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TOWARDS A STRONGER, DYNAMIC & INCLUSIVE SOUTH ASIA

EDITED BY
SAMAN KELEGAMA & ANUSHKA WIJESINHA



INSTITUTE OF POLICY STUDIES OF SRI LANKA

Towards a Stronger, Dynamic and Inclusive South Asia

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SAMAN KELEGAMA AND ANUSHKA WIJESINHA

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Preface

It is now widely acknowledged that a cornerstone of South Asia's future must be its ability to cooperate among each other in tackling the key socio-economic challenges of our time. While diplomatic discussions take place at the highest level - through the thirty year-old initiative, SAARC - there is an important role for Track II processes that complement this and offer platforms for the exchange of knowledge and the generation of ideas. Within this, a lack of Track II engagement in economic policy-making processes had been recognised as a limiting factor to regional integration in South Asia. As an attempt to remedy this, the South Asia Economic Summit (SAES) was launched in 2008, initiated by a regionally-based group of five think-tanks, namely, the Institute for Policy Studies (IPS) in Sri Lanka, the Research and Information System for Developing Countries (RIS) in India, the South Asia Watch on Trade, Economics and Environment (SAWTEE) in Nepal, the Centre for Policy Dialogue (CPD) in Bangladesh, and the Sustainable Development Policy Institute (SDPI) in Pakistan. At each Summit, issues concerning key growth opportunities and challenges experienced by the economies of South Asia constitute the central focus. In this sense, it follows the example of the World Economic Forum held annually in Davos, albeit at a regional rather than a global level. Nearly seven years since the first Summit, the SAES is now seen as an important regional platform for dialogue and debate in this region, and is recognised as the premier forum for the region's thought leaders to tackling the critical socio-economic issues, develop new insights, and generate fresh ideas on the way forward.

In previous years, the SAES has been concerned mostly with issues of regional cooperation, as well as with regional approaches to dealing with such issues as food and energy security. While recognizing the importance of regional cooperation in strengthening South Asia and positioning it as a better integrated region, the 6th SAES in Colombo, organised by the IPS, offered a new focus. It is motivated by the idea that for South Asia to emerge as a strong regional player and latch on to the shift in economic might from West to East, countries in the region - indeed the region as a whole - must see rapid, inclusive and sustainable growth. This growth in South Asia depends not only on collective regional action but, equally, on

efforts made by South Asian countries to address the constraints to growth and unleash growth opportunities at a country level. This essence is captured in the theme of the 6th SAES - 'Towards A Stronger, Dynamic and Inclusive South Asia'. The Summit returned to Colombo since the inaugural one in 2008, and brought together regional stakeholders including academics, policymakers, government officials, private-sector representatives, young leaders, and the media.

The 6th SAES centred around discussion of four key issues concerning growth in South Asian states, namely, making maximum use of the region's human capital resources by creating productive employment for a growing labour force; adapting to the vagaries of climate change and its socio-economic consequences; addressing intra-country growth disparities; and ensuring the continued competitiveness of private enterprise in both domestic and external markets. Each of these featured a sub-set of themes which formed the basis of parallel session discussions at the Summit. These four broad themes were selected on the basis of their relevance to growth concerns in South Asian economies. While certainly not an exhaustive list, they are, nevertheless, issues which have either been discussed insufficiently at previous Summits (such as the importance of private-sector development), or which seek to offer fresh perspective on familiar subjects (such as climate change).

The organisers (IPS) invited anchor research papers on each of the four main themes, from four of the region's leading think-tanks. The chapters in this book comprises of the edited and updated versions of these background papers. The chapters include, 'Demographic Change, Brain Drain, and Human Capital: Development Potentials in Services-Driven South Asia' prepared by the RIS (India), 'Managing Climate Change, Water Resources and Food Security in South Asia' prepared by SAWTEE (Nepal), 'Managing Intra-Country Growth Disparities in South Asia' prepared by SDPI (Pakistan), and 'Development of the Private Sector in South Asia: Addressing the Challenges for Building Competitiveness' prepared by CDP (Bangladesh).

The purpose of this edited volume is to highlight the significance of these issues, and to discuss ways in which the South Asian economies may begin - both individually and collectively - to address them, thereby best

positioning the region to achieve sustained and inclusive growth in the future and usher in an era of greater prosperity for its people.

We are grateful to the authors of the four papers for their valued contribution to this book, and their institutions for the valued partnership and cooperation during the 6th SAES. We are grateful to Mr. Harry Waidyasekera for editing this volume, and Ms. Nayomi Jayakody for formatting it. We also acknowledge the contribution by Ms. Madushi Seneviratne (Asia Foundation LankaCorps Fellow 2014) for her valuable assistance in preparing the volume.

We are thankful for the generous support of numerous international partners, without whom the Summit would not have been possible. We thank, the World Bank, UNESCAP and its Sub Regional Office for South and South West Asia (SRO-SSWA), IDRC Think Tank Initiative, The Asia Foundation, AusAid (International Seminar Support Scheme), GIZ (SAARC Trade Promotion Network), South Asia Network on Development and Environment Economics (SANDEE), OXFAM (Bangladesh), SAWTEE, and the Commonwealth Secretariat (London). We also acknowledge the support of our Sustainability Partner, the Carbon Consulting Company, who assisted us in making the 6th SAES Sri Lanka's first Certified CarbonNeutral conference, our Private Sector Partner, the Ceylon Chamber of Commerce, and the local sponsors, Sri Lankan Airlines, Sri Lanka Telecom, Mobitel, Softlogic PLC, DFCC Bank, People's Bank, Commercial Bank and Axis Bank.

Finally, we would like to thank the nearly 300 participants from South Asia and beyond who participated in the Summit, whose insights helped enriched the discussions at the Summit, but also no doubt helped the authors refine the final papers contained in this volume.

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October 2014

Abbreviations

ADB	-	Asian Development Bank
ASEAN	-	Association of South East Asian Nations
BBS	-	Bangladesh Bureau of Statistics
BEPZA	-	Bangladesh Export Processing Zones Authority
BITAC	-	Bangladesh Industrial Technical Assistance Center
BRAC	-	Bangladesh Rural Advancement Committee
BSCIC	-	Bangladesh Small And Cottage Cooperation
BTC	-	Bangladesh Tariff Commission
CBS	-	Central Bureau of Statistics
CCAFS	-	Climate Change And Food Security
CPD	-	Center for Policy Dialogue
CPIA	-	Country Policy and Institutional Assessment
CSO	-	Civil Society Organizations
CUTS	-	Consumer Unity and Trust Society
DFID	-	Department for International Development
DNP	-	Department of National Planning
EAP	-	East Asia and the Pacific
EU	-	European Union
FAO	-	Food and Agriculture Organization
FBCCI	-	Federation of Bangladesh Chambers of Commerce and Industry
FDI	-	Foreign Direct Investment
FICCI	-	Federation of Indian Chambers of Commerce and Industry
FPCCI	-	Federation of Pakistan Chambers of Commerce and Industry
GCR	-	Global Competitiveness Report
GDP	-	Gross Domestic Product
GVC	-	Global Value Chains
HRD	-	Human Resource Development

ICT - Information Communication Technology
IDRC - International Development Research Centre
IFAD - International Fund for Agriculture Development
IIED - International Institute For Environment and Development
IMR - Infant Mortality Rate
IPCC - Intergovernmental Panel on Climate Change
IPS - Institute of Policy Studies
IRRI - International Rice Research Institute
IT - Information Technology
LAPA - Local Adaption Plan for Action
LDC - Least Developed Country
LPI - Logistics Performance Index
MDG - Millennium Development Goals
MFN - Most Favored Nation
MOSPI - Ministry of Statistics and Programme Implementation of India
MRA - Mutual Recognition Agreements
NAFTA - North American Free Trade Agreement
NAPA - Nation Adaption Plan for Action
NGO - Non-Governmental Organization
NSBB - National Statistics Bureau of Bhutan
NTB - Non Tariff Barriers
ODA - Official Development Assistance
ODI - Overseas Development Institute
OECD - Organization for Economic Co-operation and Development
OXFAM - Oxford committee for Famine relief
PBS - Pakistan Bureau of Statistics
PPP - Private Public Partnerships
PSE - Public Sector Enterprises
RIS - Research and Information System for Developing Countries
RMG - Resource Management Group

RMG	-	Ready Made Garments
RTA	-	Regional Trade Agreement
SAARC	-	South Asian Association for Regional Cooperation
SAES	-	South Asia Economic Summit
SAFTA	-	South Asian Free Trade Agreement
SANDEE	-	South Asia Network on Development and Environment Economics
SAWTEE	-	South Asia Watch on Trade, Economics and Environment
SDF	-	SAARC Development Fund
SDMC	-	SAARC Disaster Management Center
SDPI	-	Sustainable Development Policy Institute
SDPI	-	Sustainable Development Policy Institute
SIPA	-	Silicon Valley India Professional Association
SME	-	Small and Medium Enterprise
SMEDA	-	Small and Medium Enterprises Development Authority
SPS	-	Sanitary and Phyto-Sanitary
SRI	-	System of Rice Intensification
SRO	-	SSWA - Sub-Regional Office for South and South West Asia
SURE	-	Seemingly Unrelated Regression Equations
TBT	-	Technical Barriers to Trade
TFR	-	Total Fertility Rate
TIE	-	The Indus Enterprises
UNCTAD	-	United Nation Conference on Trade and Development
UNDP	-	United Nations Development Programme
UNEP	-	United Nations Environment Programme
UNESCAP	-	United Nations Economic and Social Commission for Asia and the Pacific
WB	-	World Bank
WDI	-	World Development Indicators
WFP	-	World Food Programme

1. Introduction

Saman Kelegama and Anushka Wijesinha

The potential of a 'rising Asia' has begun to dominate economic discourse as the world is witnessing the most profound shifts in the global economic landscape for a century. In the midst of the rapidly growing Asian region, South Asia has experienced striking levels of economic development within the last two decades as a result of greater openness to the world economy and overall market-oriented policy reforms with a focus on inclusivity. Average GDP growth in region leapt from 5.3 per cent in 1990 to 8.3 per cent in 2007/08, prior to the global downturn. While the region enjoyed the subsequent rewards, including declining levels of poverty in India, Sri Lanka, and Bangladesh, the global financial crisis placed pressures on these economies, with growth falling to about 6.3 per cent in 2009 and brought to the fore the fundamental challenges that they still need to address. If the region as a whole, and the countries that constitute it, are to see sustained rapid growth, take full advantage of the strategic location – amidst 'rising Asia', and emerge as a prosperous region, these challenges need to be tackled comprehensively. In this context, this publication seeks to understand South Asia's development and continued challenges faced by the region through four key themes – harnessing human capital potential; managing water resources, food security and climate change; addressing intra-country growth disparities; and building competitiveness of the private sector – and put forward an agenda for action towards building a stronger, more dynamic, and more inclusive region.

1.1 Harnessing Human Capital Potential

Future economic growth in South Asia will rely heavily on individual states' ability to harness the various opportunities presented by human capital. These include the demographic dividend, the allocation of its growing labour-force into productive employment (both domestically and overseas), and the existence of a large and widespread diaspora, an important source of remittance revenue and knowledge transfer.

Due to changes in the demographic structure of the South Asian population over time, the region will, by 2020, have the youngest population in the world.[1] These changes have important implications for growth through

[1] Ejaz Ghani (ed.), *Reshaping Tomorrow: Is South Asia Ready for the Big Leap?*, World Bank, 2011.

such channels as a swell in the labour force, increased female labour-force participation as fertility rates continue to fall, and higher physical and human capital accumulation due to increased savings. In fact, it is projected that South Asia's working-age population will grow by an average of 18 million people per year for the next twenty years, reaching the peak of its working-age to non-working-age ratio in 2040.[2] All South Asian states except Sri Lanka, have the potential to benefit from this demographic dividend, with the ratio of working-age to non-working-age people rising significantly faster between 2005 and 2050 than it did between 1960 and 2005. By contrast, Sri Lanka – having missed making use of the demographic dividend – now faces the problem of an ageing population. These issues come into focus in Chapter 2, on 'Demographic Change, Brain Drain, and Human Capital: Development Potentials in Services-Driven South Asia' by Biswajit Dhar and Sayan Samanta. In this, the authors argue that the demographic dividend highlights the need to implement effective policies and investment into human capital in efforts to provide skills and training to those who would form the working population. Health, education and vocational skills training are areas of particular importance in this regard. Of equal significance is creating productive employment opportunities for this growing labour-force in order to avoid the socio-political unrest that could arise from widespread unemployment and consequent poverty in the region.

The growth benefits of the demographic dividend cannot be fully enjoyed unless the extra workers generated by the demographic transition are productively employed. Youth unemployment is a growing issue in South Asia, particularly among first-time job-seekers and, increasingly as regional education levels improve, among graduates. Consequently, government policy among the South Asian states must prioritise the creation of productive employment domestically. Two alternative paths remain open in this respect: a 'low road' approach, which consists of expanding low-wage jobs in order to absorb the excess labour, and a 'high road' approach, which seeks to develop more highly-skilled forms of employment in the services, industrial and agricultural sectors.[3] While the latter is plainly the more desirable option, it is also more difficult to implement, a fact that governments must consider during the process of reframing labour regulations. The validity of such initiatives is open for further investigation as Dhar and Samanta explore the challenges faced by the South Asian

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[2] David E. Bloom, David Canning and Larry Rosenberg, "Demographic Change and Economic Growth", in Ejaz Ghani (ed.), *Reshaping Tomorrow: Is South Asia Ready for the Big Leap?*, World Bank, 2011.

[3] i*bid.*

region in facilitating equitable growth. According to the authors, the service sector constituted almost 55 per cent of South Asia's GDP in 2010 yet employed only a fraction of the region's workforce. Policies aimed at developing South Asia's burgeoning services sector could prove particularly useful in this regard, as the sector's growing need for high-skilled workers supports a 'high road' approach to job creation. The promotion of entrepreneurship is also a key factor in ensuring productive job creation in South Asia. A World Bank study finds that entrepreneurship is particularly significant for job creation in economically lagging regions.[4] It improves allocative efficiency and firm competition, supports innovation and promotes trade growth through product variety and is an important element of the drive towards productive job creation.

Just as South Asia's population grows younger, the populations of many developing countries are ageing. A consequence of this 'demographic divergence' will be severe labour shortages in the developed world, a state of affairs which Western Europe is due to face as soon as 2025.[5] One way of achieving productive employment is thus to facilitate migration in the face of growing global disparities in labour-force size. The authors examine this issue with a perspective on the role of diaspora communities in providing human capital as well as remittances toward development. There is, consequently, a need to liberalize labour and migration policy in order to support such labour movements. South Asia is, already, a highly mobile region, with approximately 26 million (or 1.6 per cent of the regional population) residing outside of their country of birth, according to Dhar and Samanta. Migration occurs both intra- and inter-regionally. A study conducted in 2011 revealed that 43 per cent of South Asian migrants relocate regionally, while 35 per cent live in the Middle East and 20 per cent reside in OECD countries.[6] Consequently, migrant remittances are an important source of revenue for South Asian states; in 2006, for instance, remittances were four times larger than ODA to the region. Furthermore, countries such as India and Israel have used diaspora bonds as a method of attracting foreign capital. Nevertheless, a large proportion of migrants currently are unskilled. The current changes in global demographics present an opportunity to expand the migration of skilled workers. There remains a persistent fear that this would induce an

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[4] Ejaz Ghani, William R. Kerr and Stephen O'Connell, 'Promoting Entrepreneurship, Growth, and Job Creation ', in Ejaz Ghani (ed.), *Reshaping Tomorrow: Is South Asia Ready for the Big Leap?*, World Bank, 2011.

[5] Caglar Ozden and Christopher Robert Parsons, 'International Migration and Demographic Divergence between South Asia and the West', in Ejaz Ghani (ed.), *Reshaping Tomorrow: Is South Asia Ready for the Big Leap?,* World Bank, 2011.

[6] i*bid*.

economic loss, as such migrants may offer meagre or no returns to the economy which expended resources for their education and training. Equally, however, there is an increasing awareness that such migration can induce 'brain *gain*' rather than 'brain drain' if opportunities are appropriately exploited, through knowledge and technology transfers, fostering 'transnational networks' or strategic links between regional and foreign markets, and the engagement of surplus workers in productive economic activity. The fact that South Asia's diaspora is the most widely dispersed in the world significantly enhances the region's ability to benefit from such opportunities. This diaspora played an invaluable role in the formation of India's IT and information services sectors, for instance. Dissemination of knowledge across diaspora networks has yet to be studied in-depth throughout this chapter, but the phenomenon does demonstrate a certain degree of potential for working alongside remittances to provide South Asia with the much-needed resources for development.

1.2 Water Resources, Food Security and Climate Change

While climate change is rapidly becoming a pressing concern for every region of the world, South Asia's geography, high poverty levels and population density have rendered it especially vulnerable to these effects. As the region's greenhouse gas emissions are negligible relative to the global total, however, its ability to mitigate climate change is severely limited. Instead, an important policy priority for South Asian states is to take measures to moderate the *effects* of climate change. These include a particular focus on food security, social protection for those most vulnerable to weather-related shocks, and improved water management.

Chapter 3 on 'Managing Climate Change, Water Resources and Food Security in South Asia' by Smriti Dahal and Posh Raj Pandey deals with these issues comprehensively. Increased natural disasters such as droughts will place a high level of stress on the populations of the developing world. The authors argue that 2.5 billion individuals in South Asia will face water scarcity by 2050 despite the projected continual increase in water demand. Furthermore, over 60 per cent of the region's labour-force is employed in agriculture, the sector most susceptible to damage as a result of climate change.[7] Changes in temperature, increased variability in rainfall patterns and increased severity and frequency of extreme weather events are all features of climate change which threaten

[6] ibid

[7] C. Sterrett, *Oxfam Research Reports: Review of Climate Change Adaptation Practices in South Asia*, 2011.

the quantity and quality of agricultural output in South Asia. Consequently, climate change has important implications for food security and the livelihoods of the region's large agrarian community. Moreover, low-lying coastal cities and islands in the region are increasingly vulnerable to the effects of storms and rising sea levels. It is estimated that 125 million people across Bangladesh, India and Pakistan could be rendered homeless as a result of these effects by the end of the century.[8] The future submergence of much of the Maldives also remains a very real possibility. Rising sea levels will equally have adverse impacts on the fisheries industry, thereby posing further challenges for regional food security and livelihoods management. These effects are compounded by the fact that high population density and concentrated poverty limits the ability of citizens to cope with such shocks. In this sense, climate change poses a critical obstacle to the region's efforts at alleviating poverty and achieving the Millennium Development Goals. The inadequacy of social protection in the region thus becomes an increasingly urgent challenge for governments.

Furthermore, climate change may have a strong bearing on regional health outcomes. Changes in the climate could alter the movements of vector species and, thus, widen the spread of diseases such as malaria. In rural areas that lack adequate public health infrastructure, the effects of this on human health could be particularly large.

There is a clear need for regional cooperation in mitigating the effects of climate change. The decision at the 17th SAARC Summit to set up a regional seed bank is an important step towards ensuring food security, but requires further support from member states in order to be realised. Meanwhile, seven years since its establishment, it is an opportune time to look at the SAARC Disaster Management Centre (SDMC) and explore what more can be done to strengthen this valuable regional initiative, including strengthening the link between the SDMC and national disaster management bodies.

Another regional challenge compounded by climate change is water management. All of the South Asian states currently face water shortages and a water security crisis. Future estimates show no alleviation of this problem. Rather, average water availability per capita has decreased by 70 per cent since the 1950s, and remains on a downward trajectory.[9]

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[8] i*bid*.

[9] S. Roy, 'Climate Change and Water Sharing in South Asia: Conflict or Cooperation?', The Asia Foundation, 2010, http://asiafoundation.org/in-asia/2010/12/01/climate-change-and-water-sharing-in-south-asia-conflict-or-cooperation/.

According to estimates, 2.5 billion South Asians will be affected by water stress and scarcity by 2050.[10] Managing conflicting national claims over water resources is a major challenge, as many bodies of water – notably, several rivers – are located across state borders. Bangladesh, Bhutan, India, Nepal and Pakistan share 20 major rivers, for instance.

Contestations over water resources also occur at an intra-country level, resulting in social cleavages and disruptions to developmental processes. Historical tensions are identified throughout the chapter as contributing to regional water conflicts despite bilateral agreements designed to diffuse these situations and encourage equitable allocation of resources. These frequently are stratified along class lines, with disputes between rich farmers and smallholders being a particularly common manifestation of the issue.There is thus clearly a need for improved mediation and dispute settlementprocesses, at the level of both communities and countries,in order to address more effectively the political economy issues of water security that currently plague the region. While efforts are already being made to cope with the various challenges posed by climate change to countries in the region, a report by the UNDP observes that the capacity to adapt to these regional environmental challenges varies widely at both an inter- and intra-country level. Adaptability is, moreover, severely constrained by a lack of access to technology, information and skills, infrastructure and adequate institutions. Consequently, the success of such efforts has been limited.

Food insecurity has long been identified as a major development challenge for all South Asian countries – South Asia alone is estimated to have more than one third of food insecure people in the developing countries of the world[11]. Much attention has been devoted to the need to control and manage high food price volatility, as its burden falls disproportionately on the poor. Dahal and Pandey identify national and regional initiatives within South Asia to combat the negative effects of climate change, including the Indian National Food Security Bill of 2013 that attempts to enhance food security by ensuring the provision of cheap grain to approximately 70 per cent of India's population. However, the ability of South Asian governments to control food price trends is evidently limited, while regional initiatives such as the SAARC Food Bank have yet to deliver the desired results.

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[10] U. Kelkar and S. Bhadwal, 'South Asian Regional Study on Climate Change Impacts and Adaptation: Implications for Human Development', Human Development Report 2007/08, UNDP, 2007.

[11] von Braun, Joachi;'The World Food Situation: New Driving Forces and Required Actions', International Food Policy Research Institute (IFPRI), *Food Policy Report*. Washington, DC: IFPRI, 2007.

A contentious issue receiving increased attention in the recent past is the linkage between trade and climate change. On the one hand, it has been argued that trade itself can be damaging to the environment, thereby affecting climate change and its socio-economic implications. On the other hand, it is argued that trade can work as a means of introduction and diffusion of climate-friendly technologies, particularly in developing countries, which would aid in dealing with the adverse implications of climate change. Exports of technology-embodied goods by one country can reach other countries. Closer trade relations among economies can also promote awareness on the existence of climate-friendly technologies. This is an important option for the South Asian region to explore as a means of dealing with food security challenges. The chapter concludes with the insight that trade liberalization, effective research on climate change and the assimilation of private and public institutions will allow the region to better adapt to the changes that are inevitably coming its way.

1.3 Intra-Country Growth Disparities

Despite having achieved steady growth in recent years, and also despite favourable growth projections for the region over the next decade, the South Asian growth experience has not been inclusive. A positive effect of growth has been that South Asia's middle-class has grown at an average rate of 12 per cent per annum over the last decade. Simultaneously, however, more than 1.1 billion people in the region lived on less than $2 a day in 2008.[12] Although the poverty rate has fallen over time, the region remains home to over 40 per cent of the world's poor. The extent of intra-country growth disparities thus remains a significant challenge for South Asia.

These issues are tackled in Chapter 4 on 'Managing Intra-Country Growth Disparities in South Asia' by Abid Q. Suleri, Vaqar Ahmed, Muhammed Zeshan, and Samavia Batool. With GDP growth rates ranging from 8 per cent (Afghanistan) to 6 per cent (Sri Lanka), deficiencies in institutional capacities and management of scarce resources have resulted in a lack of inclusive growth throughout the region. Growth at low levels of income in the South Asian states has not translated sufficiently into a movement of workers from rural and traditional sectors (such as agriculture) into

[12] World Bank, "An Update to the World Bank's Estimates of Consumption Poverty in the Developing World", 2012.

manufacturing.[13] Rather, growth has been led largely by a flourishing services sector, which primarily employs high-skilled workers, while the share of employment in manufacturing, which provides opportunities for low-skilled workers, remains low and stagnant. But, the infrastructure and highly-trained workforce required by the services sector remains deficient in rural South Asia. Consequently, growth has been concentrated in urban centres, while a large proportion of the rural population remains employed in agrarian activity, and often benefits little from growth. With the services sector growing far more rapidly than the agricultural, a danger of this state of affairs is that, as the output share of agriculture declines, its employment share would become disproportionately large. The result of this is a labour force which remains predominantly agricultural and rural, while a small proportion of the population – that which is urban and more highly-skilled – enjoys the benefits of growth and integration with the global economy. All of this comes at a time when many South Asian countries are facing new realities with regard to rapid urbanization, which itself comes with new challenges – infrastructure, public services, etc. Some estimates posit that by the middle of the 21st century, nearly half of all South Asians will live in cities.

Another failure of growth in South Asia that is referenced in the chapter but warrants further investigation is the inability to alleviate gender disparities. Despite rising female labour-force participation driven by the demographic transition, the share of female employment in total regional employment is among the lowest in the world. Furthermore, women are significantly overrepresented in the informal sector, which consists predominantly of low-skilled and poorly remunerated employment. In terms of gender disparities in health and education outcomes, South Asia fares the worst of all regions in the world. Girls are significantly less likely to receive treatment for common childhood diseases, and the female disadvantage in educational enrolment is high, particularly in the 11-15 age group.[14] According to Suleri *et al.*, female participation in vocational education is only 25 and 22 percent in India and Nepal, respectively. Importantly, these disparities have been found to be unrelated to income levels, a result which suggests that the problem cannot be eliminated merely through sustaining economic growth in the region.[15]

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[13] A. Panagiriya, 'Avoiding Lopsided Spatial Transformation', in Ejaz Ghani (ed.), *Reshaping Tomorrow: Is South Asia Ready for the Big Leap?,* World Bank, 2011.

[14] D. Filmer, E. King and L. Pritchett, *Gender Disparity in South Asia: Comparisons Between and Within Countries*, World Bank Publications, 1998.

[15] D. Filmer, E. King and L. Pritchett, *Gender Disparity in South Asia: Comparisons Between and Within Countries*, World Bank Publications, 1998.

Throughout the chapter it is noted that with the lack of fiscal and institutional discipline, South Asian countries are faced with a deficit in capital accumulation as state borrowing activities crowd out the private sector and limit the level of investment activity. Presenting a critical problem, the alleviation of such disparities is thus an important challenge for South Asian governments and there is a need for significant tax revenue to be directed towards programmes and policies with this objective. For instance, funding rural social infrastructure provision, as well as improving economic infrastructure for the purpose of supporting small and medium enterprises in rural regions are important measures in attempting to lower both rural-urban and gender disparities. South Asian states, however, collect exceptionally low levels of tax revenue; the average is approximately 10-15 per cent of GDP, compared to 20 per cent for comparable developing states. Reformation of tax structures, laws and institutional arrangements should therefore be a priority in the struggle against intra-country growth disparities in South Asia.

Meanwhile, growth in South Asia is accompanied by increasing infrastructure needs, particularly in rural regions, where existing infrastructure is severely limited. It is estimated that the increased infrastructure needs resulting from a 7.5 per cent growth in regional GDP would require investment of about 5 per cent of regional GDP in order to be met.[16] This suggests an annual financing gap of approximately US$ 60 billion. Developing public-private partnerships (PPPs) and securing funding through multilateral sources are two important ways in which this gap may be narrowed. An ADB report highlights the fact that sector policies and the regulatory framework in South Asian are currently not PPP-friendly, and that the market has neither the capacity nor the instruments to meet the long-term equity and debt financing required by infrastructure projects.[17] These constraints need to be addressed in order to solve the region's infrastructure dilemma. The authors note that these combined factors of unequal growth have resulted in high levels of poverty and reduction in welfare in the region. To combat these issues, the authors state that it is the responsibility of each state to implement policies toward greater redistribution and inclusion to affect positive change toward poverty reduction and inequality in South Asia as a whole.

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[16] I. Chatterton and S. Puerto, 'Estimation of Infrastructure Investment Needs in the South Asian Region', World Bank, 2011.

[17] G. Nataraj, 'Infrastructure Challenges in South Asia: the Role of Public-Private Partnerships', ADB Discussion Paper, 2007.

1.4 Private Sector Competitiveness for Economic Growth and Job Creation

The private sector is an important engine of growth for the economies of South Asia. Given the prevailing imperative to reap a demographic dividend by generating productive employment opportunities for its growing labour-force, providing support for private sector development is a particularly urgent objective. Chapter 5 on 'Development of the Private Sector in South Asia: Addressing the Challenges for Building Competitiveness' by Dr. Khondaker Golam Moazzem and Professor Mustafizur Rahman takes an incisive look at these issues. The authors contend that South Asia is trailing behind other regions in the context of entrepreneurship and the private competitive market in the fields of technology use, adequate supplies of skilled workers, and viable finance options to support business infrastructure.

Like many countries, SMEs make up a significant proportion of South Asian private sector. The growth of the private sector in South Asian countries can only be inclusive is there are strong efforts to support SME development. There are certain bottleneck issues that obstruct the development of private sector competitiveness, including corruption and lack of sufficient infrastructure in India and complex and high tax regulations in Sri Lanka. The authors explore the option of instituting global value chains with each country in the region exporting particular goods to targeted demand countries. However, they recognize that there are a number of barriers to creating a regional value chain: tariffs that act as intra-regional trade barriers, weak logistical structures, the lack of energy and physical infrastructure to maintain a value chain in South Asia, and the economic climate that is not conducive to business due to high start-up costs. Governments need to refocus attention on SMEs and identify better policies and strategies to address gaps in finance, technical and managerial competencies, market linkages, and export competitiveness, etc. Strengthening the South Asian SME sector will be an important element in greater employment creation for people in the region. Best practices and policy options from within the region need to be shared. The chapter delves into the processes through which South Asia can learn much from successful SME development strategies adopted in neighbouring countries, for instance the Philippines, Malaysia, Thailand and others in the ASEAN region.

Throughout the development of the chapter, Moazzem and Rahmen note the uneven participation in intra-regional trade in South Asia that has brought up a number of issues concerning the region's ability to compete in the global market. While India has contributed to 80 per cent of trade in South Asia 2011, the remaining member countries have only produced 2 (Sri Lanka) to 7 (Bangladesh) percent levels of participation in global trade and have failed to maintain consistent levels of intra-regional trade as well. These issues bring up a number of topics for broader discussion, including whether quantity-led expansion will continue to sustain growth in the face of worsening terms of trade and increased protectionism by the developed economies which constitute the primary markets for South Asian exports.

Furthermore, as wages rise, technologies change and skill requirements become more demanding, it is likely that labour-intensive industry in South Asia will become less competitive.

Indeed, a general shift in the nature of global competition, from an emphasis on low costs and prices to an increased focus on quality, flexibility, reliability and networking means that South Asian firms need to reconfigure their competition strategies in a manner that allows them to position themselves favourably amid the mêlée of these changes.[18] The ability to remain competitive in the context of rapid global technological progress now depends, to a great extent, on the ability to absorb these technological advances into manufacturing and services production, as well as to effect a structural shift into more technology-intensive industry. The South Asian states lag considerably behind their South East Asian neighbours in this regard.

The threat to competition of such a structural shift creates an increasing need for South Asian governments to develop a clear and effective competition policy. Such policy should focus on generating dynamic, rather than static, productive efficiency, for the purpose of supporting long-term growth. This involves identifying an optimal level of competition: one which prevents resource inefficiency at a microeconomic level but, equally, one which is not so high as to deter private investment.[19] Furthermore, most South Asian states lack suitable regulatory bodies for fostering fair competition in markets. Efforts to develop such agencies – after the manner

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[18] M. Best, *The New Competition,* Cambridge: Polity Press, 1990.
[19] A. Singh, *Competition Policy, Development and Developing Countries,* South Centre Publications, 1999.

of India's Fair Trade Commission, for instance – are thus to be desired. The vertical integration of key input markets is another important factor in maintaining competitiveness, both in agriculture and manufacturing. This is of particular importance to the development of regional supply chains which, currently, are inadequately formed in South Asia, especially when compared to other regions. The new emerging opportunity is in global production sharing, where firms plug into parts and components value chains through global and regional production networks. However, getting the right incentives and policy regime has an important impact on whether South Asian firms can latch on to such networks.

With intra-regional trade stagnant at around 5 per cent of total trade volume of countries of the region, much lower than better integrated regions like ASEAN, there is extensive evidence to suggest that by breaking down barriers to trade, South Asia has much to gain. Whilst tariff levels in South Asia have gradually tapered down in-line with global trends, tariff levels in comparisons with other regional groupings are still at the higher-end of the spectrum especially in light of the large sensitive lists submitted under the South Asia Free Trade Agreement (SAFTA).

Whilst some progress is being made on the tariff-front under SAFTA, various forms of non-tariff barriers (NTBs) to trade are increasingly becoming more visible, which in consequence is leading to increased trade costs and posing serious market access implications South Asian exports both within and outside the region. The authors note that the signing of mutual recognition agreements among South Asian countries could be a possible solution to removing NTBs and thus, one aspect of barriers to trade. Weak trade facilitation measures, especially pertaining to the facilitation of trade within the region in particular is also leading to unwarranted increases in easily avoidable trade costs, thus hampering the region's ability to fully harness the large unexploited intra-regional trade potential which exists. Moving from inefficient and cumbersome to well-functioning and futuristic customs and border procedures needs to be reiterated. These areas are critical to enhancing the competitiveness of the South Asian private sector. This session will discuss existing knowledge and explore new evidence and put forward a strong agenda for action.

1.5 Developing a New Agenda for Action

As this introduction has attempted to capture, and the chapters that follow will fully explore, the governments of individual South Asian economies face a number of daunting challenges. Equally, however, they possess a number of opportunities and a variety of policy options for tackling them. One of the most important tools in this respect is regional cooperation. The need for South Asian governments to act individually in order to address the problems specific to their economies is strongly coupled with a need for these governments to act together to alleviate mutual obstacles to regional growth. This volume provides an important starting point for considering the most effective ways in which individual and collective state action may be channelled towards achieving the goal of a future South Asian growth miracle.

2. Demographic Change, Brain Drain, and Human Capital: Development Potentials in Services'

Biswajit Dhar and Sayan Samanta

2.1 Introduction

In the past few decades, most South Asian economies have experienced structural changes that have been unique. Defying historical experiences, the economies of the region have made transition from their high dependence on agriculture to become service sector-led[20], while the share of manufacturing in the gross domestic product has remained almost unchanged. This pattern of production shift has implications for both opportunities and participation in the labour market, which, in turn, would determine the development prospects of a region that is home to the largest number of the poor in the world. [21]Services sector being relatively skill intensive in nature, the region's development potential in the coming decades would, therefore, be largely dependent on its ability to provide a steady supply of skilled labour. Fortunately, the present on-going demographic change being experienced by the region suggests that there will be a large cohort of young people joining the workforce in the coming decades. However, the growth prospects of the region will eventually depend on the extent to which this young labour-force can get access to education and appropriate skill development opportunities in order that they can secure productive employment.

South Asia has often been termed as a remittance economy. Over the past few decades, the inflows of remittances have been steady and are relatively high as compared to foreign direct investment and official development assistance[22] . Remittances augment incomes of the recipient households and can thus enable them to gain access to essential services like education and health. At the same time, however, effective utilization of personal remittances remains as a major challenge, for they are largely conditioned by the individual incentives. While their perceived comparative advantage in semi-skilled services help South Asia

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[20] Presently, more than 55 per cent of its gross domestic product comes from the service sector.

[21] Presently, the services share in world GDP is more than 70 per cent. Therefore, potential for services sector to be further globalized is huge.

[22] In 2011, South Asia received 4.3 per cent of its GDP from inflows of remittances compared to 1.6 per cent foreign direct investment. It can also be seen, as the service sector also relies on traditional personal services in which tradability depends on migration and South Asia has been doing well in this regard and getting higher remittances.

to send its large numbers of its residents mostly to West Asia, resulting in high inflows through remittances, the region has also seen an increase in skilled migration over time[23] .

The increase in productivity in services in across the South Asian region arises from the fact that the countries started from a low initial technological base and there is therefore tremendous potential for catch up[24]. Thus, not only has the region as a whole moved from low-skill agricultural production to services production, some of the countries have also moved into exports of high-end services. Notwithstanding this scenario, these countries suffer a productivity gap in high-end services vis-a-vis developed countries[25], but if the various externalities of existing Diaspora are utilized effectively, the possibilities of realising the demographic dividend even in the presence of high skilled migration in a services driven economy, is large.

Presently, there exists considerable heterogeneity in demographic experiences and related economic outcomes, such as across and within countries' income inequalities, which can lead to changes in economic conditions in South Asia. Gains from demographic changes had been identified in models with the assumption that international migration was not quantitatively important[26]. However, in today's globalized context, the process is far more complex and it is obvious that merits and demerits of skilled migration from the developing countries are based on externalities and are largely qualitative in nature. Therefore, with the communication revolution,[27] the interrelated phenomena such as, increase in labour force participation, high-skill migration, high-tech service exports and Diaspora network externalities altogether have an important role in the realization of future development potential in South Asia.

There have been many attempts to understand the economic prospects of South Asia through the lens of demographic performances of the region. The causal relationship of demographic change and future

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[23] Sri Lanka has the highest rate of skilled migration, and the lowest rate of population growth in South Asia.

[24] Only Bangladesh and Bhutan have higher labour productivity in manufacturing than services in this region.

[25] The considerable increase in productivity growth in services in South Asia accrues from the fact that it started with an initial low technological base and so there exists rapid catch up potential. It is worth mentioning here that only Bangladesh and Bhutan have higher labour productivity in manufacturing.

[26] The global international migration has been steady at 3 per cent in past few decades. However, the nature of migration from developing to developed countries has been skilled in nature.

[27] Communication revolution led to a reduction in cost differential in services delivery which was earlier only possible through migration. The scope for reaping the benefit from such cost differential in the future world is much higher. Blider (2006) argues that there will be an increase in the number of business processes, which can be globalized and digitized.

development of the region with specific policy intervention has been well portrayed. It has been argued that the prevailing demographic scenario in the region presents the region with a wide range of economic opportunities, which can have a virtuous influence on its growth prospects. Effective participation of the large and relatively young women and men who have been joining the workforce in the region has immense potential to add to the domestic capital, as the region has always had a high domestic savings ratio. Policies directed towards creating productive employment will enable the region to exploit the demographic dividend. In this paper, we delve into the association between demographic experiences, and the migration scenario to asses and utilize the services led future growth potential in South Asia.

The paper is organized as follows. In the following section, we discuss South Asia's demographic transition (trends, characteristics and overall challenges) with a view to highlight the differences for different South Asian countries. Section 3 discusses the issue of feminization of human capital and in labour market participation, resulting from the service sector led growth and employment experiences in South Asia. Section 4 raises some critical issues of skilled migration. Finally, in the final section we present the conclusions.

2.2 South Asia's Demographic Transition

In South Asia, the mixed demographic experiences definitely raise the question about the nature of the future economic fate and coherence. [28]The region is marked by very similar demographic trends across the countries. However, there are some notable differences.

Table 2.1: Demographic Transition in South Asia

Periods	Life expectancy at birth, total (years)	Mortality rate, infant (per 1,000 live births)	Population growth (annual %)	Fertility rate, total (births per woman)
2011	65.7	48.3	1.3	2.7
average 2000s	63.8	56.6	1.5	3.0
average 1990s	60.0	76.3	2.0	3.8
average 1980s	57.0	96.4	2.3	4.7
average 1970s	50.3	120.9	2.3	5.6
average 1960s	44.9	147.6	2.2	6.0
1960	43.3	162.3	-	6.0

Source: WDI, online database.

[28] Bloom and Rosenberg (2011).

The table 2.1 depicts the demographic changes in South Asia over the past decades. Infant mortality rate (IMR) declined in the region from an average of 147.6 per thousand live births in the 1960s to 48.3 per thousand live births in 2011. This decline in IMR was accompanied by a sizeable decline in total fertility rate (TFR), which declined from 6.0 births per woman in the 1960s to 2.7 in 2011. Life expectancy at birth also shows considerable improvement; from 43.3 years in 1960 to 65.7 years in 2011.The growth rate of population has been falling steadily and stands at 1.3 per cent now.

Table 2.2: Key Determinants of Population Growth in South Asia

Countries	Life expectancy at birth, total (years)			Fertility rate, total (births per woman)			Mortality rate, infant (per 1,000 live births)			Population growth (annual %)		
	2000-11	1960s	2011	2000-11	1960s	2011	2000-	1960s	2011	2000-11	1960s	2011
Afghanistan	46.9	32.8	48.7	6.9	7.7	6.2	83.5	231.5	72.7	3.1	2.2	2.5
Bangladesh	67.0	48.4	68.9	2.6	6.8	2.2	48.5	156.6	36.7	1.3	3.0	1.1
Bhutan	64.8	38.5	67.3	2.9	6.7	2.3	52.8	198.1	42.0	2.3	2.5	1.7
India	63.5	45.5	65.5	2.8	5.8	2.6	55.3	144.4	47.2	1.4	2.1	1.3
Maldives	74.2	40.3	76.9	2.2	7.2	1.7	21.7	189.9	9.2	1.8	2.5	1.9
Nepal	65.6	40.2	68.7	3.3	6.1	2.7	49.6	172.1	39.0	1.5	1.9	1.1
Pakistan	64.2	49.6	65.4	3.8	6.6	3.3	67.3	152.7	59.2	1.9	2.6	1.7
Sri Lanka	73.6	59.8	74.9	2.3	5.0	2.3	13.3	64.5	10.5	0.8	2.4	1.0
Standard Deviation[29]	0.1	0.2	0.1	0.4	0.1	0.4	0.6	0.4	0.8	0.4	0.1	0.3

Source: WDI, online database.

Table 2.2 shows the demographic patterns in each of the South Asian countries. The demographic experiences across countries are mostly similar with the exception of Afghanistan, Maldives and Sri Lanka. While Afghanistan has lagged behind the other countries in the region in almost all indicators, Maldives and Sri Lanka have out-performed their neighbours in South Asia, often by a considerable margin.

Afghanistan continued to record the highest IMR in the region. In 2011, its figure of 72.7 per thousand live births was more than 50 per cent higher than the average for the region as a whole. Maldives and Sri Lanka are at the other end of the spectrum, with figures far lower than those recorded by the upper middle-income countries. In the same vein, the total fertility rate in Afghanistan is still very high at 6.2 children in 2011.The region's

[29] Standard deviations are calculated on natural logarithmic values of the respective indicators.

lowest TFR was recorded by Maldives, 1.7 children. The life expectancy at birth is almost 26 years higher in Maldives (76.9) than Afghanistan (48.7). The population in Sri Lanka is growing only at 1 per cent per year.

Viewed in the context of the MDGs, South Asia shows somewhat of a mixed picture in the progress it has made towards meeting the 2015 targets. In the case of under-five IMR, three of the four least developed countries in the region, viz., Bangladesh, Nepal, and Bhutan, can boast of strong performances. In these countries, under-five IMR declined by at least 60 per cent, or more than 4.5 per cent a year on average[30].

However, the wide differences in performance as between countries mean that the region as a whole is making slow progress towards the attainment of the Millennium Development Goals (MDGs). Assessment made by the United Nations shows that South Asia does not seem to be on course to meet the 2015 under-five IMR target.

The measure of dispersion of the logarithmic values of demographic indicators shows that South Asian countries are catching up with respect to life expectancy at birth. In all other parameters, countries seem to diverge from each other. Moreover, countries that have been performing well in the indicators listed above, continue to do well. These observations raise the important question as to what extent the process of demographic change is exogenous to the countries in South Asia. It is generally argued in the literature[31] that the similar timings of decline in mortality across South Asian countries are probably due to the exogenous factors. On the other hand, differences in speed of fertility decline and the lag between mortality decline and initiation fertility decline across countries, are due to the demand driven endogenous factors.

One of the major endogenous factors that have caused a significant change in fertility rate is the increased feminization in education. The literature on the "feminization U hypothesis"[32] of labour force participation argues that the increase in female labour force participation in the labour market in developing countries is due to more of push factors than increase in opportunities, as women in these poor countries cannot afford to stay unemployed. Not much evidence has been found in favour of the role played by increased opportunities in feminization in countries like India.[33]

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[30] The Millennium Development Goals Report, 2012, p. 27.
[31] Bloom and Williamson (1998).
[32] This hypothesis argues that there is a U shaped relationship between female labour force participation and economic development, the latter typically being proxied by GDP per capita.
[33] Klasen (2011).

Moreover, endogenous characteristics of demographic change affect the age structure of an economy and consequently affect economic development.

Bloom and Williamson have argued that the East Asian miracle can be explained by its demographic factors. The region managed to effectively translate its increased young working age cohort to productive employment. In this context, two major differences with South Asia can be identified. First, in East Asia the manufacturing sector played an important role in its growth generation. Second, feminization in education and employment in East Asia has been quite widespread.

2.3. Changes in Composition of the Working Population

The demographic scenario corresponds to economic outcomes of a region through the changes in the ratio of non-working age population to working-age population[34], in other words, the dependency ratio. This ratio is an indicator of the extent of support that the working age population is expected to provide to its non-working population. Population growth resulting from the demographic change translates into economic development when it affects the ratio of the dependent non-working age population to working-age population[35]. In the late 1950s, Coale and Hoover primarily emphasized the importance of the dependency ratio, a completely opposite but not contradictory concept to the concept of demographic dividend. Since the 1970s, rapid decline in child mortality resulted in population growth, which, in turn, led to higher consumption burden and less savings, and therefore lower growth. However, in the coming decades, South Asia should witness a reversal of this process as it starts reaping the benefits of the demographic dividend. The region should surpass its neighbours in the growth dynamics on the back of the massive influx of human capital into its production system.

Different periods of fertility decline, fuelled by a range of endogenous factors, have led to differences in age structures in the countries of South Asia. Figures 2.1 and 2.2 show the dependency ratio (ratio of non- working age population to working population) in the region as it has evolved since 1950 and is expected to develop until the middle of the present century. Table 2.3 and Figures 2.1 and 2.2 show the trajectory of the dependency ratio in South Asia.

[34] Relates the number of children (0-14 years old) and older persons (65 years or over) to the working-age population (15-64 years old).

[35] Bloom and Williamson (1998).

Table 2.3: Dependency Ratio in South Asia (1950-2050)

Years	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka	South Asia
1950	83.0	82.3	86.5	68.4	81.1	71.3	84.9	92.9	71.3
1955	84.0	83.6	78.8	72.0	68.6	71.2	80.8	88.4	74.2
1960	85.8	86.6	77.7	76.5	67.8	71.9	79.5	87.5	78.2
1965	87.0	90.9	77.9	81.2	79.1	75.8	83.4	82.8	82.6
1970	90.9	92.9	81.2	80.0	94.5	78.3	88.1	78.5	82.2
1975	93.8	92.7	80.5	77.4	93.0	79.8	89.3	71.5	80.1
1980	95.9	92.3	82.6	75.2	90.7	81.0	88.8	67.4	78.4
1985	99.9	89.4	86.5	72.8	92.7	82.4	88.3	64.2	76.6
1990	102.1	84.5	87.1	70.6	98.9	84.2	90.1	60.2	74.8
1995	101.1	77.5	89.6	67.0	97.1	81.2	89.3	55.2	71.0
2000	106.2	69.6	79.9	62.8	82.1	79.1	83.2	49.5	65.8
2005	105.5	62.9	61.5	58.6	63.7	78.1	73.3	48.1	60.3
2010	103.1	56.9	52.1	54.4	53.8	72.5	66.0	49.0	55.9
2020	75.4	46.6	44.6	49.0	48.6	53.7	56.0	53.1	49.9
2030	57.4	43.8	41.2	46.9	44.0	47.7	49.9	54.4	47.1
2040	49.1	44.5	41.2	46.1	43.1	46.4	45.3	57.6	46.1
2045	45.3	46.8	44.4	46.5	46.0	46.0	44.4	60.5	46.6
2050	41.8	50.4	50.1	47.6	52.8	46.3	44.5	63.3	48.0

Notes: Figures for 1950 to 2010 are estimates. Projections for up to 2050 are based on the assumption of medium fertility, i.e., total fertility in all countries is assumed to converge eventually toward a level of 1.85 children per woman.

Source: World Population Prospects 2012 Revised, United Nations.

Figure 2.1: Trends in Dependency Ratios in Select South Asian Countries

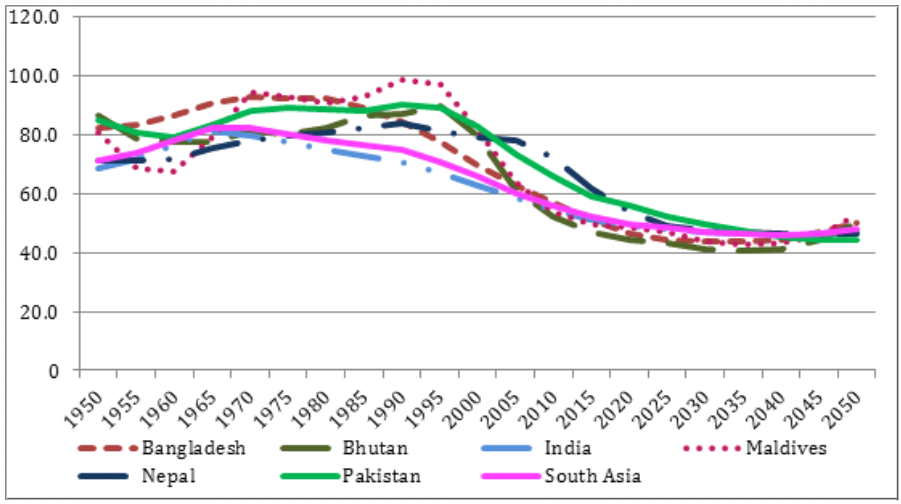
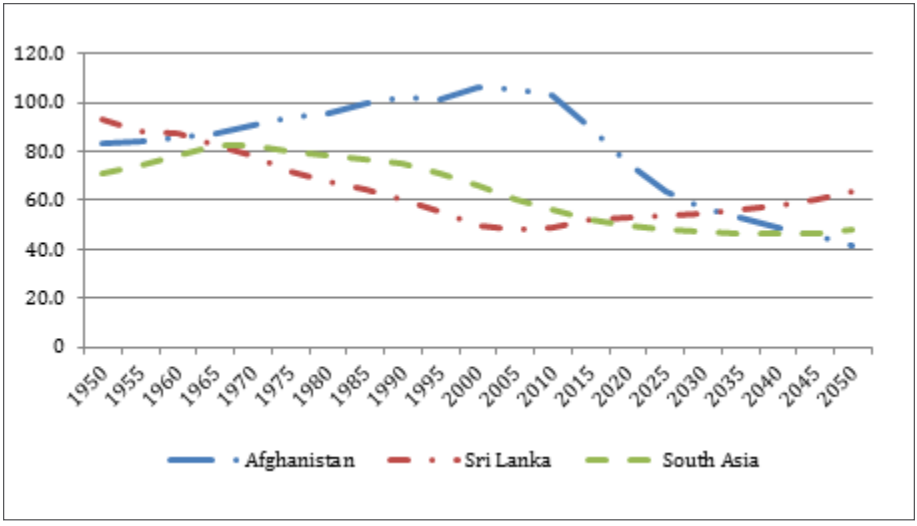


Figure 2.2: Trends in Dependency Ratios in Select South Asian Countries



Source: World Population Prospects 2012 Revised, United Nations. (Figures 1a and 1b)

With the exception of Afghanistan and Sri Lanka, all South Asian countries seem to be headed for a convergence in their dependency ratio by the middle of the present century, assuming that these countries continue to be in the "medium fertility" bracket. In the case of Sri Lanka, the dependency ratio has already bottomed out, according to the estimates. Having achieved an early decline in the fertility ratio as compared to its other South Asian neighbours, Sri Lanka is expected to face the burden of an ageing population in the coming decades; by 2050, the dependency ratio would have increased to 63 per cent as compared to 50 per cent in 2010. Estimates show that since 1990, Afghanistan has had higher numbers of non-working population in relation to the working population. This scenario is expected to change in the next several decades during which the country should witness a rapid decline in the dependency ratio, a trend that is likely to continue beyond the middle of the century. Although Afghanistan is expected to lag behind its South Asian neighbours in lowering the dependency ratio, the country should reach a level that would not be attained by any other country in the region.

All other countries in South Asia are expected to see a bottoming out of the dependency ratio by 2040, by when the working population in the

working age group should be slightly more than one-half of the population in the non-working age groups. Available scenarios suggest that in the subsequent decade, there would be a slight increase in the relative weight of the non-working population. It is interesting to note that for the three larger economies, viz., India, Pakistan and Sri Lanka, the dependency ratios would be bottoming out at a relatively higher level as compared to the other economies. This implies that the smaller economies can take advantage of the larger population they would have in the working age bracket to improve their economic conditions.

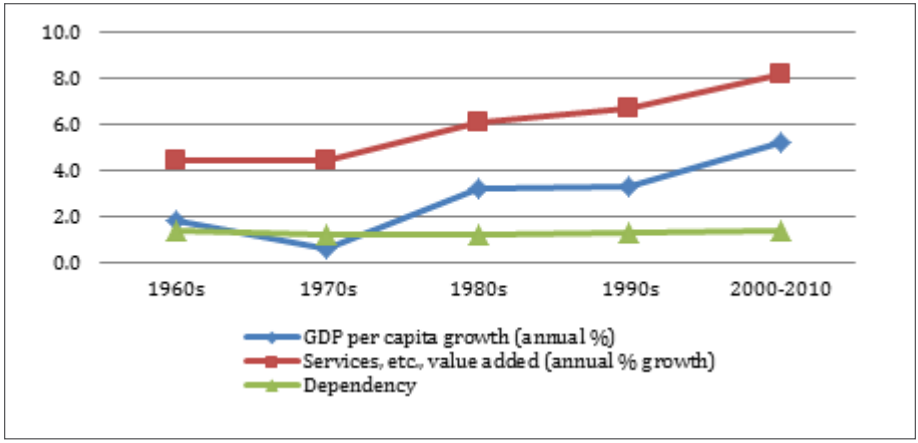
For all these countries, the dependency ratios had begun to dip during the nineties, which raised expectations regarding the demographic dividend. However, the major decline in the dependency ratio is expected from the middle of this decade. These trends in the dependency ratios underline the importance of imparting adequate training to the able-bodied persons who would constitute the working age population, to enable South Asian countries to take full advantage of the demographic dividend. This implies that each of the countries will have to put in place appropriate policies and provide for adequate resources necessary for investment in human capital formation and effective health services, as most countries in the region suffer from sizeable deficits in these two critical areas.

2.4 Service Sector-led Growth, Employment and Human Capital in South Asia

It has been argued that South Asia's growth performances in the past decades have been attuned to the region's demographic changes[36], and that the gradual increase in the per capita income growth had strong correspondence with the changes in age composition in population, i.e., the increase in the ratio of working-age population to non-working age population. With appropriate policies of job creation and skill development, South Asia has large potential in reaping the demographic dividend. However, to delve into the future prospects of economic fate, we have to move to sources of the realized economic growth in South Asia during the past decades and its association with the demographics.

[36] Bloom and Williamson (1998) and Bloom, Canning and Rosenberg (2011).

Figure 2.3: Per Capita Income Growth, Services Growth and Age Dependency

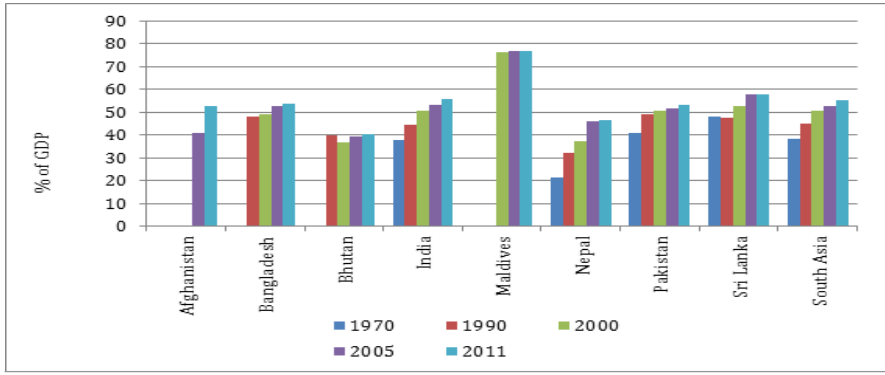


Data Source: WDI, online database.

As stated earlier, over the past two decades, economic growth in South Asia has been conditioned by its rapidly increasing services sector. This phenomenon is captured in Figure 2.3, which shows the relationship between growth rates of GDP and those of the service sector. This relationship was strengthened post-1980s when the services sectors started growing at rates that were distinctly higher than those recorded by the manufacturing sector, in particular.

At present, South Asia derives more than 55 per cent of its income from the services sector. This showing of the services sector comes on the back of sustained growth that this sector has experienced in almost all major economies in the region over the past several decades (see Figure 2.4 for details). India's service sector is the most prominent in the region, accounting for more than 55 per cent of the country's GDP (in 2012). The sector has grown at an impressive rate of over 7 per cent in the recent decades. With the exception of Pakistan, all the large economies in South Asia have been experiencing a degree of buoyancy in their services sector growth. During the past decade, Bangladesh has been able to accelerate its services sector growth on the back of some impressive performances from its information technology and enabled services sub-sectors. Maldives, which has been overwhelmingly dependent on its services sector (contribution of the sector is in excess of 75 per cent), is now witnessing a tapering-off of the growth in its lead sector.

Figure 2.4: Growth of the Service Sector in South Asia



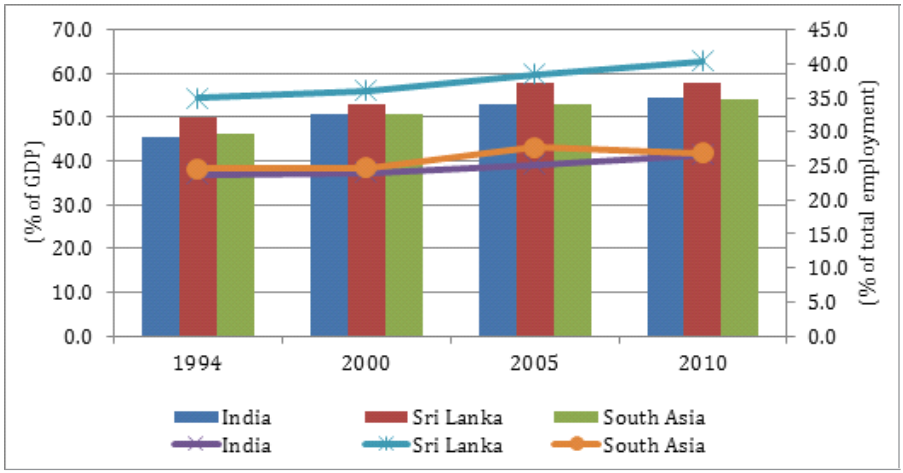
Source: WDI, online database.

Given the importance of the services sector, it is quite evident that the future growth potential of the region crucially depends on the performance of this sector. Arguments have been made that the modern services sectors, including communication, banking, insurance and a range of professional services, can provide significant impetus to the South Asian economies on a scale that could be similar to that provided by the manufacturing sector in East Asian economies[37].

The growth and employment experiences in the South Asian economies, especially in the services sector, provide some pointers to the challenges that these countries face in reaping the demographic dividend. High share in GDP and high growth rates across the countries are not matched by the low share of employment in the services sector. In South Asian economies, agriculture is the still major source of employment generation. While the contribution of the services sector in the region's GDP was about 55 per cent in 2010, only 27 per cent of the workforce found employment in this sector. The largest economy in the region, viz. India, broadly followed this trend: services accounted for more than 54 per cent of the country's GDP in 2010, while providing only 26 per cent of total employment. Perhaps more importantly, in a decade and a half since the mid-1990s, the share of services sector in India's GDP had increased by nearly 10 per cent, but the share of workforce had increased by only 3 per cent. Sri Lanka's experience was considerably different: services sector absorbed a considerably larger share of the country's workforce (40 per cent) as compared to the average for South Asia.

[37] See Ghani (2009).

Figure 2.5: Services Sector's Contribution in South Asian Economies



Source: WDI, online database.

One of the reasons behind the mismatch between growth and employment in the services sector of South Asia is the high productivity in this sector. In the region, only Bangladesh and Bhutan have higher productivity in manufacturing than services. As the countries started with a low technological base in this sector, the high productivity is the consequence of the catch up mechanism with the developed countries and it has been argued that there is immense potential in this regard.

It has been argued in the literature that the sustainability of economic growth is possible through services as it is generating growth in demand for industrial products. The limited opportunities created in terms of job creation seem to be good with high wages[38] .

One of the major concerns in South Asia is the female labour force participation in the development process. The region is remarkably lagging behind in this regard (see Table 2.4 for details). As compared to the global average of 40 per cent, the female labour force in South Asia was just 21 per cent in 2010. The performance of South Asia was conditioned by the below par performance of the three largest economies in the region, viz., India, Pakistan and Sri Lanka. While in Sri Lanka, females were about a third of the labour force, in India and Pakistan, the

[38] See Bosworth, Barry and Annemie Maertens (2009) in Ejaz Ghani (ed).

ratios were even lower at a fourth and a fifth of the labour force, respectively. In sharp contrast, the smaller countries performed quite admirably. In Nepal, the females formed the majority of the labour force (50.5 per cent), and Bhutan, Maldives and Bangladesh were around the global average of 40 per cent.

A similar picture presents itself regarding the female labour participation rate in the female working age population. South Asia's figure of nearly 32 per cent was well below the global average of over 51 per cent. Nepal recorded a staggering 80 per cent figure. Bhutan, Maldives and Bangladesh were once again above-par performers, and the three leading economies showed considerably lower performance of female labour participation.

The decline in fertility rate in South Asia did not accompany the increase in female workforce participation. The concern is more severe when the growth in female employment takes place due to push factors. The increase in female employment in India is an outcome of the socio-economic pressures, as women have to seek employment opportunities to sustain their livelihoods[39].

Table 2.4: Female Workforce Participation

Countries	Employees, services, female (% of female employment)			Labour force, female (% of total labour force)			Labour participation rate, female (% of female population ages 15+)		
	1990	2000	Latest available	1990	2000	2010	1990	2000	2010
Afghanistan	N.A.	N.A.	N.A.	15.2	13.6	15.6	15.5	13.4	15.5
Bangladesh	N.A.	12.1	19.4[@]	38.8	37.1	39.7	61.7	54.3	56.9
Bhutan	N.A.	N.A.	28.0[B]	36.4	38.6	41.5	49.6	53.5	65.5
India	N.A.	13.7	17.0	27.5	27.9	25.4	34.8	34.3	29.0
Maldives	42.9	39.0	56.1	19.4	33.7	41.9	20.2	37.4	55.1
Nepal	N.A.	N.A.	13.3	47.5	48.7	50.5	80.0	81.9	80.3
Pakistan	13.5	18.1	12.9	12.7	15.2	20.6	13.4	16.0	22.4
Sri Lanka	N.A.	N.A.	27.2	31.5	33.1	32.5	36.3	37.2	34.6
South Asia	N.A.	13.6	17.2	28.0	28.3	27.1	35.8	35.0	31.7

Notes: @ for 2005, for 2008, for 2006, for 2001. All other figures are for 2010.
Source: WDI, online database.

[39] Klasen (2011).

Data on South Asian economies' female participation in the services sector are extremely limited. The available figures, included in Table 2.4, only allow us to arrive at some broad conclusions regarding female participation in the services labour market. Services sector is the preferred sector for female employees in Maldives. In 2006, the latest year for which data are available, more than 56 per cent of female employees were engaged in the services sector, increasing from 39 per cent in 2000. In Bangladesh and India, the two countries show an increase over 1990s to recent (2000-2012) average women participation in the services sector. Maldives has the highest female labour force participation of 39.3 per cent in the region almost touching the world average of 40.1 per cent followed by Bangladesh (38.4 per cent). Significant increase in services female employment in Bangladesh leads to the question of push factors as in this country productivity is low in the service sector compared to manufacturing. Pakistan has the worst female employment scenario. Only 18.1 per cent of total employment is women employment in this country. Slowing down of services growth in this country is also accompanied by a fall in female labour force participation. South Asia is far away from East Asia and the Pacific with respect to female labour force participation. Poor performance of the region in this regard has serious consequences on future human capital formation .The poor performance can be also attributed to the education level of women in this region.

In order to benefit from the demographic changes that are afoot in the region, South Asia needs to accord priority to building its human capital base. This factor becomes even more imperative with skill-intensive services sectors emerging as the drivers of the economies in the region. Countries in South Asia would therefore have to shift their priorities in the education sector, and have to go beyond the primary education, which has been the focus of their policy in this sector. In other words, these countries would have to invest in secondary and tertiary sectors, including on vocationalisation, in order to bring the workforce in sync with the requirements of the sectors that are driving the growth of their economies. Table 2.4 provides the key indicators of human capital formation in South Asian economies. The numbers presented in the table help us in understanding the challenges that the economies in the region face in this regard.

The considerable increase in tertiary school enrolment ratio across the countries of South Asia reflects the increase in demand for tertiary education due to services growth and wage level. Investment in tertiary

Table 2.5: Education Scenario

Countries	School enrolment (%)									Ratio of girls to boys in primary and secondary education (%)		
	Primary			Secondary			Tertiary					
	1990	2000	2010	1990	2000	2010	1990	2000	2010	1990	2000	2010
Afghanistan	29.3	19.5	97.1	10.6	N.A.	45.5	2.1	N.A.	N.A.	N.A.	N.A.	63.8
Bangladesh	81.3	N.A.	N.A.	20.7	48.2	51.1	4.1	5.5	N.A.	75.5	N.A.	N.A.
Bhutan	N.A.	77.4	111.1	N.A.	40.7	65.8	N.A.	N.A.	7.0	N.A.	86.1	101.6
India	91.2	93.8	112.0	N.A.	45.3	63.2	5.9	9.4	17.9	N.A.	78.8	96.3
Maldives	N.A.	131.5	106.3	N.A.	52.8	N.A.	N.A.	N.A.	N.A.	N.A.	101.5	N.A.
Nepal	110.2	117.8	N.A.	32.2	35.0	N.A.	5.0	4.1	N.A.	56.7	77.0	N.A.
Pakistan	55.3	70.4	94.9	20.9	N.A.	34.1	3.0	N.A.	N.A.	49.0	N.A.	79.6
Sri Lanka	110.4	N.A.	98.8	71.9	N.A.	100.2	N.A.	N.A.	15.5	102.0	N.A.	101.6
South Asia	85.9	89.5	108.4	35.3	43.6	58.4	5.3	8.0	15.7	67.8	79.5	95.0
Low & middle income countries	99.6	98.9	107.1	41.4	53.7	66.1	7.4	12.1	22.5	83.1	90.5	96.7

Source: WDI, online database.

education also depends on opportunities of migration to developed countries. Sri Lanka with the highest skilled migration rates, shows the highest tertiary school enrolment ratio. In anticipation to migrate, the increase in tertiary school enrolment can be complementary to services growth.

Only Bangladesh is spending more in education compared to previous decades. All the other major countries are experiencing a cut in public expenditure in education. Privatization of education may be one of the explanations. The fall in public expenditure in Sri Lanka can be explained in demographic terms as its number of young age population started to decline from 2005. Ratio of girls to boys in primary and secondary education shows an overall improvement in South Asia but far away in achieving the Millennium Development goals target of 100 per cent that has been already achieved by EAP.

Though the overall education outcomes show improvements over the previous decades, South Asia remarkably lags behind EAP. In future decades, the change in age composition will demand much more from the existing human capital infrastructure. For the future growth process to be inclusive, access to public quality education is essential. The major challenge in this regard is to modernize the education sector and provide quality education delivery for the future generation.

2.5. Issues of Skilled Migration and Development Potential in South Asia

The literature in the 1960s, in traditional trade-theoretic framework mainly argued that the impact of the brain drain on the development of the source country is trivial. Rather, its impact through creation of international public good (knowledge) on the world community is more profound. [40]While this argument is more general, a specific region based application of it can be interesting. Considering the lack of political coherence in South Asia and the growing importance of the issues of global governance, knowledge created through the South Asian Diaspora can be of importance to solve the regional issues. Regional institutions along with the national governments of the region, have an important role in creating the common platform of such knowledge base as well as dealing with issues of intellectual property rights in this context to ensure the diffusion of the knowledge.

[40] Grubel and Scott (1966).

Presently, more than 26 million people born in South Asian countries are living outside their countries of birth. This is around 1.6 per cent of the total population of the region. Although India has the highest number of migrants (11.4 million), the rate of emigration is higher from smaller countries like Sri Lanka, Afghanistan, and Bhutan. Interestingly, the rate of skilled migration is also very high in some of these smaller countries. Table 2.6 and 2.7 show the pattern of emigration in South Asia. Sri Lanka has the highest rates of total emigration and skilled emigration in the region. More than 9 per cent of the population of Sri Lankan origin live outside their country of birth. In addition, almost 30 per cent of the country's tertiary educated population are working as skilled workers in other countries of the world. A similar pattern is observed in Afghanistan. The rate of emigration from Afghanistan is 8.1 per cent and the rate of skilled emigration is 23.3 per cent. Pakistan has also a high rate of skilled emigration of 12.6 per cent, although its rate of total emigration is relatively low at 2.5 per cent. Bangladesh and India share a moderate 4.3 per cent skilled emigration rate.

Table 2.6: Status of Emigration in South Asia

Country	Stock of emigrants as % of population	Emigration rate of tertiary -educated population -2000	Stock of immigrants as % of population	Females as % of immigrants
Afghanistan	8.1	23.3	0.3	43.6
Bangladesh	3.3	4.3	0.7	13.9
Bhutan	6.3	0.6	5.7	18.5
India	0.9	4.3	0.4	48.7
Maldives	0.6	1.2	1	44.7
Nepal	3.3	5.3	3.2	68.2
Pakistan	2.5	12.6	2.3	44.7
Sri Lanka	9.1	29.7	1.7	49.8
South Asia	1.6	10.2	0.7	45.6

Source: Migration and Remittances Fact book 2011, World Bank.

In terms of destination of the South Asian emigrants, the two major destinations are West Asia (34 per cent) and the high-income OECD countries (almost 24 per cent). In fact, emigration to other countries in the region are the second most popular destination, with all other developing

countries attracting only about 10 per cent of the emigrants from the region. Migrants heading to the developed OECD countries are relatively skilled whereas migrants to the countries of West Asia and other developing countries are either semi-skilled or unskilled. In terms of the benefits to the countries of origin, emigrants finding employment in the OECD countries can be seen as an important channel of technology transfer and network formation in the future. On the other hand, migrants in developing countries, in particular those employed in West Asia, have been a major source of remittances inflows.

The immigration stocks in the South Asian countries are mostly due to the immigration from the neighbouring countries. The high share of female immigrants in these countries leaves the hope of better integration in the society.

The pattern of emigration from South Asia has had an impact on the services trade from the region. The high rate of skilled migration in this region resulting in 24 per cent of its migrants in developed countries, contributes critically to Diaspora network formation. The region is growing with respect to its exports of both modern impersonal services and traditional personal services (trade, hotel, restaurant, beauty shops, transport and public administration). Information technology (IT) enabled modern impersonal services growth is key to future development potential in South Asia. Blinder argues that the communication revolution will transform more services into modern impersonal services .[41] At present, there is a productivity gap between South Asia and the developed countries. If fully utilised, the Diaspora network can be effective as a source of technology transfer and can therefore play an important role in narrowing this productivity gap. However, in order to adapt the technology developed in the advanced countries to suit their needs, South Asian countries must ensure that the high rates of tertiary educated emigration is complemented by high demand for technical education in their own countries. This, in other words, implies that South Asia must be able to provide adequate opportunities for the development of skills necessary for the assimilation of critical technologies.

[41] Blinder (2006).

Table 2.7: Top Destination Countries for South Asian Emigrants

Afghanistan	The Islamic Republic of Iran, Germany, the United States, the United Kingdom, Tajikistan, Canada, the Netherlands, Australia, Saudi Arabia, Denmark.
Bangladesh	India, Saudi Arabia, the United Kingdom, Kuwait, Oman, the United States, Malaysia, the United Arab Emirates, Italy, Jordan.
Bhutan	Nepal, India, Germany, the United States, France, Australia, the United Kingdom, Belgium, the Netherlands, Switzerland.
India	The United Arab Emirates, the United States, Saudi Arabia, Bangladesh, Nepal, the United Kingdom, Canada, Oman, Kuwait, Sri Lanka.
Maldives	Nepal, Australia, the United Kingdom, India, New Zealand, Germany, the United States, Switzerland, Japan, Italy.
Nepal	India, Qatar, the United States, Thailand, the United Kingdom, Saudi Arabia, Japan, Brunei Darussalam, Australia, Canada.
Pakistan	India, Saudi Arabia, the United Arab Emirates, the United Kingdom, the United States, Qatar, Canada, Kuwait, Oman, Italy.
Sri Lanka	Saudi Arabia, Kuwait, India, the United Arab Emirates, Canada, the United Kingdom, Jordan, Qatar, Italy, Australia.
South Asia	High-income OECD countries (23.6%), High-income non-OECD countries (34.2%), intra-regional (28.2%), other developing countries (9.4%), unidentified (4.6%).

Source: Migration and Remittances Fact Book 2011, World Bank.

2.6 Diaspora, Services Delivery and Human Capital Potential in South Asia

The high rates of skilled emigration of relatively small countries can affect the distribution of income in the region even in the short run, and therefore, naturally demands research attention. As the region is going through the demographic change and with varied rate, almost all the countries are experiencing a decline in the fertility rate with the result that the population growth rate is falling. Lower population growth and a relatively high rate of skilled migration may have both a qualitative and quantitative effect on the future supply of skilled Labour. The shortage of skilled Labour can be prevented if the positive externalities of the Diaspora network pull up the level of human capital in the source countries. To the

Table 2.8: Remittances, FDI and ODA

Countries	Net ODA and official aid received as % of GDP				FDI, net inflows (% of GDP)				Net remittances as % of GDP			
	2011	2000-10	1990s	1980s	2011	2000-10	1990s	1980s	2011	2000-10	1990s	1980s
Afghanistan	37.2	40.3	NA	NA	0.5	1.9	NA	NA	NA	NA	NA	NA
Bangladesh	1.3	2.1	3.8	6.5	1.0	0.9	0.2	NA	10.8	8.2	3.4	2.8
Bhutan	7.8	10.5	20.2	12.5	0.9	1.5	NA	NA	-4.8	-4.1	NA	0.0
India	0.2	0.2	0.5	0.7	1.7	1.8	0.4	0.0	3.2	2.9	1.8	1.0
Maldives	2.1	3.4	8.3	13.3	13.1	7.2	2.3	0.8	-9.9	-7.7	-6.2	-1.5
Nepal	4.7	6.0	9.4	10.0	0.5	0.2	0.2	0.0	22.0	14.7	0.8	0.0
Pakistan	1.7	1.7	1.9	2.8	0.6	1.9	0.9	0.4	5.8	4.3	2.5	7.2
Sri Lanka	1.0	2.4	4.4	8.4	1.6	1.5	1.3	0.7	7.7	6.7	6.1	5.2
South Asia	0.7	0.8	1.2	1.6	1.6	1.8	0.5	0.1	4.0	3.5	2.1	1.8
World	0.2	0.2	0.2	0.3	2.4	2.8	1.6	0.7	0.2	0.1	0.0	0.0
Low & middle income	0.7	1.0	1.3	1.4	3.0	3.4	2.2	0.6	1.4	1.6	1.0	0.7

Source: WDI, online database.

extent the externalities are extracted and demographic dividend is achieved through skill development, may actually decide the inequality within the region.

Diaspora can foster human capital accumulation in the home country in two major ways. Firstly, remittances may directly augment incomes and can therefore ease the liquidity problems of the beneficiary households. Secondly, the Diaspora can improve the average level of education in the home country through knowledge spill overs. However, the effect of remittances on development of poor countries remains a debatable issue. This is partly due to the paucity of detailed data on the use of remittances in developing countries. However, it has often been argued that the larger portion of the remittances received in the home country is used for individual consumption rather than productive investment. Therefore, the relationship between remittances and development is broadly conditional on individual incentives and in our view, needs further research. Table 2.8 shows the relative importance of remittances in the total inflows of foreign funds in South Asian countries.

In 2011, foreign remittances received by South Asian countries were larger than all other major forms of inflows, namely, foreign direct investment, development assistance and foreign aid, put together. Remittances have been critical to Nepal's economy; in 2011, they were almost 22 per cent of the country's GDP. Among the other countries, Bangladesh showed a fair dependence on remittances; as a share of GDP, inflows on this account had increased by almost three-fold over the past two decades. Remittances have played an important role in narrowing the current account deficit in India, particularly over the past couple of years when the country has faced severe payments problems on its current account.

The impact of migration through remittances on economic potential depends on how the money received is being spent. It may lead to income poverty reduction in the source countries but may or may not ensure better access to public services. There may not be any direct impact of remittances on the health and education outcomes of the economy.

On the other hand, when perceived as the sources of human capital, the Diaspora has important roles in the growth process. Efficient entrepreneurship and knowledge diffusion through the Diaspora network can positively contribute to economic growth in the services led economies. For example, the active network of Indian Diaspora engaged in the IT and the enabled services has played an important role in making

the Indian IT sector familiar to the rest of the world and therefore more exports of modern services[42].

However, the effect of direct services delivery by the existing Diaspora on human capital formation in the source country has not received much research attention yet. Scientists and technologists, among others may spend some part of their professional life in the country of their origin and can thus contribute directly to the development outcomes. This has happened particularly in the current phase of globalisation of the economies in South Asia. Available evidence suggests that in this phase, networks of migrants have played an important role on two counts. First, foreign firms that expanded their operations in countries like India found it was more convenient to send employees of Indian origin to manage their overseas operations in order to resolve local problems. In order to interact with the bureaucracy to overcome the regulatory bottlenecks and to cope with the challenges of implementing their projects, foreign firms found that it convenient to deploy their employees who were well versed with the cultural knowledge and their language skills. In several instances, members of the Indian Diaspora holding executive positions in these firms were also able to convince their non-Indian colleagues to relocate in India.

The second set of contributions from the Diaspora became evident when successful entrepreneurs of Indian origin, particularly those involved in the coming of age of Silicon Valley, began investing their time and money to support business ventures in India. Through associations such as TiE, The Indus Entrepreneurs[43] or SIPA Silicon Valley Indian Professional Association[44], these professionals assisted the Indian IT entrepreneurs with business start-up. Not only did the Indian technology professionals get the critical technical advice, the Diaspora also helped them in getting access to investible funds. A study of their participation in venture capital in Bangalore showed that nearly 50 per cent of Indian companies established in the early years of the 2000s, received funding from the Diaspora[45]. Literature suggests that Bangalore has served as a "corridor" for the return of a large number of Indian IT professionals from abroad.

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[42] Leclerc (2008).

[43] Leclerc (2008), quoting Lal, 2006.

[44] Saxenian, 2000.

[45] Upadhya, 2004.

2.7 Conclusion

This paper was an attempt to understand the nature of demographic change that is occurring in the South Asian countries and the implications that this phenomenon could have on the development prospects of the region. Almost all countries in the region are currently undergoing far-reaching changes in their demographic profiles, which is evident from the declining dependency ratios. Estimates show that for all countries barring Sri Lanka and Afghanistan, the dependency ratios should be declining until the 2040-45. While in the case of Sri Lanka, the dependency ratio had bottomed-out in the previous decade and is currently increasing, Afghanistan should be witnessing a declining trend in its dependency ratio even by 2050.

Falling dependency ratios present huge opportunities to the countries in South Asia for they can benefit from the demographic dividend offered by the large young population who are getting into the working age group. However, the challenge for these countries is to ensure that this employable population is able to join the workforce.

Alongside the changes in the demographic profile, South Asia has also been going through a rapid change in the structure of its economy. In almost all countries in the region, service sectors have emerged as the drivers. More than 50 per cent of the GDP in large economies like India, are accounted for by this sector. This changing composition of the GDP therefore necessitates imparting adequate skills to the young population so that they can be considered employable by the skill-intensive service sectors.

This is an area where most countries in South Asia suffer from major deficiencies. Education levels of the population are still at a much lower level relative to those in the other regions. While all countries have realised the target of universalization of primary education, they have made little progress in secondary and tertiary education. This has created the spectre of growing skill gaps, which can eventually deny the South Asian countries the benefits of demographic dividend.

Over the past several decades, South Asia has contributed to the workforce in several countries around the world. This migrant population from the region has been benefiting the countries through several different channels. Remittances, particularly from the semi-skilled and unskilled workforce, are the immediate source of benefits. Nepal and Bangladesh

are the main beneficiaries from remittances inflows; in the case of the former, remittances were as high as 22 per cent of GDP in 2011. Remittances received by India, which have been in excess of 3 per cent of the country's GDP, have prevented its bulging current account deficit from brimming over.

More recently, migration of its population has benefited South Asian countries in yet another important manner. South Asian Diaspora has been contributing to the development processes in the countries of the region, especially in sectors like information technology and enabled services. Most countries in the region have been making efforts to seek this important source of resources, both technological and financial, for they realise that if harnessed effectively, these resources can help address the development deficits that they suffer from.

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3. Managing Climate Change, Water Resources and Food Security in South Asia

Smriti Dahal and Posh Raj Pandey

3.1 Introduction

Climate change is defined by the IPCC as change in climate over time, attributed either to human activity or a result of natural variability (Cruz et al., 2007). Observations and research has shown that human activities, mainly burning of fossil fuels and changing land covers, are contributing to warmer climates (Sivakumar and Stefanski, 2011).

South Asia consists of a wide range of geographical features ranging from towering Himalayan peaks to fertile deltas and small islands. With its climatic zones as diverse as its physical features, it is also the most disaster prone region in the world (UNEP, 2003). Between 1990 and 2008, more than 750 million people, accounting for about 50 per cent of the region's population, were affected by one form or other of weather related natural disasters. That included deaths of 60,000 people and US$45 billion in economic damages (World Bank, 2013).

South Asia, with its varied geography, high rates of population growth, natural resource degradation, high rates of poverty, and pollution, is highly vulnerable to climate change. Although South Asian countries are the least emitter of carbon dioxide, the region is currently bearing the brunt of extensive use of natural capital and massive greenhouse gas emissions by developed countries in the past. A change in annual temperature along with changes in precipitation patterns pose a serious risk to agriculture, food production and water resources in regions that are already stressed due to a combination of other factors. Among others, poor countries and the poorest people living in these countries are most vulnerable to these climatic changes. The most significant impacts of climate change are likely to be felt by small landholders and farmers due to their direct dependence on natural resources and their low financial and technical capabilities to adapt to climate variability.

According to the IPCC's Fifth Assessment Report (2014), impacts of climate change, especially, increased floods combined with droughts and irregular precipitation patterns, is expected to have severe impacts on South Asian countries in the future. The region is already experiencing an

array of climate change impacts, including, but not limited to, increase in average temperature with warmer winters, irregular rainfall patterns - both monsoon and winter rainfall, increased salinity in coastal regions due to rising sea level and reduced discharge from major rivers, weakening ecosystems, recession of glaciers in the Himalayas, mountain and coastal soil erosion, and increased frequency/severity of extreme weather events - floods, cyclones, droughts (Sterrett, 2011). Climate variations in South Asia will be heterogeneous, with some areas experiencing high intensity rainfall and floods while others encountering high temperature and prolonged droughts.

Table 3.1: Observed Climate Change in Different Countries in South Asia

Country	Change in temperature	Change in precipitation
Bangladesh	Increasing trend of about 1oC in May and 0.5oC in November from 1985 to 1998	Decadal rain anomalies above long-term average since 1960s
India	0.68oC increase/century with increasing trends in annual mean temperature and warming more pronounced during post-monsoon and winter	Increase in extreme rains in north-west during summer monsoon in recent decades and lower number of rainy days along east coast.
Nepal	0.09oC increase per year in Himalayas and 0.04oC in Terai region with more in winter	No distinct long-term trends in precipitation records for 1948-1994
Pakistan	0.6-1.0oC increase in mean temperature in coastal areas since early 1900s	10-15% decrease in coastal belt and hyper arid plains and increase in summer and winter precipitation over the last 40 years in northern Pakistan
Sri Lanka	0.016oC increase/year between 1961 to 1990 over entire country and 2oC increase/year in central highlands	An increase trend in February and decrease trend in June

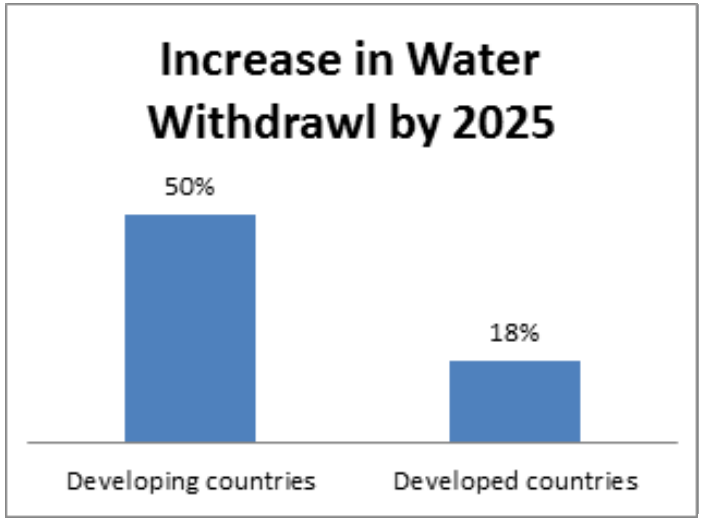
Source: Cruz et al., 2007.

Some countries in the region, and specifically some areas within the countries, have already been witnessing increases in temperature and severe heat waves. For example, the average air temperature in Sri Lanka has increased by 0.64 degrees over the past 40 years. The lower plains of Afghanistan is currently experiencing extreme seasonal variation in temperature while also suffering the most severe droughts the country has experienced till now (DFID, n.d.) . These droughts in the country are likely to be a norm rather than a periodic event by the year 2030. Nepal experienced an increase in overall temperature by around 1.5C over the period of 1975-2009; warming more pronounced in higher altitudes where the average temperature has increased by 2°C since 1970 (Krishnamurthy et al., 2013). Temperature in India is expected to rise by 2-4°C and the number of rainy days will decrease by more than 15 by 2050 (Chatterjee and Khadka, 2011). Table 3.1 gives an overview of how South Asian countries have experienced changes in temperature and precipitation over the years.

Currently 1.2 billion people or almost one-fifth of the world's population live in areas of water scarcity with an additional 500 million people approaching this situation (United Nations, 2012). According to the United Nations, water scarcity is defined as "the point at which the aggregate impact of all users impinges on the supply or quality of water under prevailing institutional arrangements to the extent that the demand by all sectors, including the environment, cannot be satisfied fully". Water use in the world has been growing at more than twice the rate of population increase in the last century (United Nations, 2012). It is predicted that by 2025 two third of the world's population will be under water stress. The increase in water withdrawal will be more for developing countries than developed ones (Figure 3.1). Hence in addition, with the existing impacts of climate change on water resources, more than half of the world's population will be living in areas of high water stress (Hanjra and Qureshi, 2010).

The demand of water in South Asian countries is increasing due to increased in population, varibability of climate change and irrigated agriculture (Field et al., 2014). In South Asia 2.5 billion people will be affected by water stress and scarcity by the end of 2050 (Kelkar and Bhadwal, 2007). There has already been a 70 per cent decrease in per capita water availability in the region since 1950 (Langton and Prasai, 2012). For India alone, the demand for water resources is expected to double and exceed 1.4 trillion cubic metres by 2050; with the country's major river basins likely to face water deficit by 2050 (Khatun and Hossain, 2012; Mathur 2011).

Figure 3.1: Future Water Withdrawal



Source: unwater.org

Due to South Asia being densely populated, scarcity of water results in people not having access to safe drinking water hence resulting in increase in deaths due to water related diseases like dysentery and diarrhoea.

With water basins in South Asia being increasingly overused, polluted and salinized, mainly due to floods and temperature rise along with increasing agricultural demands, water shortage is also likely to decrease crop production in the region. Additionally, conflicts between different South Asian countries on issues of water sharing (Mathur, 2011) makes the issue of agriculture and food security more intense in the region.

Food security is defined as the condition where all the people have access to sufficient, safe and nutritious food that meets their dietary needs for an active and healthy life (FAO, WFP, and IFAD, 2012). Currently 13 per cent of the world's population or approximately 900 million people are undernourished in the world (World Bank, 2013; FAO, WFP, and IFAD, 2012) ; the vast majority of these people live in developing countries (16 million in developed countries versus 852 million in developing countries) (FAO, 2013).

Increasing population results in increased demand for food. Projected estimates show that the global food production will have to increase by 70

per cent until 2050 to meet the growing demand of world population, (Huang, von Lampe, and van Tongeren, 2011). For example, the world demand for cereal is projected to increase to 2.50 billion tons in 2050 from 1.2 billion tons in 1974. Similarly, the demand for meat is projected to increase to 327 million tons from merely 109 million tons in 1974 (Lal, 2013). This will also lead to future rises in food prices. These increases in food demand coupled with future rises in food prices will be more severely felt in developing countries where malnutrition is already a serious problem.

Home to more than one fifth of the world's population, South Asia is the most densely populated region in the world. It consists of majority of the world's poor with majority of the region's population living under $1.25 per day. Sixty nine per cent of the total population in South Asia lives in rural areas; the poverty rates are higher in rural setting (Field et al., 2014). For example, Bangladesh, the most densely populated country in South Asia (5th most densely populated country in the world) consists of almost half of its population living in poverty and almost two-third of its population living in rural areas (Table 3.2).

Table 3.2: Statistical Overview of South Asian Countries

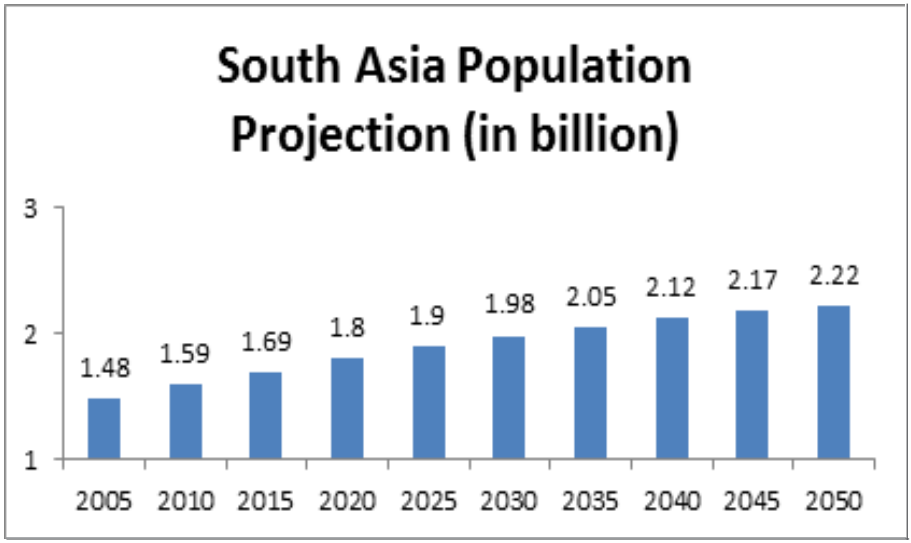
Country	Area (km2)	Population (millions)	Density (people/ km2)	Rural population (% of total population)	% of population below $1.25/day (survey year)	GDP growth rate (%)
Afghanistan	652,230	35.3	52.7	76	36 (2009)	5.7
Bangladesh	143,998	150.5	1142.3	71	43.3 (2010)	6.7
Bhutan	38,394	0.7	18.9	64	10.2 (2007)	5.6
India	3,287,263	1,241.5	411.9	68	32.7 (2010)	6.3
Maldives	300	0.30	1053	58	<2 (2004)	7.5
Nepal	147,181	30.5	209	83	24.8 (2010)	3.9
Pakistan	796,095	176.7	225.2	63	21 (2008)	3.0
Sri Lanka	65,610	20.9	329.3	85	4.1 (2010)	7.1

Source: World Bank 2013; FAO 2013.

Although, South Asia is experiencing an increased high level of growth in food consumption, it is the second most undernourished, malnourished and food insecure region in the world. Approximately 18 per cent or 300

million of South Asian population is undernourished (FAO, WFP, IFAD, 2012). In the region, Afghanistan has the highest number of undernourished people, and Maldives the lowest (World Bank, 2013). As the population of the region rises, the demand on food production will also rise. The population of South Asia is predicted to reach 2.2 billion by 2050 (Figure 3.2). Hence the combination of rapid rise in population with non-traditional insecurities like climate change is likely to increase the high incidence of food insecurity in the region.

Figure 3.2: South Asia Population Projection



Source: World Bank 2013.

In South Asia, more than 75 per cent of the population depends on agriculture for daily subsistence and livelihood. For example, in Afghanistan, Bhutan, India, and Nepal agriculture employs more than 50 per cent of the country's population. Except for the Maldives, agriculture accounts for a significant percentage of each South Asian country's GDP (Table 3.3). Collectively, the region's agriculture contributes 22 per cent to the region's GDP (World Bank, 2013). Hence, agriculture in the region is closely related to food security and poverty alleviation.

Table 3.3: Agriculture and Food Security in South Asia

Country	Arable land (%)	Agriculture employment (%)	Agriculture contribution to GDP (%)	Undernourished population (millions)	Child malnutrition, (% of child under age of 5)	Prevalence of food inadequacy (2010-2012) (%)
Afghanistan	12.13	78.6	29.9	12	-	45.2
Bangladesh	55.39	48.1	18.4	25	41.3	26.8
Bhutan	2.3	65.4	18.7	0.19	12.7	-
India	48.83	51.1	17.2	217	43.5	27.5
Maldives	13.33	21.2	3.1	0.018	17.8	11.4
Nepal	16.07	66	38.1	5	29.1	25.9
Pakistan	24.44	44.7	21.6	35	30.9	27.7
Sri Lanka	13.96	32.6	13.7	5	21.6	32

Source: FAO 2013.

The increase in frequency of climate related events is further likely to aggravate the problem of food security worlwide (Lal, 2013). Water quality and quantity in South Asia are increasingly being compromised due to climate impacts and regional conflicts. A combination of other factors will lead to increasing agriculture demands which will further stress the water resources in the region. Climate change is also likely to increase malnutrition through its effects on infectious diseases like diarrhoea, dysentery and other diseases (Tirado et al., 2010). Hence, this will have additional negative impacts on the food insecurity in the region, especially for the poor and vulnerable population.

The objective of the paper is to explore the impacts of climate change, especially in the context of water resources and food security in South Asia. The following section looks at the linkages between these three issues. The paper then focuses on details of the impacts of climate change on agriculture and water resources in South Asia. The concluding sections mention some national initiatives undertaken to address the impacts of climate change followed by the need for a trans-boundary regional cooperation in South Asia.

3.2 Climate Change, Water Resources and Food Security

Climate change, water resources and food security are linked through numerous means. The depth and variability of climatic changes is likely to affect water resources and food security in different intensities. Water is a key driver for agriculture production. Water scarcity can lead to decrease in agriculture production which in turn can have adverse impacts on food security.

Climate change affects water resources in a magnitude of ways. The impacts of climate change, mainly the changes in rainfall patterns and its intensity, glacier retreats and evapotranspiration. The scarcity and abundance of water resources due to the impacts of climate change poses a significant threat to food security in South Asia, mainly by reduction in crop productivity and loss of arable land. Higher temperatures will increase water demand, combined with decrease in rainfall, and many agriculture systems will turn towards irrigation to ensure food security and maintain livelihoods (Turral, Burke, and Faures, 2011). The unsustainable consumption of ground water for irrigation along with other uses is considered to be the main cause of ground water depletion.

A decline in rainfall combined with an increase in temperature will increase the water requirements of different crops due to high evapotranspiration while less rainfall will increase the net irrigation requirements for crops (Hanjra and Qureshi, 2010). Hence this will exacerbate the existing water scarcity problems in many regions and countries and further affect food security. In addition, mismanagement of water resources will heighten the issue of water scarcity in many regions.

Among those that will suffer the most will be areas with intense water scarcity and food security issues, parts of Sub-Sahara Africa and South Asia (Lal, 2013; Hanjra and Qureshi, 2010). These regions are already prone to malnutrition, poverty and episodes of food scarcity.

3.3 Context of South Asia

South Asia is predominantly agrarian, with 69 per cent of its population living in rural areas, of which 70 per cent are dependent on agriculture for their livelihood (World Bank, 2013). Climate change, via water resources, will impact agriculture production by limiting crop productivity and by reducing water availability in the region. Some of the main impacts of climate change and its effect on agriculture in South Asian countries is illustrated in Table 3.4. These impacts are further elaborated in the following section of the paper. The main effect of climate change in food production in South Asia is due to the variation in temperature and precipitation.

3.4 Increase in Temperature

The heat stress along with varying precipitation in South Asia will shorten the growing period of the crops and reduce crop yields. Although an increase in temperature is expected to result in immediate increase in yields due to the "fertilizer effect" of rising atmospheric carbon, the net result for food production is predicted to be negative for developing countries (Hanjra and Qureshi, 2010). Countries in South Asia are likely to suffer prolonged droughts and overall crop yields in the region are expected to decrease up to 30 per cent by mid-21st century (IFAD, 2008). It is predicted that South Asia will experience a 50 per cent decline in wheat production by 2050, which equals to 7 per cent of global food production (Hanjra and Qureshi, 2010). Similarly, cereal production in South Asia is expected to decline by 4-10 per cent by the end of the 21st century.

Table 3.4: Climate Change and Agriculture in South Asia

Country	Main impact of climate change	Effect on agriculture
Afghanistan	Droughts, glacial melt, flash floods, landslides	Deteriorating quality of agriculture land, decrease in wheat production
Bangladesh	Droughts, cyclones and storm surges, flooding, sea level rise and inundation of low lying areas	Decrease in rice production
Bhutan	Glacial lake outburst floods, droughts, landslides, increase in temperature	Deposition of sediments on agricultural land, irrigation canals and streams resulting in deterioration of agricultural lands and decreased productivity, shifting of cultivation zone to steep slopes
India	Droughts, heavy rainfalls leading to flash floods, linundation of ow lying coastal areas, glacial melt	Deterioration of agriculture land. Decrease in wheat yields
Maldives	Inundation of islands, storm surges, droughts	Loss of land
Nepal	Glacial melt, Glacial lake outburst floods, reduced river flows, floods, landslides	Soil loss resulting in a decline in agriculture production. Reduction in yields of wheat and maize
Pakistan	Droughts, flash floods, glacial melt, reduced river flows, inundation of low-lying coastal areas	Decrease in productivity of cereal crops, shortening of crop life cycle, effect on wheat, cotton, mango and sugarcane
Sri Lanka	Droughts, flash floods, cyclones, landslides, inundation of low-lying coastal areas	Impacts on coarse grain, legumes,vegetables and potato.Coconut production, tea, rubber industry are mostly affected

Source: Adapted from IFAD 2008, and Mittal and Sethi 2009.

Agriculture is extremely sensitive to even a slight increase in temperature; hence, even a small increase in local temperature is likely to have a serious impact on agriculture production in the region. For example, in Sri Lanka, the rise in temperature by half a degree is expected to increase the frequency of droughts and extreme rainfall events, which in turn is expected to reduce rice outputs by 6 per cent. Pakistan, with a rise in temperature by 1°C, is predicted to reduce its wheat yields by 6-9 per cent. Similarly, in Bangladesh a 1°C rise is likely to drop the yield of rice and wheat by 8 per cent and 32 per cent respectively (Khatun and Hossain, 2012). Since rice and wheat are among the top earning crops in the region, their low yields can significantly have an adverse effect on the food production and increase the cases of famine and food scarcity in different parts of South Asia. These rises in temperatures are raising irrigation requirements for crops and variable rainfall patterns will place rain-fed agriculture at severe risk. For example, a temperature rise of 1.5 °C and 2mm increase in precipitation in India could result in a 3 to 15 per cent decline in rice yields in India (Field et al., 2014). This number could increase to 10-40 per cent by 2050 if the rise in temperature continues in India (Chatterjee and Khadka, 2011).

There is likelihood of increasing rural poverty in different parts of the region due to the negative impact of climate change on rice and wheat production.

3.5 Precipitation

Agriculture in South Asia relies heavily on the monsoons which account for more than 70 per cent of the annual precipitation and hence are critical to ensure food security in the region (Sterrett, 2011). Irregular monsoons resulted in droughts between 2000-2002 in India and led to widespread starvation in northeast India as a result of crop failure (Khatun and Hossain, 2012). The drought of 2006 in Afghanistan affected rain-fed wheat and resulted in reduction of wheat yields in most regions, hence further increasing food insecurity (Mittal and Sethi, 2009). Along with food security, impacts of climate change on crop productivity will also have a negative impact on the income of farmers along with macroeconomic stability of the countries of the region. The increase in temperature and decrease in precipitation will affect the yield of tea in Sri Lanka, and with the tea industry being a major source of foreign exchange and significant source of income for the labourers, this would have serious impacts on local livelihoods as well as the country's economy (Mittal and Sethi, 2009).

Although the total amount of rainfall and the number of rainy days in South Asia has decreased, the intensity of rainfall in many parts of the region has increased. For example, South Asian countries, especially Bangladesh, Nepal and Northeast India experienced serious and recurrent floods from 2002-2004. Excessive rainfall and floods have damaged excessive amount of paddy land in Bangladesh in the last few decades and hence affected rice production in the country. In India the areas affected by floods more than doubled from 1953-2003 (Sterrett, 2011). In 2005, within 18 hours, Mumbai got a record rainfall of 944 mm resulting in a loss of over 1,000 lives and loss of more than US$250 million (Cruz et al., 2007). This was one of the worst floods experienced by Maharashtra in the last 100 years (Government of Maharashtra, 2005). Similarly, floods in Pakistan in 2010 affected 20 million people and were the worst the country had experienced since 1929 (Sterrett, 2011). Maldives has experienced a number of storm surges, larger storm waves and more intense flooding in the last few decades (Chatterjee and Khadka, 2011). In Bhutan, the increase in frequency of monsoon storms and flood result in higher number of landslides which deposit sediments in the agricultural lands and irrigation canals contributing to deterioration in crop production and the quality of agricultural lands (Kelkar and Bhadwal, 2007).

These impacts of climate change will be felt mostly in the arid zones and flood affected areas of the region. This increase in temperature and decrease in rainfall is already disrupting growing seasons for hot and semi-arid range lands in Pakistan, India and Bangladesh. In Sri Lanka, areas of north-eastern and eastern dry zones are likely to be drier, affecting agricultural productivity of the region. These impacts will force farmers in the region to shift their cultivation zones to lower cooler elevations where the steep slopes are more susceptible to landslides and hence unsuitable for agriculture (Khatun and Hossain, 2012). On the other hand, in Bhutan, climate change will cause cultivating zone to shift upwards to unsuitable steep slopes if temperature increases by 2oC (Mittal and Sethi, 2009).

Low income and rural population that rely on agriculture system of marginal land in such areas for daily subsistence are particularly vulnerable to climate change. The shift in these climatic zones for major food crops will also result in the extinction of natural vegetation like local rice varieties.

3.6 Health Impacts

Besides food production, climate change is also likely to have widespread and diverse health impacts, mostly through frequent and intense heat wave which is likely to increase mortality and morbidity in vulnerable groups in urban areas of the region (Field et al., 2014).

Contamination of surface water due to flooding can give rise to water-borne diseases like diarrhoea, cholera, dysentery and typhoid. Mortality due to diarrhoea that is already prevalent in the region will rise. The stagnant water after the floods is also a good breeding ground for mosquitoes increasing the risk of malaria and dengue fever in the region (Khatun and Hossain, 2012). In India, dengue fever is projected to be a big issue whereas the sub-tropical and warm temperate regions in Nepal are predicted to be more vulnerable to malaria and kala-azar (Kelkar and Bhadwal, 2007).

Also, warmer sea surface temperatures along countries' coastlines could support higher phytoplankton blooms which are excellent habitats for survival and spread of infectious bacterial disease like cholera (IPCC, 2001). Coastal Bangladesh is likely to experience transmission of infectious disease such as cholera epidemics (Field et al., 2014). These climate change related diseases and death are more concentrated among the most vulnerable groups in the region, i.e., children, poor, elderly, labourers, etc. Table 5 explains different health concerns and vulnerabilities due to climate change in South Asia.

Table 3.5: Health Concerns and Vulnerabilities due to Climate Change

Health Concerns	Vulnerabilities due to climate change
Temperature related morbidity	Heat and cold related illness; cardiovascular illness
Vector borne diseases	Changed pattern of diseases; malaria, filarial, kala-azar, Japanese encephalitis; dengue
Health effects of extreme weather	Diarrhoea; cholera, and poisoning caused by biological and chemical contaminants in the water; damaged pub lic health infrastructure due to cyclones and floods re lated injuries and illnesses
Health effect due to food insecurity	Malnutrition, hunger, especially in children

Source: Kelkar and Bhadwal 2007.

3.7 Glacier Melting

Enhanced climate variability, rapid melting of glaciers and existing political conflicts on water sharing issues in South Asia are further likely to aggravate water scarcity in the region.

An important impact of climate change observed in South Asia is the melting of the glaciers in the Himalayas. Due to the decrease in snow water, which is predicted in the next 30 years, the region will suffer from water stress from the Himalayan impact. The warming impacts on glaciers and snow fed rivers will experience two contrasting phases: the initial phase of immediate increases in river discharge due to intensified melting and the second phase of shrunken glaciers that result in reduced stream flow.

The increase in temperature and increased seasonal variability in precipitation will result not only in accelerated recession of glaciers but will also increase the size and number of glacier lakes. For example, Lake Tsho Rolpa in the Nepalese Himalayas has increased in size from 0.23 km2 to 1.65 km2 from 1957-1997 (IFAD, 2008). Most of such lakes in the Himalayas have been formed only in the second half of the 20th century due to global warming. The rapid melting of glaciers is filling these lakes beyond their capacity and result in glacier lake outburst floods (GLOFs). Out of the 2,323 glacier lakes in Nepal, 20 are identified as potentially dangerous in relation to GLOF (Sivakumar and Stefanski, 2011). The impact of GLOF is devastating downstream with damages to infrastructures, agricultural land as well as loss of human lives. A significant incidence occurred in Nepal in 1985 when a GLOF caused a 10-15 metre high surge of water and debris to flood BhoteKoshi and DudhKoshi rivers for 90 km and destroying Namche Small Hydro Project, crop lands, infrastructure, among other damages (Raut, 2006). Hence, the melting of glaciers and GLOFs will affect the quantity and quality of water resources in the region aggravating the conditions of the rural people that rely on them.

The melting of glaciers will not only result in increase in frequency of flood events but will also permanently reduce river flows in the next 30-50 years. The Himalayan glaciers are retreating at an alarming rate and many small glaciers (<0.2 sq. km) have already disappeared (Bajracharya, Mool, and Shrestha, 2008). According to the IPCC if the current trend of receding of Himalayan glaciers continues, they will disappear by 2035. In the dry season the melt water from the Himalayan glaciers currently supply up to 85 per cent of the flow of the great rivers of the Northern Indian Plain. With

the current trend of climate change this supply could be reduced to about 30 per cent of its current contribution over the next 50 years (IFAD, 2008).

These melting Himalaya glaciers feed three major rivers in South Asia: the Indus, Ganges, and Brahmaputra. These three river basins are the most densely populated river basins in the world, which support an estimated 700 million people (Langton and Prasai, 2012). With the changing climate and decrease in water supply, these three rivers could turn into seasonal rivers and affect food production in South Asia as well as the economic livelihoods of the region. This is bound to have significant downstream consequences and can result in food insecurity as these rivers feed over half a billion people. Majority of these people are dependent on agriculture and fisheries, both of which will be severely affected by decrease in fresh water availability (Sterrett, 2011). According to IPCC, the annual runoff in the Brahmaputra River is projected to decline by 14 per cent and that of the Indus by 27 per cent by 2050. The decrease in flow of the Indus River will affect cotton production in Pakistan, being detrimental not only to the economy as it is the country's main cash crop but it will also affect the livelihood of those that work on cotton farms (Mittal and Sethi, 2009).

3.8 Agricultural Demands on Water Resources

While climate change is likely to increase the intensity and number of flood events, it will also be the cause of deepening water scarcity in the region. Not only will the water scarcity in the region affect water but the relationship is inter-changeable with agriculture and climate change likely to further stress the water resources in South Asia. In addition, the need for water to meet irrigation demand for agriculture in arid and semi-arid regions are likely to increase their water needs by 10 per cent for every 1 per cent increase in temperature (IFAD, 2008). As seen in Table 3.6, in most of the South Asian countries more than 90 per cent of the total water withdrawal is for agriculture reasons. Ground water is the primary source of drinking and irrigation in South Asia. In South India, a major reason for water shortage is the result of unsustainable extraction of ground water by farmers (World Bank, 2009). Agriculture currently uses 70 per cent of the global freshwater withdrawal, most of it for irrigation systems which are responsible for crop yields (Huang, von Lampe, and van Tongeren, 2011). In Pakistan, a 6 per cent decrease in rainfall will increase the net irrigation requirements for wheat by 29 per cent further stressing the already stressed water resources in the region (Kelkar and Bhadwal, 2007).

Hence, as seen in Table 3.6, 69 per cent of its freshwater withdrawal in Pakistan is for agriculture. The major food producing regions of Punjab and Haryana of India, along with rise in temperatures are also facing severe depletion of ground water resources due to intensive cultivation techniques. This increase in demand for irrigation water supplies will likely increase competition for water for industrial, household and ecosystem uses.

Table 3.6: Water Withdrawal by Country

Country	Year	Renewable resources Total (%)	Freshwater withdrawn Ag(%)	Total water withdrawal (million m3/yr)	Water withdrawal by agriculture (%)
Afghanistan	2000	36.6	35.1	23123	98.8
Bangladesh	2008	2.9	2.6	35870	87.8
Bhutan	2008	0.4	0.4	338	94.1
India	2010	33.9	36	761000	90.4
Maldives	2008	15.7	0	6	0
Nepal	2005	4.7	4.6	9787	98.2
Pakistan	2008	74.4	69.9	183450	94
Sri Lanka	2005	24.5	21.4	12946	87.4

Source: FAO 2013.

3.9 Water Conflicts

In addition to the impacts of climate change in water resources, water issues in South Asia are also deeply impacted by conflicts between different countries. Many rivers in South Asia share national borders and hence the trans-boundary nature of these rivers give rise to many disputes in the region related to water resources. For example, Bangladesh, Bhutan, India, Nepal and Pakistan share 20 major rivers within their borders (World Bank, 2009). The conflicting claims over shared water resources in South Asia serves as a major security challenge in the region. Increasing water scarcity due to climate change is further straining regional relationships and is a major source of tension and conflict in the region.

Despite the presence of numerous bilateral treaties and agreements that govern water sharing in the region, due to deep historical mistrust and chronic political tensions, their implementation is problematic and friction over water usage is a prominent problem in South Asia. Accusations between countries on damming of rivers without regard for regional impacts or monopolizing water flows are some of the major challenges that South Asia faces.

The three groups of countries that mostly face political disputes with regard to water resources in the region are: India- Bangladesh, India-Nepal and India-Pakistan. Table 3.7 highlights some of the major bilateral treaties/agreements that focus on major rivers of South Asia and are filled with political controversies between the two respective countries.

Table 3.7: Major Water Treaties/Agreements between Bangladesh, India, Nepal and Pakistan

Countries	Treaty	Date	Issues
India- Pakistan	Indus Water Treaty	1960	Violation of the Indus Water Treaty by building of dams on Pakistani rivers - Krishna ganga dam, Bagiihar dam, dams on Indus river, projects on Chenab river
India-Bangladesh	Ganges Water treaty Teesta River Controversy	1997	Fair and equitable sharing of water, changes in the upper riparian regions (India) will affect water in Bangladesh
India-Nepal	Mahakali Treaty Koshi Treaty Gandak Treaty	1996 1954 1959	Water distribution, power generation and energy sharing attributed mainly due to increase in floods

Source: Author's compilation.

One of the major treaties between India and Pakistan is the Indus Water Treaty signed by the two countries in 1960 to share the water of the Indus River (Malhotra, 2010). There are six rivers of the Indus system that are critical to both the countries. According to the treaty, the three Eastern Rivers of the Indus are to be used by India whereas the 3 Western ones are allocated to use by Pakistan except for certain salient circumstances

(Rai and Patnaik, 2011). Even with the treaty, the countries have differences over its interpretation and Pakistan has been raising a long standing concern of India's construction of dams.

Similarly, water conflict between India and Bangladesh dates back to 1951 with India's construction of the Farakka Barrage to divert water from the Ganges to another river in India. As a step forward to reduce this conflict, India and Bangladesh have between them the Ganges Water Treaty of 1997 for 54 trans-boundary rivers they have between them. However, Bangladesh has alleged that due to it being on the downstream receiving end, it does not receive a fair share of water from India. All of the rivers flowing through Bangladesh originate outside its borders and hence any changes in the upper riparian regions will have an impact on the water resources in Bangladesh.

One example is the current controversy surrounding the Teesta River that numerous people in West Bengal and Bangladesh depend on for survival. Teesta flows through West Bengal in India before entering Bangladesh. In 1983, an ad-hoc agreement was reached between the two countries allocating 39 per cent and 36 per cent of the water flow to India and Bangladesh, respectively. Currently, there have been efforts to expand on this and develop a bilateral treaty that proposes an equal allocation of the Teesta River to both countries. But the deal fell through when the elected Chief Minister of West Bengal refused to sign the treaty fearing loss of higher volume of water to the lower riparian area would cause the northern part of the state to experience water problems, especially in the dry months.

Similarly, India and Nepal have a long history of water problems between the two countries. Some of the major water treaties between the two countries are Sharda Treaty (1927), Koshi Treaty (1954, amended 1966), Gandak Treaty (1959, amended 1964), and Mahakali Treaty (1996). Mahakali Treaty is governed by the Sharda treaty and is related to the integrated development of the Mahakali River (or Sharda River in India) and includes three major projects: Sharda Barrage, Tanakpur Barrage and Pancheshwar project (Dhungel and Pun 2009; Salman and Uprety, 2002). There are numerous conflicts related to water distribution, power generation, and energy sharing surrounding these treaties between India and Nepal. Such conflicts arise mainly in relation to floods and their impacts. For instance, in the past, conflicts have been fuelled by devastating floods in the Koshi River in 2008 which displaced 3 million people in India and 50,000 people in Nepal. Both sides blamed each other

for failing to prevent the disaster (Malhotra, 2010). Similar disaster events are going to magnify in the future due to increase in floods resulting from climate change and increase water scarcity in the region. Hence, to solve these conflicts there is a need for regional cooperation within South Asian countries to tackle the issue of water scarcity.

3.10 Sea Level Rise

The rise in sea level will have significant impact on the low lying coastal systems and islands in South Asia. Those living in these low lying zones and flood plains that are densely populated are especially at a higher risk from climate change. Rise in sea level will result in exacerbated inundation, storm surge, erosion and other coastal hazards (World Bank, 2013). Rise in sea level is already affecting cities in South Asia with large population. According to the worst case scenario, much of Maldives will be submerged by the end of the century (Sterrett, 2011). Sea level rise is projected to decrease total arable areas and further exacerbate food insecurity and loss of livelihoods due to the loss of cultivatable land as well as nursery areas for fisheries. Various parts of East India, Bangladesh, Maldives and Sri Lanka are currently experiencing obvious impacts due to the rise in sea level. In Bangladesh alone, the sea level is projected to rise by 45 centimetres by 2050 affecting 10-15 per cent of the land area and an estimated 35 million people (ADB, 2004). These rising sea levels will threaten rice cultivation. UNEP estimated that a 1 metre rise in sea level would inundate 17,000 square kilometers of Bangladesh's land, which is over ten per cent of its total land mass, and pose a serious threat to agriculture in the country.

Countries like Sri Lanka and Maldives that are approximately 1 metre above sea level could be submerged with the rising tides (ADB, 2004). Bangladesh has witnessed a 7.6-10.2 cm rise in high tide level per year and a rise in sea level of 1 metre predicted over the next 50 years (Chatterjee and Khadka, 2011). In Maldives the rise of sea level and other extreme climatic events are causing erosion of beaches and coral bleaching, resulting in reduction in the values of tourism destinations.

Rise in sea level along with decrease in flow of major rivers, also gives way to saline water intrusion posing a risk on the region's freshwater supply used for drinking and agriculture. The change in salinity and warming of sea water are affecting fisheries and aquaculture in countries like Bangladesh and Sri Lanka where fish is not only a source of staple

food but also a form of economic development for the region. It is estimated that by the end of the century, more than 125 million people across India, Pakistan and Bangladesh will be homeless due to the rising sea level (Sterrett, 2011). Relocation of these densely populated areas will result in economic and social disruption and refugees will further stress the already stressed cities in these countries (IFAD, 2008).

Impacts of sea-level rise in cities like Mumbai and Kolkata in India and Dhaka in Bangladesh will see increased riverine, coastal and urban flooding leading to widespread damage to infrastructure, livelihoods and settlements (Field et al., 2014). Urban areas of these cities are home to more than 46 million people and the population is rising. They will face the greatest risk of flood related damage over the next century. Salinization of ground and surface water by the intrusion of sea water into coastal areas is a big concern for the availability of fresh water, as well as for fisheries and agriculture in India, Bangladesh and Sri Lanka. As of now, 15,000 hectares of paddy field in Galle District of Sri Lanka are already affected due to salt water intrusion.

3.11 National Initiatives

South Asian countries, individually and as a whole, have been aware of the imminent catastrophe that climate change, food insecurity and water scarcity could bring to the region. On a national level, governments of different countries along with community groups have taken initiatives to adapt and mitigate the adverse effect of climate change, water scarcity and food security.

Understanding the urgency to ensure food security at the national level, all South Asian countries, except Afghanistan and Bhutan, have addressed the rights to food in their constitution (Sharma, 2010).

These countries define food security as a human right and the responsibility of the government to feed its entire population. For example in the case of Nepal, "food sovereignty" is defined as a fundamental right of the people; in Maldives along with food security rights to clean water is also stated (Table 3.8). However, in most countries, despite significant improvements in securing food security, the issue of rights to food security and clean drinking water is still a vision and not a reality.

Table 3.8: Addressing Food Security in South Asian constitutions

Country	Constitutional provisions
Afghanistan	None
Bhutan	None
Bangladesh	It shall be a fundamental responsibility of the State to attain, through planned economic growth, a constant increase of productive forces and a steady improvement of the material and cultural standard of living of the people, with a view to securing to its citi zens... the provision of the basic necessities of life, including food, clothing, shelter..."
India	"The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties and, in particular, the State shall endeavour to bring about prohibition of the consumption except for medicinal purpose of intoxicating drinks and of drugs which are injurious to health."
Nepal	a right of every citizen to "food sovereignty" as a fundamental right of the people.
Maldives	adequate and nutritious food and clean water.
Pakistan	"The State shall provide basic necessities of life, such as food, clothing, housing, education and medical relief."
Sri Lanka	"The State is pledged to establish in Sri Lanka a democratic socialist society, the objectives of which include... the realization by all citizens of an adequate standard of living for themselves and their families, including adequate food, clothing and housing."

Source: Author's compilation.

Millions in the region still do not have access to adequate food and nutrition. This number is higher in the case of rural population, which comprise the majority of the population in many countries. The populations in these rural areas still live in extreme poverty and lack access to food, nutrition and sanitation.

In addition, there are other national initiatives that strive to ensure food security for its citizens. For example, the primary objective of the Indian National Food Security Bill, 2013, is to guarantee cheap food grain to nearly 70 per cent of India's 1.2 billion people (Times of India, 2013).

NGOs, multilateral and bilateral agencies have played a significant role in advocating food security in the region. For example, a bulk of the relief assistance provided by various development agencies in Afghanistan has been in the form of food. Similarly, due to Bhutan's lack of resources and lack of technological know-how, various multilateral and bilateral agencies (example IDRC, IRRI), have supported the country in achieving food self-sufficiency.

Understanding the urgency to adapt to the changing climate, South Asian countries have developed different national strategies and adaptation plans. For example, India in 2008 released its National Action Plan on Climate Change, with future policies and programmes aimed at addressing mitigation and adaptation issues with an emphasis on maintaining high economic goals while addressing climate change.

Similarly, Bangladesh and Nepal have developed their own national adaptation programmes of action (NAPA) in 2005 and 2010, respectively, and Pakistan has a draft national climate change policy (Sterrett, 2011). Finding pitfalls in NAPA and its inadequacy to address the magnitude of climate change impacts in the country, Bangladesh has developed a Climate Change Action Plan. It is a 10 year programme developed with an aim to build the capacity and resilience of the country to meet the challenges of climate change. Similarly, the Government of Bangladesh also has established a National Climate Change Fund which will focus mainly on adaptation (Khan, Haq, Shamsuddoha, 2012). Nepal is a pioneer in the development of the Local Adaptation Plan for Action (LAPA), which aims to provide climate change actions at a more localized level.

Similarly, Maldives with the support of the World Bank also has a Climate Change Trust Fund which supports the development and implementation of climate change strategy and action plans for the country. Identified as one of the most vulnerable small island states to climate change, Maldives is also one of the first to initiate a process to develop a Strategic National Action Plan on disaster risk reduction and climate change adaptation.

Along with national policies, South Asia is also home to diverse indigenous knowledge and experiences on coping with the impacts of

climate change. In Bangladesh, farmers have developed floating gardens in flood prone areas using hyacinth (Khatun and Hossain, 2012). In Pakistan Oxfam has helped farmers to enlarge their water pond sizes from 60m to 100m and strengthen their pond lining as a method to adapt to water scarcity in the region. In India, regions of Rajasthan and Andhra Pradesh that have witnessed extreme droughts and erratic rainfall patterns have started using a System of Rice Intensification (SRI) thus cutting irrigation water requirements and increasing yields and profitability (Sterrett, 2011). Similarly in Nepal, under the LAPA initiative, one of the seven pilot projects focuses on watershed management in central Nepal involving, 5000 households across three villages. Adapting agriculture to the increasing salinity in the coastal area of Sri Lanka, Practical Action, worked with 500 households to help them identify traditional rice varieties suitable for cultivation in degraded paddies.

3.12 Regional Initiatives

On a regional level, food security and environmental issues have occupied an important position in SAARC (South Asian Association for Regional Cooperation) summits. Realizing the food crisis of South Asia, countries signed the agreement to establish a SAARC food bank during the 14th SAARC summit in 2007. The main objective for such an initiative was for food shortage and emergencies, regional support to national food security efforts, foster-inter-country partnership and regional integration, and solve regional food shortage through collective action (Mukherji, 2012). However, although SAARC has understood the importance of such an initiative, it has yet to operationalize the food bank due to practical and political barriers that exist in the region.

Similarly, the SAARC nations have come together, to find a way to reduce the impact of climate change through adaptation and mitigation. During the SAARC Ministerial Meeting on Climate Change in 2008 in Dhaka, the governments adopted a SAARC Action Plan on Climate Change, which was later endorsed by the 15th SAARC Summit in August 2008 in Colombo. Similarly, the 16th SAARC summit held in Thimphu came up with a separate statement on climate change besides the regular Summit declaration. The statement emphasized the importance of reducing dependence on high-carbon technologies for economic growth, and stated that promotion of climate resilience will promote both development and poverty eradication in a sustainable manner. It also recognized that effective responses, both on mitigation and adaptation, should be

formulated and implemented at regional and international levels, and showed commitments to meet the challenges of climate change. The meeting also took the initiative, among others, to establish an Inter-governmental Expert Group on climate change to develop clear policy direction and guidance for regional cooperation.

3.13 Way Forward

Issues of water scarcity and food security have intensified worldwide. The issue is more severe in South Asia as more than one third of the region's population is still in poverty and the region has one of the highest rates of malnourished children in the world. Currently, climate change adds a layer of complexity to the issue. South Asia has faced a need to adjust to the new climatic conditions, especially the impacts due to increased / decreased rainfalls that cause frequent floods/droughts, changes in ecosystems, mutation of disease, etc. Individual countries' ad hoc response has been hardly sufficient especially with climate change constantly posing a risk on cross-border basis. Although adaptation to the impacts of climate change, at the end, needs to be local in nature, for an efficient response to the problem in South Asia, regional cooperation and inclusion of all social factors is a must.

3.13.1 Food Security

Although the establishment of food bank was a good solution to periodic food crisis in the region, the inability of the region to operationalize it has been a source of major criticism towards SAARC. Mittal and Sethi (2009) also state that in order to achieve long-term food security, there is a need for individual countries and the region as a whole to become food secure. Government policies in South Asian countries focus more on domestic measures to increase national food production and mostly neglect the role of international trade and regional dynamics (Pandey, 2012).

The role of trade. There is a need for liberalization of regional trade including trade in food items. Trade can ease the impact of instability in national domestic agriculture production while ensuring food security and stabilizing food prices in the region (Mukherji, 2012). The role of trade to address food security should be through removing trade barriers between countries and by enhancing cooperation on smooth flow of agriculture goods from food surplus to food deficit nations in South Asia (Huang, von

Lampe, and van Tongeren, 2011). Trade can also be used to alleviate food insecurity by importing of climate change friendly technology and importing inputs facilitating the implementation of these technologies. However, there is low intra-regional trade among SAARC countries, for example, intra-regional trade in South Asia is 0.8 per cent of GDP as compared to nearly 28 per cent in East Asia (Ahmed and Ghani, 2008).

There exist bilateral trade agreements between countries in South Asia, but these bilateral trade agreements have their own set of issues. A case in point is the unbalanced trade between Nepal and India due to Nepal's high import and low export (Pandey, 2012). In addition, trade between India and Pakistan has its own problems due to the conflicting nature of these countries. There is increasing realization of the need to undertake regional collaboration efforts to address food security; SAARC being one such platform where the collaboration can take place.

3.13.2 Water Scarcity

In the case of water sharing, numerous bilateral treaties exist between different countries in South Asia. However, for an effective management of water resources in South Asia, there is a need to move from bilateral to multilateral dialogue in the region.

Need for multilateral treaties. Bilateral treaties tend to render one party more powerful than another and the power to make decisions of water resources that affect millions fall on the hands of a few politicians, as in the case of Teesta River. Hence the need for regional cooperation to address water sharing in South Asia is stronger due to the river basins in the region sharing national borders. It is critical to understand and recommend how the shared rivers of the region are governed in the present to meet poverty reduction, food security, growth and environmental challenges that South Asia faces. The issue over water dispute in the region is likely to aggravate in the future due to recent drivers like climate change, further pushing the region towards a serious water deficit and conflict. Hence the way forward is the need for more regional cooperation across the countries that share the rivers of the region. Hence, an effective regional management strategy for water resources in the region is necessary to ensure regional peace, stability and economic development.

Currently, South Asia lacks organized river basin management systems across the region. There is also lack of long-term water management strategies in the region. There is a need to view rivers as common systems that countries share through river basin management. Issue of water discourse in South Asia is highly political, driven more by national and local interests than shared regional concern. Hence, a step that all countries need to adopt is to change their mind set and denote water as a shared resource rather than a political warfare.

According to Mathur (2011), two ways to move forward to minimize and control the clear risks arising from the water disputes in the region are by firstly, developing a camaraderie and understanding among the countries. He stresses the need to depoliticize water as an issue and work towards bringing all the countries in the region together to increase dialogue and transparency among them. Secondly, he talks about the need for individual countries to develop their own efficient water management systems and to learn about best practices from each other to minimize wastage and increase conservation of water resources.

3.13.3 Climate Change

Challenges imposed by climate change are hugely demanding, inter-connected and increasingly viewed as the foremost problem of South Asia. Hence, immediate actions need to be taken at the regional level to ensure clear strategies for the management and highlight possible cooperation among SAARC countries to address climate change. Some of the recommendations are provided below to address the impacts of climate change at the region.

Implementation of plans and policies. Climate change issues have gained importance in various SAARC summits, but the transfer of existing plans and policies to action is still lacking.

Establishment of early warning systems. SAARC countries had previously talked on issues related to establishing early warning systems for disaster management. Due to the severity of climate change in the region, there exists a need for such warning system to be implemented immediately.

Increased funding for research and transfer of technology. There is also a need for a SAARC Climate Fund and research centre to assist with

financing and transferring successful climate change mitigation and adaptation techniques in the region. There is also a need to highlight community based adaptation methods in different countries and focus on adaptive technology transfer from a local to regional level.

Integration of institutions and sectors. Insufficient integration between institutions, including intergovernmental cooperation and public and private partnership makes adapting to these adverse conditions difficult in South Asia. Existing gaps in capacity, knowledge and experience across South Asia along with inadequate tools, knowledge and financial resources makes the region weak in tackling the impacts of the existing inequalities (Sterrett, 2011). Hence the integration of private sector into adaptation strategies is a must for the region to address the impacts of climate change. These partnerships also enhance the capacities of policy makers and experts to gain stronger access to climate change funds and technologies.

Need for research and documentation of successful practices. Mostly, in the case of climate change there is lack of information on monitoring and evaluation of climate change adaptation practices. Documenting good practices across the region while understanding and sharing lessons learned across South Asia is an important action that needs to be adopted on a regional scale. Within South Asia identification of 'hotspots' where a large proportion of the population reside, better research to understand how they will be affected and to develop efficient adaptation measures are some of the factors that need attention.

Need for monitoring and evaluation. There is a need for monitoring and statistical analysis of major river basins in South Asia, study river flows and floods. There is a need to manage natural resources more effectively mainly through efficient water and land use measures (Sterrett, 2011). Hence monitoring and evaluation of these practices will provide efficient measures to tackle the changing climate in the future.

3.14 Conclusion

Many initiatives are currently present to tackle the impacts of climate change, water scarcity and food security in South Asia. However, these policies and plans, although good on paper, have not been effective in developing significant practical options for the countries and the region as a whole. In addition, nothing concrete has been established at the

national and regional levels to manage these issues of food security, water scarcity and climate fluctuations in South Asia. In most of these countries, climate change and food security policies have been fragmented and isolated; lacking a link between different sectors. South Asia currently lacks general research on these three issues and their nexus. Individual countries and the region as a whole have failed to integrate these three issues with existing development strategies. There is also a need to factor in the cost of climate change into economic planning. There is a strong need to follow up these action plans and statements with formulation and implementation of detailed time bound actions.

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4. Managing Intra-Country Growth Disparities in South Asia

Abid Q. Suleri, Vaqar Ahmed, Muhammed Zeshan, and Samavia Batool

4.1 Introduction

While most regions of the world suffered enormously due to the global financial crisis of 2007-08, South Asian economies were better able to cope and it became the fastest growing region over the past decade. South Asian region expanded at 5 per cent in 2012 and the growth rate for 2013 is estimated to be at 5.7 per cent (ADB, 2013).

Despite rapid growth, South Asia is home to 35 per cent of the world's poor, 250 million undernourished children, 30 million children out of school, and nearly 600 million people living on US$ 1.25 a day. Moreover, South Asian region is also dominated by high conflict rate, lowest female labour force participation rate in the world (Ghani, 2010) and low progress towards most of the Millennium Development Goals (World Bank and IMF, 2013).The growth performance has not been evenly distributed throughout the region, creating a divide between 'leading' and 'lagging' economies within the South Asia. This divide is not only restricted to the regions but can also be observed within countries (in the form of rural-urban, urban-peri urban, and peri urban-slum divide). These gaps in growth seem to be widening over time resulting in high incidence of poverty and income inequality across South Asia.

South Asia has resiliently grown in the past decade fuelled by a large working age population, growing capacity of productive endowments, a large Diaspora and an overall increasing integration with the rest of the world. The four key trends that may sustain these positive developments include a substantial share of youth in the population structure of South Asia, fast urbanization in turn making agglomeration possible, a rising share of services in the gross domestic product, and transformation of agriculture.

Thus, South Asia is unique in a sense that on one hand, services contribute a major share to its GDP growth and on the other hand, agriculture sector is still the largest employer, absorbing maximum labour force. While strong economic growth kept South Asia insulated, to a

certain extent, from global fiscal crisis; strong agro-base minimized the impacts of global food prices shocks in South Asian countries during 2008-09.

Growth in services sector can provide jobs to skilled, educated, and trained workforce. With a growing working age, urbanized and agglomerated population (Table 4.1), the key challenges for South Asian countries will involve provision of education, health and jobs in order to ensure respectable livelihoods. Furthermore, if migration from rural to urban is being fuelled by rising opportunities in the latter, then one would have to adopt a two pronged strategy. On one hand, valuing rural space and sustainable resource and leveraging potential of sustainable livelihoods; nurturing socio-cultural co-existence; and enhancing productive potential, and on the other hand, working on an infrastructure that connects people and places, providing an enabling environment for work and residence. Both social sector and infrastructure provisions will indeed require enhanced domestic resource mobilization.

Table 4.1: Population, Urbanization and Agglomeration in South Asia (2012)

Country	Population ages 15-64 (% of total)	Population ages 0-14 (% of total)	Urban population (% of total)	Population in urban agglomerations of more than 1 million (% of total population)
Afghanistan	50.3	47.4	23.9	10.7
Bhutan	66.8	28.5	36.3	-
Bangladesh	64.7	30.6	28.9	14.9
Nepal	59.4	35.6	17.3	-
Pakistan	61.3	34.3	36.5	19.2
India	65.4	29.4	31.7	12.7
Sri Lanka	66.6	25.2	15.2	-
Maldives	66.0	29.0	42.2	-

Source: World Development Indicators 2013.

The growth experience in South Asia has not been inclusive or participatory (Stalon, 2013; Suleri, 2006a). The region like many other competing regions has also not regarded the basic norms of sustainable development, in turn increasing the vulnerability originating from un-sustainable production and consumption patterns. The various forms of inequalities still existing hinder the equitable access to even the basic necessities of life. The inequalities are not limited to income or consumption patterns but also include continued inequalities of various sorts faced by women, marginalized groups and minorities. The demand-side accountability still remains weak given the low levels of literacy particularly in rural areas. This has resulted in weak service delivery in most social sectors as well as rent-seeking in the productive areas that have state footprint.

This paper aims to explore that despite expansion in gross domestic product in South Asia, intra-country socio-economic disparities continue to exist. We will specifically look into opposite behaviours of macro-level economic and micro-level welfare indicators. We also explore if evidence from new economic geography (Krugman, 1991) can provide answers for minimizing intra-country (and intra-region) disparities. Particularly important here is the role of trade, urbanization, agrarian transformation, integrated supply chains in the region, and reforming in-country institutional structures.

This paper also looks into the development financing challenges of reducing meso and micro-level disparities within South Asian countries. An argument is made that besides strengthening sustainable livelihoods (growth) through new economic geography, concerted efforts are required to reform taxation structures that can mobilize fair revenue collection, and finally, strengthen the social safety nets to take care of the excluded segments of the society and explore the regional financing vehicles including the SAARC Development Fund.

In this paper we resorted to results from already available literature on South Asia which focuses on intra-country growth-related disparities. We supplement our analysis with literature from new economic geography and an econometric exercise that aims to look at the potential of South Asian growth and integration for reducing poverty and inequality.

On top of it, we also looked at the key mega trends observed across South Asia including individual empowerment, rise of middle class and urbanization, diffusion of power, evolving cultural trends, agrarian transformation and climate change (Suleri, 2013a). These trends can turn

into a boon or bane depending upon relevant influencing factors (termed as game changers in this paper).

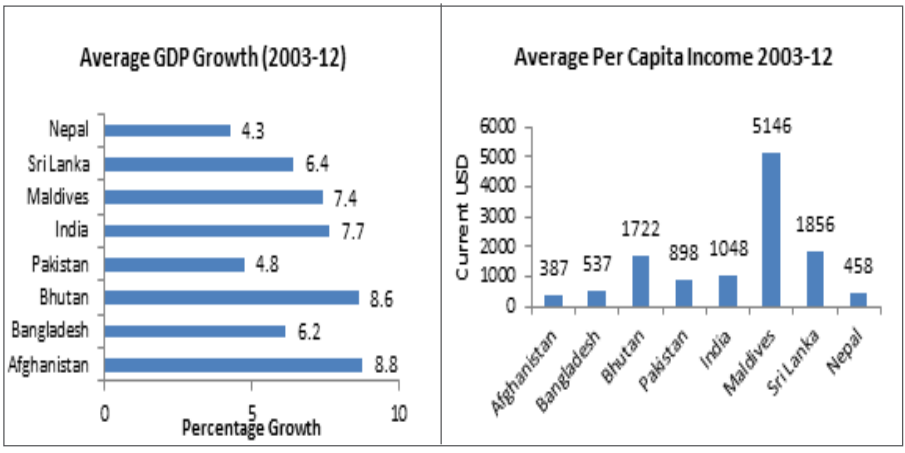
The growth experience across South Asia is discussed in detail in the next section. This is followed by a discussion on intra-country disparities in sources of economic growth including human and physical capital. In Section 4 a discussion based on the new economic geography literature exhibits how economic growth coupled with increased regional integration may provide an answer to enhancing welfare. This linkage can be further strengthened through the forces of agglomeration which take place in cities and integrated supply chains. Finally, we look at the future development options possible for South Asia including a discussion on MDGs achievement and the financing mechanisms available to South Asian countries for addressing intra-country growth disparities.

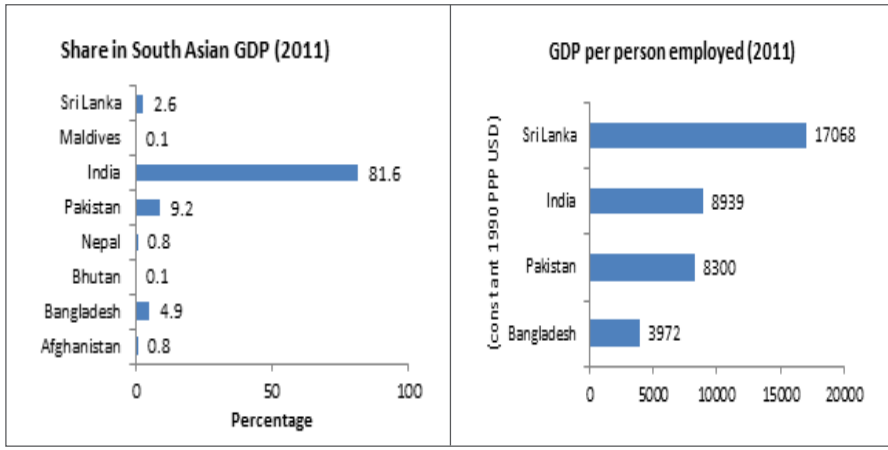
4.2 Growth Experience in South Asia

4.2.1 Expanding Productive Capacities

The past few years have seen South Asian countries expanding their productive capacities to new frontiers. Some of the fastest GDP growth rates were seen in these economies (in the past 10 years) with Afghanistan and Bhutan growing above 8.5 per cent average, India and Maldives remained above 7 per cent, Bangladesh and Sri Lanka's real GDP growth rates ranged between 6.2 - 6.4 on average, whereas Nepal and Pakistan remained above 4 per cent average (Figure 4.1).

Figure 4.1: Growth and Productivity in South Asia





Source: World Development Indicators 2013.

The population growth in the South Asian region was cited as a critical factor in keeping the per capita incomes of these economies low at least in the past decades (Nafziger, 2006). India, despite being termed as the world's largest economy exhibited an average per capita income of slightly over USD 1000 across 2003-12. As explained in the introduction section, the pace of population growth in many of the region's economies outpaced the resource availability with the government to spending on public goods ultimately resulting in deprivation of various forms. Having said this, the share of Indian economy in South Asia remains dominant. In 2011 this share stood at around 82 per cent followed by Pakistan at 9.2 per cent. For these two economies and others to become globally competitive players, the stock of GDP is far less important than the level of productivity in the economy. A large labour force is still rendering a GDP per person employed, lower than the average of middle income countries. Figure 4.1 indicates these numbers for select South Asian economies for which the data is available.

4.2.2 Constraints on Inclusive Growth

While a lot has been written about the various constraints faced by the South Asian countries on the economic front, there seems to be a consensus on two issues (Ahmed et al., 2010; Ahmed et al; 2011). First, the fiscal discipline continues to be compromised and second, the quality of public institutions responsible for the government's economic management has shown slow improvement. So in essence, while there remains a resource constraint to meet development priorities of South

Asian countries, a clear dearth of capacity to manage existing resources is also evident (GoP, 2011). The combination of the above mentioned factors leads to a weak linkage between growth, employment and poverty alleviation thus constraining the inclusive growth.

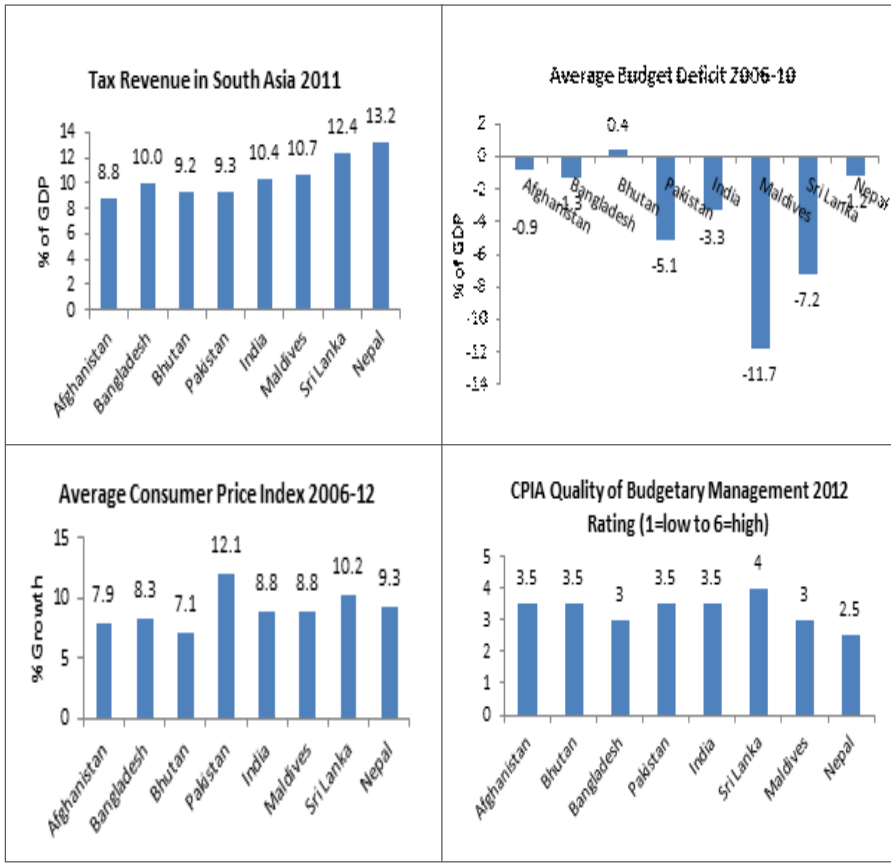
4.2.3 Macroeconomic Governance

One of the reasons for low spending on Millennium Development Goals (MDGs) and related targets is the low levels of government revenues. In fact, South Asia exhibits some of the lowest levels of tax to GDP ratios across the globe (Figure 4.2). The taxation structure is complex and suffers with leakages owing to intervention by public officials. Tax administrative reform measures have been ongoing in most South Asian economies, however the desired increase in revenues as a result of such measures has yet to be witnessed (Ahmed et al., 2011).

The expenditure side of the budgets in this region represents overspending, in turn resulting in budget deficits. The average budget balances between 2006-10 indicate that only Bhutan exhibited a minor surplus. Some of the high budget deficits in the region were seen in the case of Maldives, Sri Lanka, Pakistan and India. These budget deficits and the manner in which they were financed have been partly responsible for the growth in consumer prices, constraining purchasing power and keeping poverty rates stubbornly high. The average growth in consumer price index between 2006-12 remained positive and was in double digits in the case of Pakistan and Sri Lanka.

The management of available stock and flow of resources with the governments in South Asia requires substantial improvement. The World Bank's Country Policy and Institutional Assessment (CPIA) quality of budgetary and financial management rating measures the extent to which one observes discipline in budgetary priorities, controls, reporting accuracy and audit procedures. This rating for South Asian countries is given in Figure 4.2 which indicates a mediocre level of discipline where there is space for improvement. Bangladesh, Nepal and Maldives are on the lower side within South Asia in terms of this rating.

Figure 4.2: Taxes, Deficits and Inflation in South Asia



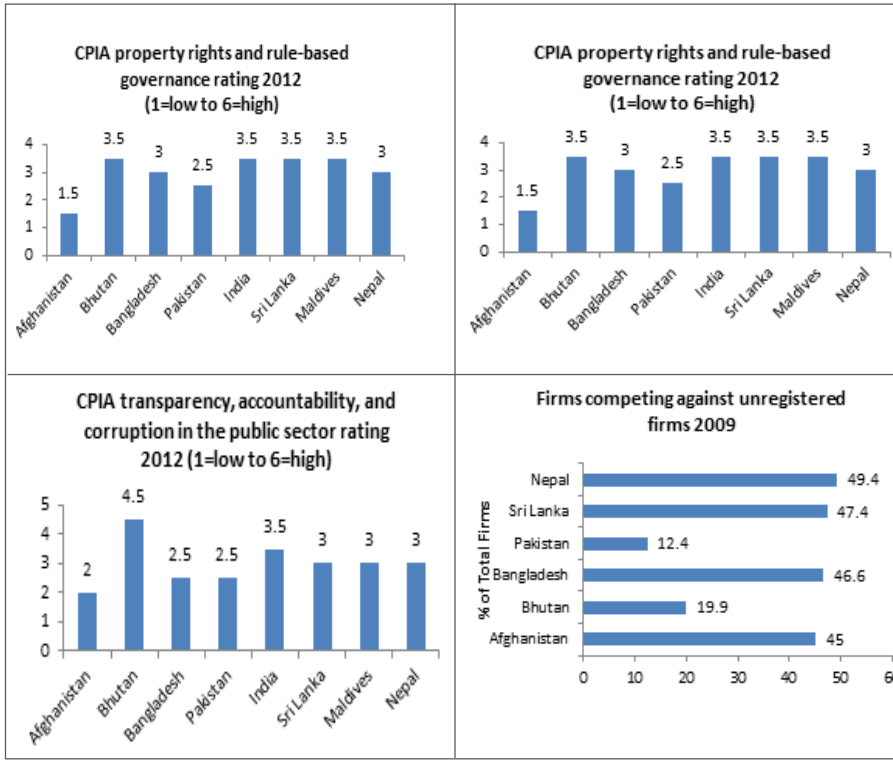
Source: World Development Indicators 2013.

4.2.4 Quality of Public Institutions

While revenue mobilization and overall budgetary management is the responsibility of economic managers at finance and planning departments, the efficiency with which the money is absorbed heavily depends on the quality of public institutions and human resources capacities within those institutions responsible for spending of resources, providing an enabling environment for equal opportunities to all, competition, and ensuring transparency in policy and practice. It is argued that poorly resourced and weak public institutions produce public policies heavily in favour of those 'who have' over those 'who do not have'. This in turn, makes the rich even richer and turning the poor further poor (Suleri, 2006a).

We further argue that in "shining South Asia" and "suffering South Asia" - where public institutions are weak, policies are tailored on a quick-fix approach, and an on-going tension between "haves" and "have nots" prevails. The property rights, a prerequisite of free market economies do not get enough respect. Formal economic sector is another victim of these institutional and policy deficiencies, thus there are a high number of firms operating in the informal sector (undocumented economy) in every South Asian country. Such a phenomenon not only gives rise to disincentives for formal sector firms and loss of important revenue for the government, but also to usurpation of rights of employees working in the formal sector. The CPIA ranking indicates a wide margin of improvement that can be brought about in this area (Figure 4.3). This phenomenon is however inevitable given the high levels of corruption endorsed by the poor performance exhibited under transparency, accountability and corruption rating in Figure 4.3.

Figure 4.3: Public Sector Governance and Informal Sector



Source: World Development Indicators 2013.

4.2.5 Poor Linkages between Growth and Poverty Alleviation[47]

The assumption by policy makers that achieving growth may produce some losers in society in the short run, but in the long run growth would automatically alleviate poverty, is the major constraint on inclusive growth (Suleri, 2006a).

Suleri (2006a) argues that (in case of India and Pakistan) "Our service delivery system favours the rich, our infrastructure is developed to cater to the needs of the already privileged, our lending institutes lend money to those who can prove that they are not in need of money, our taxation system offers tax holidays to big investors, big loans worth millions of rupees can be written off with a little push of the political pen but defaulters of small loans are sent behind bars. Even our educational and health systems (the backbones of any living society) also favour those who can afford to pay". He further argues that the notion of pro-poor development needs to be revisited, as the growth will remain pro-poor as long as it is at least of some benefit to the poor.

Quoting UNDP (2005), "...if one dollar is poured in Brazil, then according to the existing wealth distribution pattern, only 15 cents would reach the poor whereas 85 cents would go to the rich and this would still be a pro-poor intervention", he argued that to make growth really inclusive for the poor, it has to be relative - that is, it has to be positively biased towards the poor and the marginalised (Suleri, 2006a), which unfortunately could never be the case for South Asia.

Though there are many initiatives focusing on inclusive growth, lack of policy cohesiveness is neutralizing almost all of them. The weak institutional arrangement and poor macroeconomic governance, lack of coordination (among institutions, among institutions and target population, and among target population themselves) is a major factor affecting policy cohesiveness. As a result, many of these initiatives have turned into standalone activities which do not bring any real change. But there is much more to these policies than just the lack of coordination and cohesiveness. For instance, absence of democratic participation by all stakeholders including the targeted sections of population, non-consultative and non-transparent policy formulation mechanism, and

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[47] This section is derived from Dr. Abid Suleri's article, "Ranks of the rich, files of the poor", published in *The News* in March 2006. The article is accessible at http://www.cuts-citee.org/articlesmar06.htm

a predilection for quick fixes in most of the developing countries are some of the other factors -- which not only widen the gap between various inclusive growth initiatives, but also favour the rich and the well off over the poor and the marginalized thus leading to economic disparities.

4.3 Disparities in Access to Sources of Growth

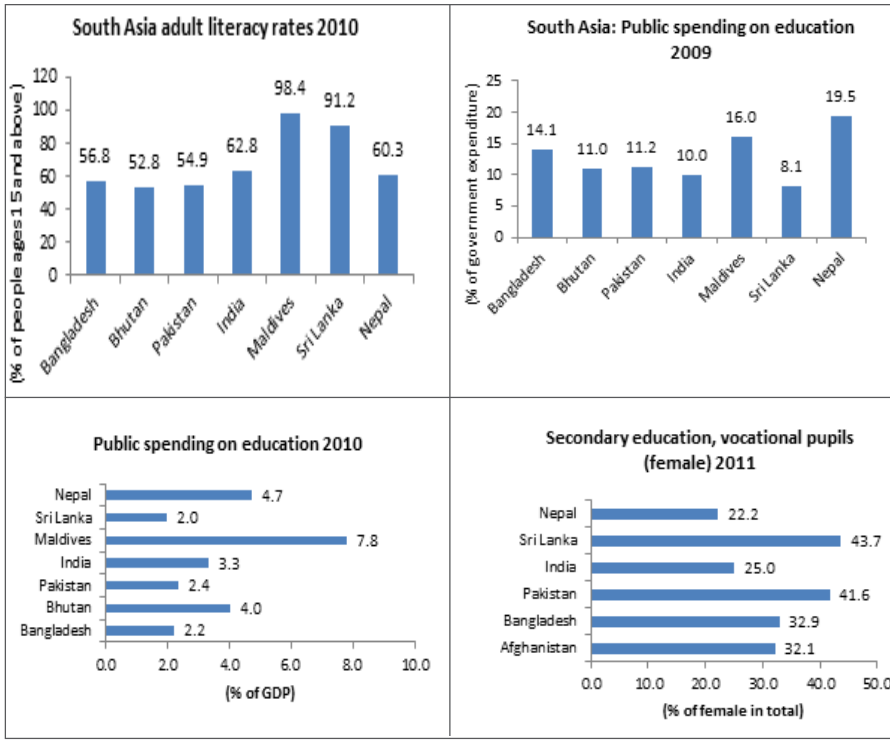
The discussion in the previous section builds a strong case that in order to achieve inclusive growth, one needs to have two parallel strategies, one that would take care of the growth per se, and the other that would simultaneously take care of distributing the benefits of growth in a manner that also favours the excluded segments of society. The latter also demands that the sources of economic growth are equitably accessed by the society. Quality of human capital and level of physical capital available for growth are the major sources of economic growth. We briefly discuss the state of these two factors in South Asia.

4.3.1 Human Capital

The availability and quality of human capital available in the economy greatly depends upon the kind of provisions made towards education, health and human resource development (HRD). South Asia is home to a large and uneducated labour force. This fact is endorsed by the low levels of adult literacy rates. Except for respectable rates in Sri Lanka and Maldives, the other economies in the region have adult literacy rates[48] ranging between 52-63 per cent (Box 4). Within the national budgets we observe that Maldives attaches the most priority to education in the region by spending 7.8 per cent of its GDP on education in 2010. Whereas Bangladesh and Pakistan despite having some of the lowest literacy rates in the region, spent under 2.5 per cent of their GDP on education in the same year. While vocational education has been greatly promoted across South Asian countries in order to orient labour force with skills-based and demand-driven knowledge, however we observe gender disparities even in access and take-up of this medium. For example, in India and Nepal only 25 and 22 per cent of vocational school pupil are female.

[48] Here we are not judging by the official definition of literate person which in certain instances means someone who can write his/her name in national language and can put his/her signatures.

Figure 4.4: South Asia Education Statistics



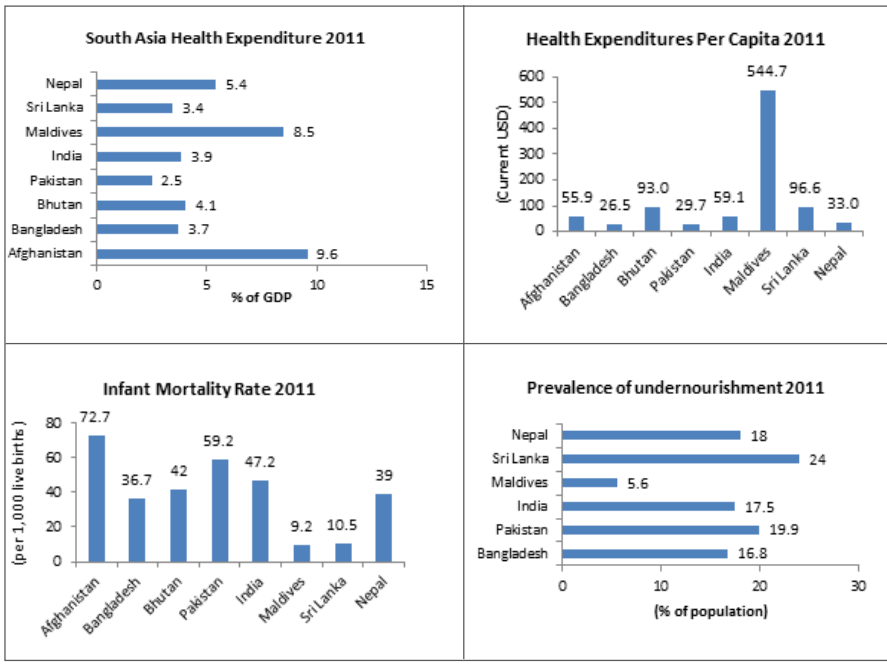
Source: World Development Indicators 2013.

Thus, the society in each South Asian country may be divided by literacy levels. Those who get a chance to go to school, college, and for higher education versus those who do not have access to education. Barring few exceptions, this would in turn establish who would survive in service oriented economies which rely on skilled and educated service providers (see Ghani, 2010).

From education, we move to the health sector where South Asia clearly spends one of the lowest per capita levels on the health of its citizens. The per capita health expenditure for 2011 was under USD 30 in the case of Bangladesh and Pakistan (Figure 4.5). The highest per capita health expenditure in South Asia in 2011 was seen in Maldives at USD 544.7. The actual outcomes data on health indicates that there is still a long way to go before health related MDGs can be achieved in this region. For example, there still exist high infant mortality rates in the case of Afghanistan, India and Pakistan. Similarly, the food security related hazards also pose future health risks. We see that the percentage of

undernourished population in case of Bangladesh, Nepal, India, Pakistan and Sri Lanka, is above 15 per cent. There is increased evidence in South Asia that it is the female member of the household that has a higher probability of remaining undernourished (Hatlebakk, 2012). We understand from literature that malnourishment in the early childhood has irreversible negative effects on a child's IQ level. In simple words, it means that people who do not have access to adequate health services would lose out when it comes to access to sources of growth.

Figure 4.5: Health Sector Statistics in South Asia



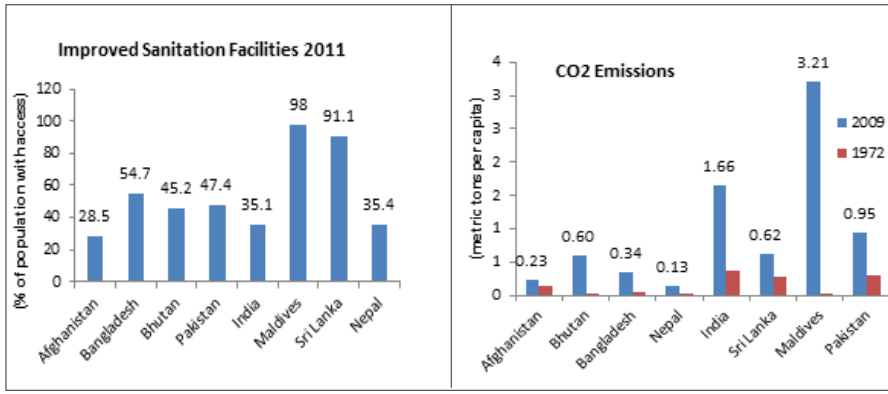
Source: World Development Indicators 2013.

4.3.2 Challenges of Urbanization

One should also bear in mind that investments in health and education by themselves will not ensure a society safe from future risks. The increased urban settlements (particularly peri-urban areas) have implied lack of proper sanitation and increased incidence of hazardous carbon. Over 60 per cent of population in Afghanistan, India and Nepal did not have access to improved sanitation facilities in 2011 (Figure 4.5).

There is a clear increase in CO2 emissions in the South Asian region over the past few decades. Figure 4.5 indicates that the highest increase in emissions between 1972 - 2009 is seen for India and Maldives. However, other South Asian countries are not far behind. The production structures which contribute to such high levels of emissions certainly cannot help towards the goals of sustainable development. There are now instances of climate change-led migration across South Asia. This again has a negative effect on equitable access to sources of production.

Figure 4.6: Challenges Associated with Urbanization



Source: World Development Indicators 2013.

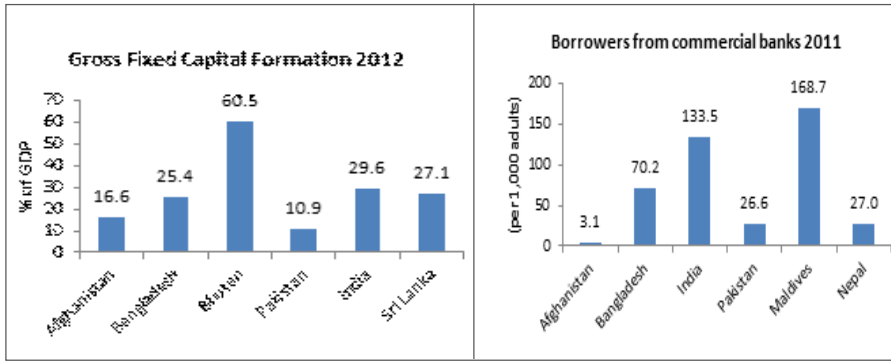
The above mentioned is a classical chicken-egg situation. The unprecedented economic growth in South Asian countries does not help in strengthening its human capital, as this growth does not get translated into improved public services i.e., education, health, and sanitation. Deprived of these basic services, majority of South Asians in each country cannot have access to sources of production and hence remain trapped in poverty. This vicious cycle is an important factor behind intra-country disparities.

4.3.3 Capital Accumulation

There have been extensive debates if the growth in South Asia was consumption-led in the past decade. While this seems merely a national income accounting argument whereby consumption and investment shares in GDP are analyzed separately, however the fact remains that

growth in these regions have been (in the case of most economies) associated with higher levels of capital formation. Except for Afghanistan and Pakistan, the South Asian economies have exhibited above 20 per cent gross fixed capital formation to GDP ratio in 2012 (Figure 4.7). There is now vast facilitation in terms of financial services as an increased number of people are now accessing the formal banking sector for ensuring their working capital needs.

Figure 4.7: Investment Dynamics



Source: World Development Indicators 2013.

In order to fulfil its budgetary deficits, most of the South Asian governments rely heavily on domestic borrowing, thus crowding out the private sector. We have discussed the importance of macro-economic governance in the beginning of this paper. Lack of fiscal discipline by the state leads to a situation where the state has a monopoly on domestic borrowing and restricts the access to capital for all other players. Going forward it is now becoming increasingly important that governments in South Asia assume a policy and compliance role and exit the market for private sector competition (GoP, 2011).

South Asia is an energy thirsty region and as a case study we picked up the energy sector and in Table 4.2 details on investment undertaken in the energy sector with private participation in 2012 are provided. Apart from India, all other countries show a dismally low level of private participation in a sector that is certainly important for growth in other productive avenues. Partly this is due to refusal of South Asian governments to deregulate the energy sector. For capital accumulation to increase, large scale and longer term investments will be desired. Such

investments however, require a competitive and level playing field, certainty of contract enforcement and timely dispute settlement mechanisms (Hussain and Ahmed, 2012).

Table 4.2: Investment in Energy with Private Participation 2012

Country	current US$ Billion
Bhutan	0.2
Bangladesh	0.3
India	18.2
Pakistan	0.7
Sri Lanka	0.5
Nepal	0.03

Source: World Development Indicators 2013.

The entrepreneurship milieu is not much encouraging if one looks at the new business density across South Asia measured by new registrations of businesses per 1000 people (Table 4.3). There may be several reasons for this, however two are worthy of being highlighted in the context of our overall analysis. A large informal sector discourages people to enter the formal market where transactions costs of complying with rules can make them uncompetitive vis-à-vis the formal sector. Second, the formal markets are closed for the smaller segments of entrepreneurs. By 'closed' we imply that the costs of entry and exit are abnormally high for an aspirant entrepreneur to pursue (see Orso, 2009).

Table 4.3: New Business Density 2011

Country	New registrations per 1,000 people
Afghanistan	0.12
Bhutan	0.06
Bangladesh	0.10
India	0.09
Pakistan	0.03
Maldives	3.10
Sri Lanka	0.58

Note: New registrations per 1,000 people ages 15-64.

Source: World Development Indicators 2013.

In countries like South Asia with low investment in human capital development, low capital accumulation, and monopolized access to capital, one of the major determinants of access to sources of production is access to natural resources; especially access to land. Despite the fact that feudal patterns of landholding are gradually phasing out in most parts of South Asia, one still finds that land ownership is highly skewed.

India has the highest number of tenants and landless labourers in South Asia. Incidentally the highest number of poverty related suicides also prevails in rural India. We will discuss the factual details about land inequality later in this paper, however we recognize here that the skewed ownership of land not only deprives the majority of rural workforce in South Asian countries to access the sources of production, but also forces them to migrate to urban areas for a better future. The aftermaths of this unplanned urbanization can be seen in terms of the growing number of peri-urban neighbourhoods and slums in all major cities of South Asia.

This dichotomy of development can only be removed through meaningful land reforms and creating opportunities for the landless rural workforce to access natural resources of production. At a more macroeconomic level the concentrated land holdings and cartelized supply chains in agriculture sector are also contributing towards food price inflation in South Asia (Ahmed and Jansen, 2010).

4.3.4 Is Welfare Improving?

In Table 4.4 we observe the relatively higher levels of growth seen recently in South Asia vis-à-vis some other regions. However, as we observe in preceding sections, they are two interesting phenomena. In the case of some countries, one observes improving social sector numbers (particularly education and health) coming out during phases of declining long run economic growth. In the case of others, there are greater investment commitments towards social sector priorities, however declining absorption of already disbursed budgets.

If one splits the analysis by urban and rural setting, there are rising per capita incomes in rural areas amid lack of access to basic services. [49]Similarly, there is lack of capacity to organize resources (e.g. see ODI,

[49] The non-farm incomes in rural areas have seen strong growth. See Binswanger-Mkhize (2012).

Table 4.4: Annual Per Capita Growth Rates

Region	1970s	1980s	1990s	2000s
South Asia	0.55	3.23	3.33	4.96
East Asia & Pacific	5.03	5.97	6.82	8.00
Middle East & North Africa	3.46	-0.67	2.01	2.40
Sub-Saharan Africa	1.26	-0.73	-0.67	2.00
Latin America & Caribbean	3.19	-0.24	1.15	1.85
Europe & Central Asia	-	-	-2.60	4.89
World	2.09	1.37	1.25	1.34

Source: World Development Indicators.

2005) and assets which ultimately prevents growth from translating into empowerment. In the urban setting and due to faster growth in cities, there are higher rates of internal migration across South Asia (Rajan,2012). However the potential of domestic commerce, which is the first resort for poor migrant dwellers in slums and peri-urban areas, is being stifled due to fragmented urban zoning leading to malfunction of municipal authorities (GoP, 2011).

Stalon (2012) summarizes the above mentioned disconnect with 3 key results from South Asian growth experience. First, the growth has accelerated since 1970s. Second, income inequality has increased over time and third, despite high growth, there has been a slowdown in poverty reduction. In case of the third result, the author explains that economic growth has not been inclusive due to: a) changing sectoral pattern of growth, b) impact of employment growth on poverty has been limited due to low labour productivity growth and c) low levels of public spending on social sectors.

The above mentioned discussion on macro and meso level economic indicators can also be supplemented with data on poverty profile in the South Asian region. The situation is particularly grave if one considers poverty headcount ratio at USD 2/day (Table 4.5). With this definition Afghanistan, India, Pakistan and Nepal have alarmingly high levels of poverty. This clearly indicates that the growth process has been uneven and while many in South Asia might have crossed the poverty line during the past decade, a lot more still needs to be accomplished. The policy

makers also need to understand that while growth may be a necessary condition for poverty reduction, it is in no manner a sufficient condition (Basu and Mallick, 2007).

Table 4.5: South Asia Poverty Profile

Country	Poverty headcount ratio at $1.25 a day (PPP) (% of population)	Poverty headcount ratio at $2 a day (PPP) (% of population)
Afghanistan	-	-
Bangladesh	43.3	76.5
Bhutan	10.2	29.8
Pakistan	21	60.2
India	32.7	68.8
Maldives	1.48	12.2
Sri Lanka	4.11	23.9
Nepal	24.8	57.3

Note: Latest available figures after 2004.

Source: World Development Indicators 2013.

The inequality milieu is far more concerning as the countries in South Asia have GINI index above 30. Most of the economies are not very far from each other implying that the variance in inequality across the region is very less. This clearly indicates the weak policies in the region towards redistribution of wealth and resources. The data is endorsed by statistics on the income share held by the lowest 10 per cent in South Asia. This is relatively higher for Pakistan at 4.4 per cent and low for Maldives and Bhutan at 2.7 and 2.8 per cent, respectively.

Let us now take a broader view of welfare in terms of not just poverty and inequality, but also gender equality, voice and accountability. South Asia has come a long way in refining its understanding about the new and more productive roles of women in the society. However, the data shows that a lot more needs to be done before gender equality can be established in practice. Figure 4.8 indicates that none of the South Asian countries are on the higher gender equality rating according to the World Bank's CPIA methodology. Bhutan, Maldives, Sri Lanka and Nepal have a relatively higher rating than Afghanistan, Bangladesh, India and Pakistan.

Table 4.6: South Asia Inequality Profile

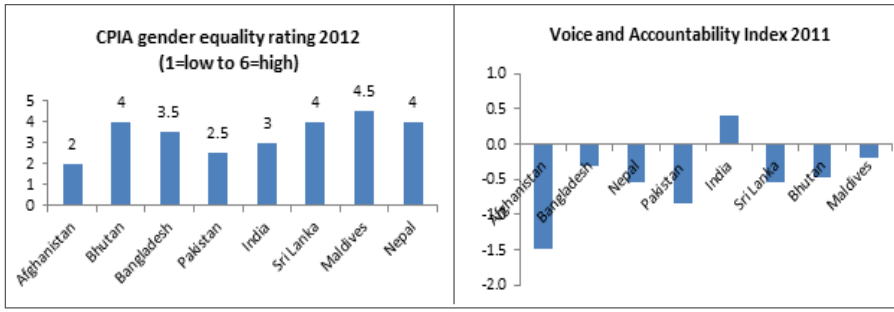
	GINI index	Income share held by highest 10%	Income share held by lowest 10%
Afghanistan	27.82	23.21	4.08
Bhutan	38.06	29.36	2.8
Bangladesh	32.12	27.03	3.9
Pakistan	30.02	26.05	4.36
India	33.9	28.79	3.69
Sri Lanka	36.4	30.03	3.39
Maldives	37.37	28.03	2.71
Nepal	32.82	26.52	3.63

Note: Latest possible figures after 2004.

Source: World Development Indicators 2013.

The drive to provide women their true place in the society is very closely linked with the ability to raise voice on critical issues, deepen outreach and having both demand and supply side accountability mechanisms. The voice and accountability index of the World Governance Indicators for 2011 exhibits that voice and accountability mechanisms for the citizens are weak in South Asia. Due to a relatively more vibrant civil society, this index is on a positive ranking for India while all other countries are in negative.

Figure 4.8: Gender, Voice and Accountability



Note: Estimates for voice and accountability index range from -2.5 (weak) to 2.5 (strong) performance; Voice and accountability index from World Governance Indicators follows methodology in Kaufmann et al..

Source:World Governance Indicators 2013.

As mentioned in the previous section, access to land is quite skewed in South Asia. The land inequality in South Asia remains stubborn and there are a large number of small land holders cultivating small pieces of land. This implies that the vast South Asian population for which the pattern of land holding determines empowerment through assets and activities remain under empowered. The size of average operational land holding is 0.5 hectares in Bangladesh, 0.8 in Nepal and Sri Lanka, 1.4 in India and 3.0 in Pakistan. In India there are 81 per cent farms that have land holding under 2 hectares having a share in total cultivated area of 44 per cent (NCEUS, 2008; Thapa, 2009).

For growth to translate into human welfare, it is necessary that macroeconomic policies are accompanied by complementary and compensatory microeconomic policies with a view to introduce and strengthen social safety nets. This will create resilience among growth's assumed losers who are often left to fend for themselves (Suleri, 2006a).

4.4 Growth, Welfare and New Economic Geography

Although the true potential of regional trade within South Asia has been studied in several past studies, however, we propose here that trade may be an important instrument for addressing intra-country disparity in South Asia. In this section we start by discussing the usual role of exchange (trade) between people and places and introduce two concepts from the new economic geography i.e. role of cities as engines of growth and integrated supply chains. South Asia is house to several services-led economies (Ghani, 2010). Services and their value addition are compounded as agglomeration increase, after all, services can only be exchanged when people to people interaction multiplies (Kolko, 2010). This act of exchange is facilitated by modern cities.

The new economic geography explains how infrastructure-related improvements can promote total factor productivity which can in turn, boost domestic economic growth, trade and competitiveness. There are two channels that allow this to happen. The first is that economies of scale emerge as a result of better availability of growth and trade facilitation. Second, agglomeration economies also set in spatial clusters. Apart from these two, literature also suggests the occurrence of innovation-induced effects.

Linking the above mentioned with South Asia's logistics performance (Table 4.7), one observes low levels of ranking in terms of competence and quality of logistics services, quality of trade and transport-related infrastructure and efficiency of customs clearance processes. This is indicative of how much South Asia is in fact, losing in economic terms due to its own inability to reform sectors, necessary for benefiting from location, transportation and distribution economies of scale.

Table 4.7: South Asia Logistics Performance Indices 2012 (1=low to 5=high)

	Efficiency of customs clearance process	Quality of trade and transport-related infrastructure	Competence and quality of logistics services
Afghanistan	2.33	2.0	2.16
Bhutan	2.29	2.3	2.42
Bangladesh	2.33	2.49	2.44
India	2.77	2.87	3.14
Pakistan	2.85	2.69	2.77
Maldives	2.24	2.47	2.68
Sri Lanka	2.58	2.5	2.8
Nepal	2.20	1.87	2.12

Source: World Development Indicators 2013.

4.4.1 Modelling Regional Growth and Welfare

In order to demonstrate how geography can help poverty, we see in this section the poverty and inequality impacts of growth in South Asia. Williamson (1965) developed the theory of a negative correlation between regional inequality and economic growth. This relation has been summarized in Equation (1) where r stands for regional inequality and Y stands for GDP per capita.

$$r = è(Y), \quad èY<0 \qquad (1)$$

This relation depicts a long-term process, consistent with the neo-classical view, that reducing macroeconomic disparities are associated with higher

economic growth. It presumes that regional disparities in developed countries diminish due to many factors such as representative political power, technological spill overs, transport infrastructure (Friedmann, 1969).

However, Berry (1988) claims that change in regional inequalities depends on macroeconomic cycles. It links high economic growth rates with rising inequalities, the so- called spatially cumulative growth (Thisse, 2000). Economic processes are associated with increasing spatial inequality as more developed regions have comparative advantage during economic booms. Following Petrakos et al., (2005), the present study constructs a model of regional inequality, economic development and regional integration which is as follows:

$$rit = f(g\,it,\ y\,it,\ s\,it), \quad fg>0, \quad fy<0, \quad fs><0 \qquad (2)$$

$$i = 1, \ldots, N \quad \text{(countries)}; \ t = 1, \ldots, T \quad \text{(time)}$$

Where r indicates the level of inequality in each country over t time, g stands for growth rate of national gross domestic product (GDP), y stands for national GDP per capita, and finally, s stands for trade integration of a country. This model presumes that inequality is pro-cyclical, and a higher national GDP growth rate will increase regional inequality. Especially, during the earlier stages of development, from short-term to medium term, the development process might promote inequality.

The present model introduces a longer term development process which is represented by y, this variable has an inverse causal link with the regional inequality (fy<0). Finally, it presumes that developed regions will benefit more from greater regional spread and trade in the short run, but spatial inequalities tend to decrease in the longer run over the time. Literature argues that less developed countries might be under pressure because of rising regional competition (Padoa-Schioppa, 1987). However, discussion on this topic is limited and need extensive research. The next section provides details of the variables and the data sources used in our estimation.

4.4.2 Model and Data

The present study analyzes the impact of short-term and longer term economic growth and regional integration (measured through trade) on

poverty and inequality in SAARC countries. To achieve this end, it employs 4 variables: rit is GDP per capita's coefficient of variation (population-weighted) for each country used as dependent variable (in case of impact on poverty we used, pit, headcount ratio as dependent); git, yit, and sit are independent variables indicating GDP growth rate (which is an indicator of short-term development), GDP per capita (which is an indicator of longer term development), and trade integration. [50]It assumes that a higher ratio of intra-SAARC trade represents a higher level of integration between SAACR member countries. This may be represented as follows:

$$s_{it} = \left(X_{it}^{SAARC} + M_{it}^{SAARC} / X_{it} + M_{it} \right)$$

And also

$$r_{it} = \sqrt{\sum [(x_{ijt} - \bar{x}_{it})^2 * (p_{ijt} / p_{it})]} / \bar{x}_{it}$$

The present study employs three models for empirical analysis of SAARC countries; Seemingly Unrelated Regression Equations (SURE), Fixed-effects and Random-effect models (Ai et al., 2013; Barr et al., 2013). SURE provides better results than the individual country case study as it simultaneously estimates the parameters of all the countries. The specification details regarding a standard SURE model may be seen in (Kubacek, 2013).

4.4.3 Model Results - Impact on Poverty

Our results support the neo-classical hypothesis which maintains the view that economic growth reduces the poverty in SAARC countries (see SURE model in Panel A of Table 4.8). We use Poverty Headcount Ratio at USD 2 a day, as our dependent variable. Within the region, the short-term development such as growth in real GDP and long-term development such as rising per capita income (in size terms measured in USD) both significantly reduce the poverty.

To be more specific, Nepal experiences the highest reduction in poverty followed by Bangladesh and Sri Lanka, whereas India and Pakistan both experienced the least decline in poverty. Further, the short-term real GDP growth rate helps in reducing poverty but its impact is weaker. The reason

[50] Source: World Development Indicators 2013.

for this weaker impact is the short-term adjustment mechanism taking place during the process of growth when reallocation of resources occurs. However, this impact is more visible after the completion of this transition period when the markets clear. Finally, regional trade among the SAARC countries also helps in reducing this regional poverty. Our results indicate that India has been the largest beneficiary in terms of poverty reduction from regional trade followed by Pakistan, Sri Lanka, Nepal and Bangladesh.

Table 4.8: Impact of Growth and Trade on Poverty

Dependent Variable: Poverty Headcount Ratio at USD 2 a day

Panel: A Seemingly unrelated regression model

Variables	Bangladesh	India	Nepal	Pakistan	Sri Lanka
gdp_pc	-0.026***	-0.01***	-0.04***	0.01	-0.02***
gdp_gr	-0.035	0.02	-0.03	-0.06	-0.08*
S	-0.12	11.94***	-0.14***	-2.81***	-0.30***
Constant	96.74***	64.38***	104.54***	97.33***	56.00***
R-sq	0.7317	0.9422	0.8866	0.8565	0.8931
chi2	76.58	563.97	259.48	181.88	256.01

Panel: B	Fixed-effects model	Random-effects model
gdp_pc	-0.01***	-0.03***
gdp_gr	-0.10*	-0.01
S	-0.27***	-0.07**
Constant	86.51***	90.80***
F/Wald test	120.74	179.64

***, ** and * indicate 1%, 5% and 10% level of significance respectively.

The findings of SURE model are consistent with our Fixed-effects and Random-effects models which we have estimated for the panel of SAARC countries (see Panel-B of Table 4.9). These models, Fixed-effects and Random-effects, exhibit that GDP growth rate and GDP per capita both reduce the poverty in this region significantly. Further, the regional

connectivity through trade also has significant impact on poverty reduction in SAARC countries. In contrast to the SURE model which portrays weaker poverty reduction associated with real GDP growth, the Fixed-effects model indicates that real GDP growth significantly reduces poverty.

4.4.4 Impacts on Inequality

The present study also examines the impact of short-term to long-term economic growth, and regional trade on the inequality in SAARC countries. Our results indicate that long-term economic development measured by higher GDP per capita has a significant impact on regional inequality. It is evident that all the SAARC countries experience reduced income inequalities after the improvement in GDP per capita. Further, it is encouraging to see that short-term economic development measured by real GDP growth has also contributed to reduce inequality in SAARC countries especially in Bhutan, Maldives, and Pakistan. It can be suggested that both long and short-term growth factors reinforce each other towards equitable growth (see Panel A of Table 4.9).

Finally, the regional trade integration has produced mixed results for SAARC countries. For a few countries like Afghanistan, India, Nepal and Pakistan; regional trade integration has a positive impact on inequality while for the rest, it has a negative impact on inequality. However, given the fact that regional trade within the SAARC countries is not very liberalized, these results are not much discouraging.

The Fixed-effects and Random-effects both strongly support that inequality reduces during long-term rising GDP per capita and also by the short-term higher real GDP growth. On the other hand, the (low levels of) regional trade among the SAARC countries is not impacting the regional inequality. These models are more robust than the SURE model as they use larger degrees of freedom.

Table 4.9: Impact of Growth and Trade on Inequality

Panel: A- Seemingly unrelated regression Dependent Variable: Inequality

	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
gdp_pc	-0.0001***	-0.00004***	0.000003***	-0.0001*	-0.000002***	-0.00002***	-0.00004***	-0.00002***
gdp_gr	0.0003***	0.00001	-0.000006***	0.00002	-1.33E-06	0.00000	-0.00002	0.0000
s	0.0004***	-0.00010	-0.0000022***	.021***	-0.000001*	0.00002***	0.0013***	-0.00007
Constant	0.120***	0.3060***	0.020***	.84***	.014***	0.12***	0.303***	0.12***
R-sq	0.8689	0.9317	0.9468	0.9963	0.9977	0.7769	0.6794	0.9737
chi2	441.47	660.92	718.87	11019.59	15989.57	197.35	175.32	1600.86

Panel: B -Fixed-effects Model and Random-effects Model

	Fixed-effects	Random-effects
gdp_pc	-0.000009***	-0.000009***
gdp_gr	-0.0002**	-0.0002**
S	0.00	0.00
Constant	0.22***	0.22**
F/Wald	12.10	36.50

***, ** and * indicate 1%, 5% and 10% level of significance respectively.

4.5 What Next for South Asia?

4.5.1 Mega Trends

There are three key development challenges facing South Asia at this point. First, how to make macroeconomic developments more relevant at micro levels and eliminate the disconnect between growth and welfare. Second, is the laggard achievement towards MDGs and reconfiguring the pro-poor reforms post-2015. Third, how to innovatively finance the rising cost of future development priorities. We tried to address some of these challenges in our previous sections, but before summing up our arguments it would be pertinent to discuss the political economy context of the past and future of South Asia too.

We argued in the introduction section that there are several evolving mega trends in South Asia that could either become a boon or bane depending upon how game changers impact them. Some of these mega trends can be highlighted at this stage.

First, we see increased examples of individual empowerment across South Asia. The decreasing number of people below the poverty line, rising middle class, access to information and cellular technology and an independent media in most South Asian countries has contributed towards empowering an ever large number of people. This trend has been strengthened by pro-people legislation such as right to information laws in Bangladesh, India and Pakistan. Such laws have increased transparency across public sector governance. There have been instant impacts of increased empowerment that have resulted in Nepal's anti-monarch movement, Pakistan's independence of judiciary movement led by a vast number of lawyers, and India's Anna Hazarey movement against corruption.

Second, demography and urbanization will have a greater interface in determining development outcomes. Today, South Asia's dominant youth population has greater choices in terms of mobility for education, jobs and related opportunities. This has translated in an increased internal migration from rural to urban areas as well as rising number of younger people leaving for other parts of the world. The former has implied greater diffusion of knowledge where family relatives in rural and urban areas interact, the latter has been a sources of increased remittances from abroad in turn supporting balance of payments and also technology and ideas transfer from advanced countries (Ahmed et al., 2011).

Third, there are new power centres emerging within most South Asian countries. In Bangladesh this has taken the form of civil society led social enterprises such as Grameen and BRAC influencing lives of vast numbers of people. In Pakistan the military's hold is now fast getting replaced by parliament, superior judiciary, provincial governments and corporate owned media. In India, the free market and growth led prosperity has implied a greater role of large businesses in the development process. There is also an increased power with State governments. Some rebel movements like the one in northeast have challenged the centre's monopoly. In Nepal the weakening of Kathmandu-based parties signifies the diffusion of power.

Fourth, there are evolving cultural trends that cannot go unnoticed. An improved per capita income across the region, better literacy rates, access to information and technology have implied an expansion in tastes and preferences of South Asian consumers. While these have implied a rising appetite for consumer imports, some sophistication is also seen in export of South Asian soft products. Today, Bollywood movies, yoga, cuisines, Ayurveda, Khadi clothing, hand-stitched sports equipment, vintage leather and information technology are some examples of how South Asia is starting to impact global consumer preferences.

Finally, the region is witnessing an agrarian transformation and adverse impacts of climate change. There is increased evidence that peri-urbanization is eroding cultivable land, there are decreasing returns for farmers (due to distortive structure of agricultural subsidies) and a declining share of agriculture in overall GDP. The climate change threat further exacerbates the food insecurity already seen across South Asia.

We should also discuss briefly here the game changers that can impact our mega trends mentioned above positively or negatively. First, is the failure of South Asian governments to invest in human capital. The public spending towards education and health (discussed above) remains dismally low. There are increased instances of documented exclusion and marginalization when it comes to distributive justice. Such marginalization in perceptions or reality then transforms into passive and later active (and sometimes armed) movement.

Second, there is weak redressal of natural and human made disasters. Kumar and Parikh (2001) show that even after accounting for farm level adaptation, a 2 °C rise in mean temperature and a 7 per cent increase in mean precipitation will reduce net revenues by 8.4 per cent in India. For

Pakistan, wheat yields are predicted to decline by 6-9 per cent in sub-humid, semi-arid, and arid areas with 1°C increase in temperature (Sultana and Ali, 2006). For Sri Lanka, Wijeratne (1996) shows that an increase in the frequency of droughts and extreme rainfall events could result in a decline in tea yield, which would be the greatest in regions below 600 metres. Karim, Hussain and Ahmad (1996) project a net negative effect on the yields of rice, the staple food of the population in Bangladesh.

The 6F challenges (food, fuel, fiscal, frontiers, functional democracy, and fragility of climate challenges) if responded by inappropriate policies and practices lead to wrong prioritization of resources by the state and the result is individual insecurities. Individual insecurities, when get any collective identity -be it ethnic, national, sectarian, creed or provincial- lead to class conflict and erode the whole societal fabric (Suleri, 2010), thus turning the mega trends negative.

Third, attempts to realize openness and transparency in isolation from democracy, or rather at the expense of democracy, may let the dark forces of dictatorship emerge all over the region. Even in India, some analysts like former editor of the Times of India, Mr. Padgaonkar (2013) in his blogs has talked about the rise of middle class fascism on the twin issues of corruption and transparency which may succeed in toppling the Indian democracy which so far has proved the only guarantee for the country's continued survival. The January 2013 Long March of Islamic cleric Tahir-ul-Qadri in Pakistan for transparency in the electoral system, especially accountability of candidates before the Pakistan's general elections had created serious doubts that elections might get postponed (AFP, 2013). The thirst for openness and transparency is a major game changer which may change the direction of mega trends.

Fourth, the positive impacts of the absence of violent conflicts on mega trends are as obvious as are the negative effects of their presence and need no explanation. Countries like Afghanistan and Pakistan which face continuous threats from external and internal militants is also a big issue for the region. The above mentioned mega trends if influenced positively by the game changers would determine to a large extent on how to reduce the intra-country disparities in South Asia. The future of equitable development in South Asian countries depends on how appropriately they capitalise upon some of the mega trends and how they can manoeuver the game changers in their favour.

4.5.2 MDGs: Issues for the Future

A lot has been written about the various MDGs and how the achievement across the development world remains mixed. For us the fundamental question is the inherent contradiction in MDG framework, for instance, MDG1 i.e., poverty reduction and MDG7 i.e., environmental conservation may contradict each other if a holistic approach is not applied to work on MDGs (Ahmed and Suleri, forthcoming). The lack of local ownership of MDG agenda is also visible in most of the development plans and initiatives in South Asia (Ahmed and Suleri, forthcoming). In cases where the top leadership lacked interest in overall coordination, one also observes lack of supply-side accountability.

The deadline to achieve MDGs is fast approaching and having realised that most of the developing countries have already missed the train, now the focus of discussion is development beyond MDGs. However, any new initiative towards this direction is again bound to fail if an attempt is not made to rectify some of the mistakes that the region collectively and the countries at individual level have been making so far (Ahmed, 2013).

As mentioned in the previous section, some of the game changers did not work well to capitalize on emerging trends across South Asian countries and it negatively affected their pursuit to attain MDGs. Due to a disconnect between economic growth and citizen welfare, the spending on formation of human capital remained low; natural calamities, very often got turned into human disasters due to flawed policy responses (either due to weak public institutions, poor capacity among implementers, or budgetary constraints); the trust deficit between donor/lender states and South Asian recipient states and between the state and citizens due to the reports of lack of transparency and openness in various development initiatives, affected the capacity of South Asian governments to deliver on MDGs; and finally, violent conflicts and militancy partly triggered due to the perception of individual insecurities and started as struggle between "have" and "have nots" (Suleri, 2013) have made achievement of MDGs an uphill task for South Asian countries. It goes without saying that until existing game changers in South Asia are not made people centric, the chances of succeeding in any post- MDG agenda would remain slim.

The future potential and challenges facing MDGs or post-MDG agenda in South Asia include the election cycles in at least 3 economies including India and Pakistan[51] which may imply policy shifts. There is also increased

[51] In Pakistan the new government has assumed office in June 2013.

frequency of climate change led and human made disasters. Even in 2013 Bangladesh, India and Pakistan have seen large scale flooding and the subsequent loss of human life and assets. The volatility in global commodity prices and South Asia's increased integration with the global economy has implied a higher vulnerability of agriculture and manufacturing sectors. Most of these economies have an oil-based energy mix and oil import has occupied a heavy share in the balance of payments. Any increase in oil prices (and related raw material) has implied a slowdown in domestic production activity. Finally, we observe the increased instances of militancy across South Asia. As a result, most countries in the region had to divert scarce budgetary resources towards maintenance of internal and external security.

Across the region there also remains a need to evaluate the past programmes and projects aimed towards achieving MDGs. The current evaluations have not been termed comprehensive across literature (Nayyar, 2012). Once recent studies are in place, lessons learnt can then feed in to future strategies. Furthermore, there are examples of large scale social safety nets that have helped in reducing incidence of poverty in South Asia, however the impact of such programmes on MDGs is still awaiting research. The examples of such social safety programs include: Benazir Income Support Program in Pakistan and Indian National Rural Employment Guarantee.

Going forward, the governments in the South Asian region will also have to account for the spoilers in the MDGs progress. In the short-term we should be mindful of food security and malnutrition issues facing this region. Strictly in economic terms, these will result in a less than desired quality of future labour force. In the medium term and as the youth bulge in South Asia enters the working age group there is a need for national strategies for youth engagement. In several countries of this region, the youth still remains distant from the development objectives at the local and national levels. Finally, in the longer term, climate change and its resultant hazards need to be understood in location-specific and regional contexts. There is weak coordination among SAARC countries towards actionable adaptation measures across the region.

4.5.3 Understanding New Triggers for Change

We would like to argue in favour of 3 possible triggers than can enhance the effectiveness of development spending in the region and optimize

results in the context of MDGs. First, the need to realize the importance of local knowledge and build social capital around this knowledge base (Malecki, 1998). This can readily help in bridging the trust deficit between public sector and local communities and thereby making the latter a partner in effective development. Second trigger could be the spread of social accountability tools which can strengthen local level demand-side accountability, enabling the communities to demand better service delivery in social sectors (WB, 2013). The last trigger worthy of further research is social innovations. Experience across the developing world tells us that pro-poor and informal innovations have greater diffusion at local levels, in turn increasing productivity of poorest of the poor (Westley and Antadze, 2010).

4.5.4 Positioning South Asia in a New Development Agenda

Joseph Stiglitz (2013), in his recent work, "the price of inequality: how today's divided society endangers our future", writes and we quote,

"The political and economic reform agenda (..) assumes that while market forces play some role in the creation of our current level of inequality, market forces are ultimately shaped by politics. We can reshape these market forces in ways that promote more equality. We can make markets work, or at least work better. The Great Recession did not create the country's inequality, but it made it much worse (..), and it further limited a large segment of the population's access to opportunity. With the right policies, (..) we can make things better. It is not a matter of eliminating inequality or creating full equality of opportunity. It's just a matter of reducing the level of inequality and increasing the extent of equality of opportunity."

Stiglitz's work is based around increased inequalities and lack of opportunities in the United States, but his remarks can be very well applied to the developing world and South Asian countries. We basically need to work on political processes across South Asia if a dent in poverty and inequality has to be created. We also understand from the past and current literature that post-2015 development agenda will require developing countries to build effective partnerships with the developed world (towards technology, knowledge networks, technical assistance etc.) at the same time strengthening South-South linkages in trade and investment (Kelegama, 2013). However, in order to benefit from both these opportunities, countries in South Asia will have to step up their efforts

towards domestic resource mobilization and that necessitates reduction in intra-country disparity. Already, one sees that in several South Asian economies share of foreign aid in the GDP is on the decline. This further increases the importance of tapping in domestic resources including tax revenues.

If one looks at the key challenges facing the taxation regimes in South Asia we see that direct taxation mechanisms are inelastic with a narrow tax base, and substantially high administrative costs. Therefore, in most cases these taxes are easy to evade (Bird et al., 2005; Avi-Yonah et al., 2006). The indirect taxes again have a narrow base along with a complex rate structure and a high compliance costs (Ahmed et al., 2011). To make matters worse, the political representatives instead of taking bolder measures towards tax reforms have increasingly started to rely on non-tax revenues which are politically less damaging. Non-tax revenues have also been found to have a negative long run relationship with tax to GDP ratio.

Can there be a regional and collective effort towards reducing various forms of intra-country welfare disparities? In this regard the South Asian economies need to be more visionary regarding the expansion of the SAARC Development Fund (SDF) with a view to overcome some of the bottlenecks for equitable access to resources of production. SDF has three main Windows including Social, Economic and Infrastructure. The Social Window has started operation and projects are being implemented in SAARC countries. There is now a need to open economic and infrastructure windows for scaling up SDF for accelerating growth and Infrastructure development in South Asia.

SDF also needs to coordinate its fund receipts, allocation and disbursement efforts with national planning and development departments. Currently, the national representatives in SDF are only below the Finance Departments of the Central Government. This can allow for greater room towards innovation for development finance. Sobhan (2013) has argued that in several developing countries domestic savings, foreign direct investment and remittances from abroad have exceeded official development assistance. Therefore, the innovation and additionality in development finance should be configured to focus towards more effectively using growing external surpluses in particularly remittances from abroad.

A regional solution to this region's poverty can be more sustainable if a shared vision for accessing SDF is established across South Asia. Ghani, et al. (2013) suggest that in order to reduce growth disparities in the South Asian region, fiscal transfers should be made to the lagging regions because these regions spend less on social service and have low tax-to-GDP ratio. Furthermore, acceleration of the privatization of Public Sector Enterprises (PSEs) and then diverting the revenue from the sales to the development of the lagging regions may help. Resources can be diverted from the subsidy-oriented programmes to provision of education, health, infrastructure etc. in low income regions.

Palanivel and Unal (2010) also advocate similar pro-poor policies for addressing the rising inequality in South Asia. As the poor consume more public goods than the rich, social spending would break the poverty trap by providing job opportunities, education and health services. Social spending not only reduces the incidence of poverty but also provides social and physical infrastructure for growth (Narayan, 2008). In the South Asian region, a substantial amount of working population is also poor, thus Felipe and Hassan(2006) also recommend to provide quality jobs to address the issue of 'working poor' in the country. Kabir (2013) also supports the idea of 'protecting workers' rather than 'protecting jobs' with a special focus on the youth for creating a long-term impact on growth. In order to ensure that the social spending is protected across South Asia, SDF may be empowered to play the role of a whistle-blower. In such a role it will be able to strengthen its oversight over national economic policies and advice accordingly. Given its leverage through various funding windows, SDF can link the future releases with present reforms and their success.

Prabir (2009) observes that the land-locked states (Nepal, Bangladesh, India's northern-eastern states) have a higher concentration of poor as compared to the coastal states in South Asia. Trade restrictions arising out of high transportation cost, border delays etc. impede the trade-led industrialization and widen the income gap. Kelegama and Abayasekara (2012) view regional economic integration as a step towards balanced regional development. They argue that by becoming a part of the connected regional markets, lagging regions may be able to overcome macroeconomic imbalances and thus suggest removing barriers to trade, allowing free labour movement, developing crisis-sustaining financial markets and most importantly, coordinating fiscal policies. Moreover, Agarwala (2013) also views the connectivity of the cities as a tool for shared growth among the regional economies. Expanding the industrial

base to lagging cities and overcoming commuting hindrances may help countries to sustain its GDP growth.

We understand that in order to make the regional solution towards reduction in poverty and inequality a success, overall responsibility lies with the national governments for fulfilling their responsibility towards the regional integration agenda, and also the SAARC Secretariat to provide a visionary leadership and reforms coordination role. The civil society organizations (CSOs) and think tanks continue to provide analytical support and they will also have to innovate their role depending upon the fast changing political economy of the South Asian region. There are new tools at hand to create demand for national and regional solution to welfare disparities. CSOs need to form partnerships and take advantage of a deregulated media in most parts of South Asia. The large presence of youth on the social media is another trigger for bridging the information gap. It is this bottom-up approach to outreach that if augmented with the already underway top-down efforts (for creating change at the government and SAARC levels), can bring sustainable improvement in the lives of future generations.

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5. Development of the Private Sector in South Asia: Addressing the Challenges for Building Competitiveness

Khondaker Golam Moazzem and Mustafizur Rahman[52]

5.1 Introduction

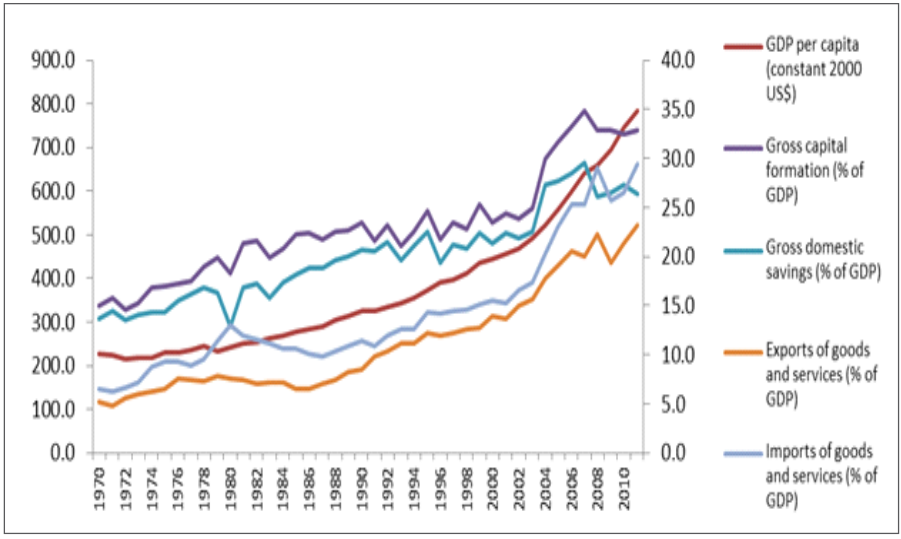
The private sector plays the key role in South Asia's economic growth and development. This is demonstrated in the higher share of private investment in total investment, the higher pace of employment in the private sector, and the rising degree of openness with a greater role of export and import in the economy (Figure 5.1). Despite commendable success in a number of areas, South Asia continues to remain one of the least competitive regions in the world. In major global rankings on competitiveness, the majority of the South Asian countries find themselves in the lower ranks in the ranking hierarchy. For example, in the Global Competitiveness Index, India which is ranked highest within the region, occupied 59th position (out of 144 countries in 2012), followed by Sri Lanka (68), Bangladesh (118), Pakistan (124) and Nepal (125). Since the private sector has the commanding heights in all these countries, these rankings in terms of global competitiveness essentially in a way, also reflects the level of competitiveness of the private sector in South Asia in a global setting.

Private sector in a number of South Asian economies have passed a challenging time due to slowdown of domestic and global economies, political unrest and other issues. India's economy has slowed down - GDP growth rate decelerated to almost half in two years; and there was a significant devaluation of the Rupee during the first half of 2013. Bangladesh has experienced deceleration in GDP growth for the last three years- domestic private investment (in terms of GDP) has decreased; there was a slowdown in import of raw materials, intermediate products and capital machineries; and registration of new investment projects

[52] Disclaimer: The research contained herein, including data, analysis, and/or policy recommendations are those of the author/s and the IPS bears no responsibility for them. Any queries/clarifications/errors/ omissions can be directed to moazzemcpd@gmail.com. Authors would like to register their deep appreciation to Kishore Kumer Basak, Research Associate, CPD, Farzana Sehrin, Research Associate, CPD, and Mashfique Ibne Akbar, Research Associate, CPD for their research support in this study.

decreased. Sri Lanka's GDP grew at 6.0 per cent in the first quarter of 2013 - slowing down from 8.0 per cent last year and 6.3 per cent in the 4th quarter of 2012. Pakistan's GDP growth was only 3.59 per cent in the fiscal year 2012-13.

Figure 5.1: Trends of Major Macroeconomic Indicators of South Asian Countries



Source: World Development Indicators Database, 2012.

The objective of this paper is to provide a 'state of affairs' picture and structure of the private sector in South Asia, its major defining features, identify factors responsible for the low level of competitiveness and put forward suggestions about possible ways to build competitiveness. The paper includes nine sections. Section Two presents the conceptual framework for competitiveness of the private sector at macro, meso and micro levels. Section Three briefly discusses the methodology of the study. Section Four presents an overview of the structure of the private sector in South Asian countries. Section Five analyses the performance of key economic indicators including production, investment, productivity and efficiency of the private sector of South Asia. Section Six analyses factors responsible for the poor performance of the private sector in South Asia. Section Seven briefly analyses domestic bottlenecks that impede private sector competitiveness. Section Eight presents the current state of development of value chains in South Asia and the scope and opportunity

for development of regional supply chains. Finally, Section Nine presents a set of recommendations for building enterprise level competitiveness in the region.

5.2 Analytical Framework of Private Sector Competitiveness

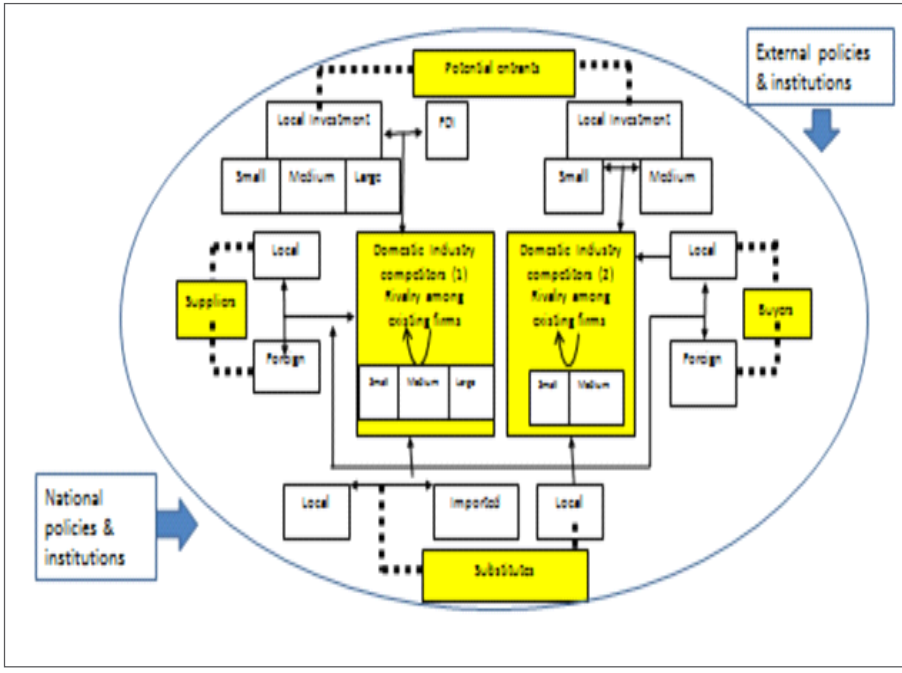
Enterprise level competitiveness is interpreted through an ability of the entrepreneurs to offer goods and services which are competitive in price and quality, the ability to respond to changes in demand quickly through offering diversified products and the capacity to follow innovative marketing strategies (Altenburg et al., 1998)[53]. In other words, building competitiveness along those lines could be interpreted as an ability to increase value added through enterprise level activities (Chaudhuri, 1997). According to Porter (2000), an iterative way to increase value added at the enterprise level is to look beyond comparative advantage which involves lowering of price by focusing on competitive advantage which deals with quality of products, better marketing and delivery system and flexibility in market changes. In less competitive economies, enterprises often operate targeting for low cost advantages without having focus on development of quality and diversity of products, lack of attention to marketing and delivery issues. In a broad sense, most of these enterprises compete not for earning normal profit, rather the end-result is to cut the profit margin. Thus, often enterprises operating in these economies fail to pay attention to the 'Five Forces' that inform a typical model of competitiveness that features in Porter's model.

Porter (2000) delineates the 'Five Forces' model for building competitiveness at enterprise level (Figure 5.2). Given the situation of prevailing segmented markets in developing countries, Porter's model could be differentiated into two segments- advanced and traditional. An elaborate structure of enterprise level competitiveness reveals different aspects related to potential competitors, suppliers, buyers, substitutes and industry competitors. These are particularly important with the presence

[53] Entrepreneurship in developing countries has developed with the development of the private sector. Schumpeterian 'entrepreneurs' are those which feature the role of risk taking (Kihlstrom and Laffont, 1979), managerial ability (Lucas, 1978), having wealth (Evans and Jovanovic, 1989), and preferences for the control, flexibility and other job attributes that come with being one's own boss (Hamilton, 2000) as the primary motivations for entrepreneurship. A large segment of small enterprises do not evince features of 'entrepreneurship' in the Schumpeterian sense. Most of these enterprises manufacture similar products and offer services which are to some extent, available in the market and therefore,such enterprises often tend to cut the 'normal profit' margin in the market (Clough,2011a and 2011b).

of a large number of small and medium enterprises who usually operate informally without having any presence of well-structured value chains in the market. Markets in developing countries operate with multiple actors in each segment. Firm's entry, operation and exit from the market depend on its activities in the market under complex situation. Only a small segment of firms, mainly those that compete in the global market, perhaps operate on building competitiveness as envisioned in Porter's five forces model which considers potential entrants, buyers, suppliers, product substitutes and rivalry of enterprises (Figure 5.2).

Figure 5.2: Elaboration of 'Five Forces' in the Domestic Market in Developing Countries



Source: Based on Porter, 2000.

Enterprise level competitiveness further depends on development of meso level issues which include national, regional and global policies and domestic institutions. Lall (2000) has put emphasis on development of supportive policies and institutions as a core force for building competitiveness. This is particularly relevant for enterprises, particularly SMEs, which have to confront various types of market failures including in such areas as financing, access to information, technologies and

marketing etc. In a 'systemic competitiveness' enterprise level, competitiveness lies in the ability to design appropriate instruments and mechanism to improve macro, meso and micro level competitiveness. Countries lagging behind competitiveness often fail to identify appropriate instruments and are not able to undertake continuing improvements in areas that define competitiveness.

In the context of an ever changing global economic environment particularly through globalization, accelerated technological change and growing demand for better quality products, enterprises in less competitive economies particularly the SMEs often have to confront the risks of exit. Limitations of small size, market distortion, weak institutional support and ineffective policy interventions act against the SMEs. Thus, ensuring conducive business environment is not sufficient for building competitiveness of SMEs unless proactive national, regional and global policies are in action there (Lall, 2000; OECD, 2004). Here proactive policy support to SMEs in building their competitiveness becomes critically important.

5.3 Methodology of the Study

The paper focuses on both national and enterprise level competitiveness of the private sector in South Asia with a view to drawing deeper insights into the underlying factors. The following methodology has been followed towards this.

Analysis of national competitiveness has been carried out by using data from the Global Competitiveness Report (GCR) published by the World Economic Forum. Except Afghanistan and Maldives, all other South Asian countries are included in the ranking of the GCR. Besides, country level data for various macroeconomic indicators have been used from the database of the World Development Indicators. Discussion on national policies as well as regional and global initiatives and arrangements have been drawn on published materials, documents and academic articles.

There is a lack of regional level data on enterprises, particularly on SMEs in terms of the number of enterprises, production cost, profitability, productivity and level of efficiency. For this study, the World Bank's enterprise survey data has served as a key resource (Table 5.1). This dataset is based on firm-level survey using representative sample from the private sector. A total of 8436 enterprises were covered under this

Table 5.1: Sample Structure of the Survey

Country	Year	Total	Size			Sector			Ownership		Market exposure	
			Micro/ Small (<20 employees)	Medium (20-99 employees)	Large (100+ employees)	Manufacturing	Retail	Other Services	Others	Domestically-owned	Foreign-owned	Exporters	Non-exporters
Afghanistan	2008	535	64.9	27.3	7.9	23.0	19.6	57.0	0.2	95.7	4.3	2.2	97.8
Bangladesh	2007	1,504	29.2	30.6	40.2	85.9	2.8	6.7	4.6	97.7	2.3	25.1	74.9
Bhutan	2009	250	48.4	37.6	14.0	37.6	12.0	49.6	0.8	94.0	6.0	16.0	84.0
India	2006	4,234	69.6	18.4	8.6	52.6	46.0	0.0	0.8	98.5	1.0	8.5	87.2
Nepal	2009	368	52.4	38.9	8.7	37.2	29.6	32.9	0.3	95.9	4.1	6.3	93.8
Pakistan	2007	935	60.7	23.5	15.7	83.9	6.3	9.8	0.0	97.2	2.4	11.1	79.5
Sri Lanka	2011	610	52.0	29.2	18.9	59.3	19.8	20.8	0.0	95.1	4.9	7.4	92.6
South Asia		8,436	58.5	23.9	15.9	59.5	28.6	10.3	1.3	97.5	2.1	11.4	85.4

Source: World Bank.

survey; except Maldives, sample enterprises were taken from all other South Asian countries. The firms include companies with five or more employees. Firms have been categorized as small, medium and large in terms of their size of employment. [54]Since the country-specific surveys have been carried out at different points in time (2007-2011), inter-country comparability will likely have its limitation. However, many issues are generic and time dimensions should not be of overriding concern.

5.4 Dynamics and Changes in the Private Sector of South Asia

5.4.1 Share of Manufacturing and Services Sectors in GDP

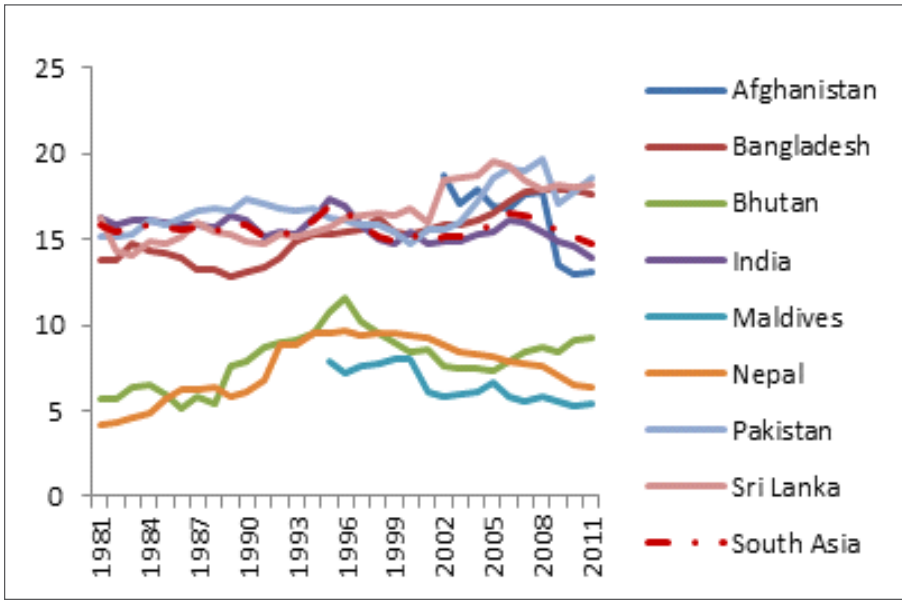
The economic transformation of South Asian economies in terms of growth of manufacturing and service sectors is not the same. The growth in the manufacturing sector (in terms of share in GDP) has passed two trajectories (Figure 5.3) - while a group of South Asian countries have maintained a higher share for the manufacturing sector in GDP (between 15-20 per cent), another group of countries has experienced a lower share in GDP (between 5-10 per cent). A higher level of growth in manufacturing sector in Bangladesh and Sri Lanka since late 1990s, has contributed to raise the share of manufacturing value added in the GDP. In contrast, a low level of growth in manufacturing value added in Nepal and Maldives have reduced their manufacturing share in GDP during the same period. Due to the global financial crisis, most countries have experienced a slowdown in growth in manufacturing value added which reduced the share of the manufacturing sector value added in GDP. Overall, the dynamics and changes in the manufacturing sector of South Asian countries are not so significant in the post-reform period.

Whilst there has been a notable compositional change in the GDP with rise in share of the manufacturing sector, with the private sector's role on the ascendency, the structural transformation in the economy has been of rather limited nature. Even in the case of India, the leading economy in the region, the manufacturing sector has experienced slower growth of the value added during the post-reform phase and the sector is still dominated by low-tech industries (Mehta, 2011).

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[54] Firms are categorized as follows: 'small firms' with employment between 5-19 workers; 'medium firms' with 20-99 workers and 'large firms' with employment above 100 workers.

Figure 5.3: Manufacturing Sector as % of GDP of South Asian Countries: 1981-2011



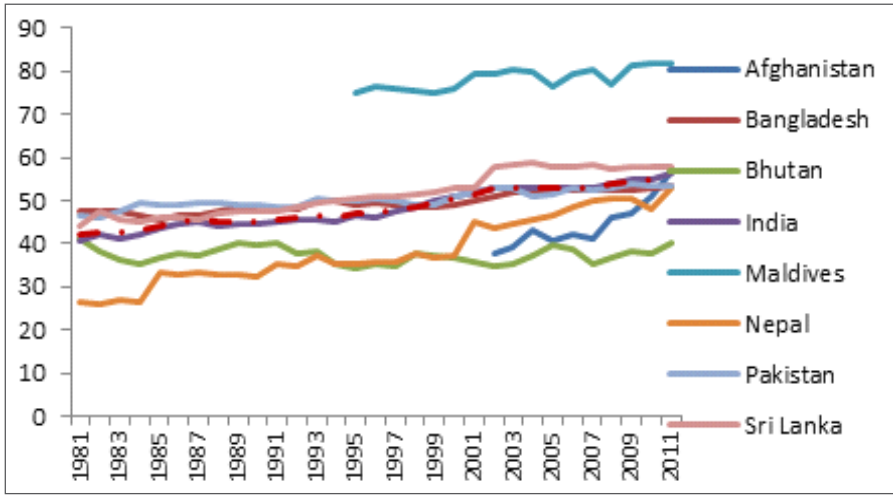
Source: World Development Indicators Database, 2012.

Some spatial differentiation is, however, visible - with regional diversity in growth of enterprises underwritten by higher access to foreign technology and better infrastructural support (Siggel and Agarwal, 2009). A significant share of micro, small and medium enterprises is dominated by marginalized groups and these are of a subsistence nature (Deshpande and Sharma, 2013). Concurrently, the share of the corporate sector in industry's gross output, value added and number of employment has been on the rise in India (Rajkumar, 2011). In Bangladesh, trade liberalization had mixed results as far as the manufacturing sector was concerned. Whilst the share of the manufacturing sector in the GDP, as a group, has gone up, only a few sectors have been able to demonstrate their competitive strength in the global market barring the RMG. However, some domestic market oriented industries, thanks to the sizeable and growing domestic market, have been able to strengthen their foothold in the domestic market (Moazzem et al., 2012) which includes processed food, light engineering, electronics, plastics etc.

Service sector is the major contributor in the GDP and its share has been increasing in all the South Asian economies (Figure 5.4). Some of the

economies are overwhelmingly dependent on services (i.e. Maldives); other economies are becoming increasingly dependent more on services (Sri Lanka, India and Bangladesh). [55]The rise of the service sector has come in the backdrop of deregulation and policy reforms particularly in the telecommunications, rising income and domestic demand for various types of distribution related services (Raihan, 2013). A growing debate relates to whether a service-sector led economic development is possible in South Asia (World Bank, 2009)?[56]. Besides, South Asia's services sectors are yet to be functionally integrated with the manufacturing sector to support advanced manufacturing supply chains.

Figure 5.4: Service Sector as % of GDP of South Asian Countries: 1981-2011



Source: World Development Indicators Database, 2012.

5.4.2 Trends in Investment in Manufacturing and Services Sectors

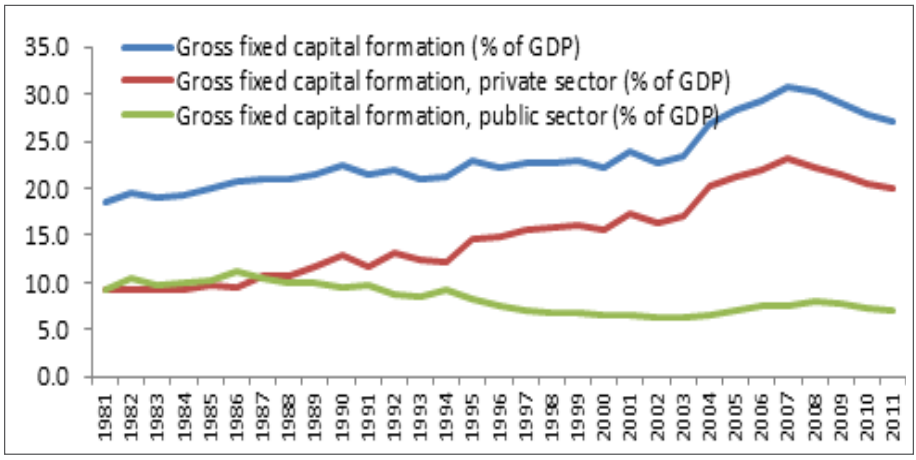
Private sector investment has now emerged as the main driver of domestic investment in all the South Asian countries (Figure 5.5). It reached its peak in 2008 when South Asia's domestic investment reached over 30

[55] The former group of services could be termed as 'stagnant impersonal services' where application of modern technologies (ICT) has tended to be lower whilst the second group is often called 'progressive impersonal services' where modern technologies are being extensively used (World Bank, 2009).

[56] Major service-related activities in the region include both traditional services such as wholesale and retail trade, restaurants and hotels, transport-storage, construction and community, social and personal services and modern services that include communication, banking insurance and business related services.

per cent of GDP which declined afterwards mainly due to the global economic slowdown after the global financial crisis. Most South Asian countries have experienced a rise in the investment-GDP ratio, although this has fluctuated over the years; Sri Lanka and Pakistan have experienced a decline in this ratio. Domestic private investment constitutes the major share of investment with only a small share claimed by foreign direct investment (FDI) - FDI's share is about 2-3 per cent of total investment. [57]Unlike in Southeast Asia, FDI is not a key player in South Asia's investment scenario.

Figure 5.5: South Asia: Trends in Public and Private Investments



Source: World Development Indicators Database, 2012.

5.4.3 Structure of Export and Import

South Asian countries have exported an amount of about US$365 billion and imported about US$572 billion in 2011; over 80 per cent of this trade has been carried out by India (Table 5.2). The structure of export of South Asian countries widely varied in terms of volume, product composition and export destination etc. The volume of export is ranged between as low as a mere US$83.3 million from Maldives in 2011 to as high as US$301.5 billion from India. While a large part of export of land-locked countries such as Nepal, Bhutan and Afghanistan is destined to source the South Asian market mainly in India, others mainly target the extra-regional

[57] Foreign owned firms are relatively high in the services sector of Bhutan and perhaps in Maldives mainly in the tourism sector.

markets. Agricultural and minerals have been exported largely by Bhutan, Maldives, and Afghanistan while manufactured products are exported largely by India, Pakistan, Bangladesh, Sri Lanka and Nepal. On the other hand, export of services, as a percentage of GDP, is high for Maldives (78 per cent in 2001-10), Nepal (37 per cent) and India (31.7 per cent).

Intra-regional trade in South Asia has increased from US$4.7 billion in 2003 to US$15.5 billion in 2011 at an annual growth rate of about 29 per cent; however, its share of intra-regional trade has experienced deceleration in total export indicating a relatively lower growth of intra-regional trade vis-à-vis trade of South Asia with that of the rest of the world (Table 5.2). Bilateral export between member countries also failed to maintain a consistent trend. Nepal's export outside India has been highly erratic, particularly to Pakistan and Sri Lanka. Similarly, Pakistan's export to South Asian countries has also not been consistent. Similar is the case in bilateral import of South Asian countries. Overall, South Asian countries are increasingly lagging behind compared to other RTAs in terms of trade

Table 5.2: South Asia's Merchandise Export and Import

Country	In value ('000 US$)			Share of Intra-regional Export to South Asia
	Total Export, 2011	Total Import, 2011	Total Trade	
Total ('000 US$)	364,947,884	571,943,148	936,891,032	4.27
Share (% of total)				
Afghanistan	0.10	1.12	0.72	
Bangladesh	7.20	5.51	6.17	2.65
Bhutan	0.12	0.18	0.16	
India	82.61	80.85	81.53	4.01
Maldives	0.02	0.25	0.16	
Nepal	0.25	1.03	0.73	65.52
Pakistan	6.94	7.62	7.36	6.24
Sri Lanka	2.74	3.44	3.17	6.43

Source: World Development Indicators Database, 2012.

(Table 5.2). This is indicative of the weakness in developing regional value chains. Intra-regional trade of South Asia is well behind those of East Asia, EU15 and NAFTA regions in all categories of products (non-oil, manufactured parts and components).

South Asia's export of services, on the other hand, has significantly increased in recent years - from US$20 billion in 2005 to US$ 149.7 billion in 2011, and its global share has also increased from 1.4 per cent to 3.5 per cent over this time. India is the main exporter of services with a share over 90 per cent of South Asia's total export followed by Pakistan, Bangladesh and Sri Lanka (Table 5.3). Services export in the form of remittances sent by temporary migrant workers constitute the major export of services for most of the South Asian countries - 30.8 per cent in India, 81.6 per cent in Bangladesh, 59.3 per cent in Pakistan and 58.3 per cent in Sri Lanka. Besides, a number of non-traditional services are also getting into services export baskets in some countries[58].

Table 5.3: South Asia's Service Export

Exporting Country/ Region	Exported value in 2000	Exported value in 2005	Exported value in 2009	Exported value in 2010	Exported value in 2011
World	1,533,457,152	2,551,571,456	3,483,828,224	3,862,051,584	4,259,875,328
SAARC	20,720,091	46,995,125	102,283,201	137,117,372	149,717,365
% of world	**1.4**	**1.8**	**2.9**	**3.6**	**3.5**
India	80.5	84.6	91.0	90.7	91.6
Pakistan	6.7	7.8	3.9	4.7	3.4
Sri Lanka	4.6	3.3	1.9	1.8	2.1
Bangladesh	3.9	2.7	1.9	1.8	1.8
Nepal	2.4	0.8	0.7	0.5	0.6
Maldives	1.7	0.7	0.6	0.6	0.6
Bhutan	0.2	0.1	0.1	0.1	0.1

Source: World Development Indicators Database, 2012.

[58] For example, computer services in case of India and Sri Lanka, profession and technical services in Bangladesh, Pakistan and Sri Lanka, financial services in India, sea transport freight for India and Sri Lanka, air transport for Sri Lanka. Some non-traditional services cater to the need of manufacturing sector value chains in the region. Amongst these, banking, insurance, ICT etc. are critically important from this perspective which is in operation in these countries.

Majority of small and medium enterprises in South Asian countries have only limited exposure to global markets- share of their export is much lower compared to that of large ones (World Bank, 2012). In general, SMEs are found to be less export competitive (Chowdhury, 2008). [59]The share of direct export in total sales of large enterprises is higher for Bangladesh (53 per cent), Pakistan (30 per cent), Sri Lanka (25.0 per cent) and India (27.7 per cent), respectively. A large part of SMEs operated in a 'vicious circle' which hardly contribute to their expansion and growth and make them competitive.

5.4.4 Skill Composition and Technology Use

Skill Composition: According to the enterprise survey, size of the skilled workforce in enterprises are rather small in Afghanistan (18 workers), Nepal (13) and Pakistan (23), while they are relatively big in Bangladesh (200 workers). In other words, large enterprises of some countries possess scope to take advantage of scale of production. Unskilled workers comprise a major share of the workforce in most of the enterprises particularly in India and Nepal which ultimately affect labour and total productivity of firms (Table 5.4). In India the unskilled workforce comprises a major share in service related enterprises. In contrast, use of unskilled workers is relatively less in the case of enterprises in Sri Lanka. Use of low skilled workers in the production process constrains the majority of enterprises to improve their productivity and efficiency which ultimately slows down their expansion of businesses.

Technology Use: A large share of private enterprises in South Asia operate with low-skilled traditional technologies (Table 5.4). Compared to global level, South Asian firms are way behind in using technologies licensed by foreign companies, quality certification by recognized firms and use of IT in production processes and in developing forward linkages. Because of the overwhelmingly domestic market orientation, service enterprises use relatively less modern technologies compared to that of manufacturing sector enterprises. On average, only 7 per cent of total firms in South Asia have international quality certification, lower than the case for small enterprises in most of the countries; medium enterprises also do not fare better. International certification is somewhat better in the

[59] Between the two categories, medium enterprises have higher share of export in their total production.

Table 5.4: Skill Composition and Technology Use in South Asian Enterprises

Country	Year	Sub-group Level	Proportion of unskilled workers (out of all production workers) (%)	Percent of firms using technology licensed from foreign companies	Percent of firms having their own Web site	Percent of firms using e-mail to interact with clients /suppliers	Proportion of total inputs that are of domestic origin (%)
Afghanistan	2008	Manufacturing	28.9	10.9	20.2	35.3	38
		Retail	...	...	16.5	33	...
Bangladesh	2007	Textiles	...	1	8.2	46.7	75.7
		Retail	...	...	5.9	22.5	...
Bhutan	2009	Manufacturing	...	12.8	16.1	49.3	40.6
		Services	...	...	33.8	60.9	...
India	2006	Manufacturing	36.1	5.3	32.9	60.7	96.2
		Services	40.3	4.5	20.6	34.2	97.9
Sri Lanka	2011	Retail	...	...	26.4	41.2	...
Nepal	2009	Manufacturing	36	0.6	18.6	36.8	55.8
		Retail	...	...	17.6	45.7	...
Pakistan	2007	Textiles	20.3	1.2	21.4	26.6	95.9
		Services	...	...	10.9	32.6	...

Source: Enterprise Survey, World Bank, Different Years (available at: http://www.enterprisesurveys.org/)

case of Indian SMEs. Compared to large enterprises, the SMEs continue to lag far behind. Similarly, use of technologies licensed from foreign companies is rather limited particularly for small enterprises. Similarly, these enterprises lag behind in terms of building network with foreign companies through using IT based technologies. South Asian enterprises tend to lack dynamism in technology use perhaps also arising from the relative absence of competitive pressure in the local market.

5.5 Performance of Key Economic Indicators

5.5.1 Changes in Output and Employment

According to the World Bank (2009), growth in real output and employment have accelerated in the manufacturing and services sector in 2000-2006 compared to that in 1990-2000; however, growth in the service sector in most countries has slowed down in 2000-2006. Curiously, growth of output per worker has decelerated across the board in 2000-2006 over the previous decade; some countries have even experienced negative growth in 2000s such as the manufacturing and services sectors in Nepal, manufacturing sector in Sri Lanka and the services sector in Maldives.

Growth of sales in small enterprises is either low or negative, while it is better for medium enterprises although in some countries it is negative. Despite less impressive growth in sales, growth in employment in SMEs is considerably better. In other words, rise in employment may not enhance productivity and efficiency of firms in all cases which is partly reflected in the decline in growth in productivity in most of these countries.

Analysis of the relationship between GDP growth and investment growth revealed no significant granger causality in case of investment growth over GDP growth in most of the South Asian countries (Table 5.5). In contrast, investment growth was granger caused by GDP growth in Sri Lanka and Nepal. More importantly, lagged value of investment growth had significant granger causality with investment growth for Sri Lanka, Nepal and Bangladesh. Overall, role of investment in GDP growth was found to be rather limited in South Asian countries.

Table 5.5: Granger Causality Test for South Asian Countries

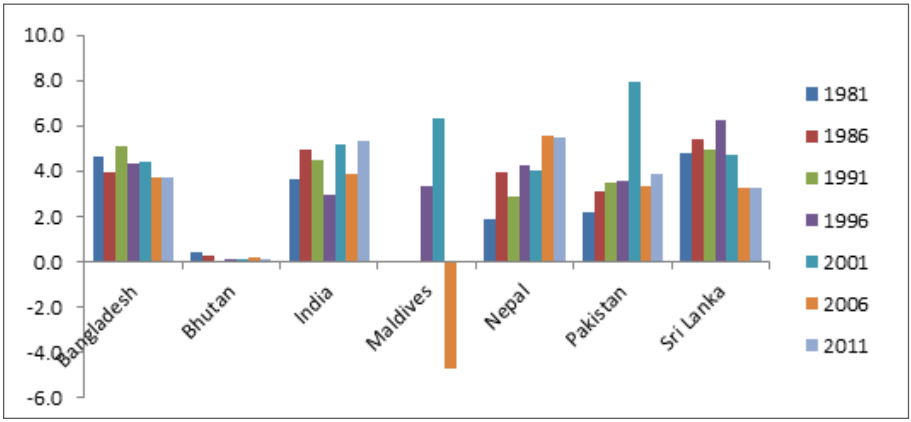
Country	GDP Growth Granger Causes By				Investment Growth Granger Causes By			
	GDP growth L1	GDP growth L2	Investment growth L1	Investment growth L2	GDP growth L1	GDP growth L2	Investment growth L1	Investment growth L2
Sri Lanka	0.03	0.02	0.03	-0.00	1.47	-2.58	0.00	0.35
	(0.866)	(0.895)	(0.247)	(0.907)	(0.173)	(0.023)	(0.561)	(0.037)
India	-0.15	0.05	0.16	0.09	0.40	0.56	-0.17	-0.13
	(0.442)	(0.793)	(0.108)	(0.929)	(0.203)	(0.134)	(0.407)	(0.500)
Nepal	0.07	-0.15	-0.00	0.09	-2.70	1.99	-0.69	-1.09
	(0.870)	(0.543)	(0.978)	(0.296)	(0.127)	(0.067)	(0.053)	(0.014)
Pakistan	0.22	0.22	-0.05	0.00	0.83	1.01	0.17	-0.13
	(0.209)	(0.228)	(0.424)	(.945)	(0.115)	(0.062)	(0.341)	(0.465)
Bangladesh	0.39	0.26	-0.01	0.06	-0.05	0.04	0.46	-0.15
	(0.046)	(0.168)	(0.883)	(0.463)	(.915)	(.934)	(0.034)	(0.446)

Source: Authors' estimation, 2013.

5.5.2 Changes in Productivity

Except for a few countries (Bangladesh, Sri Lanka and Bhutan), productivity of capital (in terms of capital-output ratio) did not show any significant improvement in most of the South Asian countries (Figure 5.6). Capital-output ratios have tended to fluctuate in recent years; the year 2008 appears to be an outlier of sorts perhaps because of the shocks transmitted by the global financial crisis. Increasing participation of the private sector did not automatically transform those enterprises and make them productive and efficient.

Figure 5.6: Capital-Output Ratio in South Asia



Source: World Development Indicators Database, 2012.

The sources of growth of output per worker in the manufacturing and services sector of South Asian countries are not the same - while India's output growth in manufacturing largely relied on growth of capital and, in services, on growth in total factor productivity; in the case of Pakistan, both manufacturing and services were more dependent on growth in TFP (World Bank, 2009).

Labour productivity in industrial and services sectors in South Asia vary widely; however, in general, labour productivity was higher than in the agriculture sector (Table 5.6). Labour productivity was found to be relatively high in Bhutan (US$19366 PPP per worker in 2005) perhaps because of the small number of industries in selected sectors and the lowest labour productivity was found to be in Nepal (US$1716). This indicates significant departures in the level of productivity in the industrial sector among South Asian countries.

Labour productivity in the services sector was found to be high in Maldives (US$12790) perhaps due to large scale foreign investment particularly in the high-value tourism sector; matched figures for Sri Lanka (US$11856) and Pakistan (US$11829) were found to be lower. Bangladesh has the lowest productivity in the service sector (US$4679). Total factor productivity in India was the highest among the South Asian countries followed by Sri Lanka, Pakistan and Bangladesh (World Bank, 2012). However, South Asian countries were well behind the countries of the neighbouring region, Thailand and Malaysia being the examples.

Table 5.6: Average Labour Productivity of Selected South Asian Countries, 2000-2006

Countries	Labour Productivity (US$)	
	Manufacturing	Services
Bangladesh	6,208	4,679
India	7,479	8,901
Maldives	7,533	12,790
Nepal	1,716	5,552
Pakistan	10,439	11,829
Sri Lanka	8,906	11,856*

Source: World Bank, 2009.

5.5.3 Changes in Entrepreneurial Abilities

South Asian entrepreneurs who operate mostly small and medium scale enterprises have yet to emerge as so called 'Schumpeterian entr epreneurs'. According to Moazzem and Kishore (2013), self-employed firms which are more risk-averse and less innovative appear to earn lower revenue in Bangladesh compared to those which take risks, mostly the large enterprises. According to Bhattacharya (2008), Indian small and medium entrepreneurs are struggling to build their entrepreneurship; however, in the case of larger entrepreneurs, many features of developed entrepreneurship are evident. A large share of the enterprises in South Asia operate on 'subsistence' pressure owing to lack of opportunities in the formal sector and/or driven by 'push' factor from the farming sector. A considerable number of these firms are involved in various types of informal services and manufacturing activities producing similar kinds of

goods and services. These lack innovation and marketing. In general, these firms don't demonstrate an objective and ambition to maximize profit and lack the motivation to take risks and innovate new products and services.

It may be discerned from the above discussion that, the structural transformation of South Asian economies in the backdrop of economic liberalization have created opportunities for the private sector to participate in economic activities; over time their participation has been on the rise. However, an overwhelming presence of small and medium enterprises that primarily focus on the domestic market and lack dynamism, expansion and up gradation indicate that South Asian economies have not experienced the structural changes that the developed economies have undergone. Development of the formal corporate sector is still at an early stage in South Asia, barring some part of the economy. Overall, these enterprises are yet to gain the characteristics of competitive firms as suggested by Porter (2000).

5.6 Policies of South Asian Countries towards Developing Competitive Private Sector

5.6.1 Major Policies Related to the Private Sector

South Asian countries in general have pursued pro-private sector led development strategies backed by supportive policies and incentives. Most South Asian countries have structured policies targeting enhancement of investment, trade and employment generation etc. (Table 5.7). A major thrust of various supports to the private sector related to measures to reduce production cost through various subsidies, providing advantages over imported products, facilitating employment generation particularly through support to SMEs, fiscal-financial support to encourage raising of productivity etc. Some support is provided at post-establishment stage through tax holiday, duty waiver and subsidized credit etc. In contrast, support at pre-establishment phase for private enterprises particularly for SMEs has been rather limited. These kinds of support include access to market related information on major competitors, market potentials and buyers and suppliers of the market etc.

South Asian countries allocate a significant amount of resources each year for various fiscal measures including tax holidays, reduced taxes, depreciated allowances, tax waiver and duty waiver etc. The overall tax

Table 5.7: Policies of South Asian Countries towards Developing the Private Sector

Country	Industry related	Investment related	SME related	FDI related	Trade related	Special zones related
Bangladesh	Industrial Policy, 2010	PPP Policy and Guidelines, 2010	Policy Strategies for Small & Medium Enterprises (SME) Development in Bangladesh,2005	FDI Act 1980	Import Policy Order 2012-15	BEPZA Act; SEZ Act 2010
Bhutan		Framework for private participation in Infrastructure 2010	Cottage, Small and medium Industry Policy, 2012	FDI Policy, 2010, FDI Rules & Regulation 2012		
India	Industrial Policy, 2012			FDI Policy, 2012	Foreign Trade Policy 2009-14	
Maldives				Law on Foreign Investments in the Republic of Maldives		
Nepal		Competition Promotion Act 2007			Trade Policy 2009	
Pakistan	National Industrial Policy, 2011		SMEDA_ Ordinance_ 2002	FDI Strategy, 2013-17	StrategicTrade Policy Framework, 2009-12	
Sri Lanka	Strategic Plan, 2011-15			FDI Policy 2013		

Source: Collected by authors from various websites.

expenditures tend to vary widely across countries - for example, tax expenditures in India and Pakistan account for 4.5 per cent and 0.4 per cent of GDP in FY2005, respectively (Itriago, 2011; Mortaza and Begum, 2006). [60]Besides, fiscal incentives are given in the form of reduction of tariff, para-tariff and other taxes on imported raw materials, intermediate products and capital machineries with a view to reduce cost of production and make the product competitive in local and global markets. Some South Asian countries have also taken recourse to import duties as a means of giving protection to the domestic private sector.

A large part of budgetary support is targeted to domestic market oriented SMEs to ensure better access to capital, technological readiness, and protecting their interest against imported products. There are targeted training programmes for SMEs for development of human resource, managerial ability, marketing and product quality. In case of Bangladesh, the training support for small and cottage industries provided by BITAC are found to be very elementary and there is lack of focus on the market niche in different areas (Moazzem, 2012).

5.6.2 Competition Policy

A number of countries in South Asia have introduced competition policy with a view to ensure fair competition in the market. Major focus of these policies had been to contain anti-competitive practices in the form of building monopoly, price-manipulation and cartels to enable firms to operate in a level-playing field (CUTS, 2003). Attempts have been made to address distortions in the domestic market by putting in place national competition policy; however, anti-competitive practices are common in international trade and these need to be addressed through multilateral efforts. For example, the Bangladesh Tariff Commission has examined anti-competitive practices as regards a number of imported products and identified frequent cases of dumping (BTC, 2009). In view of the global financial crisis, instances of such cases have been on the rise in the global trade.

[60] Tax expenditure in Bangladesh is accounted for 2.52 per cent of GDP in 2006; major share of this expenditure is related to indirect taxes (88 per cent of total expenditure) particularly value added taxes at domestic and import stage (63 per cent and 19 per cent of total tax expenditures in 2006).

5.6.3 Bilateral, Regional and Multilateral Policies

Besides national policies, multilateral and bilateral policies have positive implications for the development of the private sector. A number of South Asian countries which are LDCs have enjoyed preferential market access in developed and developing countries for most of their tradable products. Such preferential market access has positively contributed not only to raise export and production but also to generate employment, develop entrepreneurship and attract inflow of FDI etc. Bilateral preferential market access as is in existence between several countries of South Asia, has also made positive contribution to the working of the private sector in South Asia.

5.6.4 Challenges for Ensuring Private Sector Development through Policy Support

Although theoretically it seems that policies are 'effective' to ensure targeted objectives for meeting the market failures in case of credit, labour, products and knowledge, in practice it is always challenging to implement these policies (Rodrik, 2007). In South Asia, majority of support measures under different policies target formal enterprises only. Thus, most of the enterprises which operate informally are often left out. In fact, given the difficulty to comply with requirements, often even the formal SMEs find it difficult to access the benefits provided under the various support schemes (Moazzem, 2012).

A major criticism of policy support for enterprise development is their lack of effectiveness. Selection of preferential sectors is often found to be biased in South Asia because of the pressure of different groups (Moazzem et al., 2012). Besides, various instruments offered under different policies are found to be of low effectiveness because of the failure to cater to particular and specific requirements of firms. Given the limited resources available to these economies, failure to target properly leaves out the SMEs from getting the expected benefit.

Poor institutional linkages often create bottlenecks for SMEs in getting the intended support. Lack of coordination among the various involved Ministries and governments remain a major problem. For example, the industrial policy of Bangladesh, which is implemented by the Ministry of Industry, speaks of various financial support measures to be given to industries. On the other hand, it is the Ministry of Finance which has to

foot the bill. Often, lack of interface and coordination among these two creates obstacles in timely delivery of the support.

At bilateral levels often countries undertake policies particularly with a view to support domestic industries against competition of imported products or to support the domestic consumers. For example, India's decision to ban export of cotton directly affects the RMG industry in Bangladesh which is largely dependent on imported cotton. Similarly, Bangladesh's decision to restrict trade of cotton and yarn through land ports increased the import cost. Non-tariff barriers are increasingly becoming an issue of concern in bilateral trade in South Asian countries. Long certification process, limited testing facilities, lack of human resource for fast trade facilitation at the border point, limited number of border points for trade etc. often increase the transaction cost of export at the regional level.

5.7 Domestic Bottlenecks Impeding Private Sector Competitiveness

5.7.1 Key Constraining Factors at Macro Level

There is a broad agreement among the South Asian entrepreneurs as regards key constraining factors that undermine competitiveness. According to the GCR, entrepreneurs of India found inadequate infrastructure as the topmost obstructing factor for their businesses followed by inefficient government bureaucracy and widespread corruption (Table 5.8). Despite the improvement in trade facilitation process at border points and increasing use of air, rail and waterways in transporting goods in South Asia, efficiency in time use did not improve much - since 2005 average time for export has reduced by only three days while the average time for import has reduced by ten days. The major inhibiting factors for Sri Lankan entrepreneurs, on the other hand, were found to be high tax rates and complex tax regulations. In general, successive GCRs indicate that factors which are often referred to by entrepreneurs are inadequate infrastructure, inefficient government bureaucracy, corruption, policy instability and government instability etc.

5.7.2 Key Constraining Factors at Micro Level

At the micro level, businesses face a wide range of problems which start

from commencing the businesses and its operation (Table 5.9). [61]It is to be noted that, over time significant improvements have been observed in starting a business in South Asia in terms of reduction of procedures, time and related costs. However, for most of the following activities the experience was not found to be encouraging. These included dealing with construction permit, registration, access to credit and paying taxes and undertaking trading operations involving export-import costs. Despite some improvement in trade facilitation, entrepreneurs in most South Asian countries experienced problems since the time of operation and documentation related hassles could not be significantly reduced. In other words, a better advantage of easier entry into business could not be fully realised because of operational difficulties faced by enterprises.

However, the nature and extent of constraints and challenges are not same for all South Asian countries or across all types of enterprises. These tend to be different for different categories of firms. Access to finance and lack of electricity are found to be a major problem across the board in all South Asian countries; but the problem is found to be more severe in Bangladesh, India, Bhutan and Pakistan (Table 5.10). Political instability is a major constraining factor in Nepal, while crime and theft is a problem in Afghanistan. Other factors that were noted are: informality in Sri Lanka, high tax rates in India, corruption in India and Pakistan, and access to land in Bhutan. Thus, businesses operate in South Asian countries under multiple risks and challenges and the extent of risks are not same for all countries particularly for SMEs. The risks and returns for entrepreneurs are also not the same.

Traditional mode of collateral-based financing, even with subsidized interest rate, is found to be not serving the effective demand of enterprises in South Asia. Credit is insufficient vis-à-vis needs, procedures are cumbersome, there is lacking in terms of timeliness, and bad governance and corruption pushes up the effective cost of credit. Given the diverge range of activities that firms need to be involved in the production process and marketing of products, more innovative forms of financing is required in South Asia. A diverse range of financing ensures not only the supply of inputs and production of products but also ensure marketing of products. Capital market in most of the South Asian countries is not well developed particularly when needs of SMEs are concerned.

[61] Major problems are related with starting a business, dealing with construction permit, registration, access to credit and paying taxes and trading etc.

Table 5.8: Top-3 Major Constraints Confronting Businesses in South Asia: 2007-2011

Country	2007			2009			2011		
	Top 1	Top2	Top 3	Top 1	Top2	Top 3	Top 1	Top2	Top 3
Bangladesh	Corruption	Inadequate supply of infra-structure	Inefficient gover-nment bureau-cracy	Inadequate supply of infra-structure	Corrup-tion	Inefficient govern-ment bureau-cracy	Inadequate supply of infra-structure	Corrup-tion	Inefficient govern-ment bureau-cracy
India	Inadequate supply of infra-structure	Inefficient govern-ment bureau-cracy	Restric-tive labour regula-tion	Inadequate supply of infra-structure	Inefficient govern-ment bureau-cracy	Corrup-tion	Inadequate supply of infra-structure	Corrup-tion	Inefficient govern-ment bureau-cracy
Nepal	Government instability/ coups	Policy instability	Inefficient govern-ment bureau-cracy	Govern-ment instability/ coups	Inadequate supply of infra-structure	Corrup-tion	Govern-ment instability/ coups	Inefficient govern-ment bureau-cracy	Policy instability
Pakistan	Inadequate supply of infra-structure	Inefficient govern-ment bureau-cracy	Corrup-tion	Govern-ment instability/ coups	Policy instability	Corrup-tion	Government instability/ coups	Corruption	Policy instability
Sri Lanka	Policy instability	Inflation	Inefficient govern-ment bureau-cracy	Tax regulation	Access to financing	Tax rates	Tax rates	Tax regulation	Inflation

Source: World Economic Forum, Global Competitiveness Report, Various Issues.

Table 5.9: Severity of Constraints according to Various Factors

Country	Year	Access to finance	Access to land	Business licensing and permits	Corruption	Courts	Crime, theft and disorder	Customs and trade regulations	Electricity	Inadequately educated workforce	Labour regulations	Political instability	Practices of the informal sector	Tax administration	Tax rates	Transportation
South Asia		15.7	5.5	2.4	5.0	0.5	5.2	1.5	27.6	3.3	3.2	15.4	4.5	2.8	4.8	2.6
Afghanistan	2008	16.8	12.2	0.4	8.4	0.0	20.0	1.1	17.9	0.2	0.2	16.4	3.4	2.4	0.0	0.6
Bangladesh	2007	34.9	4.1	0.3	4.3	0.0	0.1	0.5	42.7	0.5	0.0	11.4	0.4	0.3	0.6	0.1
Bhutan	2009	21.7	2.8	7.3	3.5	1.8	3.7	3.3	0.6	10.5	9.7	0.2	6.5	6.9	12.6	9.1
India	2006	6.5	3.5	1.0	10.7	0.5	0.8	2.5	35.2	4.5	4.0	1.5	1.6	8.5	16.8	2.5
Sri Lanka	2011	14.1	9.8	6.4	2.0	0.5	2.1	2.7	11.4	6.4	6.6	1.0	16.0	6.1	11.9	3.1
Nepal	2009	2.5	0.5	0.0	0.3	0.0	0.0	0.4	26.5	1.6	2.6	62.1	0.3	0.6	0.3	2.4
Pakistan	2007	3.9	3.6	0.0	11.7	0.5	5.5	0.9	66.7	0.7	0.1	1.2	0.3	0.7	3.7	0.5

Source: Enterprise Survey, World Bank, Different Years (available at: http://www.enterprisesurveys.org/

Global financial capital including commercial finance and development finance are available only at a limited scale in South Asia. According to the Global Competitiveness Report, indicators related to access to finance is found to be relatively better in India and, partly in Sri Lanka. Firms in Bangladesh and Nepal are found to be at a disadvantageous state in terms of access to credit and venture capital financing.

Table 5.10: Ranking of South Asian Countries in Selected Indicators on Financial Issues, 2012

Issues	Ranking (Out of 142 countries)				
	Bangla-desh	India	Nepal	Pakistan	Sri Lanka
Ease of access to loan	80	35	86	41	57
Financing through local equity market	22	15	31	51	03
Venture capital availability	94	27	99	45	51
Regulation of securities exchanges	100	26	119	70	27

Source: World Economic Forum, 2013.

Total tax incidence was found to be very high in Sri Lanka and India which lower their global rankings as regards respective indicators (Table 5.11). This is mentioned as a major constraint for businesses in these countries. In terms of political instability and crime, Nepal and Pakistan perform poorly; positions of Sri Lanka and India are relatively better in this context.

Table 5.11: Ranking of South Asian Countries in Selected Tax related Indicators, 2012

Issues	Ranking (Out of 142 countries)				
	Bangla-desh	India	Nepal	Pakistan	Sri Lanka
Total tax rate	53	124	65	41	126
Extent and effect of taxation	47	39	53	69	34

Source: World Economic Forum, 2013.

Entrepreneurs of the region were of the opinion that there were some improvements in terms of a number of indicators. These included access to land, getting business licence and permit, difficulty faced in courts, customs and trade regulations and transportation. It appears that

entrepreneurs and private sector in general, also appreciate the improvements which have taken place particularly in the context of ease of doing business.

Micro-level environment for enterprises in South Asia also calls for improvement in many areas. Enterprises are constrained in their operation from lack of access to capital, high tax rates and poor infrastructure. These have also impacted negatively on development of supply chains both at domestic and regional levels.

5.8 Challenges for Building Regional Supply Chains in South Asia

5.8.1 Major Supply Chains and Their Competitiveness

Participation in the global value chain is rather limited for South Asian enterprises. Firms' participation in the global value chains can be revealed by measuring the extent of export and import of different products from different sources. About 51 per cent of South Asian firms used 35 per cent of inputs of foreign origin for manufacturing output; this is indicative of their moderate linkage in the global production process (Table 5.12). Indeed, a part of the imported inputs are used for domestic market- oriented industries which are corroborated with limited participation of firms in export (only 11 per cent of total firms). In most cases, large firms, and also partly medium firms, have linkages with global value chains. A considerable proportion of large firms of Bangladesh, Sri Lanka, Pakistan and India export a major share of their products in international markets. Medium sized firms which have a sizable share of export are found in the case of Pakistan, Sri Lanka and India.

Intra-industry trade at regional level is confined to only a few products, particularly those that concern textiles and clothing value chain, automobiles value chains, and light engineering electrical products. However, in most of the cases, backward and forward linkage parts of these value chains are either linked to the domestic market or with markets outside the region. In most of the cases, export destinations are outside of the region - EU, USA, Middle East and other developing countries. Region as final destination is found in the case of export of agricultural products (India's mango, fresh vegetables; Sri Lanka's pepper, Pakistan's live animals, Bangladesh's jute and apparels; Bhutan's citrus, potato; Nepal's coffee, pulse, cardamom, leather and Afghanistan's raw afghan wool etc.).

5.8.2 Possibilities for Development of Regional Value Chain

An analysis of trade potentials of top 50 products exported by each of the South Asian countries in major markets (e.g. US and EU 27) for 2011 reveals a possibility to further enhance the export of a number of products and thereby strengthen the value chains. Afghanistan has strong potentials to develop its woollen carpets value chain particularly targeted to the EU market; Bangladesh could strengthen golf equipment value chain in USA and leather and leather goods, ceramic and kitchen wares in the EU market; Bhutan could export minerals such as limestone to the US market and wheat flour and malted beer to the EU market. India could further enhance its export of a number of products and thereby strengthen the related value chains which include medicaments, articles made of iron/steel, wheeled tractors, flanges, reception apparatus, static converters, carpets and pipes in the US market and cellular telephone and its parts, castor oil, photosynthetic semi-conduct device, tobacco, polythene and foot wear in the EU market. Pakistan has the potential to increase its export of leather products, woollen carpets, gloves, polythene and inflatable balls in the US market and medical instruments, ethyl alcohol etc. in the EU market. Sri Lanka's potentials lie on solid tyres, activated carbon, surgical gloves, rubies, sapphires, forklifts parts, and printed circuits in the US market and among others, bicycles, tobacco, transformers, tricycles etc. Nepal on the other hand, has potential opportunities to expand export of shawls, ceramics, cartons etc.

Several studies have identified a number of horizontal and vertical integration in the industries of South Asian countries (Table 5.12). The Commonwealth (2011) and De Mel (2009) noted that textiles and clothing and automobile industries have the potential to develop as intra-regional industries. Similarly, parts and components, and agro-based products have potentials to develop horizontal and vertical integrated industries within the region.

5.8.3 Major Obstacles for Building Supply Chains in South Asia

The challenges confronted by local and foreign investors participating in the global value chain can be categorised into four groups which include: (i) Operational challenges, (ii) Logistical challenges, (iii) Infrastructural challenges, and (iv) Challenges in business process.

Table 5.12: Regional Supply Chain in the Textiles Sector in South Asia

Country	Global Imports ($'000)	Imports from other three Countries of the Region ($'000)	Global Exports of Other Three Countries in the Region ($'000)	Imports from the Region as % of Country's Global Imports	Global Imports of country as % of Global Exports of the Region
Bangladesh	493,150	146,628	2,690,257	29.70%	18.30%
India	4,834,969	221,657	1,380,133	4.50%	350.30%
Pakistan	1,166,083	202,466	15,543,371	17.30%	7.50%
Sri Lanka	327,176	94,808	3,623,488	28.90%	9.00%

Source: UNCTAD and Commonwealth Secretariat, 2011.

(i) Operational Challenges

A number of constraints work against the development of supply chains within the region (Table 5.13). Trade related barriers including tariffs, continue to undermine intra-regional trade and discourage the development of regional supply chains. A large number of products continue to remain in the sensitive lists of member countries in spite of the SAFTA Accord and these are traded at MFN tariffs. These lists ought to be pruned in a speedy manner based on an acceptable methodology (Moazzem, 2013). If supportive measures are put in place, the DF-QF market access provided by India to all SAARC LDCs, particularly Bangladesh, could stimulate more trade with India and development of regional value chains. Here, attracting FDI from India and from outside the region targetting the Indian market is critically important. Non-tariff barriers including complicated customs procedures, problems of product standardization, requirement of time consuming testing and expensive and poor border trade facilitation etc. are the major hindrances that constrain the development of regional supply chains. Increasingly, ability to supply quality products is becoming a critically important factor. Among the South Asian countries, India and Sri Lanka are better positioned in the supply chain particularly in terms of value chain breadth, quantity of local suppliers, and extent of marketing and production process sophistication.

Table 5.13: Major Obstacles for Building Supply Chains

Issues	Bangladesh		India		Nepal		Pakistan		Sri Lanka	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Prevalence of trade barriers	81	4.2	78	4.2	120	3.7	114	3.8	101	3.9
Trade tariffs	129	13.1	126	12.6	140	3	135	16.5	124	11.7
Burden of customs procedures	124	3.2	84	3.8	106	3.5	93	3.7	59	4.3
Local supplier quantity	77	4.6	10	5.6	106	4.3	74	4.7	20	5.3
Local supplier quality	81	4.3	69	4.5	132	3.6	86	4.3	41	4.9
Value chain breadth	93	3.3	38	4.1	127	2.8	65	3.6	29	4.4
Production process sophistication	119	2.9	46	4.1	134	2.5	73	3.6	44	4.2
Extent of marketing	119	3.3	48	4.4	132	2.8	81	3.8	34	4.9

Source: World Economic Forum, 2013.

(ii) Logistical Challenges

Poor state of trade facilitation at border points increases the lead time in regional trade and thus undermine the competitiveness of producers. A large part of intra-regional trade in South Asia is carried out through land, whilst trade with the outside world is carried out mainly through waterways. Because of poor road connectivity with nearest ports, landlocked countries find limited opportunity to develop supply chains other than with neighbouring markets (particularly for their finished products). Since the value chains for finished consumer goods usually operate on the principle of 'just-in time', inventory delivery often gets interrupted by weak logistical facilities within and outside the country (Bhattacharya and Moazzem, 2013). Development of land ports should be given equal importance as the development of maritime facilities. South Asia continues to lag behind in terms of major logistic performance indicators such as international shipments, logistic quality and competence, tracking and tracing and timeliness (Table 5.14). Private sectors in land-locked countries such as Bhutan, Nepal and Afghanistan are particularly handicapped. The only solution is greater intra-regional connectivity.

Table 5.14: Logistic Performance Index of South Asia

Country	International shipments	Logistic quality and competence	Tracking and tracing	Timeliness
Afghanistan	134 (2.3)	139 (2.2)	146 (2.1)	119 (2.8)
India	54 (2.9)	38 (3.1)	54 (3.1)	44 (3.6)
Pakistan	68 (2.9)	72 (2.8)	90 (2.6)	83 (3.1)
Sri Lanka	50 (3.0)	68 (2.8)	86 (2.7)	2.9 (110)
Bhutan	102 (2.6)	111 (2.4)	101 (2.6)	111 (2.9)

Source: World Economic Forum, 2013.

(iii) Infrastructural Challenges

Most of the LDCs have experienced improvement in physical infrastructural facilities over the years in terms of better road, port and air infrastructures. However, further improvements will need to be made, particularly in terms of labour and capital productivity if LDCs are to enter regional and global supply chains from positions competitive enough

vis-à-vis other countries in developing supply chain linkages. Similarly, supply of access to power and energy has improved in most of the LDCs, but it is still of poor quality which hinders strengthening of the value chains in South Asia. Overall, quality of infrastructure, connectivity, availability of energy products and access to information technology (IT), continue to remain major concerns in most of South Asia - thus hindering expansion and intensification of the available value chains (Bhattacharya and Moazzem, 2013).

(iv) Challenges in the Business Processes

Business enabling environment in South Asia is often in a poor state in South Asia, especially as far as weaker economies in the region are concerned. Cost of business start-ups is still high particularly for small and medium scale suppliers. Complex and burdensome customs procedures have also constrained these economies in participating more extensively in the GVCs (Bhattacharya and Moazzem, 2013).

5.9 Overcoming the Constraints to Build Competitiveness of the Private Sector in South Asia

Private sector in South Asia has experienced rapid expansion over the past years in tandem with the high pace of growth of these economies, higher per capita income, growing linkages with global markets and demographic changes with increasing participation of youth in the job market. Despite the positive changes, development of the private sector has been constrained by various factors and still continues to remain, to a large extent, at the early stage of development. Overwhelming part of the private sector enterprises are micro, small and medium scale units. They will have to go a long way to operate from a position of competitive strength on a global scale. On the other hand, vertical expansion of the private sector is rather limited due to weak linkage of the firms in the production processes and lack of development of domestic supply chains with participation of firms in different segments of the chain. Barring some components of the private sector, no major structural changes have taken place in the private sector and the economies of South Asia.

Private enterprises have been growing both in manufacturing and services related activities over the past years with the rise of income in South Asia and demand for diversified products both in domestic and international markets. National policies and measures need to put more

focus on development of the manufacturing sector with the objective of higher employment generation and more value added in the economy. On a positive note it is to be mentioned that private enterprises in the service sector have been growing at a fast pace in recent years. A well-developed service sector could contribute to structural changes in the economies of South Asia and also its integration with the manufacturing sector could make the South Asian private sector more competitive. Traditional services, skill-based, technology-driven modern export-oriented services are gaining strength for a number of South Asian countries and these need to be supported. A large part of this rise in non-traditional services is linked to domestic and global value chains of exportable manufacturing products. In other words, development of interlinkage between manufacturing and service related activities through building domestic and global supply chains will likely help South Asian enterprises to participate in regional and global value chains from a position of strength.

National policies in South Asia will need to be geared more to enable the private sector to address market failures. Traditional market failures that constrain access to credit, information, skill, and marketing have continued to remain major obstacles to functioning of particularly the SMEs. Low productivity and efficiency, weak export competitive strength and the informal nature of the majority of enterprises still characterise the major part of the South Asian private sector.

Entrepreneurship development in the private sector of South Asia is at an early stage - only a small segment has developed its capacity in product development, marketing system, risk taking behaviour, and corporate culture. Attaining the status of the so called 'Schumpeterian Entrepreneurs' is still a long walk. A large part of owners of SMEs continue to carry on business with the objective of meeting the 'subsistence' need. Initiatives for the private sector of South Asia thus ought to be focused on 'building competitiveness' for graduation from 'subsistence' to 'competition'; or from 'employment generation' to 'efficiency based operation'. Building competitiveness should be pursued through developing supply chains at domestic, regional and international levels through horizontal and vertical expansion of the firms in the value chain.

National policies for enterprise development should be targeted and focused on building competitiveness of firms that could operate in a value chain from a position of competitive strength. Instead of offering support to sector components that is accessed by firms that operate

predominantly at the final stage of the production process, support should be offered to specific activities in the supply chain in a targeted manner. Southeast Asia's experience shows the advantages of such an approach. Countries should follow a strategic trade policy by creating space for building competitiveness of local firms. Such a policy should provide better opportunities for building regional ties between firms through policy support.

Building national competitiveness is a major precondition for improving competitiveness at enterprise level. Given the poor state of basic requirements for competitiveness such as poor infrastructure, weak governance, political instability, the private sector finds investment to be a risky and uncertain venture. Bringing changes to address such structural weakness overnight is difficult which is understood well by the entrepreneurs as well; but changes in attitude towards those weaknesses are possible in the short-term for which strong political will is necessary. Entrepreneurs expect positive changes in attitude so that, entrepreneurs are not constrained by 'binding constraints' and are able to take long-term decisions as regards investment. Higher public expenditure particularly in infrastructure and ensuring a conductive business environment could go a long way to stimulate the private sector in the region.

As is the case, a large number of firms belonging to the private sector in South Asia continue to operate informally without advantage of receiving any policy support. Efforts should be put in place to bring these firms under some form of formal business structure so that adequate support measures could be designed for them. A support mechanism should be built within a value chain system ensuring participation of firms at different segments of the production process instead of concentrating only on the end-segment of the process. It is to be ensured that efforts to bring 'formality' to the informal sector are not complicated and burdensome for the firms.

Corporate structure in South Asia should be strengthened with incentives for corporatisation of firms. However, the corporate sector should follow market principles, basic code of conduct, business ethics and corporate social responsibility. Corporate sector of South Asia should play the lead role towards building national as well as regional competitiveness. Major chamber bodies of South Asia such as SAARC Chamber of Commerce and Industry, FICCI, India, FBCCI, Bangladesh, FPCCI, Pakistan, Ceylon Chamber of Commerce and other business bodies have an important role to play in this transformative venture.

Governments and private sector of South Asian countries should work together to break the bottlenecks relating to lack of basic requirements for initiating and operating businesses. Obvious areas concern addressing the formidable problems of lack of electricity, lack of access to finance, inadequate supply of skilled workers, corruption and complicated tax regime. Policies and measures have to be geared towards the private sector having assured access to good finance, a conducive and business friendly environment and the needed infrastructure support. SMEs are to be supported through subsidized credit, supply of electricity at low tariff, easy way for formalization and mainstreaming of firms and by ensuring access to appropriate incentives and facilities. It is important to ensure better facilities for entrepreneurs at the pre-establishment stage so that firms have a sound idea about markets, competitors and suppliers and buyers.

There are a number of potential sectors for developing reliable and efficient regional supply chains in South Asia. Identification of these sectors ought to be given priority. Development of regional value chain has been constrained mainly because of tariff structures, NTBs, poor trade logistics at border points and underdeveloped connectivity between the countries. Land ports between member countries should be upgraded at par with that of sea ports to reduce lead time and facilitate regional and international trade. Regional connectivity between member countries including land locked countries are critical to development of private sectors in land-locked LDCs such as Nepal, Bhutan, and Afghanistan. There is scope for building regional value chains in SME products if low-cost connectivity between countries could be ensured (Moazzem and Mehruna, 2011). Non-tariff barriers need to be removed on an urgent basis. Here, signing of mutual recognition agreements (MRA) could address many SPS-TBT related NTBs. Pruning the items in the sensitive list of SAFTA member countries with a view to reducing those are important. Given the importance of intra-regional investment for building regional supply chains, South Asian countries should think of pursuing a flexibly open capital account regime for stimulating investment in regional projects. To overcome the constraints and create a business-conducive environment, suggestions have been put forward by various chamber bodies in the region. These need to be taken into consideration and acted upon by the SAARC secretariat and concerned authorities of different governments.

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Annex Table 5A: Micro, Small, Medium Enterprises (MSMEs) in India

Year	Number (in million)	Employment (in million)	Production (in crore)
2006-07	26.10	59.46	709,398
2007-08	27.28	62.63	790,759
2008-09	28.52	65.94	880,805
Yearly % change between 2005-06 and 2008-09	4.64	5.45	12.08

Source: Annual Report 2009-10 of Ministry of Micro, Small and Medium Enterprises, Government of India.

Annex Table 5B: Manufacturing Establishments in Pakistan

Issues	2000-01	2005-06	Yearly % change
Establishments (in thousands)	4,528	7,701	14.0%
Value Added (million rupees)	1,145,061	2,446,596	22.7%

Source: Pakistan Bureau of Statistics (available at: www.pbs.gov.pk).

Annex Table 5C: Manufacturing Establishments in Nepal

Number of workers	2001		2006-07		Yearly percentage change	
	Number of establish-ments	No. of persons employ-ment	Number of establish-ments	No. of persons employ-ment	Number of establish-ments	No. of persons employ-ment
10-19	1635	16,481	1912	19,647	2.8	3.2
20-49	716	19,969	755	21,793	0.9	1.5
50-99	372	25,448	392	25,706	0.9	0.2
100-199	317	43,379	229	31,818	-4.6	-4.4
200+	173	76,666	158	70,900	-1.4	-1.3
Total	3213	181,943	3446	169,864	1.2	-1.1

Source: Central Bureau of Statistics Nepal (available at: http://cbs.gov.np/?p=646

This book examines four key issues concerning growth in South Asian states, namely, making maximum use of the region's human capital resources by creating productive employment for a growing labour force; adapting to the vagaries of climate change and its socio-economic consequences; addressing intra-country growth disparities; and ensuring the continued competitiveness of private enterprise in both domestic and external markets. The governments of individual South Asian economies face a number of daunting challenges in addressing these four issues. Equally, however, they possess a number of opportunities and a variety of policy options for tackling them. One of the most important tools in this respect is regional cooperation. The need for South Asian governments to act individually in order to address the problems specific to their economies is strongly coupled with a need for these governments to act together to alleviate mutual obstacles to regional growth. This volume provides an important starting point for considering the most effective ways in which individual and collective state action may be channelled towards achieving the goal of a future South Asian growth miracle.

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