation has comparative advantages

to the boundary dispute. Conflict between India and Nepal on tapping the water resources and also conflict on environment degradation with Dam related issue is known fact. Water sharing and its related issue between India and Nepal is witnessed in the case of Kosi agreement consequently this agreement in 1954 causes many dispute and environmental disturbance on both side, in 2008 there was a flood in the area which affect nearly 30 lakh people in India and 500,000 people in Nepal (Malhotra 2010). India and Nepal's bitter differences are reflected in various other agreement including Tanakpur agreement, Sharada Dam construction, Gadak agreement (Malhotra 2010). The chukha hydroelectric project between India and Bhutan has inflicted problem between the two countries, in another case The Sankosh project between India and Bhutan in 1993 generated the possible destructive effect on Manas sanctuary (Boruah 2015).

Conflict in sharing the natural resources between India and Pakistan is more serious, differences between the two countries in the Indus water sharing prevailing from a long time. Recently India said it will restart Dam building on Jhelum which sparked unpleasant on Pakistan side. Apart from the Inter-States conflict in water and natural resources sharing, South Asian region also witnessed Intra-State natural resources sharing conflict. the conflict in India's Punjab in water sharing with the neighbouring states started since from 1970s, the water sharing of Cauvery river has been witnessed a serious concern between the two state of Tamil Nadu and Karnataka which recently(2016) led to widespread violent in Karnataka (livemint 2016).

In Pakistan diversion of Indus water to Punjab province from the Sind, Baluchistan and NWFP sparked ethnic crisis. Punjab province's geographical location in the upstream took the advantage of diverting desire water requirement which in turn affect to the requirement in the lower stream Sind and Baluchistan province (Pakistan Institute of Legislative Development and Transparency (2011). Decline in the fish resources invited unwanted dispute between Indian fishermen and Sri Lankan fishermen, which is even reach to the diplomatic politic between the two states. The sovereignty dispute of small island Kachchativu is matter of dispute between the two country often Tamil Nadu fishermen were detain in the disputed site which led to the involvement from both

government(Livemint 2016). Water, river and hydrological resources are likely to play critical factors in the conflict and dispute dynamism in the South Asia. Natural resources constraint and its related issues have drastic impact on social-economy dimension of South Asia.

The matter of concern for this research work is how relevant/important is the environment issues as the main driver of SAARC. Many experts on SAARC often view that cooperation in environmental related area in SAARC is one of the less contentious and most effective cooperation. Looking from the South Asian's distinctive regional dynamism it is most likely that cooperation in the environmental related issues and area will be more fruitful in bring a equilibrium win-win situation among the most asymmetric South Asia region. In this context environmental issues bear the most agreeable areas to strengthen the cooperation. It is important to study and analyse the status of cooperation in others areas vis-a vis environment cooperation, as mention above cooperation in environmental related issues and area in SAARC recorded one of the leading positive outcome. How far SAARC comes along in the sphere of environmental cooperation remains a matter of important for this research work.

Broad characteristic of South Asian engagement in regard to environment

A general overview of the characteristic of South Asian state give us the observable character of threat-based approach in tacking and examining environmental problems in this region. Major reason on why environment tacking issues in this region is less effective is because of its intervention when and only the issues is aggravated like waiting for the issues to appear and then apply the curative measure. The South Asian Policy makers need to adopt and must ready to foresee the long-term programme and policy, the South Asian region urgently need a collective proactive environmental strategies that emphasize on environmental preservation for enhancing peace and economic stability.

The South Asian state seems to neglect that this region's Environmental security can be best understand from the perspective of local concern. The South Asian state must realise

that the prism through which the developed countries looks on environment issue is base on strategically important and from the view that seek their benefits. They would interpret the rule and regulation from the dominant international organisation which they have upper hand. Any simple imitation could be less feasible on the South Asian region. South Asian states must emphasis on the linked of environment issue and with that of social, economic and cultural affinity in a peculiar regional configuration.

As mention above most often the South Asian states treat the issues of environment and its resources as a separate entity. Often the natural resources and environment concern are overshadowed by the political motivation at the expense of millions of people who are directly affected from such political tussle. On the implementation part of numerous environmental laws, this region show little achievement in implementing the environmental law.

SAARC Institutional Response on Environment Issues

Environment and its related issues have been important issue since 1987, successive summit and ministerial meetings underline the need to increase regional cooperation on environment especially to preserve, protect and manage the diverse and fragile ecosystems of the South Asian region. Main emphasis has been given to the challenges posed by climate change and natural disasters to ensure the development process and prospects of the Member States.

Early initiatives and effort from SAARC on tackling environments related issues can be traces back to its During the Third SAARC Summit at Kathmandu in November 1987. The representative of the states expressed their deep concern at the fast and continuing degradation of the environment including extensive destruction in the region. They unanimously express their concerned of natural disasters such as floods, droughts, landslide, cyclone and tidal waves, rise of sea level which caused excessive damage to the natural resources and immense human suffering. Following this summit the then secretary general of SAARC in 1988 formed a experts groups in which they concluded

that natural disasters such as floods, glacial lake outburst, submersion of coastal areas due to the rise in the sea level, tidal waves, landslide, droughts, cyclones and others environment degradation need for serious attention. Upon the deliberation among the members state; the experts groups envision the important tasks for SAARC members state which include: Country-wise identification and study of natural disasters their nature, extent, causes and consequences; Identification of specific areas of national priority; Identification of common areas of regional concern; and, Identification of measures and programmes at the regional level, or strengthening disaster management capabilities and for the protection and preservation of the environment of the Member Countries to supplement national bilateral, regional and global efforts. Country-wise identification of different aspects of environmental degradation, the causes of such degradation and their implications for natural disasters which undermine the development process; Country-wise survey of existing programmes for the management of disasters including prevention/mitigation relief and rehabilitation and the protection conservation and restoration of the environment(SAARC document 1988).

Some of the core issues and initiative of SAARC to tackle the environment and its related areas are:

The preservation and protection of the environment including disaster risk reduction and management remains a high priority on the agenda of cooperation being pursued by the Member States of SAARC. The subsequent summit and ministerial meeting of SAARC after the 1985 gave importance focus to the natural calamity and climates changes. The ministerial meetings of the SAARC Environment Ministers and the Technical Committee on Environment and Forestry formulate the programme and study on the issues (Dwivedi 2008; Secretariat 2009 f).

The establishment of regional centres have been key milestone of SAARC. These various regional centres served in addressing diverse aspects of environment, climate change and natural disasters. These are: notable regional centre established by SAARC include (I) SAARC Coastal Zone Management Centre (SCZMC) established in 2004 to promote

cooperation in planning, management and sustainable development of coastal zones, including research, training and awareness; (ii) SAARC Forestry Centre (SFC)in 2007 for the protection, conservation and prudent use of forest resources by adopting sustainable forest management practices through research, education and coordination among Member States; (iii) SAARC Disaster Management Centre(SDMC) in October 2006 to provide policy advice and facilitate capacity building including strategic learning, research, training, system development, expertise promotion and exchange of information for effective disaster risk reduction and management – the mandate of the Centre was expanded to include the development of a Natural Disaster Rapid Response Mechanism (Fifteenth SAARC Summit, Colombo, 2-3 August 2008); and (iv) SAARC Meteorological Research Centre in 1995 to carry out research on weather prediction and better understanding of monsoon (Dwivedi 2008; Secretariat 2009 f).

Apart from the summits, SAARC Environment Ministers have met regularly to discussed and monitor the progress and to further increase the regional cooperation in the area of environment, their core area of concern include such as climate change and natural disasters (tsunami, earth quake, flood as frequently confronted by most of the SAARC members' states). Moreover the special sessions of the SAARC ministers also met during the important situation such as in the situation natural calamity. For instance such emergency session was held in July 2005 in Male in the aftermath of the disastrous tsunami hit the Indian Ocean region (Dwivedi 2008; Secretariat 2009 f).

In 1992 a technical committee on environment was formally formed to coordinate cooperation on environment and related issues. This Technical Committee on Environment was tasked to monitor the progress made in some of the Regional environmental related Studies. Subsequently the role of the Committee was expanded to include meteorology and forestry (Dwivedi 2008; Secretariat 2009 f).

The SAARC environmental technical Committee also coordinates and monitors the implementation of the 1997 SAARC Environment Action Plan; and 2008 SAARC Action Plan on Climate Change.

Some of the important initiatives in response to the environmental issues in the region are reflected in their summits, environmental ministerial meeting, and on the platform of SAARC technical committee. In the third SAARC Summit (November 1987 at Kathmandu) the leaders representing the members states commissioned a Regional Study on the "Consequences of Natural Disasters and the Protection and Preservation of the Environment" to analyse the nature and characteristic of natural disasters which effect the south Asian region. The Fourth SAARC Summit (Islamabad, December 1988) directed the concerns committee to conduct a joint study on the "Greenhouse Effect and its Impact on the Region". The main concern for such study was to provide a basis for an action plan for meaningful cooperation among Member States in the area of environmental and its related consequences (Dwivedi 2008; Secretariat 2009 f).

Third Meeting of the SAARC Environment Ministers (Male, 15-16 October 1997) adopted The "SAARC Environment Action Plan" whereby the said meeting identified some of the key concerns environmental related issues of the Member States. Upon their throughout deliberations the environment ministers of the SAARC formulated the activities and modalities for regional cooperation in the issues concerning to environment and its related area. Subsequently after the adoption of the mentioned action plan, a number of measures and activities have been implemented by the SAARC Regional Centres (Dwivedi 2008; Secretariat 2009 f).

Natural calamity and natural disaster affect all the south Asian states, most of the south Asian states are under the seismic zone, natural disaster often threatens Nepal and Bhutan, the geographical location of these two states makes them more vulnerable from the natural disaster. While recognising the threat from natural disaster SAARC leaders Following the Malé Declaration, formulated a "Comprehensive Framework on Disaster Management for 2006-2015" which was adopted in 2006 to address the diverse specific needs of disaster risk reduction and management of South Asia. Following the adoption this framework, Member States were recommended to prepare their respective National Plans of Action for implementation of the Regional Framework (Dwivedi 2008; Secretariat 2009 f).

Climate change and global warming heighten the challenges across the globe, efforts to address the climate change goes beyond the hand of national boundary, various international, regional efforts becomes a necessary, SAARC as a regional platform recognised their role toward the collective cooperation to address the global phenomenon. The south Asian region with its fragile ecology has been confronted with various challenges, any undesirable changes in the climate effect its forest, glacial resources, agriculture, coastal area etc in recognition of the high vulnerability of this region from the global warming, the Twenty-ninth session of the SAARC Council of Ministers (New Delhi, December 2007) stressed the confronting vulnerabilities, inadequate means and limited capacities in the south Asia to deal the issue, therefore they express to ensure rapid social and economic development to make SAARC and its members state to equip and prepare to tackles the climate change and any of its consequences. Following this decision, a Ministerial Meeting on Climate Change was held in Dhaka on July 2008 arranged an Expert Group Meeting on Climate Change on July 2008. The Ministerial Meeting adopted the "Dhaka Declaration and SAARC Action Plan on Climate Change" to increase the cooperation on the climate change and its consequences. The Dhaka Declaration directed Member States of SAARRC to increase activities to promote various advocacy programs and mass awareness on climate change in their respective states; cooperation in capacity building including the development of CDM(clean development mechanism which was defined in the Kyoto protocol) projects and others incentives for removal of Green House Gas, Dhaka declaration also urged the members states of SAARC to facilitate the exchange of information of best practices in the field of climate change mitigation, exchange of best practices adaptation measures, moreover the declaration urged the members states to increase sharing of the results of research and development in the field of climate change to help each members for collective benefit. The declaration also recognised the important of south-south cooperation in the field of technology development and transfer, as per established SAARC norms in the south Asian region (Dwivedi 2008; Secretariat 2009 f).

In the subsequent moves to address the climate change challenges in the south Asian region SAARC Action Plan on Climate Change (2009-2011) identifies seven core areas

of cooperation covering; mitigation; technology transfer; adaptation; finance and investment; education and awareness; management of impacts and risks; and capacity building for international negotiations. The Action Plan marked the areas of capacity building for Clean development mechanisms (CDM) projects; exchange of information on disaster preparedness and extreme events; exchange of meteorological data; capacity building and exchange of information on climate change impacts (e.g. sea level rise, glacial melting, biodiversity and forestry which generally affects the most in this region); and mutual consultation in international negotiation process as the Priority Action Plan (Dwivedi 2008; Secretariat 2009 f).

As part of the regular meeting to monitor and evaluate the programme and other agreed area of cooperation in the environmental issues in SAARC region The Eighth Meeting of the SAARC Environment Ministers (New Delhi, October 2009) adopted the "Delhi Statement on Cooperation in Environment" this statement identifies many crucial areas that need to be addressed and they resolved to reaffirms the existing commitment of SAARC Member States towards enhancing regional cooperation in the area of environment and climate change (Dwivedi 2008; Secretariat 2009 f).

The sixteenth SAARC summit (Thimphu, April 2010) on the mark of silver jubilee declaration of the SAARC was held with theme on climate change under the slogan; "Towards a Green and Happy South Asia" the leader at this summit adopted the "Thimphu Statement on Climate Change", which outlines a number of important initiatives at the national and regional levels to strengthen and intensity regional cooperation to address the adverse effects of climate change in a focused manner. They reiterate that climate change has affecting every part of world, but compared to the developed countries, the developing countries faced the tremendous hardship, therefore members of SAARC states reiterate that the global negotiations on climate change should be guided by the principles of equity, and common but differentiated responsibilities and respective capabilities as enshrined in the UN Framework Convention on Climate Change, and should be conducted in an open, transparent and inclusive manner. Leaders at this summit recognised the important of water for its all round development in the

south Asian region. In view of this the leaders at this summit urged the members states to focus on water management and conservation and development of cooperative projects at regional level in terms of exchange of best practices and knowledge, capacity building and transfer of eco-friendly technology which would benefits all the members states. Dwivedi 2008; Secretariat 2009 f; SAARC summit document 2010) In response to the increasing natural disaster in the south Asian region, the leader at this summit resolved to prepared effective regional policy and programme for early warning, preparedness and management of natural disaster, subsequently the summit urged the members' states for early finalization of the SAARC Agreement on Rapid Response to Natural Disasters. The leaders at this summit also welcomed the signing of the SAARC Convention on Cooperation on Environment and they called for its early ratification and implementation by the members' states. In response to this called for ratifying and implementation, the mentioned Convention has been ratified by all Member States and entered into force with effect from 23 October 2013. The Convention identifies 19 areas for cooperation in the field of environment and sustainable development through exchange of best practices and knowledge, capacity building and transfer of eco-friendly technology in a wide range of areas related to the environment. The task of implementation of the Convention has been entrusted to a Governing Council, comprising of the Environment Ministers of Member States of SAARC (Dwivedi 2008; Secretariat 2009 f; SAARC Summit Document 2010).

During the Seventeenth SAARC Summit in Addu city (Maldives, 10-11 November 2011) the leaders of the SAARC signed The "SAARC Agreement on Rapid Response to Natural Disasters", and put forward for ratification, later it has been completed by five countries till date (November 2014).this Agreement would institutionalize regional cooperation among Member States in the critical area of response in the aftermath of natural disasters in the region Dwivedi 2008; Secretariat 2009 f; SAARC Summit Document 2011).

Apart from the various initiatives and programme to deal the environmental issues and its challenges in the south Asian region, SAARC successfully form various Collaboration with many Inter-governmental Organizations at the regional and international level, some

of such collaboration includes; in July 2004 SAARC signed Memorandum of Understanding (MOU) with the South Asia Cooperative Environment Programme (SACEP); signed collaboration MOU with United Nations Environment Programme (UNEP) in June 2007; signed MOU with the United Nations International Strategy on Disaster Reduction (UNISDR) in September 2008 and Asia Disaster Preparedness Centre (ADPC). Some of the mentioned collaboration MOUs is renewed and evaluate subsequently. These collaborate agencies generally extend technical and financial support in implementing SAARC programmes in the area of environment and other related fields. SAARC is an accredited Observer of the United Nations Framework Convention on Climate Change (UNFCCC) since COP 16 (Cancun, Mexico, 29 November-10 December 2010) and has presented common SAARC positions on climate change (SAEO 2014).

Environment was included as the major concerns area under the SAARC development goals (SDGs), the policy makers of SDGs recognised the important of environment sector goals in order to conserve natural resources necessary for life-support and livelihoods of the poor in the south Asian region.

The important area of target goals under the SAARC development goals in the sphere of environment are briefly highlighted below :(Ministry of Statistics and Programme Implementation Government of India 2015; ISACPA 2007).

- Key targets include reversing the process of deforestation, engaging traditional communities in forest conservation, promotion of social forestry including roadside and homestead forestry.
- Key targets include appropriate water management, ban on 'dirty dozen' of pesticides/insecticides, control of waste and industrial discharges, use of organic fertilizers, etc..

 Key targets include a) reduction of indoor air pollution caused by inefficient biomass cooking devices to acceptable levels, b) discouragement of leaded petrol, and c) improved solid and hazardous waste management.

Over the years SAARC establish various centres and monitoring cell to tackle the environment issues in south Asian region some of the notable such establishment are mention below:

- (I) SAARC Coastal Zone Management Centre (SCZMC) established in 2004 to promote cooperation in planning, management and sustainable development of coastal zones, including research, training and awareness. This centre also organised workshop and other knowledge base activities in 2014 five day long workshop was held at Port Blair to discussed the climate change affect to the ocean and marine life in the south Asian region. In April 2007 this centre organised an expert group meeting to draft the SAARC coastal zone management action plan. However the SAARC high level meeting in 2014 decided to merged the four centres including SAARC disaster management centre in India, SAARC coastal zone management centre Maldives, SAARC meteorological research centre Bangladesh and SAARC forestry centre in Bhutan. The meeting also name the new centre as SAARC environment and disaster management centre SEDMC.(Secretariat 2011; NDTV 2014).
- (ii) **SAARC Forestry Centre (SFC)**: In 2007 for the protection, conservation and prudent use of forest resources by adopting sustainable forest management practices through research, education and coordination among Member States. Capital cost of this centre is born by the host government. 40% of institutional cost is borne by host government and 60 % through membership contribution. And programme budget is borne by membership contribution (SAARC Forestry Centre 2013).
- (iii) **SAARC Disaster Management Centre(SDMC):** In October 2006 to provide policy advice and facilitate capacity building including strategic learning, research, training, system development, expertise promotion and exchange of information for effective

disaster risk reduction and management – the mandate of the Centre was expanded to include the development of a Natural Disaster Rapid Response Mechanism (Fifteenth SAARC Summit, Colombo, 2-3 August 2008).

(iv) SAARC Meteorological Research Centre established in 1995 to carry out research on weather prediction and better understanding of monsoon in the South Asian region.(SAARC Meteorological Research Centre (SMRC) and its Future Plans 2007).

Apart from these SAARC environmental centres mention above there are others various regional environmental initiatives which is operating in the region of south Asia. Few of these centre and programmes are collaborated with SAARC however majority of others programmes and centre are run under the external funding outside of SAARC. Most of these independent programme and initiatives are overview by inter-governmental programmes and others independent body, some of such initiatives and programme are highlighted below:

Regional environmental initiatives in South Asia

South Asian Cooperative Environmental Programme (SACEP)

To enhance the regional cooperation through management of natural resources and to protect the environment in the south Asian region, SACEP was established in 1982 by the Ministers of Environment of SAARC member countries as an inter-governmental organization. members countries of this organisation are India, Maldives, Nepal, Sri Lanka, Pakistan, Bangladesh, Afghanistan and Bhutan Its visions include promotion beneficial regional cooperation in areas of environment; promotion of exchange of knowledge and expertise in order to tackle the environmental issues, recognitions of environmental degradation, environment and its linked with poverty and over population in the region., and formulation, financing of environmental projects. Its secretariat is located at Colombo. SACEP has implemented a number of projects and programmes in

the areas of environment education, environment legislation, biodiversity, air pollution, and the protection and management of the coastal environment. this inter governmental organisation formulated and endeavour various implementation of major regional programmes and initiatives in the south Asian region, including, and South Asian Coral Reef Task Force, South Asia Biodiversity Clearing House Mechanism, South Asia Network for Security and Climate Change and International Partnership for Expanding Waste Management Services of Local Authorities, the South Asian Seas Programme (SAEO 2014; SACEP 2017).

South Asian Seas Programme

Established in 1982, the South Asian Seas Programme (SASP) is one of the 18 programmes of Regional Seas Programme of UNEP. It important area of interest are on Protection of marine environment, integrated coastal zone management(ICZM), protection of environment from the oil spill, human resource development through regional Centre of excellence. It follows the existing international environmental laws, members countries in this programmes are assigned the task to involve in conducting various activities in the national important areas. A MoU for cooperation on the response to the oil spill and chemical pollution in the south Asian region was signed with the Maldives government, Bangladesh government, Sri Lanka Pakistan to promote cooperation between countries in the event of an oil or chemical spill, a Regional Oil and Chemical Pollution Spill Contingency Plan was developed. In 2010 introduced the blue flag beach conservation programme to the south Asian seas region in collaboration with foundation for environment education. A regional and National Plan of Actions for Global Programme of Action (GPA) has been formulated by the members' countries. This programme organised various workshop, seminars, and meeting to discussed in the related issues (SACEP 2017; SAEO 2014).

South Asia Coral Reef Task Force

The South Asia Coral Reef Task Force (SACRTF) was established in the five south Asian countries which shared the Indian Ocean in order to facilitate the implementation and management of various initiatives of coral reefs and related ecosystems in the region, and to promote collaborative action, and trans-boundary responses to shared environmental challenges. It was endorsed by the country governments of the five maritime nations of South Asia, at the SACEP Governing Council Meeting in Nepal, in January 2007. Regional Integrated Multi-Hazard Early Warning System is an international and intergovernmental institutes, set up to generate the early warning information in Asia and Africa, established after the 2004 Indian ocean Tsunami. It provides early warning services for tsunami, hydro-meteorological hazards like cyclone, floods, droughts and storm. Its secretariat is located in Maldives and its regional early warning Centre located at the campus of the Asian institute of technology in Thailand. It members and collaborating countries from south Asia are India, Maldives, Bangladesh, Sri Lanka, Afghanistan, Bhutan and Nepal(SACEP 2017c; SAEO 2014).

International Centre for Integrated Mountain Development (ICIMOD)

Based in Kathmandu, ICIMOD is a regional intergovernmental learning and knowledge sharing centre serving the eight countries of the Hindu Kush Himalayan region-Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal and Pakistan. ICIMOD aims to assist the mountain people on the impacts of globalisation and climate change and its impact on the livelihoods of mountain people, and fragile ecosystem in the mountain region of Hindu Kush Himalayan region. They support regional transboundary programmes through partnership with regional partner institutions, facilitate the exchange of experience, and serve as a regional knowledge hub. They assist in knowledge exchange mission in the region (SAEO 2014; ICIMOD 2017).

South Asia Youth Environment Network

The South Asia Youth Environment Network was set up in July 2002.supported by the UNEP, it aims to bring together youth with a vision of promoting sustainable development in South Asia. Set up in July 2002, SAYEN is linked to TUNZA, UNEP's strategy for engaging young people in environmental activities and in the work of UNEP. Centre for Environment Education (CEE), India, hosts the Secretariat for SAYEN, which has membership from all the eight SAARC countries. it membership in each members country ranges from 20 to 100 with over 1500 youth organisation, individual, national and international agencies including government in the region associated with the SAYEN. It main vision is sustainable development in South Asia with the mission of effective youth participation in the decision making process to promote sustainable development in South Asia. The key activities of SAYEN include Networking and Information Servicing, Capacity Building, Documentation, Developing resource materials and Creating Awareness Programmes for youth. SAYEN organizes capacity building programmes to help youth to understand sustainable development issues, challenges and efforts through participating in ongoing projects and initiatives (SAYEN Secretariat; SAEO 2014).

Climate Action Network South Asia

CANSA is a coalition of 149 civil society organisations from the 8 South Asian countries. this organisation acknowledge the climate change as the single most overarching issue confronting communities, nations, regions and the entire world. Some of the important objectives of the organisation are to promote research, education, and knowledge sharing. Building capacity of member organisation in imparting, mitigation and strengthen membership base. Important programmes of this organisation include research, education and advocacy, capacity building of the member organisation, mitigation and adaptation programmes, develop linkages and collaborate with local, regional and international organisations, universities(SAEO 2014: CANSA 2015).

Transboundary Air Pollution

Male Declaration on Control and Prevention of Air Pollution is one of the prominent initiatives to control and manage the air pollution in South Asia. This declaration recognised major air pollutant and its consequence on human being and other living being this declaration was adopted in the Seventh Meeting of the Governing Council of SACEP. The participant countries are Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan, and Sri Lanka. This declaration urged the member states to initiate studies and programmes on air pollution. the Declaration also sets up an institutional framework linking scientific research and policy formulation for the south Asian region (SAEO 2014; SACEP Male declaration 2011).

Regional Initiative to Counter Water Quality

To address the issue of trans-boundary water quality in the south Asian region, the Cooperative Monitoring Centre (CMC), USA with complementary funding from the US Department of Energy, initiated the South Asian Water Analysis Network (SAWAN). With the participation from Bangladesh, India, Nepal and Pakistan, this networks aims to monitor the transboundary river water quality of the Ganga Basin in South Asian. The main objective of this programme is to promote co-operation in South Asia on environmental research, share regional information to build confidence, expand future co-operation, as well as collect and share water quality information pertaining to a number of rivers in the south Asian region. The key interest of the programme is to collect and share water quality information among partner countries in order to understand the quality of the rivers.

The South Asia Water Governance Programme (SAWGP) is an initiative for better management of the three primary Himalayan Rivers the Indus, Ganges and Brahmaputra shared by the seven south Asian countries (India, Afghanistan, Bhutan, Pakistan, china, Nepal and Bangladesh). This programmes aims to increase cooperation in these seven countries in tacking transboundary challenges such as flood water for irrigation, and

maximising hydropower potential and impact of climate change in these countries. This programmes aims to facilitate co-operation between these countries, to create significant benefits that these rivers could offer to economic growth through hydropower development and its resources and poverty reduction through management of efficient water supply for food and agriculture, flood and drought in these countries.

South Asia Wildlife Enforcement Network

SAWEN is an intergovernmental wildlife law enforcement support network of Nepal, Afghanistan, Bangladesh, India, Maldives, Pakistan, Bhutan and Sri Lanka. It was formally established during the Second Meeting of the South Asia Experts Group on Illegal Wildlife Trade, held on 2011 in Paro, Bhutan.

The SAWEN Secretariat was formally established on 20th April, 2011 in Kathmandu, Nepal.

Important objective of SAWEN are to take initiatives for harmonising Laws and policy of wild fauna and flora; to document the trend of poaching and illegal wildlife trade and to combat wildlife crime.

In April 2016 government of India adopted the Statute of the South Asia Wildlife Enforcement Network (SAWEN secretariat 2017, PIB Government of India 2016; SAEO 2014).

Traditional Security versus Environmental Security in the Case of South Asia

Major Player in the south Asian are continues to emphasis on the militaristic centred security concept. One of the most critical problems on the meaningful cooperation in the south Asia is their inability to come out from the boundary of traditional threat point of view. Bilateral contentious issues withheld the prospect for any progress in the larger interest. This bilateral political tussle not only hampered the SAARC but the biggest lost

is the people in large, the argument here is that a huge chunk of budget in most of the Asian states are spending in the defence sector. Any other non traditional threat and security aspects are often overlooked by the conventional threat. The central argument in this junction is that in a rational analysis in this region the threat from non-traditional security aspect is more alarming and inflicting than the direct casualty and lost from the war or cross border military clash. This is not to deny the fact that the other region in the world is also spending the huge budget in the defence sector. However this region shows poor expenditure in the non traditional security. Important security aspect including environment, health care, education and other social welfare programme are lacking much behind the desirable level. A simple analysis can highlight the dismay in this region. The recent annual calculation by the Washington base International food and policy research institute (IFPRI)¹⁰ ranked Pakistan at 107, ranked India 97th rank among the 118 developing countries in the global hunger index (GHI) others states stood at Nepal 72th rank, Sri Lanka 84th rank and Bangladesh 90th rank(International food and policy research institute 2016). Spending on social welfare and other sector which affected the common people other than the military conflict is account to be less than the desirable level. In India spending on many welfare programme are reducing and at many instances the government social spending to come up to the desire mark. In 2015-16, India's Union Budget has cut it spending on child education, development, health and protection as compared to last year, as independent NGO like child rights organisation CRY has stressed¹¹, reported by daily news and analysis, Child Rights and You (CRY) has said "in absolute terms" child budget has decreased from Rs 81,075.26 crore in 2014-15 to Rs 57,918.51 crore in 2015-16. It has said as a proportion of the total expenditure of the government, the child budget has seen a "sharp decline" from 4.52 per cent in 2014-15 to 3.26 per cent in 2015-16. "Similarly, massive cuts have been announced in Sarva Shiksha Abhiyan (Rs 22,000 crore from Rs 27,758 crore in 14-15) and mid day meal

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¹⁰ International food and policy research institute (2016), "the global hunger index", [ghi.ifpri. org } accessed on 4 january 2017 URL http://ghi.ifpri.org/

¹¹ Daily news and analysis (2015), "the government cuts spending on education, health care of children" [www.dnaindia.com] accessed on 4 January 2017 URL http://www.dnaindia.com/india/report-government-cuts-spending-on-education-health-of-children-cry-2065438

scheme (Rs 9,236 crore as against Rs 13,215 crore in 14-15 (Daily news and analysis 2015).

The neighbouring state Bangladesh is also not an exception, it need to fight to reduce the poverty as its 47 million people living in poverty and 26 million in extreme poverty as reported by the world bank in 2014(world bank 2014)¹². The Bangladesh government's 2015-16 budget was seen reducing the cooperative taxes to attract the foreign investment however the matter of disappointment is that the budget slashed spending in the health and family welfare ministry, allocating approximately 127 billion taka, or just 4.3 percent of total budget allocations. This is a drop of 0.51 percent from the current fiscal year, and the lowest proportion of budget expenditure since 2010-2011. Even before the cuts, per capita health spending was only \$27, half the \$54 recommended by the World Health Organisation as reported by International Committee of the Fourth International (ICFI 2015)¹³.

SAARC and Environmental Cooperation: The Institutional Working Mechanisms

In the reformulation of environmental cooperation under the SAARC certain aspect and mechanisms must fine tune to the special situation of the south Asia. In order to achieve the desire level of cooperation, the policy makers must fine tune to the possible challenges proper. As discussed earlier, the decision making organ in the SAARC is highly centralised in which the sole authority of decision maker rest on the head of the states, any called to strengthen the existing environmental cooperation must give important emphasis on the full-fledged Ministries of Environment and others related technical branch. Giving adequate authority to the concerns organ could enhance their

¹²The World Bank (2014), "Bangladesh: Safety Nets to Protect the Poor", [http:www.worldbank.org]URLhttp://www.worldbank.org/en/news/feature/2014/03/27/bangladesh-safety-nets-to-protect-the-poor

¹³ International committee of the fourth international (2015), "Bangladesh budget: More concessions to investors, increased austerity for poor" [www.wsws.org] URL https://www.wsws.org/en/articles/2015/06/23/bang-j22.html

ability to formulate and implement the programme and policy through their special needs and experience.

As experience in the present context of SAARC, most of the decision and directive are non-abiding in nature, due to lack of this enforcement power, most often the members state or concern respondent neglected or fail to comply with the recommendation and directive of the SAARC.

In the present working of SAARC, the role and participant of civil society are almost negligible. Role of NGOs and civil society are widely acknowledges in various others regional and international levels. SARC must tap the important roles play by the NGOs and civil society.. The alternate or possible route to bring this body alive is top reach out the environmental programmes and policy at ground level; NGOs and civil society must provide the space to take part and actively participates.

Imparting Environmental awareness in south Asia could alert the common people. Except for those who are expert and learned in the environmental knowledge, millions of south Asian people are not well aware of the environmental implications from various activities. At least educating the basic knowledge information regarding the environmental problems and issues could be useful. In this context the role of SAARC is very important. SAARC institution could play a crucial role to increase the awareness through the digital Medias, radio and various other means of rural action programmes.

The current political commitment to the protection and development of the environment is no doubt almost defunct particularly in the case of SAARC (detail analysis in the subsequent section).despite of their repeated agreement and declaration, there are huge gap in the translation into action. The members state in SAARC need to renew their political commitment for progressive development. Since from the inception SAARC's political commitment in any of the area of cooperation lacked the their commitment, their participation in the summit and meeting seems to be motivated by the compelled circumstance as being the contracted members, this static annual ritualistic characteristic

of engagement would yield any further progress. A strong political will and commitment could only take the cooperation further ahead.

The organ that monitor and entrusted the task of environmental protection must strengthen its laboratories and Research and Development institutions agency. In the present scenario SAARC has facing acute shortage of logistic strength to deal the emerging challenges. Establishment of R&D institute and scientific agency would provides the important input like environmental finding, study and new development to the policy maker and also it would help to impart new knowledge to the to the world specially the south Asian .it is important for SAARC to develop mandatory Academic courses on environment in colleges and universities in their respective states.

SAARC members state should commit their contribution of fund so that the programmes and action implementation goes smoothly.

The relevance of SAARC: A regional community or a reluctant platform?

The most important question of SAARC in the contemporary south Asia is the question on how much the SAARC is relevant as a regional platform to address various issues and challenges the south Asian region confronted. The next question; is there any prospect for SAARC in the future. The answer to the above question find complex to answer because for the simple reasons that one cannot conclude the ending line such as SAARC is abrogated at the same time one cannot proudly answer that SAARC is a big success. The problems and difficulty in answering the straight answer to the first question is because of the fact that SAARC is completely stop working, on the other hand SAARC's journey so far as a regional platform in the south Asian region is not a successful journey, empirical evident and prima facie examination on the working of SAARC tells us sluggish movement with little success. The inefficiency of SAARC is not in the vision or principle but largely responsible on their limited translation into the action.

Answer to the second question is also equally attribute complex and unclear, the simple reason is that it is very unlikely that the South Asian states will abandon the SAARC in the future, on the others hand it is also complicate to the speculate the future prospect of SAARC, as many of the core area of contentions and disputes in the south Asian region is likely to linger for longer time in the future too. There are numbers of indications, signs and evident to substantiate the arguments mentioned above. Analysis of nature and characteristic of the SAARC in the light of present scope and future scope is very much important in understanding the core issue of this research work, the question on how the environmental cooperation in the SAARC platform could be fit in light of complicate configuration of south Asian regional dynamic. The main concerns in this point for this research study is in the analysis and study on the comparative merit and demerit or advantage and disadvantage of environment cooperation in the SAARC platform. As briefly analyse in the previous chapter the progress of SAARC region continued to faces various political conflict in the forms of bilateral disputes, ethnic, communal and religious extremism conflicts beyond the single state boundary. after nearly three decade of established the cooperation of SAARC can hardly brought ease to the ongoing bilateral political dispute, the prime factor in the larger political tussle in the SAARC lies in the strained political relations between the India and Pakistan, because of this political dispute many SAARC summits were cancelled, moreover many key development agreement and programme couldn't finalised as the conflicting interest comes to halt the prospect for progress. political harmony is the foremost precursor element that need to secure to make progress in the meaningful regional cooperation, Although during the super power blog rivalry, both the countries claimed to choose neutral position however in reality both the states were in deep attachment to the US and USSR, after the end of the cold war many of the political structure in most part of the world marked changes, this is also the time when SAARC was in early stage of formation, there was speculation and positives expectation that the reconstitution of world after the end of cold war would bring the favourable changes for the south Asian region however contrary to the expected result the political and bilateral disputes in the region continued to sustain. The bilateral political differences in these two major power of south Asia remained static with little impact by the international political configuration, the main the problems is that fact that

political disputes between Pakistan and India contain internal sources of causes which make the dispute hard to address in the SAARC platform or any other international platform. In the present scenario both the countries are almost cut off from the political and economic relation. Even the flow of people to people contact has been halted in the recent time. Therefore any near likely solution to come over the political differences is likely to remain uncertain with little hopes for the SAARC to progress.

One of the common and most dominant forms of regional cooperation has been carried out in the economic sphere. The prospect for such economic cooperation in south Asia thought exist but have little progress, in the European case the economic integration was the main primary driver to spill over for meaningful regional integration. The simple logic is that progressive economic cooperation would led to ease the political difference and also would brought the economic prosperity in the region beneficial to all the contracted members states. Such economic cooperation attempt has put into experiment in the south Asian region too. Apart from South Asia preferential trade agreement(SAPTA) and south Asia free trade agreement(SAFTA), Members of SAARC in 18th summit declaration made ambitious goal to reach at the south Asia economic union, but the matter of fact is that leave aside the ambitious goal like Economic union, SAPTA and SAFTA faces various difficulty. While the free trade envisage in the SAFTA is beyond the reached and preferential trading also has little progress Due to huge economic different and differences in the region. At present the trading among the south Asian region remained low. The intra regional trade account little compared to their trading percentage outside of SAARC region. Based on the study on intra regional trade in south Asia conducted by Asian development banks (ADB 2009)¹⁴ highlighted that Intraregional trade found a very disproportionate bias toward intra regional trade and investment according to this study In 2007, South Asia had a total trade value of \$517.5 billion and out of this only 4% was intraregional trade in south Asia. Which is very low compared with the neighbouring region of East Asia's regional trade in 2006, which constituted 32% of its total trade. The study highlighted that despite of having the

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¹⁴ Asian development bank (2009) *Study on intraregional trade and investment in South Asia*, Publication Stock No. RPT090816, Philippines

advantages of proximity in trade, South Asian countries still choose to trade with the more distant economies of the United States and European Union. In the same manner, most of the region's FDI also comes from outside the region. This type of pattern likely to remain for longer time in the near future too as the economic size of the south Asian region will bear the identical. In view of such Sharpe asymmetric economic relations in the south Asian states, any optimistic trade cooperation will face stiff obstacles.

Another factor that led to the unhealthy regional cooperation progress in this region is cause from the lack of central authority. In the make up for successful regional formation the acceptance of hegemon or central power is very crucial part. For instance the case of NAFTA which US lead the body, in the case of European Union, Germany took the role of central power, in the case of Gulf cooperation council, Saudi Arabia took the eminence role. A general problem is that if these central or hegemon power is not accepted unanimously or by majority there is high possibility of instable in the regional configuration. The most likely outcome is that this aspiring regional hegemon could pose as major challenges for the smaller states. The similar kind of atmosphere is prevailing in the South Asian region. This could be better understood as South Asia's region's structural imbalance. This structural imbalance put the south Asian states in the unfavourable condition for fair and balance regional cooperation. Because of this situation in this region India want to maintain a leading role in the regional set up, whereas Pakistan and other South Asian countries are opposed to this design and they seek others option to counter the India. In the recent past smaller state in the south Asia continued to increase their relations with others major power outside of the south Asia. The increasing bilateral relationship between Nepal and china is seen by many experts as an attempt to counter the influences from India.

SAARC was born to improve socio-economic prospect of south Asian region, to strengthen the south Asian region politically, apart from the mentioned bilateral and economic issues it confronting, part of it failure and obstacles to realised the projected role and promises goes to the formation period. The institutional design of SAARC was not well equipped to face complex situation of south Asia. a close study of SAARC

institutional design found lacuna, the charter which served he general and backbone SAARC institution clearly mention to kept away bilateral and contentious issues in the SAARC platform. The charter forbids the possible space for political contentious issues to discussed and deliberate. Since political issues and bilateral contentious issues are the main obstacle, the possibility to use this regional platform to exchange or at least provide the leaders to communicate is totally shunned. Beside from this another lacuna in the institutionalisation of SAARC, the issue of unanimous decision as the medium of official decision procedure lack its utility in the case of SAARC, since the reality in the SAARC region is always pose with multiple and delicate complexity, issues and policy that SAARC forum pick must fine tune with all the members state. The mode of passing any official decision through the unanimous consensus make SAARC forum confined with limited scope to deal the multiple issues. At any platform international as well as in regional platform the space for collective and healthy deliberation space core mechanism, it at least served the space for dissent and disagreement through proper channel. The distribution of power to this regional body by the contracting members is almost negligible, the supreme authority rest on the hand of state's head, which met once in a year. Whereas the other branch such as secretariat and technical and ministerial council are given limited power of monitoring and coordination of the policy and programme that the Heads of the state decided. All the branch of SAARC needs to wait the official decision and area where they need to work from the summit meeting. Whereas the heads of the states which they met in a year (only if it is conducive to meet) are highly influence by the existing political and economic configuration, they are also highly influence by the domestic and international situation for instance if there is intense situation in the Kashmir then the likely outcome is that SAARC summit will not successful or cancelled. Unless the SAARC reform and only if the members' states pay willingness, the prospect environmental cooperation. The rational ground for environmental cooperation as the means of meaningful cooperation in the south Asia region is because this issue and problems is affected to all the SAARC states, environmental challenges is likely to increase, environmental c issues and problems affect directly or indirectly to other issues such as poverty, threat to human health, hunger, migration, threat to economic growth, dispute for resources etc. in addition to these another advantages side for cooperation in

the environmental issues because of its less contention and hurdle compared to other sphere like political and economic aspect. Though environment issues do pose with some contention like the water sharing in the region, but looking at the overhaul comparative analysis environmental cooperation stood high yield prospect, here the argument of this research don't deny or suggest to halt the ongoing economic and political cooperation, the matter of concern for this research is that increase in the environmental cooperation in the south Asia serve numbers of merit and advantages.

Conclusion

Prolonged ineffective functioning of SAARC stimulates to revisit the basic location of approach to regionalism groundwork in South Asia. It seems that approach to regional cooperation set up was based on inadequate groundwork. South Asian's Euro-centric approaches of the cooperation grounded on various lacunae as it failed to explain regional cooperative efforts among south Asian states. The political dynamic in this region is complex and different from the stand point of political set up in Europe. After decade of formal decolonisation in this region, south Asian state Pakistan and at some extent Bangladesh are still facing instable political atmosphere. Pakistan's democratic political institution is tackling from the unwanted interference. Bangladesh had also faced political coup and democratic institution are often threaten from the radical influence. In the case the Afghanistan which is the newest entry in the SAARC, continue to face bigger issues in order to establish democratic and stable political culture. The political institution in India though running smoothly is often seized by the domestic factors. The neighbouring country Nepal has been crippling due to political instability, the recent constitutional controversy and instable government could become a challenging roadmap toward the achievement of stable political environment. Bhutan on the other side remained a monarchical state. Uneven and complex political atmosphere in this region has tremendously affected in the run to SAARC function. The current status of ineffective nature of SAARC is largely exerted by these larger instable political cultures. The central argument is that south Asia stand quite contrast to the political atmosphere from the Europe. This differences in the regional political dynamic between the two region

conclude that the Euro centric model of regional cooperation and integration process find many inconsistency and anomaly when it applied at south Asia. The important reason for this inconsistency is the fact that Euro-centric approach for regional cooperation rest on overemphasized integration wherein they firmly aimed for creation of supranational institutions so that the function and role of constituent members' states comply on the central organisation (European Union). European case also reflects that the desire outcome is to dilute some of the political authority in the domestic constituent member state for the sake of larger beneficial. On the contrary as discuss above the south Asian state's political atmosphere is not so conducive for such regional integration. Leave aside for such grand ambition for while, almost all the south Asian states have their own challenges to tackle the instable domestic political structure. In the European case the regional cooperation give immense focus on intense integration, however when it come to apply the same logic in the case of south Asia it occurred many anomaly specially it create inadequate attention to other more conducive forms of regional cooperation that could suit to the south Asian's case. The significance possibility is that regional cooperative agreements among the south Asian states can operate on a specific most conducive area such as environmental issues, social welfare aspect, without any grant ambition like free trade or political integration in SAARC. Importance observation found is that south Asian states find more comfortable and feasible in coordinating policies on specific issue areas such as environmental cooperation, Social welfare like education, connectivity, health, fights against poverty, witnessed as more conducive area of cooperation and create more peaceful than the economic and political coordination.

Another important argument that helps us to understand the rhetoric nature of engagement among the SAARC members state is the way members state pursued their engagement in SAARC. The problem which argues at this point is that south Asian states generally treat their engagement in SAARC from the measurement of hard calculating foreign policy perspective. This misguided approach from most of the south Asian states in making a distinction between the hard calculating foreign policy and their policy and engagement toward SAARC, generate a undesirable outcome in large. Fundamental curative model for south Asian State for long term vision for progressive regional

cooperation is to understand and act differently in the approach for SAARC and their approach for foreign policy, the problems here is that conventional foreign policy are generally conducted in the elite level generally includes bureaucrat, legislature because of this nature it failed to comprehends the ground level scenario of common masses. If a progressive and common masses oriented engagement in south Asia is to be achieved then south Asian state must treat the two approaches differently. At first the sources of motivation in these two approaches must treat differently, secondly south Asian state's interaction in the larger SAARC engagement should not be treated similarly with those of interaction in their conventional practices of foreign policy. Thirdly Roles of the south Asian state in their engagement at SAARC forum must be oriented toward the noncalculating goodwill perspective aim at larger regional prosperity. When the south Asian states reached to such a desirable stage in which they understand and act to address the mention above three problems, a whole ray of possibility for greater cooperation in SAARC region could achieve. The workable model here is that when in a certain stage where south Asian states took those genuine approaches in their motivation, interaction model and inclusivity people oriented policy, then the outcome could be progressive. Since the target is inclusionary vision, it would obviously need to explore at those common areas of cooperation in south Asian region that affect whole the region. At this juncture cooperation in the areas of environmental related areas could possibly the most feasible and conducive as for the south Asian regions. As also discussed in the third chapter in general most of the environmental related issues and prospect are generally interlinked or have the nature and characteristic of trans-boundary. Asthana (2004) argued that a comprehensive approach to national security issues must transcend the traditional emphasis of security issues to incorporate the real sources of insecurity...environmental stress creates a condition where political process are unable to handle its effects resulting in the political upheavals and military violence in south Asia. Poverty, injustice, environmental degradation and conflict interact in a complex and potent ways".

Cooperation in the area of environment carried significance differences from the complex and contentious area of cooperation in economy and political aspect (as for the case of

south Asian region) as for the case of, cooperation in the environmental related area, the burden or expense of distributional and adjustment remained within the affordable extent because the cooperating state's internal as well as external resources which are require in environmental cooperation has less threaten or contentious for example in a scenario in which member states of SAARC are asked for proportional contribution of fund according to their economic size for to use in environment related cooperation, at this context members state are most likely to agreed but in another scenario in which members states in south Asia are asked for unrestricted free trade then the outcome response for such a call would be too hard to achieved because in an extremely asymmetric economy configuration in south Asia it is most unlikely that the members state would be agreed. To arrive at such conduciveness context, the regional building approach must take the path of down to top approach, in such approach the sources of cooperation must take more important at the grass root level specially the common people of south Asian region and their genuine issues and constraints. Additional positive side of environmental cooperation in south Asia is that in this area of cooperation, both the common people and also the technical expert and elite top governmental organs automatically involve. To make it clear let's take a context in which members states of south Asia resolve to address the water scarcity and contamination problems and it effect on the fishermen and farmer in major sources of south Asian river, in such context, it would create the space to interact both the affected common people across the states and also the top government functionary of the affected states. In broader process patterns of interaction in a projected intense environmental cooperation would attract various actors across the boundary. Besides, as the south Asian states become more deeply engaged in the environmental related cooperation, the process automatically create the space to deal with more and more transboundary issues such as poverty because there is a immense linked between the environmental issues and it impact on many other aspect such as environmental problems directly or indirectly factor for low yields, flood, drought, shifting of land mass, permanent infertile of land, extinction and threat to wildlife etc.

On the other hand cooperation in the environmental related area need to stretch out for rearrangement in the domestic environmental law, migration law, domestic policy on land, forest, wildlife, unban pollution related law etc. Moreover states in the south Asian region could use its own research centre and other establishment to help the regional aspiration. On the top of this common fund in the form of bank could be in the possible line, this fund bank could fund for natural disaster in the region, fund from this could use in environmental related research, this fund could use build shelters, also this fund could improve million of poor people in the region which directly or indirectly affected by the environmental related problems. Among the most fatal impact from the environmental issues is the problems of health security in the south Asian states, major chunk of work and funding could be done by SAARC in other address in the health sector, possibly the fund so generated in the mention above bank could funded SAARC health research and health care centre in important strategic location across the south Asian region.

The central argument in order to arrive at a workable process of regional cooperation in south Asia, must take significance emphasis to harmonise the domestic demands and those urge among the states in the given regional process. Generally in most of the cooperation the policy makers or leaders looks at those common areas where they could gain the domestic support as well as to find it compatible and acceptable to all the states in the given regional set up. Defining and location of such a common beneficial and common less contentious cooperation area in the regional cooperation is the foremost challenging task. Right selection of such a common area would make a desirable result. In other words, domestic urge and regional engagement must be complementarily to each another if cooperation is to proceed in south Asia.

The projected optimism for the advantageous side for environmental cooperation in the south Asia is support by regional geographical contiguity and proximity in south Asia. This region is affected more by external circumstance because south Asian states share resources such as shared resources of hydroelectric power for instance shared rivers system on which two or more countries in south Asia depend on the same river system. Numerous shared fishing grounds, the pattern of location of industrial plants in the region at many cases are largely shared the fate for instances discharges of industrial wastes located in river side in a given states in south Asia may causes reduce fishing in

downstream or could threaten the settlement and health of people in the downstream. So in larger scenario the geographical proximity gives the positive outcome and broadens the scope for addressing the contentious issues among the affected countries. Moreover mutual coordinated engagement approach within less contentious framework of regional cooperation in south Asia which is given with geographically contiguous make them in an advantage position, where the members state seek to alter the policies toward their neighbouring country to reduce the likely negative opposition from others countries and focus more to increase positive outcomes.

Conclusion

The conclusion tries to provide answer to the research questions posed in the beginning of the study. It also locates some of the lacuna or structural flaws in the SAARC right from its institutional design, motivation, and the result of its practical tasks. Besides their principles and numerous agreements and declaration, this institution lacks serious commitment in their engagement. Their focus must orient toward the result and translation into action with clear vision of the regional ground realities in the south Asian region.

The central argument is whether SARRC as a regional organisation should remain trapped in the bilateral political rivalries or should it transcend beyond these differences and provide a common platform to address fundamental problem of environment which commonly affect the region. And if in case, environmental issues in South Asia can bring about a co-operative platform, would such co-operation be able to translate into other areas of cooperation. In the case of SAARC, it is most often bound by various inherent structural constraints. SAARC right from its inception is entrapped in the bitter political tussle. This political rivalry among the south Asian state swallowed every prospect of SAARC to bring growth. SAARC has lost it independent authority to sustain itself due to the differences among the member states. The prospect of SAARC for solving and mitigating conflict and disputes has yet to translate into actions; the institutional arrangement is flawed thereby making it ineffective. One such inherent flaw in the organisational structure is the mandatory Article of SAARC to discuss only issues of unanimity and avoid any contentious bilateral issues which affect the contracting states at large. Such flaws originate from within the SAARC Charter itself forbidding the changes to table the contentious issues as the Article X (2) of the Charter which clearly "bilateral and contentious issues must be kept away from the SAARC says: deliberation".

The conventional and common regional arrangement is generally centred on political and economic areas which are complementary to each other. If there is harmony and stable

political culture then the space and chances for economic cooperation is enhanced. On the other hand, when the economic cooperation increases, there are high chances of stable political culture. The simple reason is that if the economic cooperation is smooth and conducive then that implies a context where contracting member states have less conflict or that political difference must be not strong enough to hamper the prospect for economic cooperation. In the case of South Asia, the prevailing atmosphere of political differences and lack of harmony directly or indirectly affected the prospect of economic cooperation. There is clear cut indication that economic cooperation under the SAARC framework is almost a failure. Still the member states of SAARC fail to comply with the agreed point mentioned in the South Asian Free Trade Agreement. The main contention was due to the existence of Non-Tariff Barriers (NTBs) which the smaller states felt discriminated by the major states. Another important factor that stalls the economic cooperation is the failure of diplomatic relation. Since the two major states-India and Pakistan are frequently locked into diplomatic shut down, trade and movement of goods are heavily affected. In addition to this, due to political tussle and security reasons, level of regional connectivity in South Asia is not so conducive to facilitate the flow of people and goods. More over Pakistan still refuses to grant India the status of Most Favoured Nation (MFN). In 2016 after the Uri terrorist attack the government of India hinted to revoke the MFN status to Pakistan. Successful regional economic integration is hit by the ongoing political tussle. In an interview to a newspaper in 2006 after Pakistan ratified the SAFTA, the then Pakistan's Commerce Minister Humayun Akthar Khan said that fullfledged commercial relations between the two countries would have to wait for the resolution of the Kashmir issue¹⁵.

In South Asia, the distribution of intra-regional trade is highly imbalanced. India is the largest exporter in South Asia due to its exporting capacity. In addition to this member states in South Asia increase their trading outside of regional trading. Trade under the framework programme of SAARC is hindered by other factors such as increasing self

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¹⁵ Saroj Bishoyi,(2016)," India-Pakistan Relations and SAFTA"[http://www.ipcs.org/] accessed on 1 November 2016 URL: http://www.ipcs.org/article/south-asia/india-pakistan-relations-and-safta-2102.html

regulating bilateral trade; most of the regional trade in south Asia are mostly guided by bilateral agreement between the contracting states.

From the above brief analysis and study, some important derivation would be useful to share. Despite of all the odd and obstacles in the fundamental regional cooperation in South Asia, this platform continues to breathe against the odd. The factor that thrives or sustains this regional platform despite numerous odds is the shared consciousness of being a regional entity. This shared consciousness is generated and shaped by shared contiguous landmass, the shared cultural and rich historical tradition, century long mobility of peoples from one part of this region to another part, the shared agony of colonialism and traditional economic ties among the various communities in this region. So the inevitable question in this point is that despite of all these given affinities and natural prospects for growth of regional cooperation, what hinders the growth of SAARC as a regional platform and what explains its dismal progress even after the formal establishment of SAARC? Answer to this interrogative argument has been discussed and elaborated in terms of the institutional flaws discussed both in this section as well as in the first chapter of this study. For any programme and policy to make progress, the regional policy maker must select those areas which best suit the given region. As for the South Asian case, environment cooperation offer itself as the most feasible and common issue wherein a possible cooperation among the SAARC countries can be achieve. It is not that the states have not realised the potential of environment as a common ground for cooperation. The SAARC, in various meetings, have highlighted the need for a collective approach to address the common problem of environment affecting the region. Despite such realisation of the importance of environment as a common problem, the SAARC countries so far have not been able to make any progress on this front. The reasons for this is that in most of the cases, the decision are made generally by those state leaders who in most cases, compromises such vital issues on the pressure from political factors. Also, these leaders have no knowledge of the core environmental issues. On the other hand, technical committee and standing committee who has the knowledge are given less authority to regulate themselves. The lack of coordination and preparedness in formulation and selection of issues and programme ultimately resulted into failure when

it comes to the implementation. Many experts on SAARC view that the summits and meetings have become symbolic rituals with no political will.

While examining most of the summit declaration, the language or pattern of their agreement convey less enforcing and non- abiding characteristic. For instance, maximum of their declaration use words like "the leaders reiterate", "the summit recommended", "the heads of the states observed or recognised", and "the summit expressed deep concern" so on. Such symbolic gestures dominate the SAARC decision in which the room for mandatory and enforcing characteristic lost it shine in the overall functioning of SAARC.

The institutional flaw combined with the overall regional constraints in the South Asia stall the SAARC. The important question here is that if the present SAARC progress is slow and almost failed then what could be the other alternative ways to rejuvenate SAARC. The simple and direction answer no doubt is to go for reforms. Taking into account the above mentioned constraints, in order to revamp the SAARC, the regional planner must bear the complex situation and ground reality, selection of such area of cooperation is not always necessary to begin from the ambitious and less conducive area. Taking this account, this research puts forward the advantages of environmental cooperation as environmental issues cannot be ignored at all in south Asian region. Cooperation in this area may face many constraints and obstacle. However in a relative and comparative view point, cooperation in the area of environment and its related issues attribute many advantages and merit. Since all the member states experience the affect of environmental problems, cooperation in this area attribute relatively less contention. Also, environment cooperation provides benefit and enhances cooperation in other areas like poverty, food shortest, environmental migration, natural resources related conflict, human health.

But before SAARC enhances its environmental cooperation, it is important to check the reality of existing environmental cooperation in south Asia. The overall reality in this area of cooperation is not an exception from other area of cooperation. The hindrance and

slow progress in the environmental cooperation is mainly because of the lack of will and sincerity from the contracting members. Shortage of fund and other logistic constraints remains the main obstacle. In 2014 the standing committee of SAARC at its meeting held at Kathmandu resolved to merge SAARC Coastal Zone Management Centre (SCZMC) in the Maldives, SAARC Meteorological Research Centre (SMRC) in Bangladesh, SAARC Forestry Centre (SFC) in Bhutan, and SAARC Disaster Management Centre (SDMC) in India and decided to merge under new centre called SAARC Environment and Disaster Management Centre (SEDMC). This is mainly because of lack of resources and fund shortage. In addition to this, most of working environmental programmes in South Asia is either run with collaboration or through the external funding. Notable among them are South Asia Coral Reef Task Force, the South Asian Seas Action Plan (SASAP), South Asian Water Analysis Network (SAWAN), Climate Action Network South Asia (CANSA), South Asia Youth Environment Network (SAYEN), and International Centre for Integrated Mountain Development (ICIMOD), Regional Integrated Multi- Hazard Early Warning System etc. This listed programmes and initiatives are mostly intergovernmental initiatives and fully funded and run by external body outside of SAARC or are collaborated with SAARC.

Through the analysis what we can see is that despite the shortcomings, cooperation in environment area is the most promising area for SAARC cooperation. This can be an alternative regional model for rest of the world, with its distinctive peculiarity shaped by special need and adaptability in the developing region of the world. This research once again reiterates that economic and political cooperation in South Asia shall in future depend on political and inter-state stability. Given the long history of political rivalries among and between the SAARC countries, it is suggested that the only hope for SAARC to progress and sustain is to work on environment issues and enhance environmental cooperation in the region with necessary revamp and reform of SAARC to tackle the emerging challenges in the coming times in the interest of whole earth specially the south Asian region.

SIXTEENTH SAARC SUMMIT THIMPHU, 28-29 APRIL 2010

THIMPHU STATEMENT ON CLIMATE CHANGE

The Sixteenth Meeting of the Heads of State or Government of the Member States of the South Asian Association for Regional Cooperation (SAARC) in Thimphu, Bhutan, on 28-29 April 2010,

Recalling the high priority attached by the Leaders of SAARC at successive Summits towards preserving and sustainably managing the rich, fragile and diverse ecosystems of South Asia;

Expressing deep concern about the adverse effects of climate change and its impact on the region, particularly on the lives and livelihoods of the 1.6 billion people of South Asia;

Recognizing that effective responses, both on mitigation and adaptation should be formulated and implemented at regional and international levels;

Mindful that while South Asia's contribution to climate change is minimal, the impacts of this global phenomenon transcends national boundaries;

Also Mindful that the Member States of SAARC as developing countries face the dual challenge of addressing the negative impacts of climate change and pursuing socio-economic development;

Emphasizing the overriding importance of socio-economic development and poverty eradication in our region, and convinced that reducing dependence on carbon in economic growth and promoting climate resilience will promote both development and poverty eradication in a sustainable manner;

Determined that South Asia should become a world leader in low-carbon technologies and renewable energy;

Reiterating the principles of equity, and common but differentiated responsibilities and respective capabilities as enshrined in the UN Framework Convention on Climate Change to be the basis for an agreed outcome in the global negotiations on climate change;

Also underlining that an agreed outcome of the global negotiations must emerge from an inclusive, transparent, open and democratic process of negotiations;

Noting that South Asia is particularly prone to climate change and related disasters making the need for a regional response to meet the challenge of climate change more urgent and compelling;

Welcoming the adoption of Climate Change as the theme of the Sixteenth SAARC Summit as an important initiative to galvanize and consolidate regional endeavours with the objective of making South Asia climate change resilient;

Also Welcoming the signing of the SAARC Convention on Cooperation on Environment as a significant step towards promoting and strengthening regional cooperation;

Convinced that South Asia could benefit from cooperative regional initiatives and approaches, exchange of experiences, knowledge, transfer of technology, best practices to address the challenges posed by climate change;

Aware that preservation of environment and mitigating the impacts of climate change are mutually reinforcing;

Determined to address the adverse effects of climate change in accordance with the purposes and principles of regional cooperation enshrined in the SAARC Charter;

Hereby adopt the Thimphu Statement on Climate Change and agree to undertake the following:

- (i) Review the implementation of the Dhaka Declaration and SAARC Action Plan on Climate Change and ensure its timely implementation;
- (ii) Agree to establish an Inter-governmental Expert Group on Climate Change to develop clear policy direction and guidance for regional cooperation as envisaged in the SAARC Plan of Action on Climate Change;
- (iii) Direct the Secretary General to commission a study for presentation to the Seventeenth SAARC Summit on 'Climate Risks in the Region: ways to comprehensively address the related social, economic and environmental challenges';
- (iv) Undertake advocacy and awareness programs on climate change, among others, to promote the use of green technology and best practices to promote low-carbon sustainable and inclusive development of the region;
- (v) Commission a study to explore the feasibility of establishing a SAARC mechanism which would provide capital for projects that promote low-carbon technology and renewable energy; and a Low-carbon Research and Development Institute in South Asian University;
- (vi) Incorporate science-based materials in educational curricula to promote better understanding of the science and adverse effects of climate change;

- (vii) Plant ten million trees over the next five years (2010-2015) as part of a regional aforestation and reforestation campaign, in accordance with national priorities and programmes of Member States;
- (viii) Evolve national plans, and where appropriate regional projects, on protecting and safeguarding the archeological and historical infrastructure of South Asia from the adverse effects of Climate Change;
- (ix) Establish institutional linkages among national institutions in the region to, among others, facilitate sharing of knowledge, information and capacity building programmes in climate change related areas;
- (x) Commission a SAARC Inter-governmental Marine Initiative to strengthen the understanding of shared oceans and water bodies in the region and the critical roles they play in sustainable living to be supported by the SAARC Coastal Zone Management Center;
- (xi) Stress the imperative of conservation of bio-diversity and natural resources and monitoring of mountain ecology covering the mountains in the region;
- (xii) Commission a SAARC Inter-governmental Mountain Initiative on mountain ecosystems, particularly glaciers and their contribution to sustainable development and livelihoods to be supported by SAARC Forestry Center;
- (xiii) Commission a SAARC Inter-governmental Monsoon Initiative on the evolving pattern of monsoons to assess vulnerability due to climate change to be supported by SAARC Meteorological Research Center;
- (xiv) Commission a SAARC Inter-governmental Climate-related Disasters Initiative on the integration of Climate Change Adaptation (CCA) with Disaster Risk Reduction (DRR) to be supported by SAARC Disaster Management Center;
- (xv) Complete the ratification process for the SAARC Convention on Cooperation on Environment at an early date to enable its entry into force; and
- (xvi) The Inter-governmental Expert Group on Climate Change shall meet at least twice a year to periodically monitor and review the implementation of this Statement and make recommendations to facilitate its implementation and submit its report through the Senior Officials of SAARC to the SAARC Environment Ministers:

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