Making Growth Inclusive, Just and Sustainable in South Asia

Editors:
Abid Qaiyum Suleri
Vaqar Ahmed

SDPI
Sustainable Development Policy Institute
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## Acronyms

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<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>AIF</td>
<td>ASEAN Infrastructure Fund</td>
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<td>ANC</td>
<td>Ante Natal Care</td>
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<td>ASEAN</td>
<td>Association for South East Asian Nations</td>
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<tr>
<td>BIT</td>
<td>Bilateral Investment Treaty</td>
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<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
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<td>CGIAR</td>
<td>Consortium of International Agriculture Research</td>
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<td>CSOs</td>
<td>Civil Society Organizations</td>
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<td>DDA</td>
<td>Doha Development Agenda</td>
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<td>DFQF</td>
<td>Duty Free-Quota Free</td>
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<td>DTT</td>
<td>Double Tax Avoidance Treaty</td>
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<td>ESMAP</td>
<td>Energy Sector Management Assistance Program</td>
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<td>EU</td>
<td>European Union</td>
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<td>FAO</td>
<td>Food and Agriculture Organization of the United States</td>
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<td>FDI</td>
<td>Foreign Direct Investment</td>
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<td>FTA</td>
<td>Free Trade Agreement</td>
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<tr>
<td>GATS</td>
<td>General Agreement on Trade in Services</td>
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<td>GBV</td>
<td>Gender Based Violence</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GSP</td>
<td>General System of Preference</td>
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<tr>
<td>GTAP</td>
<td>Global Trade Analysis Project</td>
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<td>HDR</td>
<td>Human Development Report</td>
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<td>IDRC</td>
<td>International Development Research Centre</td>
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<td>IFC</td>
<td>International Finance Corporation</td>
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<td>IFPRI</td>
<td>International Food Policy Research Institute</td>
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<tr>
<td>IHD</td>
<td>Institute for Human Development</td>
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<td>ISFTA</td>
<td>Indo-Sri Lanka Free Trade Agreement</td>
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<tr>
<td>ITPGRFA</td>
<td>International Treaty on Plant Genetic Resources for Food and Agriculture</td>
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<tr>
<td>LDCs</td>
<td>Least Developed Countries</td>
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<tr>
<td>LNG</td>
<td>Liquefied Natural Gas</td>
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<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
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<td>MFN</td>
<td>Most Favored Nation</td>
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<tr>
<td>MIRAGE</td>
<td>Modeling International Relationships in Applied General Equilibrium</td>
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<td>NAFTA</td>
<td>North American Free Trade Area</td>
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<td>NTF</td>
<td>Non-Tariff Barriers</td>
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<td>Acronym</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<td>PRB</td>
<td>Population Reference Bureau</td>
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<td>SAARC</td>
<td>South Asian Association for Regional Cooperation</td>
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<td>SADC</td>
<td>South African Development Community</td>
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<td>SAE</td>
<td>South Asian Economies</td>
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<td>SAF</td>
<td>South Asia Forum</td>
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<td>SAFAS</td>
<td>South Asia Framework Agreement on Services</td>
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<td>SAFTA</td>
<td>South Asian Free Trade Area</td>
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<td>SAPTA</td>
<td>South Asian Preferential Trading Agreement</td>
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<tr>
<td>SMEs</td>
<td>Small and medium sized enterprises</td>
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<tr>
<td>TFR</td>
<td>Total Fertility Rate</td>
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<td>UNDP</td>
<td>United Nations Development Program</td>
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<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<tr>
<td>WEF</td>
<td>World Economic Forum</td>
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Preface

“Inclusive, just and sustainable growth” could only be one of the Sustainable Development Goals (SDGs) this year (2015). However, detailed discussions and lengthy debates on how to make growth inclusive, sustainable and just, have been taking place during the last several years. Public thought leaders, academics, and policy makers working in and on South Asia have also pondered over this issue more than once. One of such events was 6th South Asia Economic Summit (SAES) which was titled as “Inclusive, Just and Sustainable Growth in South Asia”.

The compilation in hand is an anthology of selected papers presented in 6th SAES. It starts with an economic overview of South Asia (Chapter 1) discussing growth opportunities that lie in the form of demographic dividend, rising middle class, global integration, remittances, service sector development as well as the obstacles and growth challenges.

After analysing the growth patterns in South Asia, an attempt is made to understand the relationship between growth, poverty and inequality in the region (Chapter 2). It was observed that growth is increasing but so is income inequality. Thus the numbers moving in and out of poverty trap in the region turn growth into a zero-sum game.

The elements missing from inclusive growth of manufacturing enterprise are discussed in chapter three. Indian bi-modal structure is compared with small enterprise structure of East Asia. Pros and cons of both the systems are thoroughly analysed. An inclusive growth of manufacturing enterprises is linked with inclusive cities and urban centres (Chapter 4). It is noted that governance, or to be precise lack of it, is one of the major causes of urban poverty. It is recommended that good parameters of governance, (growth leading to) increased livelihood opportunities, and land tenure system are the prerequisites to make growth inclusive and to reduce urban poverty.

No growth can be considered inclusive unless it takes care of more than half of the population of the region. Prevalent gender exclusion is one of the reasons of non-inclusive growth in the region. Due importance was given to gender non-inclusive growth and the issue was pondered over at length. To overcome the problem of getting gender exclusion unnoticed, up scaling of gender gap index (Chapter 5) was emphasised. It was also discussed that gender gap index, although an important tool to diagnose gender exclusion, and other indicators of gender inclusion should be given due importance. Women participation in labour force and access to finance (Chapter 6) their health and literacy issues (Chapter 7 and 9), their vulnerability to violence (Chapter 8) and their political participation (Chapter 10) were also highlighted as important indicators to measure the gender gap. It is said that accurate diagnosis is half cure. The mere realization that our growth is not gendered demands gender equity and equality in policy and practice. That is the way forward for a just and sustainable South Asia.

After discussing the core principles of inclusivity and gendered growth in general, an attempt is made to apply these principles at regional level. It was discussed that in a globalized arena, nations cannot live in isolation. A case is made that India and Pakistan should break their barriers for each other. It is argued that normalized trade relations between India and Pakistan would not only bring economic dividend for both the countries but also for South Asia as a region (Chapter 6). The speakers also emphasized that trade liberalization in South Asia should not be confined to trade in goods only. For an inclusive and sustainable growth, we need to liberalize trade in services as well. The bottlenecks and potential for trade in services is presented for South Asia with particular reference to Nepal (Chapter 8) and Pakistan (Chapter 9).
While share of services in GDP has significantly increased for all South Asian economies, yet agriculture still plays a crucial role in regional trade. An analysis was made to look into sensitivities, challenges, and opportunities involved in this sector (Chapter 10) so that intraregional efforts may be strengthened to tackle the production extremes (surplus/deficit yield). Trade in agriculture has a direct bearing on the state of food security in the region. However, trade is only one mean to address the prevailing food insecurity in the region. For a common person, one of the benchmarks for inclusive, sustainable and just growth is her/his personal level of food security. The state of food insecurity, challenges and major policy measures to improve the availability, access, and utilization of food in Bangladesh (Chapter 11), India (Chapter 12) and Pakistan (Chapter 13) was discussed at length. One of the way forwards suggested were to operationalize the regional seed bank (Chapter 14).

One of the major drivers of growth is energy. Inter and intra country disparities in energy supplies are a major bottleneck in making growth inclusive and sustainable in South Asia. The deliberations in SAES VI emphasised sustainable energy choices through regional energy cooperation (Chapter 15), exploring regional energy trade potential (Chapter 16), and hydropower development in major river basins (Chapter 17).

The anthology not only contains the academic research based pieces but also the messages of policy makers such as Secretary-General SAARC, a key parliamentarian from Sri Lanka, and founding Vice Chancellor of Sikkim University, India.

We apologise for the delayed publication of this anthology but do hope that the recommendations coming from this anthology are as relevant to current development discourse as the whole issue of inclusivity, sustainability and social justice.

Happy reading

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Section A:
Envisioning a New South Asia
A New Development Agenda for South Asia

Saman Kelegama

Introduction

In the last few decades, rapid growth and development in Asia has profoundly impacted the topography of global economic power. The emergence of the East Asian Tigers in the 1970s and 1980s and China's growing predominance in the world economy are important markers of change in this respect. Furthermore, in more recent years, the South Asian region has displayed strong and consistent growth, largely enabled by broad-based economic reforms undertaken by its constituent states in the late 1980s and early 1990s. Its average growth rate during 2003-08 was approximately 8 per cent and, despite the protracted ill-effects on the global economy of the recent financial crisis, in developed countries, the region is projected to grow quite strongly in the future.

No doubt, numerous challenges remain to be met: the persistence of poverty, difficulties associated with facilitating regional integration and inherent structural and institutional weaknesses in these economies are significant in this regard. Nevertheless, there are many reasons to be optimistic about South Asia's future economic prospects, not only because these issues are beginning (however slowly) to be addressed, but also due to a range of opportunities for further growth and development that have begun to emerge in the region. Key among these opportunities are the emergence of a “demographic dividend” as a result of the demographic transition South Asia is currently experiencing, a rapidly growing middle class, increased global integration, high human mobility and volumes of remittances, developments in the service sector, and the regional spill-overs of India’s continued and increasing economic successes. If the region is able to harness these opportunities in a manner that effectively generates stable and inclusive growth outcomes, it could become, in the near future, a player of considerable note in the global economic arena. Thus the new development agenda of South Asia should be geared to exploit these opportunities.

1 Executive Director, Institute of Policy Studies of Sri Lanka.
1. South Asia: Economic Overview

In the past, South Asia has, for the most part, been passed over in discussions of “miraculous” growth, both in Asia and the world. The last few years have, however, brought about a significant shift in such perceptions, due in no small part to India’s increasing preponderance in the global economy. Growth in South Asia has risen rapidly over the last decade. For instance, the region grew at 8 per cent during 2003-08, compared with a far lower growth rate of 4.8 per cent in the preceding five-year period. The regional growth rate based on 2010 estimates is approximately 7.1 per cent. Some commentators predict that regional growth will continue to occur at 6-8 per cent until about 2030 (Burk, 2010). Considering this growth in the context of the broader picture of the global economy, it may be observed that South Asia is currently the second fastest-growing region in the world. In the list of the world’s fastest-growing economies in 2010, two derive from the South Asian region – namely, India (in fifth place) and Sri Lanka (in eighth place).

Furthermore, a reduction in protectionist barriers by the South Asian economies at various times since the late 1970s, has improved integration at both intra-regional and global levels, while also considerably expanding volumes of trade and FDI in the region. Although many scholars point to the admittedly troubling fact that, despite this, South Asia remains one of the least integrated regions in the world, these economies are now increasingly aware of the benefits afforded by regional integration – notably the spill-over benefits of India’s vast economic success. Consequently, the process of integration is beginning to show some progress, although much more untapped potential exists in this regard.\(^2\)

China’s growing interest in South Asia, and its consequent affiliation with the region through bilateral initiatives as well as through regional trade arrangements such as Asia Pacific Trade Agreement (APTA), has also contributed appreciably to regional growth prospects. China’s share in regional trade and FDI flows, as well as aid and infrastructure-building initiatives is significant and still increasing. The total value of trade between China and the members of SAARC in 2010 for instance, was approximately US$ 80.5 billion.

South Asia’s demonstrated ability to weather the 2008-09 global financial crisis more effectively (that is, with fewer ill-effects) than many developed economies is another important characteristic of the region in the post-crisis world. It is one which marks a shift in South Asia’s favour of economic power dynamics, as the region continues to grow (fuelled by a persistently robust Indian economy) while several of the G8 economies battle recession. The reasonably balanced growth path adopted by the larger South Asian economies, which relies on the “twin engines” of growth (exports and domestic consumption), has also been credited as bolstering the region against the vagaries of the global economy.

2. Growth Challenges

It is widely understood that South Asia suffers from a number of obstacles which, if left unaddressed, could severely impede regional growth and development. Chief among these is the issue of widespread and persistent poverty which is above the level of Sub-Saharan Africa. Despite achieving favourable growth figures, policy makers in South Asia continue to struggle to find ways of making growth inclusive. Although the problem is by no means unique to South Asia, the fact that the region is home to more than 40 per cent of the world’s poor makes it one of

\(^2\) RIS (2008) shows that three-fourths of the intra-regional trade potential in South Asia remains untapped.
considerable regional and global importance. Nevertheless, poverty levels in South Asia are falling as a result of increased growth. In 1990, for instance, 43 per cent of the regional population lived in absolute poverty. By 2005, this figure had fallen to 30 per cent (Ghani 2010).

Indeed, most South Asian countries are on track to halve their absolute poverty statistics by 2015, as detailed in the Millennium Development Goals (MDGs). Furthermore, at the inaugural World Conference on Recreating South Asia: Democracy, Social Justice and Sustainable Development in 2011, the UNDP opined that currently, the region is uniquely positioned to create a “growth miracle” and thereby, eliminate regional hunger by 2030.³ This thus, if the South Asian states are able to sustain their current high levels of growth and channel them towards improving human development in the context of more inclusive economic policy, poverty levels would continue to fall significantly over the next decade.

Another challenge is regional integration, as previously observed. Despite the formation of SAARC in 1985, progress has been slow and uneven, largely as a result of inter-state political hostilities (notably the long-standing political tensions between India and Pakistan), insufficient involvement of the civil society in policy-making processes and the top-heavy bureaucratic processes among the SAARC institutions. Whether or not recent attempts to revive SAARC – particularly through SAFAS (South Asia Framework Agreement on Services) and SAF (South Asia Forum) – will be successful remains to be judged. The proliferation of issues requiring concerted regional action (such as climate change, food security and global terrorism) has increased the urgency for inter-state cooperation in the last few decades; ideally, this could help to spur a more committed effort at regional integration on the part of SAARC’s member states in the future.

The persistence of deeply-ingrained weaknesses in the structure, supporting institutions and policy-making processes of the South Asian economies is a third challenge to the region’s emergence as a significant economic power. Such a state of affairs renders these economies more vulnerable to volatility in international markets, particularly as they deepen their level of integration with the global economy. Nevertheless, some progress has been made over time in this respect: many of these economies have engaged for example, in diversification -- moving from large-scale primary product dependence to foster a rapidly-growing service sector -- infrastructure development activities, implementing regulatory reforms, and so on.

Despite problems associated with corruption and various administrative inefficiencies, the British colonial inheritance of democratic governance and other institutions (such as the judiciary and education systems) that characterizes several of these states is equally an advantage.

In order to achieve sustained regional growth and development, therefore, a considerable amount of change is required in the fabric of these economies. Some of these changes would more easily be effected by closer inter-state cooperation than by the endeavours of individual state governments; consequently, the need to improve the level of regional integration continues to loom large in South Asia’s politico-economic agenda for the near future.

³ United Nations Development Plan, “South Asian “Growth Miracles” Can Wipe Out Poverty and Hunger by 2030”.
3. A Development Agenda for Growth

Despite the existence of large and complex challenges to regional growth, South Asia’s future economic prospects do not seem dour but, rather, give much cause for cheer. This is because of a range of factors which have, in the recent past, aligned to create a significant store of opportunities for the region. These opportunities have, if appropriately exploited, the potential to generate the kind of “growth miracle” that would considerably raise South Asia’s standing in the ranks of global economic dominance. The challenge is to study the emerging opportunities and create a conducive policy environment to reap the benefits from them.

3.1 The Demographic Dividend

The first of these opportunities stems from a phenomenon termed a “demographic dividend”. South Asia is currently undergoing a demographic transition, the nature of which has important and potentially favourable implications for growth. Over the last few decades, South Asia has experienced marked improvements in population health, coupled with drastic falls in infant and child mortality rates. As an indicator, the region’s infant mortality rate (IMR) fell to 53 per 1000 live births in 2010 from 168 in the early 1950s. Over time, such a state of affairs generated a baby boom in the region. Subsequently, improvements occurred in the spread of female education and family planning as economic growth picked up in the wake of these governments’ adoption of liberalization policies. As a result of these factors, fertility rates began to fall. In the early 1950s, South Asia’s total fertility rate (TFR) was 6.1 children per woman. By 2010, this figure had fallen to 2.8.

This change over time from high mortality and fertility rates to low ones (a process described as a demographic transition) means that the generation born just after the fall in mortality but just before the fall in fertility, is relatively large in size compared to previous or subsequent groups. As this group of people approaches working-age, the region experiences a significant swell in its labour-force. Indeed, it is estimated that by 2020, excluding Sri Lanka, the rest of South Asia will have the youngest population in the world (Bloom et al., 2011). Of course, the demographic transition in South Asia has not occurred at a uniform pace across all its states. Rather, just as changes in health policy occurred in different states at different times, so too did changes in health and mortality outcomes. Consequently, today the states of South Asia find themselves at different stages along the path of demographic transition.

At the lowest end is Afghanistan, which lags considerably behind the other states. At the upper end of the spectrum is Sri Lanka, whose impressive health and mortality statistics over time has meant that its demographic transition took place well ahead of all the other states; indeed, it now faces the problem of an ageing population, as the generation in question approaches retirement age (De Silva 2007). The Maldives is also notable for the speed at which its transition was effected: it currently has the highest working-age to non-working-age ratio in the entire region.

The opportunity for increased economic growth which the demographic transition affords is called the “demographic dividend”, a phenomenon which arises out of an increase in a country’s working-age to non-working-age ratio (Bloom et al., 2011 identify, in their study of the demographic transition in South Asia, five ways in which the effects of this dividend may be experienced by an economy.
They are:

1) A swell in the labour-force due to the increase in the working-age population

2) Increased investment in physical capital, job training and technological progress as resources are diverted from spending on children

3) An increase in women’s workforce participation as a result of the decline in fertility

4) Increased accumulation of physical and human capital, and technological innovation due to increased savings (the working age is the prime age for saving)

5) A further savings boost as an increased life expectancy raises the incentive to save for a longer retirement period

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. If this excess labour can be employed in productive economic activity, the potential benefits to be reaped by the region are extensive. Apart from Sri Lanka, whose relatively early and rapid mortality and fertility declines gave the country an opportunity to reap a demographic dividend, the working-age to non-working-age ratio is still on the rise for the other South Asian states, and is estimated to peak at various times over the next four decades. Therefore, the time is ripe for these economies to take serious action – predominantly, to fashion a favourable policy environment – that would ensure their ability to capture the maximum possible benefits of this demographic change.

An attempt to speed up the process of fertility decline could be useful in several of these cases, as this would enable countries to reap their demographic dividend sooner, and may even increase the size of it. For countries such as Afghanistan and Pakistan, whose fertility rates remain the highest and second-highest in the region respectively, such considerations are of particular significance.

For the majority of South Asian states, which have already experienced a steep decline in fertility rates, the ability to harness the effects of the demographic dividend will depend more heavily on the broader policy framework of the economy. Bloom et al. (2011) consider a number of factors which are particularly important in this regard. The quality of government institutions and their ability to provide a sound base for facilitating the demographic dividend is one of these – a strong and effective government is highly desirable for converting the opportunities generated by the demographic transition into tangible economic growth. Particular attention must also be paid to labour legislation, in order to ensure that the extra labour generated by the demographic transition is productively employed and not idle. Bloom et al. (2011) suggest two alternative paths 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. 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 re-framing labour regulations. Macroeconomic management and trade policy are two other factors that contribute to an enhanced demographic dividend. The need to maintain a favourable domestic macroeconomic environment for the

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expected increase in savings and investment is important here, as well as to incentivize the export industry in order to increase employment opportunities. Another consideration is the education policy: the burgeoning services sector in South Asia requires highly-skilled workers. The demographic transition provides an ideal opportunity for swelling the ranks of this type of worker through effective investment in education. Further, such investments enhance the possibility of achieving a "high-road" form of productive employment for a larger cohort of workers in the economy.

Thus, while South Asia’s demographic transition represents an important growth opportunity for the region, it is clear that the scale of potential benefits depends almost exclusively on individual state governments’ ability to generate an economic environment which is conducive to the productive employment of labour. In the absence of such an environment, the demographic dividend will likely remain unrealized as was the case in Sri Lanka during the 1970 to 2005 period (Kelegama, 2006).

3.2 The Rise of the South Asian Middle Class

Demographic change in South Asia has also occurred along income lines in recent years. A significant decline in poverty figures has pushed large numbers of people who formerly survived on less than US $2 a day into the ranks of the middle class. In India, a country that is home to a significant proportion of South Asia's poor, and where strong economic growth has generated improvements in income over several years, this effect is particularly marked. Among the South Asian states, Sri Lanka is the other country expected to experience a large middle-class expansion within the next decade. South Asia's middle class has grown at an average rate of 12 per cent per annum over the last decade, rising in absolute terms from 24 million in 2000 to 72 million in 2010. It has been estimated that, by 2025, South Asia could boast a middle class of 1 billion people, or 55 per cent of its population (Kharas 2011). This is a significant increase from its current proportion of 4.5 per cent and, even more significantly, represents approximately one-quarter of the global total. India's middle class could, by the same year, become the largest in the world in absolute terms.

The ways in which a large and growing middle class can contribute to economic growth processes have been frequently documented. (Kharas 2011), however, identifies four particular channels through which such a process could occur. Firstly, he suggests the possibility of a positive correlation between a large middle class and democracy. This is to the extent that the principles of equality and individual rights which underlie democracy might be more likely to be realized in a country with a strong middle class, which values such features relatively highly.

Secondly, links are frequently made between the degree of entrepreneurship in an economy and the size of its middle class. Thirdly, members of the middle class contribute significantly more, at least in absolute terms, to aggregate savings and human capital investment than do their poorer counterparts – middle-income groups typically save sizeable amounts for retirement, housing and their children's education, thereby providing ample resources for capital investment. A final consideration is the relationship between the size of the middle class and levels of domestic consumption. Growth in the middle class raises demand for consumer durables and other manufactured goods. This increase in the size of the domestic consumer base encourages capital investment and fosters the development of international trade.
There is also the possibility that, once the middle class reaches a critical mass, it creates a virtuous cycle of higher consumption, higher firm profits, higher savings and investment, higher growth and, consequently, a larger middle class. A contributing feature is the middle-class’s willingness to pay more for high-quality goods. This encourages product differentiation among firms, thereby leading to higher profits for successful firms.

The new development agenda for South Asia should be fully geared to make best use of the emerging middle class to growth and development in individual countries and the region as a whole.

3.3 Increased Global Integration

Since processes of liberalization began to be adopted by South Asian states in the 1970s, the region has made significant strides in the areas of trade participation and financial openness. In terms of trade figures, both imports and exports have grown strongly over the last decade. For instance, the average export growth rate for South Asia rose from 5.3 per cent in 1997-2001 to 14.3 per cent in 2002-2006. Similarly, import growth increased from 2.2 per cent in 1997-2001 to 24.6 per cent in 2002-2008. Notably, the region’s export growth rate in 2002-08 of 19.3 per cent is significantly higher than the global average of 11 per cent.5

An important development in the region’s trade experiences of the last decade has been an expansion in its base of trade partners. Traditionally, most South Asian states supply agricultural and manufactured products to Western markets. More recently, however, strong trade linkages have developed between these states and other developing states, notably in Africa, the Middle East and other parts of Asia. Trade with China has, in particular, been expanding quite strongly since the early 2000s – aggregate trade between China and the group of SAARC states was valued at approximately US$ 80.5 billion in 2010, as stated earlier. Seeking to further expand the scale of these mutual benefits, India and China have agreed to a bilateral trade target of US$ 100 billion for 2015. As a further indicator of South Asia’s growing trade engagement with other developing states, developing countries received 38.1 per cent of South Asia’s exports and provided 43.8 per cent of its imports in 1985. By 2006, these shares had increased to 42.7 and 49.1 per cent, respectively (RIS 2008). Encouragingly, South Asia also experienced a doubling of its intra-regional trade figures from 2003 to 2008. These increases in intra-regional trade, though smaller than might be desired, are particularly important, given their contribution to the process of regional integration.

A caveat in the context of South Asia’s international trade performance is that the contribution of net exports to Gross Domestic Product (GDP) growth is only about 10 per cent. Of the remainder, 70 per cent of growth is ascribed to domestic consumption and 20 per cent to investment. Nevertheless, continuing growth in services exports could profoundly impact the South Asian trade balance in the coming years – services exports grew on average at about 22 per cent per annum during 2001-08. Furthermore, it is perhaps partly its low dependence on external demand that enabled South Asia to weather the recent financial crisis with relative success. Its share of domestic consumption in GDP is higher than that of many states in East Asia, for example, and this might be considered one of the region’s strengths, to the extent that it provides an effective buffer for growth against the vicissitudes of the global economic climate.

5 Most of the data quoted in this section is from RIS (2008) and Kelegama (2010).
South Asia’s growing presence in the global economic arena has taken the form, not merely of increased trade flows, but also of greater financial flows. In the last decade, foreign direct investment (FDI) flows to South Asia have increased steadily, with India and Pakistan marked as the region’s primary recipients of such flows. During this time, FDI has grown from US$ 6.7 billion at the start of the 2000s to US $22 billion in 2006-07 – a significant change. Between the periods 2003-04 and 2006-07, FDI inflows increased from US$ 4.3 billion to US$ 17 billion in India, from US$ 0.53 billion to US$ 4.3 billion in Pakistan and from US$ 200 million to US$ 480 million in Sri Lanka. Thus, during this relatively short time, FDI flows have more than doubled for the region’s three largest recipients. Although South Asia’s share of FDI inflows is only about 5 per cent of inflows to developing states in Asia and about 3 per cent of inflows to all developing states in the world, it is important to note that this share is increasing over time, an indicator of its growing attractiveness as a region for investment relative to its other developing country counterparts.

The greater portion of FDI in South Asia flows to the services sector, which constitutes the largest sector in the South Asian economy (and one that is growing rapidly). The region’s manufacturing sector also continues to attract modest levels of FDI, particularly in Bangladesh, India, Sri Lanka and Pakistan. In Sri Lanka, 61 per cent of 2006 FDI inflows were directed to the services and infrastructure sector. The major Indian services towards which FDI was directed in 2000-08 are financial and non-financial services (22.6 per cent), telecommunication (6.8 per cent), construction (5.4 per cent), computer software and hardware (13 per cent), and housing and real estate (4.5 per cent).

Despite the growth in FDI experienced by South Asia, a caveat is the fact that several of the poorer states are unable to attract significant financial inflows. The issue of deeper regional integration is, yet again, important in this context. This is because market size and infrastructure quality have been identified as two of the determinants of FDI inflows (Kumar 2002). Thus, increased regional integration would aid states whose domestic markets are relatively small to become more attractive investment destinations in the eyes of FDI sources. The problem of insufficient regional infrastructure, which continues to plague the South Asian region in its entirety, would far more easily be achieved through intra-state cooperation, given the cost constraints faced by individual state governments. The Association of South East Asian Nations’ (ASEAN) Investment Area represents a useful model in this regard.

An interesting development in South Asia’s process of financial integration with the world is its slow but definite emergence as a source of outward FDI. In 2006-07, FDI outflows from South Asia amounted to nearly US$ 10 billion. Of this, US$ 9.67 billion came from India, US$ 0.11 billion was from Pakistan and US$ 0.03 billion was attributed to Sri Lanka (RIS, 2008). In fact, India is beginning to be viewed as a significant source of intra-regional FDI. Such a development represents yet another means by which the states of South Asia can aid each other’s growth through closer cooperation. Thus the new development agenda of South Asia has to ensure first, that the efforts to integrate with the global economy done so far are not reversed, and second, to engage in investment liberalization in the region so that the investment-trade nexus is exploited to further stimulate intra-regional trade.

3.4 Human Mobility and High Remittances

A notable feature of migration patterns in South Asia is the high level of human mobility experienced by the region. Migration occurs both intra-and inter-regionally, and each of these forms bring to bear its own set of influences (which might be positive, negative, or a combination of the two, depending on the position argued) on the regional economy.
The number of South Asians that currently reside outside of their country of birth is approximately 24 million, or 1.5 per cent of the regional population. Although the regional giant India accounts for the highest proportion of this statistic in absolute terms, studies have found that emigration rates are highest in Nepal, Sri Lanka and Afghanistan. 43 per cent of these migrants relocate regionally, while 35 per cent live in the Middle East and 20 per cent reside in OECD countries. The migration of South Asian workers, particularly of highly-skilled professionals, is often viewed as an economic loss. Citing the phenomenon of "brain drain", some economists argue that these migrants offer meagre or no returns to the economy which expended resources for their education and training. Nevertheless, there is now equally an increasing awareness that migration can induce "brain gain" rather than "brain drain", if the opportunities it creates are appropriately exploited (Kelegama 2011). While there are several ways in which South Asia’s mobile population creates favourable opportunities for regional growth, three are of key importance.

Firstly, the dispersal of highly skilled professionals into developed countries facilitates important knowledge and technology transfers to the region. Given South Asia’s relatively low levels of R&D investment, such linkages are invaluable. The strong Indian presence in Silicon Valley, for instance, might be viewed as having contributed significantly to the development of India’s IT sector, through just such transfers. An advantage enjoyed by the region in this respect is that, while the South Asian diaspora might be smaller than its Chinese and African counterparts, it is nevertheless the most widely dispersed. This enhances the range of opportunities available for transfers that could usefully be absorbed into the region.

Furthermore, the fact that South Asians are able to work in foreign firms and multinationals, provides opportunities for fostering strategic linkages between regional and foreign markets. These “transnational networks” are particularly important to South Asia’s prospective emergence as an economic power in the global arena. The Non-Resident Indian (NRI) population is a significant contributor in this regard. Returnee NRIs have, for instance, been instrumental in establishing Indian subsidiary links with various multinational corporations, notably with highly-innovative Silicon Valley-based firms such as Google and Yahoo! Yet it is not necessarily the case that only those South Asian migrants who later return to their country of birth can generate economic benefits for the region. An example of this, is the fact that diasporic entrepreneurs who continue to reside overseas have aided India’s international economic expansion by founding international firms led by Indians. Mittal Steel represents a noteworthy model in this respect.

The second opportunity concerns worker remittances. Remittances constitute a significant proportion of capital inflows to South Asian countries. In 2008, official remittance flows to South Asia amounted to approximately US$ 66 billion. The relative importance of this contribution is illuminated by the fact that, in 2006, migrant remittances were four times larger than official development assistance to South Asia. In 2007, they were over half the size of private medium and long-term capital flows to the region. Furthermore, given the fact that a significant proportion of remittance flows through both formal and informal channels go unrecorded, the true value of remittances is likely even higher. A notable (and desirable) feature of remittances, compared with other forms of capital flows, is their reasonably low volatility. Consequently, some commentators suggest that the high levels of remittance flows to South Asia were at least partly responsible for capital inflows to the region not collapsing in the aftermath of the recent global financial crisis. Thus, human mobility in South Asia provides a means of defending the regional economy against the volatilities naturally associated with increased global integration.
The third factor arises out of divergences in demographic trends between South Asian and OECD states. As previously discussed, South Asia is currently experiencing a demographic transition, resulting in a swelling labour force. By contrast, very steep declines in fertility rates and increases in life expectancy over time have given rise to ageing populations among the OECD countries. Consequently, this latter group faces the problem of a diminishing labour force. Thus, an important opportunity has been generated for South Asia in the context of the international migration of labour. One of the concerns associated with a swelling labour force is (as previously noted), the question of how to engage these extra workers in productive economic activity. The OECD’s growing need for labour presents a solution to this problem.

A further advantage is that South Asia enjoys an extremely competitive position amongst suppliers of labour to the OECD. Previously, the supply of migrant labour to the United States was dominated by Latin America, while Eastern Europe was the key supplier of the Western European labour market. Now, however, both these regions have begun to experience a significant slowdown in labour growth as they near the end of their own demographic transitions. This creates a window of opportunity for South Asia, whose working-age to non-working-age ratio is not expected to peak for at least two more decades. The only other region which enjoys a similar position is Sub-Saharan Africa. Nonetheless, given that the size of South Asia’s highly-skilled workforce is much larger than that of the Sub-Saharan region, the former retains its position of primacy.

Having detailed the clear benefits to the South Asian economy of migration, a natural next step is to consider the ways in which the region can ensure that it experiences the “brain gain” benefits, and not the “brain drain” losses, associated with its highly mobile population. (Özden and Parsons 2011) suggest an approach to this issue which focuses on trying to ensure the temporariness of migration through a combination of incentives and penalties. Incentives include increasing the advantages of obtaining and maintaining legal migration status, reducing the costs of temporary emigration and increasing incentives for return by enhancing financial transfers (savings, social security and remittances).

Sanctions such as employer loss of right to recruit abroad and the taking of strict punitive action against those who aid illegal migration are among the penalties that might be implemented for this purpose.

3.5 Service Sector Development

As a result of structural reforms implemented over the last five decades amongst the South Asian states, these economies have experienced a significant tectonic transformation. The form of this has been a movement towards greater industrialization and, in particular, towards the development of a vibrant and growing service sector. Traditionally, the South Asian economies have specialized in the production and trade of agricultural goods. Yet, the share of these goods in GDP has fallen from almost 40 per cent in the late 1970s to less than 20 per cent in 2006. Simultaneously, service sector contributions have been on the rise, and services now account for the largest share of regional GDP – approximately 55 per cent in 2008. Furthermore, this contribution has been growing at an impressive rate. During 2002-05, for instance, the increase in service sector output as a proportion of the increase in GDP was almost 61 and 53 per cent in Sri Lanka and India, respectively. Bangladesh and Pakistan recorded a figure of 40 per cent, and Nepal and Bhutan’s service sectors remain relatively close behind with growth contributions of 40 and 45 per cent, respectively.
The importance of service sector development to South Asia's growth prospects is well-documented. Firstly, an empirical study by (Ghani 2010b) suggests that service sector development is more highly correlated with poverty reduction than is growth in either of agriculture or manufacturing. This is perhaps partly due to the fact that service sector growth is intrinsically linked with improvements in education, infrastructure and telecommunications. The fact that the fastest growing services in South Asia have been those which most require a highly-educated workforce, has generated a wealth of scholarship surrounding the notion of service sector growth as a possible model of South Asian development (Dahlman 2011). Given the fact that widespread poverty remains South Asia's greatest economic challenge to date, continued attempts to foster service sector growth therefore, seem highly desirable.

Another significant point is that there is enormous potential for growth through service sector development for South Asian states, when compared with alternative sectors. The primary reasons for this are twofold: firstly, services currently account for over 70 per cent of global GDP. This is more than twice the contribution of the manufacturing sector. Therefore, there is significant demand for services in the global market, as well as numerous opportunities for globalization via the services route. Evidence of this is widely to be found, for instance, in India's IT sector. Secondly, the production of services involves an extremely large cost differential amongst countries – one which favours South Asia. In fact, the global proliferation of the internet has enabled the benefits of such a differential to be more fully exploited, by facilitating rapid and easy outsourcing procedures.

Furthermore, it would appear that South Asia enjoys a comparative advantage in services. This arises from a confluence of economic factors which have created an environment conducive to the production of services. Key among these is the region’s possession of a workforce that, for the most part, speaks English fluently – a hallmark of its colonial past. The majority of service sector jobs require just such proficiency and South Asian workers have proved themselves up to the task; conversely, a lack in this regard has been a somewhat debilitating factor for China, for instance. Secondly, service sector occupations are relatively highly-skilled. Thus, the tradition of a strong higher education system in India has certainly been of use in creating workers that are suitable for service sector roles. A large and widespread diaspora that has gained exposure to and familiarity with the rapid advances in technology is another significant advantage possessed by South Asia; this diaspora played an invaluable role in the formation of India's IT and information services sectors. Finally, despite the glaring gaps in infrastructure which continue to plague the region, South Asia's ability to embrace modern telecommunication infrastructure in an impressively widespread fashion has also aided the development of its services sector.

The fastest growing services among the South Asian states are modern impersonal services, with a particular focus on business service, communication, banking and insurance. During 2000-06, India, Sri Lanka and Bangladesh enjoyed an average annual growth rate of more than 10 per cent in these areas. Pakistan and Nepal followed close behind, with slightly lower growth rates. Traditional personal services, such as migration and remittances, tourism and transport, have also grown steadily over the last decade, and are continuing to do so, though at a lower rate than that of modern impersonal services.

The development of services production among the South Asian economies has equally led to an increased participation by these states in global services trade. As an indicator, during 1991-2006, South Asia’s trade in services grew at 16.1 per cent, notably surpassing its merchandise trade growth of 12.7 per cent. The composition of services exports diverges quite markedly across
the region: in India and Bangladesh, computer, communications and other services dominate commercial services exports; Nepal, Pakistan and Sri Lanka demonstrate high levels of transportation and travel services; and the Maldives' service exports are dominated by travel services.

Despite the considerable progress already made by the region in terms of service sector development, much scope for further progress remains. In particular, what is required is a more concerted effort at achieving regional integration and inter-state cooperation, in order to further the development of this sector. The benefits of agglomeration afforded by the services sector suggest that, in the absence of such cooperation, these countries will be unable to reap the greater part of potential economic gains from services developments occurring within the region. Thus, it is essential to expedite the SAFAS implementation in the coming years and this could be a key element in the new development agenda of South Asia.

3.6 India's Success Story: Regional Spill-overs

Currently, one of the fastest-growing economies in the world and a significant force in the arena of international geo-politics, India's growing dominance represents one of South Asia's most important opportunities for regional growth and development. The nature of such potential is multiform; this section considers some key Indian successes that could, through closer cooperation between India and the other regional states, benefit South Asia in its entirety.

Firstly, (and arguably most importantly), we consider India's booming services sector. Its successes in this regard began in the late 1980s, with a burgeoning software industry. The dotcom bubble and Y2K boom spurred a rapid development of the industry, and established India as a primary hub for global software outsourcing. In 2008, for example, India accounted for 60 per cent of all global software outsourcing. In the early 2000s, as global investments in the IT sector slowed in the wake of the bursting of the dotcom bubble, other services industries began to develop within the Indian economy. Significant among these were IT enabled services (including Business Process Outsourcing (BPO)), pharmaceutical, biotechnological and medical services. As an indicator of the speed of service sector growth in India, the country's services exports tripled between 2002-03 and 2005-06, increasing from US$ 20 billion to US$ 60 billion.

Various hypotheses seek to identify the natural advantages which have led to India's extraordinary success in services. The fact that its rigorous tertiary education system produces a large pool of highly-skilled, English-speaking workers who are ideally suited for service sector occupations might be considered important among these. A low-cost knowledge base and business model is another; in the early eighties, the cost advantage to a US firm of outsourcing to India rather than hiring domestically was about 10 to 1. Although this figure has fallen over time, India still maintains an advantage in this respect. An ethos of quality consciousness and a competitive environment resulting from the existence of numerous small firms in the Indian IT sector are also early contributors to the development of India's specialization in services.

In terms of the regional spill-over benefits arising from this specialization, an important development is the fact that, as Indian IT and other service sector firms continue to move up the value chain of production, they have themselves begun to outsource more routine procedures regionally. South Asian states which demonstrate low wages and have a workforce that is sufficiently skilled to fill the required positions, derive considerable benefits and therefore benefit from continued developments in the Indian service sector. Furthermore, an increasing amount of attention is currently being paid to the notion that South Asia could emerge as an economic
power by fashioning itself as a global ICT outsourcing hub. Regional service sector developments are no longer confined to India but rather, have extended to the other South Asian states, notably Pakistan and Sri Lanka. Nevertheless, in order to realize such an aim, considerable efforts are required to deepen the degree of regional integration within South Asia, as well as to improve the regional infrastructure necessary to sustain a vibrant service sector. Endeavours to improve education and to lower establishment costs in order to foster a favourable business environment are also desirable. (Hamid 2007) argued that a “flying geese” model in South Asia can be in IT services and this hypothesis cannot be ruled out.

A final consideration is the fact that Indian service-sector firms are increasingly moving towards economic activity that involves knowledge production. For example, certain Indian pharmaceutical companies have begun to develop new drugs, rather than merely producing low-cost, generic versions of existing drugs, as was previously their practice (Roy 2005). If, in this manner, India is able eventually to establish itself as a centre of research and development, the potential spill-over benefits to the region – in terms of knowledge and technology transfer – would expand considerably. Yet again, however, the realization of these benefits depends crucially on the states’ ability to integrate effectively, both amongst themselves and with India.

A second Indian “success” which could benefit the region is its emergence as a source of FDI outflows. As previously discussed, capital inflows to South Asia have been on the rise in recent years. Equally, however, growth in the Indian economy has spurred a culture of Indian investments overseas. India’s FDI outflows have grown appreciably in the last five to ten years: as stated, they grew from US$ 5 billion in 2005-06 to US$ 12.8 billion in 2007-08. Notably, much of India’s FDI is directed towards developing states, a significant proportion of which are regionally located. Several large Indian firms have also been involved in a number of cross-border FDI initiatives. Examples of this are Tata’s purchase of Tetly, Tata Motors’ purchase of Jaguar/Land Rover and Tata Steel’s purchase of Corus (RIS, 2008). Thus, India is beginning to become an important FDI source for the region; it is Sri Lanka’s third-largest source of FDI at present, for example. As is the case with service sector development, however, deepened regional ties are desirable in order to ensure that higher levels of Indian FDI flow intra- rather than inter- regionally.

India’s system of tertiary education is another resource that could be exploited for regional gain. The successes of numerous graduates of Indian universities who live and work in developed – and particularly Western – states have generated global recognition of the quality of the Indian higher education experience. As previously noted, this has been a key ingredient in India’s service sector boom. The Indian Institutes of Technology have, in particular, established for themselves an international reputation of excellence. Thus, other South Asian states whose education systems lack such recognition could benefit greatly by fostering education-based linkages with India. The establishment of the South Asian University in New Delhi in 2010 (an initiative of the SAARC) represents an important first step in this regard.

India’s health services is another area from which the South Asian neighbours could benefit. Heart surgery, bone marrow transplant, liver transplant, knee replacement, and cosmetic surgery in India are far cheaper than the same performed in the US, UK, or Thailand (CUTS 2005). Medanta – a medicity in the Gurgaon city is now a world class hospital that offers a plethora of medical services to the region and the world. Spill-overs from such advanced services are already visible the region in the forms of Apollo hospitals, joint ventures with Escort Heart Institute in neighbouring countries.
In addition to its prominent position in the arena of global services trade and capital flows, another unmistakeable feature of India's growing preponderance is its significant cultural influence. The widespread nature of Indian's 'soft power' represents another potential source of South Asia's rising global significance. Perhaps most obviously, the Indian television and film industry has successfully established itself (both domestically and internationally) as a significant cultural hallmark and revenue source. As an indicator, more feature films have been produced in the last few years in India than in any other country – it produced, for instance, 1164 films in 2007 (Debroy 2007). Furthermore, the Indian film industry award ceremonies are increasingly held overseas; its films are shot on location at international sites and a small movement of industry workers (such as actors, directors and the like) has begun to occur between Bollywood and Hollywood. The international fame of such individuals as the Booker Prize-winning writers Salman Rushdie and Arundhati Roy, and the highly-influential producer Ismail Merchant (of the film company Merchant-Ivory) has also contributed to the creation of a certain cachet for Indian culture. In a broader sense, Indian cuisine, music, fashion, yoga, and sport (this last particularly as a result of the establishment of the Indian Premier League in cricket) are all enjoyed by a wider international consumer base. Consequently, India's infiltration of international markets is far more wide-reaching than mere economic indicators such as trade or investment figures might suggest. This global reach and recognition is, by extension, equally of value to South Asia, and the importance of such "soft power" initiatives to the region's economic prospects should not be overlooked.

4. Concluding Remarks

Despite the continued challenges posed by poverty, structural and institutional rigidities, global economic volatility and the slow progress of regional integration, the unique and important opportunities currently afforded to South Asia have poised it on the brink of a period of significant economic growth. If appropriately harnessed, these opportunities could establish the region as a growing economic power of considerable note. Its success in this regard will, however, depend crucially upon India's continued economic achievements, and the region's ability to absorb the consequent spill-over benefits from Indian growth. This in turn, relies upon a far greater level of regional integration than is currently being experienced. Yet, despite the relative slowness of the process, greater attention is now being paid to achieving just this. If, during the next few years, South Asia is able to overcome geo-political concerns and improve regional integration, particularly with India, to a more desirable level, it could well fulfil its potential for becoming the Asian continent's newest economic "miracle". As (Kishore Mahbubani 2008, p.9) said: "...optimistic outcomes do not happen on their own. They require decisive human intervention. The time to act is now."
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Section B: Inclusive and Sustainable Growth
Growth, Poverty and Inequality – The South Asian Experience

Jean-Luc Stalon

Growth and Welfare in Asia

Over the last few years, inclusive growth has become a popular topic. There is no doubt that faster economic growth is associated with faster poverty reduction; however, the relationship varies across countries and periods. Several countries experienced only limited changes in poverty despite satisfactory growth performance whereas poverty fell in some countries where growth had been very modest. This paper looks at this relationship within the South Asian context.

1. Accelerated Growth

Both East Asia and South Asia have witnessed a considerable acceleration of growth in recent decades. In terms of per capita Gross Domestic Product (GDP) growth, the acceleration has been from 5.03 per cent in the 1970s to 8.00 per cent in the 2000s in East Asia and the Pacific, and from 0.55 per cent to 4.96 percent in South Asia. Available data show that since the early 1980s, there has been a distinct strengthening of the growth momentum. The proximate drivers of this growth spurt included the sustained investment boom, cumulative productivity-enhancing effects of reforms, an unusually buoyant international economic environment, a higher productivity, increased flow of workers’ remittances, and a demand-and technology driven acceleration of modern services output. This growth acceleration has also taken place as a consequence of a series of economic reforms that the developing Asian countries undertook at various times in recent decades. Overall reduction in domestic interest rates facilitated by low inflation and accommodative monetary policy and commitment rules-based fiscal policy have also led to acceleration of real GDP growth.

<table>
<thead>
<tr>
<th>Table 1: Annual Per Capita Growth Rates</th>
<th>World Regions (1970-2009)</th>
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<tbody>
<tr>
<td></td>
<td>1970s</td>
</tr>
<tr>
<td>South Asia</td>
<td>0.55</td>
</tr>
<tr>
<td>East Asia &amp; Pacific</td>
<td>5.03</td>
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<tr>
<td>Middle East &amp; North Africa</td>
<td>3.46</td>
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<tr>
<td>Sub-Saharan Africa</td>
<td>1.26</td>
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<tr>
<td>Latin America &amp; Caribbean</td>
<td>3.19</td>
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<tr>
<td>Europe &amp; Central Asia</td>
<td>n/a</td>
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<td>World</td>
<td>2.09</td>
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Source: World Development Indicators, 2011

For a part of the world that holds about two thirds of 1.4 billion of the world’s poor, this growth acceleration is good news. However, there has been much debate in the region as to how far the higher rate of growth has translated into a better life for the people at large. Recently many have

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6 Deputy Country Director, UNDP Pakistan
pointed out that developing Asia has two faces; a “shining” one that is internationally competitive and able to participate to globalization and a “suffering” one with an unacceptable large number of people who are deprived of their basic human needs and rights with rising inequality (Ali and Zhuang 2007).

2. Increase of Income inequality

South Asia has generally been viewed as a sub-region with relatively low inequality. Inequality in South Asia declined in the 1980s, but it increased in the early 1990s. In the early 1980s, Pakistan was the highest in terms of equality, with a Gini coefficient of about 0.46, followed by Sri Lanka and Bangladesh. With a Gini index of about 0.30 in 1980, Nepal had the lowest inequality index observed in South Asia region. By the mid-2000s, Nepal was the most unequal society with a Gini index of 0.47, followed by Sri Lanka and India. In Bangladesh, income inequality declined significantly in the 1980s – from 0.39 in the early 1980s to 0.28 in the early 1990s. But since then it started to rise and now it stands at 0.31. In Sri Lanka, the trend in consumption inequality has been very similar; a sharp decline in the 1980s – from 0.45 to 0.33, and followed by an increase to 0.41 between 1990 and 2005 (Figure 2a). In India and Pakistan, the largest countries in the sub-region, some uncertainty remains over how inequality has evolved, because of difficulties with data comparability. The available estimates suggest that inequality in India and Pakistan has been rising – particularly since 1990. In India, inequality increased by 4 percent in the 1990s.

3. Decline of Poverty

In Asia, a faster rate of growth achieved in the recent past has been accompanied by rising inequality. What has been the consequence of this ‘higher growth accompanied with inequality’ for the pace of poverty reduction? South Asia is now ahead of only Sub-Saharan Africa among developing regions in terms of the percentage of population below the poverty line, though it fared better than East Asia on this count in 1990. East Asia had 56 per cent of its population living on less than $1.25 a day in 1990, compared to South Asia’s 51.3 per cent. However, 15 years later in 2005, East Asia had 18 per cent of its population living in extreme poverty as compared to South Asia’s 40 percent. In South Asia, the absolute number of poor increased from 548 million to 596 million during 1981-2005. As a share of the population, South Asia’s poverty rate did fall, but because of population growth it was not enough to stop the increase in the number of poor.

4. Growth and Poverty Reduction

So far, we have looked at the record of growth, inequality and poverty in isolation of each other. We now bring them together in order to make an initial assessment of the inclusiveness of growth. Around the world, the general experience is for economic growth to be accompanied by falling poverty.

Based on the rate of $1.00 a day poverty reduction with economic growth, growth of 1 percent in average income is associated with a 3.0 percent decline in the incidence of poverty on average in the world in the 1980s, but the growth elasticity of poverty declined to about 1.3 percent in the 1990s and 2000s. For South Asia, a 1 percent income growth is associated with 0.7 percent decline in poverty incidence in the 1980s and 1990s, but the elasticity declined to 0.4 percent in the 2000s.

Based on rate of $1.25 a day poverty reduction with economic growth, growth of 1 percent in average income is associated with a 2.1 percent decline in the incidence of poverty on average in the
world in the 1980s, but the growth elasticity of poverty declined to about 1.0 percent in the 1990s and 2000s. For South Asia, a 1 percent income growth is associated with 0.5 percent decline in poverty incidence in the 1980s and 1990s, but the elasticity declined to 0.3 percent in the 2000s.

The above analysis indicates several points. First, acceleration of growth in Asia in recent decades is marked by rising income inequality on the one hand, and significant poverty reduction on the other. Second, even though rising inequality has not been strong enough to aggravate poverty by neutralising the effect of growth, the pace of poverty reduction slowed down in many countries. Third, the growth elasticities vary across the different poverty lines. Fourth, even though the growth elasticities for $1.00 poverty rate is similar to those reported by earlier studies, the elasticities for $1.25 and $2.00 poverty rates are substantially lower. This suggests that growth impact of poverty is actually lower than many earlier studies indicated. Fifth, the growth elasticities of poverty declined over the period indicating a weakening relationship between growth and poverty over the period. Sixth, the elasticities for South Asia have turned out to be much lower than those for East Asia or other developing regions. The elasticities for South Asia have also declined over the period despite acceleration in economic growth. Seventh, the growth elasticities of poverty have generally been lower in Asia compared to other regions or global average indicating that growth has not served the poor more favourably in Asia than elsewhere in the developing world. Overall the above analysis suggests that Asia’s recent high economic growth has been inclusive in some dimensions (poverty) but not in others (inequality).

5. Why economic growth has not been inclusive

The literature has pointed out many factors as determinants of inclusive growth. The following general factors are widely believed:

1. **Sectoral Pattern of Growth**: Sectoral structure of the economy and sectoral growth have been commonly believed to be important to the attainment of inclusive growth, with a common premise that stronger growth in the agricultural sector would promote faster poverty reduction. The pattern of growth that is fuelled most by the sector which is labour intensive would be inclusive and inequality reducing such as agriculture (Montalvo and Ravallion 2009; Pasha and Palanivel 2005). If what matters is pattern of growth for poverty reduction, then the sectoral growth rate in which most of the poor are employed becomes more important than the overall growth rate (Montalvo and Ravallion 2009). It is commonly believed that an agriculture-led economy and agriculture-led growth promotes faster rural poverty reduction, and because rural poverty tends to dominate overall poverty in most countries, overall poverty is expected to fall faster with an agriculture-driven economic growth. It has been noted, however, that this does not necessarily apply for all countries. Moreover, structural changes that shift production process away from the agricultural sector, which is labour intensive in developing countries, to the manufacturing or services sectors, which is relatively capital intensive, would result in overall reduction in utilization, and subsequently, reduced income share of labour. Such a shift would affect the poor unfavourably because by definition, the poor are those who have relatively abundant labour endowments. It is therefore, through the channel of employment that sectoral pattern of growth becomes important for poverty reduction and inequality. We will now analyse the link between inequality, poverty and economic growth by looking at the pattern of structural transformation and employment with a particular focus on South Asia.
Structurally, economies of developing Asia are different. A prominent and shared feature of the South Asian economies is the relatively larger increase of the services sector share in output when compared to the industry’s share in the last 40 years. In India and Nepal, the two countries with the highest increase in the services sector’s share in output, the contribution of the sector changed from 17 and 37 percent in the 1980s to 39 and 55 percent in 2009 respectively for the services sector, and for industry the increase has been moderate, from 17 and 25 percent in the 1980s to 22 and 28 percent in 2009 respectively.

As mentioned earlier, growth in the agricultural sector is important for inclusive growth. Relatively higher agricultural growth in the 1980s contributed to rapid poverty reduction in South Asia, as well as in China between 1979–1984 and 1995 - 1997 (Ravallion and Chen 2007). However, it is important to note that, without consideration of existing inequalities in the ownership of productive assets, agricultural growth per se does not suffice as the reason for poverty reduction.

As is evident from the present and evolving sectoral structure of the economy, the agricultural sector, which is home to the majority of the poor has been growing slower than the other two sectors in both South and East Asia. Agricultural growth has also decelerated in the 1990s in many Asian countries. This is part of the answer to the question of why economic growth has not been benefitting the poorer segments of the society, particularly in recent decades. What is not so evident is what may be causing this sluggish growth performance in the agricultural sector.

There is also evidence that the manufacturing sector has taken a more important role as the driver of employment and poverty reduction in some East Asian countries. This is a departure from the experience observed in many other Asian countries, where agriculture was seen to have been more instrumental to inclusive growth.

2. Employment Growth: Another important dimension in the nexus of growth, inequality and poverty is employment. Even though economic policies may increase the access of the poor to productive resources such as land, capital, physical and financial infrastructure, the effectiveness of policies to reduce poverty does not depend on the increased entitlement to rent or annuity from such resources but how intensively, productively and remuneratively the poor are employed (Khan 2005).

The average annual employment growth rate has been declining in most regions of the world, with the exception of South Asia. An obvious reason is reduced labour use as a result of capital deepening which also results in higher labour productivity (Drabu 2003). In South and East Asia, structure of manufacturing output has been changing towards technology intensive products, which suggest capital deepening. In labour abundant countries, using more capital intensive technologies in manufacturing results in fewer opportunities for labour. Compared to the 1980s, the share of labour based manufacturing production in both East and South Asia has declined from 27 percent each in the 1980s to 16 and 19 percent in the 2000s respectively. In tandem with this decline, the share of technology based manufacturing increased from 48 and 42 percent in the 1980s to 54 and 58 percent in the 2000s.

Pakistan has the highest rate of employment growth in the region followed by Bangladesh. However, despite increased employment growth, the impact of increased employment has been limited in reducing poverty in Pakistan. Based on $1.25 a day poverty measurement,
Pakistan’s growth elasticity of poverty has declined from -0.95 in the 1990s to -0.27 in the 2000s (Table 4). One reason for such a limited effect on poverty is the sectoral concentration of economic growth. During the high-growth episode of 2004-07 Pakistan owed its high growth to capital inflows and worker’s remittances (Felipe and Lim, 2008). The kind of jobs which have been created during that time were thus, mostly in sectors such as IT and banking, all of which require highly skilled labour when compared to other sectors such as agriculture, rarely provide opportunities for poor people who lack marketable skills in those areas. In India growth elasticity of employment has been low, one percent of economic growth resulted in only 0.28 percent of employment in 2000s, lower than what it was in 1990s (Figure 13). Most of employment generation took place in the services sector. These different country experiences, particularly of India, indicate that employment growth is a necessary but not a sufficient condition for economic growth to reduce poverty. Despite registering higher employment growth, the impact of employment on poverty reduction has been limited in South Asia due to low labour productivity growth. Because labour productivity is lower in South Asia, a substantial share (45%) of the global working poor is located in South Asia. Globally, the number of working poor (and their families) declined from 875 to 632 million in the last decade, but it remained constant at 285 million in South Asia (ILO 2011).

In a growing dynamic economy, both employment and productivity can grow. However, many developing countries in the world are faced with challenges of 21st century globalization which breaks the traditional productivity-growth link between sectors. There are many ways in which the traditional endogenous growth structure may break down for developing countries. First, in open economies, the link between agricultural production and domestic demand for food stuffs may disappear due to cheap food imports which would break the backward and forward linkages between agriculture and industry (Heintz 2009, Ghosh 2008). This may result not only in eliminating the incentive to improve productivity in the agricultural sector due to low price signals, but also low prices may destroy the existing agricultural sector creating an unmanageable rural-urban migration. Second, as countries develop, the changing structure of production towards industry and manufacturing may not be accompanied by an equal rise in manufacturing employment due to increases in productivity. Such have been episodes of, “jobless growth”, in India and South Africa recently (Heintz 2009). Third, the experience of structural change among many developing countries has been a move away from agriculture to the service sector, almost skipping manufacturing and industrialization due to the availability of cheap manufactured imports. Therefore, for many developing countries structural change may mean bypassing industrialization and concentration of employment in the services sector (Ghosh 2008; Heintz 2009; UNRISD 2010) resulting in low productivity employment for the majority of the population thereby resulting in increased poverty and inequality.

3. **Public Spending and Inclusive Growth**: Given the diverse impacts of growth on poverty, it is clear that growth alone won’t reduce poverty. Another channel through which to make economic growth inclusive is to include poor people as beneficiaries of public spending. Poor people consume more public goods than rich people, hence increasing public spending that would automatically increase levels of living standards of a very large number of people, particularly in the Asia and the Pacific as the region is home to the highest number of poor people in the world.

Growth and pro-poor social policies accelerate poverty reduction and help reduce inequalities which have risen significantly. Additionally, social spending not only provide
poor people with basic needs and allow them to break the poverty trap for better earning opportunities through provision of education and health services, but such spending also protect poor people from external shocks, such as natural disasters and food and fuel crises.

Public Spending on education and health is low both in South and East Asia compared to other regions in the world. Only 4 percent of GDP is spent on health in both sub-regions; 2.4 percentage points lower than in Sub-Saharan Africa, 3 percentage points lower than in Latin America. Additionally, the majority of the expenditure is covered by private means. According to WHO World Health Report (2006) private expenditure on health as a percentage of total expenditure on health is more than 50 percent in recent years in 14 out of 21 countries in the region. This suggests that the private sector is the main provider of health services in the majority of Asia-Pacific countries; a very high proportion of private expenditure is ‘out-of-pocket’. Annual average public spending on education is generally lower in South Asia when compared to East Asia. It is lowest in Pakistan (2.1), Nepal (2.3) and Bangladesh (2.0). Public health spending patterns in South Asia are no different than spending on education. In South Asia; health spending as a share of GDP is lower than in East Asia (Figure 25). In Pakistan, Nepal, and Bangladesh the share of public health spending is less than 1 percent of GDP. Even though it is one of the lowest in the world, the ratio of public spending in GDP has declined in Pakistan from an already low 0.85 percent in 1990 to 0.75 percent in 2000.

The emerging picture of existing social and physical infrastructure levels suggest an urgency to increase social spending in South Asia, not only to make economic growth more inclusive, but also sustainable. Another boundary to inclusive growth is through the provision of equal access to physical infrastructure. Availability of physical infrastructure such as roads, water pipe systems, irrigation canals, electricity, and easy access to information, such as the internet reduces transaction costs for the poor to access economic opportunities. More and better quality infrastructure availability would de-link the connection between investment and private wealth especially in rural societies, where markets are highly localized, with access to services such as irrigation canals, a better commute. Technical assistance enables peasants to be more aware of opportunities and to access such opportunities with less cost and increased participation in various markets, which in turn would result in more efficient resource utilization and higher incomes (Unal 2008).

6. Conclusion

It is clear that Asia and the Pacific region have a rough road ahead; rife with challenges and opportunities. The biggest challenge in our view is to make economic growth more inclusive; as poverty is still the most pressing issue in the region. First, inequality has been increasing, and this has a negative impact on the performance of economic growth and on poverty reduction. Predominantly, the rural urban divide fueled by the concentration of economic activities, and increasing skill premiums on wages are among the main reasons for increasing inequalities. Second, globalization has a changing face with increased production and knowledge sharing, higher participation of women to the world labour markets, and has a technology-bias, which favors the better educated. Third, the agricultural sector has been neglected by governments, thereby growing slowly, but many people are trapped in the sector in the absence of adequate non-farm employment growth. Fourth, structural changes have been skipping the manufacturing stage, and people are crowded into low productivity informal service sector jobs. Fifth, some of the South Asian countries have very low social and physical capital which pose very significant threats to social stability and
sustainable development. Finally, empirical evidence does not support a clear cut recipe to make growth more inclusive, however, from the analysis a couple of key messages emerge that may point towards a more inclusive path in economic development.

From a brief analysis, what emerges is the need to have a growth pattern that creates employment. There is also evidence that the manufacturing sector has taken a more important role as the driver of employment and poverty reduction in some East Asian countries. This is a departure from the experience observed in many other Asian countries, where agriculture was seen to have been more instrumental to inclusive growth. This suggests using more labour intensive technologies or creating non-farm jobs in rural areas.

There is a clear correlation between the level of social expenditures by the government and the inclusiveness of economic growth attained in Asian countries. The obvious policy implication is that the pursuit of economic growth would be enhanced (i.e., promote more inclusive growth) by deliberate allocation of greater public expenditures to health, education, and mass housing. Therefore, policies and programmes that tackle risk and vulnerability through prevention, mitigation and coping strategies are also an important component of inclusive development.

Labour markets in developing countries tend to be highly segmented, with different wages and conditions of employment in each sector and limited mobility from “less productive” to “more productive” jobs. Consequently most of the poor people are working but have poor employment conditions and earn little. The lack of sufficient productive and decent employment opportunities is a major bottleneck to reducing poverty rapidly. It is also an increasing source of social and political instability. In this context, creation of sufficient productive employment and decent work through promoting employment-intensive growth should be an important element of inclusive growth. For employment-intensive growth to translate into poverty reduction, it must occur in a “more productive” sector, while “less productive” sectors may require productivity-intensive growth to ensure a decline in poverty.

Many developing countries suffer from huge gaps in basic infrastructure such as rural roads in urban centres, drinking water, irrigation, sanitation, schools and health centers. By raising labour productivity and lowering production and transaction costs, these infrastructures can contribute to economic and social development that promotes inclusive growth.

In most developing countries, financial services are only available to a minority of the population. In this context, inclusive finance -- appropriately designed loans for poor and low-income households and for micro and small-sized enterprises, and appropriate insurance and payments services -- can serve to increase production and employment and help people help themselves to increase incomes, acquire capital, manage risk, and work their way out of poverty.

With mounting natural resource scarcity – including land, water and energy – people living in poverty, who depend disproportionately on the environment for their livelihoods, risk falling further behind. Policies that promote ecologically-diverse, low-emissions and climate-resilient will put economic growth on a more inclusive and sustainable path.

One of the main features of 21st century globalization is the fact that it is technology biased. Hence, for sustainable economic growth, improvements in social and physical infrastructure require immediate attention from policy makers in South Asia, not only to progress in modern economic development to ensure better lives, but to keep up with modern economic growth.
Manufacturing Enterprise, Growth and Inequality: An Asian Perspective

Edgard R. Rodriguez

The thoughts presented here are based on a recent publication by my organization, the International Development Research Centre (IDRC), titled: Manufacturing Enterprise in Asia: Size, Structure and Economic Growth”. The book represents part of a major piece of research from a project with the Institute for Human Development (IHD), funded by Canada’s International Development Research Centre (IDRC): “Formal and Informal Employment Growth in Manufacturing (India and Bangladesh)”. As part of the project, the authors produced a comparative survey of the distribution of enterprises by size across Asia, including India, Japan, Taiwan, Korea, Thailand, Bangladesh and Vietnam.

The book contributes to the existing literature by presenting evidence on how different patterns of enterprise growth produce differentials in productivity and thus shape economic inequality throughout Asia. At a time when Asia is experiencing increases in inequality, this research is both timely and valuable. The present summary focuses on the case of India and Korea to illustrate the equitable and dualistic patterns of enterprise growth while drawing lessons from the different patterns of enterprise growth.

1. The “Missing Middle” in India: the Bi-modal Structure

The manufacturing sector has been characterized by a pronounced dualism with strong modes at the low and high size groups, a conspicuous “missing middle,” and an unusually large productivity gap between the two. A substantial amount of employment is in household enterprises which operate in the owner-worker’s household with no help or just one or two hired workers. The productivity of labour is quite low in these units, with their non-mechanized technology. But modern industry has grown extensively outside the household subsector. Even in the no-household sector, however, labour productivity is low. This is due to the dualism in non-household manufacturing (which has been referred to as the “missing middle”). Indian manufacturing in the non-household sub-sector with extensive use of hired labour has a strong bi-polar distribution of employment: the lower mode of small units with fewer than 10 workers and a higher mode of large-scale units employing 500 or more workers. The productivity (and wage) gap between these two strong modes is very large.

The bi-modal structure, with a large productivity gap, has led to relatively low productivity in manufacturing as a whole. This in turn has slowed down the growth rate of manufacturing in both the domestic and export markets and has produced the unusual pattern of growth led by services. The problem of inequality in the growth process is also partly due to relatively faster development of services and to dualism in manufacturing itself.

The phenomenon of the missing middle is also responsible for slowing down the growth of skilled labour. In East Asian development, it is precisely the growth of SMEs (small and medium sized enterprises) which has been responsible for the wide diffusion of technology and labour skills demanded by modern enterprise—often facilitating the process emanating from large firms through an elaborate system of subcontracting.

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7 International Development Research Centre
The market for manufactured goods has in fact been segmented, with the low-end sector catering to the needs of poor consumers with low quality cheap goods, while the large-scale sector has produced high-end consumer goods for the upper-middle classes, and intermediate goods. The recent growth of the middle class, touted in the popular press, is on examination not found to be anywhere as important in relative terms as other strongly developing Asian economies like China.

The bi-modal structure in manufacturing has been a major factor driving the increase in inequality in the Indian growth process. First, the dualistic structure itself creates inequality in the distribution of earnings within manufacturing. Second, the growth process driven by the tertiary rather than the manufacturing sector (and which is partly a consequence of the peculiar size-structure of the latter) adds to inequality. It has been shown that the earnings distribution is more unequal in services since they include high-income business and financial services and low-earning trade and services.

2. The Classic East Asian Model: the Small-Enterprise Structure

In the classic East Asian model, the size distribution in manufacturing has been more even with the small and medium-sized enterprises contributing as much to growth as the large ones. A second feature of this type of size-structure is that the economic distance between the small and large units (in terms of labour productivity and wage difference) is much smaller than in the missing middle. The Japanese model of development in the first three decades of the 20th century was the original pathfinder in this pattern of development. Taiwan and Korea also followed this model after the Second World War.

In all three East Asia cases, modern industrialization was led by large enterprises with the new manufactured products going disproportionately into exports. But very soon the small and medium-sized enterprises started playing a much more crucial role in terms of both employment and value added. Although exports continued to be important in the demand expansion for manufacturers, a large share was accounted for by the increase in the size of the domestic market for such goods. In the case of Japan, it was possibly the impetus provided by the disruption of the world market during the First World War that led to relatively greater importance of the domestic market. For Taiwan the experiment with large-scale export-oriented firms was short-lived. Korea was unique in having a deliberate and successful government policy, adopted in the mid-stream of its industrialization (around 1975) which shifted the size-structure towards greater participation of SMEs.

Unlike the Indian case, all three East Asian developments were led by the manufacturing sector, not the tertiary. The domestic market for manufactured goods expanded at a significant rate, partly because the equitable distribution of income shared the gains of growth over a wide section of the population. In fact, the equitable distribution and growth of manufactured consumer goods fed on each other. The East Asian scenario contrasts with that of India, where the pattern of growth led by the tertiary rather than the manufacturing sector and increased inequality reinforced each other.

An important feature of East Asian growth which supported both the markets for manufactured goods and equitable growth was the increase in labour productivity in agriculture. The East Asian economies were as much agrarian economies at the beginning of their period of industrialization as India. Thus a substantial growth rate of labour productivity in this sector would pull up the growth rate of the whole economy. Labour productivity growth in agriculture is determined partly by growth in land productivity and partly by the reallocation of labour from agriculture, as surplus labour is transferred to non-agricultural activities.
The East Asian economies benefitted from progress on both fronts in the course of their economic development. Land productivity in Taiwan and Korea in particular was enhanced by sweeping land reforms after the Second World War. This was aided by a greater rate of reallocation of labour to non-agriculture than in India. At least part of this difference could be attributed to the pattern of growth in manufacturing, and more specifically to the difference in its size distribution. Between 1985 and 2004, India’s rate of reallocation of labour from agriculture was 0.7 percent growth per annum. This contrasts with Taiwan’s 2.0 percent in the 1960-75 period, and Korea’s 1.5 percent over the years 1965-1988. Agricultural productivity per worker relative to GDP per worker can be expected to decline with industrialization since labour productivity is so much higher in industry. But it could be expected from the record of reallocation of labour that the decline was much sharper in India than in either of the other two.

3. The Result of Competing Structures

If the reallocation of surplus labour was so much larger in the two East Asian economies during their post-war industrialization, why do we not see inequality rising more in these economies than in India? The Kuznets hypothesis had predicted that with reallocation of labour to high-productivity sectors, we would expect inequality to increase. In fact, both Korea and Taiwan might have seen some trend toward increasing inequality in the early years of their development, but this period was extremely short. Inequality declined sharply in the later decades of growth in both economies, while in India we have the picture of rising inequality as the growth rate increased.

The outcome in the dynamic process of growth and equity depends on the relative strength of two broad groups of factors. While an increase in income differences “between sectors” can be expected to increase inequality, it could be offset by the effect of decline in income differences “within sectors”. The more even size distribution of enterprises in the manufacturing sector produced a significantly smaller degree of “within sector” inequality relative to the bi-modal size structure in Indian manufacturing. This applied both to wage and entrepreneurial earnings.

Further, the more equal distribution of income in manufacturing could be expected to induce a less unequal distribution in services as well, because the pattern of demand for low- and high-income services would be less bi-modal than in the case of India. We have already seen that although the income difference between agriculture and the other sectors increased over the period of growth both in Taiwan and Korea, the relative decline was at a significantly slower rate than in the case of India—partly because the rate of reallocation of labour from agricultural was so much higher. Thus the diminishing “within sector” inequality within the individual sectors was strong enough to overwhelm any increase in “between sector” inequality in the East Asian economies.

In studying the impact of the bi-modal size distribution in manufacturing on the growth rate of the economy, the starting point is a set of three observations:

- The growth rate of manufacturing is constrained by the rate of expansion of demand for manufactured goods. (This is contrary to the assumption of the prescriptive planning model, in which the growth rate is constrained by supply factors, and the production of producer goods in the capital goods sector.)
- There is surplus labour in agriculture and the expansion of demand in manufacturing is directly related to the growth rate of employment in the manufacturing sector.
- But labour is not homogeneous in the non-agricultural sector. There is a hierarchy of wage and productivity levels directly related to the size of the enterprise. Thus the rate of expansion of wage incomes and the demand for manufactured goods, which the transfer of
labour from agriculture ensures, depend very much on the point of the "ladder" where labour is employed.

A size distribution with two strong modes and a missing middle implies that a great deal of employment is created at the low end of the size distribution. Because of the low labour productivity in this size group, employment per unit output is by definition high. But because of the relatively low wage per worker, the income per consumer unit among such workers is also low. The demand for manufactured goods for this low level of consumption per capita also tends to be very low. Thus, although employment is large in the short run, the rate of expansion of demand for manufactured output is much less than would otherwise be the case. There is then clearly a trade-off between the volume of absorption of labour in manufacturing in the short run, and its rate of growth over time.

Second, the low productivity of labour, working at low levels of technology, means that the economy is generally not very competitive in export markets. Thus, the demand expansion of manufacturer output is constrained by the limitations of both the domestic and the export markets.

The low rate of growth of employment in manufacturing has a multiplier effect. In a surplus labour situation in agriculture, the increase in income per capita among farm households is determined partly by the increase in land productivity, but also significantly by the transfer of surplus labour to manufacturing. The low rate of growth of employment in manufacturing (which the predominance of low-wage labour in this sector entails) means that the rate of absorption of labour in manufacturing is also relatively low. Thus the increase in income per capita in agriculture, which would feed the growth in demand for manufactured goods, is also low, reinforcing the slow rate of increase in employment in manufacturing.

Two further arguments complete this line of reasoning:

- In a bi-modal distribution of employment in manufacturing, there would be a significant presence of labour at the high-productivity, high-wage end of the distribution. But the contribution of these large firms to employment growth in manufacturing is not enough to compensate for the low rate of expansion of demand in the low wage subsector. The large firms in the high-productivity sector typically have a low elasticity of employment and the rate of growth of the wage bill (which would support demand expansion at the relatively high level of wages) would be limited. In fact, this type of economy with a bi-modal distribution of employment in manufacturing is likely to develop a distinctive pattern of product market segmentation in this sector. The low-wage, low-productivity sector is likely to dominate the market for relatively cheap manufactured goods for the mass consumer market, while the high-wage sector specializes in the production of intermediate goods and high-income goods for middle-class consumers and export markets. The combined size of the latter segment might be limited in terms of employment.

- Because of the limited growth of employment in manufacturing, the lead in employment growth outside agriculture could be taken by services. There are cumulative processes involved here too. With the limited transfer of surplus labour from agriculture, the low supply price of labour keeps the price of an array of services relatively low. This further constrains the demand growth for manufactured goods, since such services are often substitutes for a range of manufactured goods. In other words, the price elasticity of demand for manufactured goods reinforces the effect of income elasticity in constraining demand expansion for manufactured goods.
The SME model, in which small and medium-sized enterprises participate as much in employment growth in manufacturing as the large ones, would seem to avoid the pitfalls of the two other types of size distribution discussed above. Japan, Taiwan and Korea no doubt had their manufacturing growth launched by large-scale industries geared to the export market. This was particularly important for Japan and Korea, where giant conglomerates dominated the industrial scene for much of their development history. But while the lead in industrial growth might have been taken by large export-oriented enterprises, the domestic market soon started to play a substantial part in the growth.

The integration of small and medium-sized enterprises with larger firms in a dynamic and cooperative relationship would seem to have been a crucial factor in the expansion of domestic markets. First, labour was absorbed at higher wage levels (unlike in the missing middle case). Second, the high rate of employment growth in manufacturing led the way to a rapid transfer of labour from agriculture. The consequent increase in income per worker in agriculture added significantly to the increase of consumer income per capita, which expanded the demand for manufactured goods. The export market accounted for no more than one-third of the market for all manufactured goods produced for much of the course of industrial development. Since employment growth was led by manufacturing rather than by services, the problems arising from growing inequality and growth linkages noticed in the bi-modal pattern were avoided.

A further set of influences emanates from the role of services, and moves in the same direction. We have discussed above that manufacturing takes the lead in employment growth in the SME model, while services play the dominant role in the other two types, unless the export-oriented manufacturing growth from the large-scale sector is very strong (as in China). The higher level of "within sector" inequality in services compared to manufacturing is very much a universal phenomenon. The range of activities in services is wider, extending from petty trade and services to high-income business and financial services. The dispersion of skills and earnings in this sector is so much greater. This is true even in the Indian case which has a particularly heterogeneous pool of labour in manufacturing, with its bi-modal distribution.

Other important factors leading to growth with greater equity in the SME model stem from the geographic dispersion of industrial activity in this type of development and the more widespread formation of skills which it promotes. The decentralized industrialization which the SME-biased development promotes has a downward impact on the inter-sector productivity gap, since smaller urban areas have a smaller productivity gap with respect to the rural sector. The inflation of the rural–urban gap is dampened by the redistribution of labour to smaller urban labour markets. Further, the development of SMEs within the rural sector might provide huge opportunities for off-farm income and this might have a significant effect on decreasing “within group” inequality in the low-productivity farm sector, if indeed low-income farm households participate disproportionately in off-farm activities (as happened in Taiwan).

Since much skill formation in industry takes place through on-the-job training, decentralized industrialization leads to a more widespread acquisition of skills. This effect extends to entrepreneurship. The East Asian SME model is well known for developing an extensive network of subcontracting, helping the integration of SMEs with large-scale production (even in exports) facilitated by the widespread development of small entrepreneurs.

The process of growth with equity in East Asia was also heavily influenced by the strong growth of post-primary education, thanks to deliberate government efforts. The policy was successful in
creating and maintaining adequate standards of schooling, because the population recognized the economic value of education as the demand for more educated labour grew. It is apparent that the SME type of development increased the demand for skilled labour (including those with formal schooling) over a wide area.

Finally, increasing inequality and the relatively larger employment share of services, in the bimodal size distribution, produce a self-reinforcing effect. The low income per worker in agriculture keeps the supply price of labour in services low, thus boosting the demand for relatively cheap services in the households of high-skilled labour in non-agricultural sectors. At the same time, the large profit income created in manufacturing ramps up demand for some high-income tertiary products like high-end restaurants, hotels, shopping malls or expensive real estate. These two developments feed off each other in a cumulative process, boosting the incomes at the upper end of the distribution in non-agricultural sectors. This process is an especially likely outcome if the export demand for manufactured goods is supported by a large inflow of foreign investment.

Many developing countries in Asia have industrialized (and are continuing to industrialize) in the pattern of large enterprises. The evidence clearly shows that even when they are successful in terms of world manufacturing markets, the problem of high and growing inequality is serious (as in Thailand and China). Vietnam recorded high inequality relative to East Asia although for some special factors (related largely to its agriculture and its education system) inequality does not seem to be increasing as relentlessly as in China and Bangladesh. Bangladesh is a classic example of narrowly based industrialization with very limited large enterprises making inroads into the export markets of a single industry. Manufacturing growth is limited and inequality is high in spite of rather satisfactory performance of its agricultural sector. All the East Asian economies had indeed started off with the large enterprise model, but very quickly managed to develop the SME sector, which was often complementary to the large enterprise sector. The classic example of the switchover is Korea, which has the unique distinction of carrying out a very successful policy of SME promotion and changing the size-structure of its manufacturing in the matter of a few years, to include SMEs and increase inequality.

4. Future Concerns

Apart from concerns about equality with development, the large enterprise model suffers from serious risks of potential instability and consequent disruption of the growth process. First and foremost are, of course, the social and economic tensions which growing inequality and increase in relative deprivation cause even when absolute poverty is falling at a significant rate. But there is also a macro-economic problem threatening instability. The classic case is Thailand. The growth of export-oriented industrialization, based on the heavy inflow of short-term capital, led to a serious problem of the Dutch disease (the sharp increase in the price of non-tradable to that of tradable) which destroyed its competitiveness in the world market, led to the sudden withdrawal of foreign capital funds and prompted the Asian financial crisis of the late 1990s. Korea was also threatened with high rates of inflation of money wages and price (which could be directly traced to its large enterprise model), when it decided to aggressively promote its SME development policies in 1975. Many researchers have been seriously worried about the risks which might be in store for China. In spite of its very successful large enterprise model of industrialization, and unlike Thailand (based on long-term foreign direct investment rather than short-term capital inflow) concerns have been expressed about its low and falling share of consumption in total income and the resultant limited growth of domestic markets for its manufacturing sector.
Positioning South Asia in an Urbanizing Asia

Stephen Commins

According to a recent UN World Urbanization Prospects more than half of the world's population was living in urban areas in 2012, and global urbanisation is steadily increasing. The World Bank, in a recent paper, ‘The Urbanisation of Global Poverty’, noted a simultaneous trend towards the urbanisation of poverty, with the poor moving into towns and cities faster than the rest of the population.

Urbanisation is characterised by the massive expansion of informal settlements and strains on existing urban work, land, services and infrastructure. For example, the number of people living in slums has doubled in India in the past 20 years and is now greater than the entire population of Britain. Are government and donor strategies, policies and programmers keeping up with the pace of change occurring in these countries?

From a quick review of ten major international donors in 2010, we found little or no evidence that urban issues are moving up the aid agenda. What we tend to find is that development policies both of governments and donors retain a rural focus, with the urban focus limited to a series of statements about the challenges of infrastructure, environment and sustainability, and urban governance.

Four or five donors articulated a specific urban interest, but none appeared to have a strategic approach to the urbanisation of poverty. Is it because urbanisation is subsumed within the agendas of other development agendas, such as trade, economic growth, and infrastructure investments? There is nothing inherently wrong with taking an integrated approach, but we would argue that the specific challenges of rapid urbanisation in South Asia and the changing face of poverty warrant strategies that are focussed, well-articulated and forward looking.

1. Current Urbanisation Trends

Asia is the largest of all major regions in the world with 30 per cent of the global land mass and 60 per cent of world's population. With an urbanization rate of 42.2 per cent in 2010, Asia ranked as the second least-urbanized major region of the world after Africa's 40.0 per cent. Asian cities are home to 1.7 billion people, nearly half the urban population of the world. This proportion is expected to increase slightly by 2020, when Asian cities will be host to 2.2 billion of the world’s 4.2 billion urban population. Between 2010 and 2020, it is projected that over 400 million people will be added to Asian cities, or 60 per cent of the growth in the world's urban population (World Development Indicators).

Asia’s urban population has grown from 31.5 per cent of the total in 1990 to 42.2 per cent in 2010. Due to the region’s large size and diversity, urbanization patterns are geographically uneven. It is particularly important to point out that overall trends are dominated by two demographic giants, China and India. These two nations together account for 2.5 billion people and therefore include more than 37 per cent of the world’s total population. Moreover, six of the world’s most heavily populated countries are found in Asia: China, India, Indonesia, Pakistan, Bangladesh and Japan. Together, these account for 45 per cent of the global population and 77 per cent of all Asians.

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One note for clarity is that much of the attention to urbanisation and urban poverty tends to rest in South Asia's megacities. With their dramatically increasing populations and the stark disparities in income and living standards, cities such as Dhaka, Mumbai, Karachi and Delhi hold attention. However, much of the current urban growth is occurring outside these megacities. It is taking place in second- and third-tier cities across South Asia. They are not as well established as the typical megacities, but still far ahead of rural South Asia in apparent access to resources and opportunities, and home to a new middle class.

However, not only is the middle class growing, but so too are the poorer populations of cities. Attracted by the possibility of jobs or pushed by the lack of opportunity in the rural areas they left behind, the ultra-poor, as well as the aspirational poor, now move to these cities in search of livelihoods and new opportunities.

With the additional migrants moving into new slums, many smaller cities are finding it increasingly hard to cope with the extra population load when it comes to housing, public utilities and other services. Governments are under pressure to find resources for their new and existing residents. However, there are two notable constraints. These smaller cities have not had the experience of adjusting to continuous inflows of people as are the megacities and are therefore not as able to deal with additional people, who are relying on existing facilities and insufficient planning. The migrants end up in slum communities with access to few of these amenities. One observer has compared the slum habitat as more akin to migrant labor camps.

2. **The Dynamics of Urban Poverty and Development**

The poor in urban areas face a distinctive set of risks compared to the rural poor that accentuate their potential vulnerability. Poor people in urban settings have a greater dependence on cash income and reliance on markets, including cash required for food purchase. They are therefore more vulnerable to fluctuations in food prices. In contrast, most rural households can produce some of the food they need at times of economic shocks and price increases. Accordingly, when there are steep price increases in food staples, Asia’s urban dwellers immediately feel the pinch. Specific manifestations of urban vulnerability under these circumstances are highly likely.

Urban areas are also more exposed to environmental contamination, pollution and poor sanitation and water shortages. However, it is difficult to address these problems in low-income settlements, as, in many cases the approach to slums by local governments is to view them as illegal settlements. Governments are reluctant to bestow such settlements with legal rights given the financial costs involved if there is an obligation in providing infrastructure and services. Politicians, meanwhile, gain limited political benefits for assisting slum dwellers. Rather, many municipal administrations prefer to direct their funding towards ‘tangible’ and politically visible infrastructure delivery projects and investments outside of slum areas.

Urban poverty is also often understated statistically and thus not likely to be addressed in its full dimensions. National poverty lines are often defined as household consumption under one or two dollars a day. Yet these thresholds do not take into account a wide range of costs and hazards that urban residents face. For example, while rural residents can typically collect fuels, building materials, some foodstuffs, water, etc. from their environments, urban residents must pay for almost all of these.
Vulnerability in urban areas is further exacerbated because of higher rates of crime and generally weaker community ties. Moreover, formal safety nets, be they from neighbors and relatives or government or NGO programs, tend to be less present in urban settings. For children and youth living in these cities, educational programs are frequently under-financed limiting opportunities to learn and gain the skills needed for long-term employment. In addition, urban insecurity and livelihoods pressures frequently inhibit families from sending children to school.

These challenges pose difficult policy choices such as, what types of social services are likely to have the most immediate impact on fragility; How best to build local government capacity to effectively and accountably provide social services, after years of general neglect; what potential synergies exist between improving local government capacity and enhancing mechanisms of cooperation with civil society?

### Box 1: Characteristics of urban risks and poverty

The poor in urban areas face a specific set of risks and have different characteristics than the rural poor. A list of some of the characteristics of the poor living in urban areas, along the lines of the work by Rule et al. is outlined below.

(a) Poor people in urban areas show greater dependence on cash income and reliance on markets. While in most poor countries a large share of rural landed households can produce some of the food they need at times of economic shocks and price increases, poor urban dwellers, are completely subject to the market for the acquisition of food items, and therefore are more vulnerable to food insecurity.

(b) Greater reliance on earned income increases the need for female labor force participation and consequently increases the demand for child care.

(c) There is a greater availability of public services and formal safety nets, but the access to the poor is questionable.

(d) The urban poor lack the right type of physical, human and social capital. The type of physical capital needed in urban areas is quite different from that required in rural areas. Housing and access to markets are more important than land. At the same time property rights might not be guaranteed due to a lack of governance. Literacy and general education are much more relevant for finding a job. Social capital is weaker, because of violence and an intangible definition of community.

(e) Informal safety nets may be weaker, due to the lack of strong social ties and the existence of NGOs and CBOs that might crowd them out.

(f) Urban areas are more exposed to environmental contamination, pollution, poor sanitation and violence.

### 3. Connections between Urban Development and Governance

Does rapid urban growth contribute to urban poverty? Poverty and vulnerability are linked to weak local and national institutions, and limited or unequal access to economic opportunities. There are also diverse contextual drivers; political and economic cross-border migrants in South Asia; or climate change and resource scarcity leading to ethnic conflict in East Asia.
Overall poverty is a manifestation of weak or poorly functioning government institutions, low levels of legitimacy and trust, and insecurity at the local level that feeds wider alienation and mistrust of the police and government agencies. Large wealth disparities are reinforced by political clientelism that directs government resources to ethnic and religious allies and further exacerbates these tensions.

Other factors are also at play: conflict over resources, poor governance and weak public institutions, and hence a lack of ability to address grievances. The lack of government capacity means that even when better policies are designed, they are difficult to implement at the scale necessary. Further, the resources necessary to provide adequate investment in improving urban living conditions are either not available or not given priority due to alternative priorities and domestic political demands.

Urbanization and insecurity are thus connected by national and municipal governments’ lack of ability to address grievances, combined with the resulting growing strains on housing, infrastructure, basic services and livelihoods. Still, by themselves, these factors do not necessarily trigger violent conflict or political unrest. Qualifying variables include the willingness of elites to compromise, the relative strength of civic organizations to promote political dialogue, and the degree of political stability in neighboring countries.

4. Addressing Urban Poverty

The neglect of political and power relations in discussions of Asian urban development has hindered the development of effective policies to guide the current rapid population influx into Asia’s urban areas. Urban policy needs to be looked at from a wider lens than infrastructure or livelihoods. Recognizing urban poverty and vulnerability as a governance and development issue is vital.

Basic services when delivered effectively can improve perceptions of local government. But there are inherent tensions between delivering services to meet immediate needs and the strengthening of public institutions in the longer term. For national governments there are important policy trade-offs between investing in local governments and working with civic organizations.

There are limited resources for urban development strategies and investment. While the local government may have serious problems, the experience in most states has been that except for the most egregiously corrupt governments, it is essential to find some pathways for building government capacity. Priorities include strengthening local initiatives in water and sanitation systems, civic participation in municipal budgets and monitoring of government expenditures, and training of local government officials in basic financial and project management. Programs to build capacity also provide national governments with a mechanism for both investing in local governments and working with civic organizations.

While increasing levels of vulnerability in urban centers have focused attention on the need to address urban poverty, it should be remembered that these are symptoms of structural problems as well. Accordingly, policies aimed at reducing urban vulnerability should be incorporated into wider elements of urban planning. In this way, they can be integrated within broader efforts to strengthen weak infrastructures and expand livelihoods for urban slum dwellers.

This approach also recognizes that initiatives to address urban poverty must be sustained over time if they are to be effective. There is a policy risk that approaching urban poverty solely as an income
level problem will lead to short-term instruments that are disconnected from approaches to the underlying causes of vulnerability and endemic poverty. Poor people frequently report the value that they place on government programs for social protection, but this includes security of tenure and livelihoods, as well as direct support. This presents a major challenge to governments, as developing effective livelihoods policies is an undervalued skill both in national governments and amongst donors.

4.1 Improve local government, both capacity and accountability

Good urban governance is probably the most important factor in enhancing stability. Broad and sustainable urban development depends on political leadership that is committed to a democratic and equitable vision of urban society. Local governments, both elected authorities and local branches of national sectoral ministries need strengthening and empowerment.

This encompasses deep decentralization of power and resources to local authorities, and a thorough reframing of central government functions and policy frameworks in the areas of governance, policy reform, security and equal rights, as well as the economy. Examples of more institutionalized channels for connecting decentralization and civic engagement are public hearings and consultations, community development committees and participatory district planning councils. One way in which decentralization can enhance security is that it reduces the ‘zero sum’ competition between different identity groups at the national level and allows for more transparent distribution of resources. Decentralization, however, by itself does not necessarily reduce corruption or elite capture, which is why national governments and international actors must also invest in civil society capacities.

The participation of civil society is considered a prerequisite of good governance, as it enhances government transparency and accountability. The same holds for the adoption of legislation that enhances the protection of human rights, particularly with respect to the poor and vulnerable. Mechanisms to support positive civil society engagement include (1) legal standing for non-governmental observers within institutions of public sector oversight; (2) a systematic presence for these observers throughout the process of the agency’s work; (3) well-defined forums to facilitate exchanges between citizens and public-sector actors in meetings; (4) structured access to official documentary information to enable informed oversight; and (5) the right of observers to issue dissenting reports directly to legislative bodies.

Improvements in accountability and transparency of local authorities are needed to encourage citizens to work with local officials, who in the past may have been more accustomed to operating behind the scenes (in some cases pursuing narrow personal benefit at the expense of the general public). There are a range of tools that have been developed from Balanced Scorecards that report on the delivery of services to participatory budgeting and public expenditure tracking, citizens’ charters, integrity pacts, and Public Expenditure Tracking Surveys (PETS), among others, that now have over a decade of lessons for urban systems across several continents. Such tools are enhancing citizen oversight and participation in public policy-making and are leading to improved service delivery.

4.2 Livelihoods

Governments and international actors need to invest in livelihood opportunities at an adequate scale to address the large number of unemployed. This includes expanding rural opportunities (to
slow the pace of migration), programs for out-of-school youth so as to diminish recruitment into gangs, criminal networks or extremist groups. Mini-grants for innovative local community-based organizations can provide the seeds for dozens of small initiatives. Programs can connect income generating activities and permanent land leases with construction of adequate housing, safety and security, electricity, street lighting, and formal schooling. Local and national level NGOs can work on boosting skills and incomes through training, credit, as well as the formation of savings organizations. Children’s programs can enable adults to seek employment, and community groups can contribute to security (reducing fear of leaving the household) by impeding criminal activities (trafficking business, drugs, stealing, smuggling and kidnapping, etc.) in their slums. Livelihood protection can also include policies to reduce the shocks of food price increases through short term voucher or food coupon programs.

Governments and donors should avoid trying to select one or two ‘perfect’ models. Instead they should allow different approaches to flourish or flounder in practice. New programs can build on what the urban poor have as existing assets, rather than focusing on what they do not have. The more assets urban households have the less vulnerable they are. This recognizes that poor people are managers of complex asset portfolios, and their capacity to manage these influences their capacity to cope.

4.3 Land tenure

Another key lesson learned from urbanization in other regions is that poverty alleviation was most effective in projects that delivered secure, marketable instruments of tenure to slum residents. In many Asian countries, the urban poor are still granted only temporary tenure, like occupancy permits, that are not fully bankable and do not promote the emergence of real property markets and corresponding property tax systems that can sustain local government operations. Thus, an additional progress will be for central governments to grant clear titles or other durable tenure instruments. Among the countries that have changed laws and regulations to improve tenure security with some apparent success are Mozambique, Rwanda, Uganda, Tanzania and Namibia.

5. Conclusion

Urban poverty and well-being is likely to become an increasingly greater focus of Asian government interests in the coming years. Conventional development approaches, by themselves, will be ineffective in addressing these challenges and will, in fact, just be treating the symptom. Rather, a determined effort to build Asia’s local governance capacity, opportunities for urban unemployed youth, and increasing slum dwellers’ stake in society will be needed.

Two particular questions for the future stand out for us.

- First, what is pro-poor urbanisation? What is the relationship between the pace of urbanisation, the pace of economic growth and the pace of urban and national poverty reduction?
- Second, urbanisation needs to be understood as a process of social transformation. Urbanisation can transform social relations, such as class and caste systems and gender dynamics, in ways that may provide benefits (e.g. greater freedom for women to enter the labour market). Transformed relationships can also be inhibiting (e.g. poor labour or citizenship rights for migrant workers). There is a role for minimizing new forms of exploitation and vulnerability.
Responding to these challenges requires drawing the linkages between social inclusion, urbanisation and economic growth. Strategically, cities can be viewed as sites of vulnerability (a welfarist approach) or they can be recognized for their strategic role in development (economies of scale, vibrancy, change processes). We would argue for the latter, but urge caution against blind dismissal of the realities of rising urban inequalities, new forms of urban insecurity and poverty. Cities are, by their very nature, always in a state of flux – new people, new trade opportunities, new forms of power and opportunities. However, these dynamics lead to tensions and violence, often linked to control over space and the changing nature of vulnerability. It is very unclear how donors plan to engage with and harness these urban energies and change for pro-poor development.
Appendix: An example of a creative donor approach to urbanization

The Asian Development Bank has begun a Cities Development Initiative for Asia which seeks to support innovative programs in the region at the municipal level. The core of the program is a focus on improving institutional capacity in Asian cities to prepare better urban infrastructure projects that are financially viable but also linked with reducing poverty, improving environmental systems and strengthening local governance.

CDIA is a regional initiative established in 2007 by the Asian Development Bank and the Government of Germany, with additional core funding support of the governments of Sweden, Austria and Spain and the Shanghai Municipal Government. The Initiative provides assistance to medium-sized Asian cities to bridge the gap between their development plans and the implementation of their infrastructure investments. CDIA uses a demand driven approach to support the identification and development of urban investment projects in the framework of existing city development plans that emphasize environmental sustainability, pro-poor development, good governance, and climate change.

To facilitate these initiatives at city level, CDIA provides a range of international and domestic expertise to cities that can include support for the preparation of pre-feasibility studies for high priority infrastructure investment projects as one of several elements.

Recognizing the urban challenges confronting Asian cities, representatives of national and local governments, civil society, private sector, academia, international organizations and established networks attended the International Conference held at the Asian Development Bank (ADB) in Manila on “Investing in Asia’s Urban Future” February 5-6, 2007. At this venue, the conference participants committed themselves to the development of strategies and approaches to enhance sustainable development and reduction of poverty in cities within the Asia-Pacific region. During the conference participants formally endorsed the establishment of the Cities Development Initiative for Asia (CDIA).

From this event, the Cities Development Initiative for Asia (CDIA) was co-founded initially as a partnership between the Asian Development Bank (ADB) and the German Federal Ministry for Economic Cooperation and Development (BMZ) in October 2007. Since that time, the program has welcomed the participation of others as funding members. Further external support agencies, national and city governments, and private financing sources are considering joining the CDIA effort in supporting the common task of Investing in Asia’s Urban Future.
How the Gender Gap is Impacting Development in South Asia

Syeda Maria Hossain⁹

Background

Ensuring gender equality leads to the alleviation of poverty and ultimately the achievement of social development goals. If the demographics of this region can be utilized properly, it can be harnessed towards sustainable development setting a path towards achieving the Millennium Development Goals.

1. Defining the Gender Gap: the Index

The Gender gap can be defined by four basic elements according to the Global Gender Gap Index, namely: economic participation and opportunity, educational attainment, health and survival and political empowerment (WEF 2011).

The disparities in economic participation are mainly in the areas of male female labor force participation ratio, remuneration structure, and opportunities for advancement and growth. There is still scope for the inclusion of work environment as another dimension because it takes into account women’s intrinsic rewards.

Although educational attainment is assessed by simplistic figures such as differential literacy rates between male and female, completion of primary/secondary/tertiary level education and various others, the definition of literacy could be taken into account by making cross country comparisons. Sex ratio at birth and the gap between women and men’s healthy life expectancy are the variables considered under health and survival, while political empowerment is measured in terms of representation in politics and their tenure.

A major flaw in the area of political empowerment is that it only takes into account women’s participation in politics at the highest level ignoring the lower levels of government. However, since it is a Global Index, the availability of uniform data and structure of political hierarchy has made it impossible to account for more relevant and precise information.

1.1 Sri Lanka: The Regional Benchmark

According to the Gender Gap Report, 2011 introduced by World Economic Forum, Sri Lanka leads the South Asian Region with the highest Gender Gap score of 0.7212 (on a scale of 0 to 1 where 1 indicates absolute gender equality) while Bangladesh and The Maldives rank second and third respectively in the region. To put Sri Lanka’s Gender Gap score into perspective, North America’s Gender score averages are .74 thus showing that Sri Lanka is not far behind; while the highest scores in the world are in the Nordic region which averages at .80.

If we examine the policy initiatives taken by Sri Lanka, we will find that the different policies and programs pursued by the country’s government and international development agencies have had the greatest impact. The Women’s Parliamentary Caucus in 2006 resulted in the introduction of a

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quota system, training in leadership and negotiation skills under the UNDP country program 2008-2012, nationwide baseline survey of the access to justice for vulnerable groups, specific livelihood projects aimed to strengthening the socio-economic status of women in the community under UNDP Transition Program and various others programs which were the key efforts that helped Sri Lanka achieve their status. Moreover, increased attempts were made for awareness and capacity building for gender inclusiveness under the Tsunami Recovery Program (UNDP Sri Lanka 2010).

1.2 Other South Asian Countries

The countries lagging behind are Pakistan, Afghanistan and India of which, Pakistan is the worst off. Some key insights from the assessment of the gender gap situation reveal that the lack of access to primary health care facilities and the absence of female doctors and health workers contribute greatly to the prevalence of gender inequality (Vishwanath T. 2006). School drop-outs and mobility constraints are among other impediments towards the emancipation of women and their progress towards attaining the same status as men. According to OECD Atlas-of-gender-and-development (2010, p. 176-177):

Gender discrimination in social institutions is very high across the seven countries of South Asia, making the region one of the worst performers in the SIGI ranking. The situation is particularly bad in Afghanistan, the lowest ranking country in the region and one of the bottom three performers overall. India and Pakistan are also in the bottom ten. The two biggest concerns for the region are son preference and family code.

Although the situation in Nepal and Bangladesh has improved to some extent through enforcement of inheritance and property rights and microcredit finance respectively, it is still far from the projected objectives under the MDGs.
2. Labor Force Participation as a Means of Judging the Gender Gap

Labor force participation of women in most South Asian countries is a function of values and norms in society and the nation as a whole. When women enter the workforce, it signals a change in society towards a good and constructive cause. Hence increasing the number of women in the workforce brings forth progress and development for the country. If we look at labor force participation in developed countries e.g. the United States, we will find that the trend for the labor force participation rate for women is increasing while that for men is decreasing. Since 1970, the proportion of women in the labor force has increased from 43 percent to nearly 60 percent, while the proportion of men in the labor force decreased slightly, from 80 percent to 74 percent (PRB 2007).

![Figure 1: Labor Force Participation Rate (2009),](source: UN HDR 2011)

Though the two bars are approaching each other steadily, the convergence is even slower in other parts of the world, especially South Asia. Nepal, Bangladesh and Maldives have the highest labor force participation rate by females (Figure 1) while Afghanistan and Pakistan have the lowest female participation in the labor force (UN HDR 2011). (Jääskeläinen T. 2011) has highlighted economic efficiency as one of the most important positive outcomes of the increased labor force participation of women assuming we are not making the most of their skills at present.

There are many socio economic causes to explain what keeps women from participating in the labor force. Besides some obvious factors like limited access to finance, women are often subjected to compulsion to surrender their wages or income to their spouses. The control of women over their income and spending is an important issue to ponder upon.

3. Access to Finance

We see below how various facets of lacking access to finance have been negatively impacting women in South Asia. This is not a comprehensive account however serves to show certain sectors where intervention is required.
3.1 Reasons for limited access for women

Women’s limited access to finance can be attributed to a number of financial and nonfinancial factors. A weak business climate, lack of economic progress, the lack of available collaterals and an infringement of creditors’ rights are some of the nonfinancial barriers that are preventing women from excelling as compared to men. Loopholes in the legal system and property rights, the inability of women to enter into contracts in their own name and their inability to obtain equal share of assets in case of divorce or inheritance are some of the other nonfinancial issues resulting in a gap between both genders.

Women are often constrained by a lack of self-actualization due to a multitude of factors that are beyond the scope of the current discussion, but this means that the general inclination is towards running smaller home-based businesses rather than going outside to seek employment. As long as they do not aspire to grow their business and only have a drive to grow their small and medium sized enterprises (SMEs), efforts to make financing accessible to them will not provide any assistance.

Risk aversion strategies of financial institutions make them reluctant to lend to women because they prefer lending to people whom they believe are capable of repayment. The problem is if they do not change this perception, funding will remain out of reach and as a result women will not have a credit history. Thus, since most credit extensions are based on past repayment history, it will create a vicious cycle where women will never receive loans and it will further perpetuate the existing situation for them. The credit officers stereotypically have a poor impression of women and thus they do not fit their target market profile. Unless they come out of this generalization, women will find themselves in this never ending cycle of repression (IFC 2011). Figure 2 compares by gender the account holders at formal financial institutions of South Asian countries.

Figure 2: Percentage of 15+ age account holders at formal financial institution (2011)

![Figure 2: Percentage of 15+ age account holders at formal financial institution (2011)](chart)

Source: IFC (2011)
### 3.2 The Situation in South Asia

In South Asia, only 25% of adult females have an account at a formal financial institution compared to 40% in Europe and Central Asia (WB 2012). In terms of property rights, according to the Gender, Institutions and Development Database 2009 of OECD (2012), the situation is similar in all the South Asian countries with a score of 0.5 which is a scale that measures whether inheritance practices are in favor of male heirs (level between 0=no and 1=yes) except for Bhutan. Bhutan has an exemplary score of 0 which means there is absolute gender parity in terms of property inheritance (Figure 3).

![Figure 3: Lack of Ownership Rights 2010,](image)

Based on OECD Atlas of Gender & Development

In Bangladesh, organizations like BRAC and Grameen Bank have contributed to higher access to finance for women. Grameen Bank for example pioneered micro credit, allowing not only the poor, but women as well to receive loans for their future endeavors. These loans offered by the bank are small in sum but enough to encourage women to start building their own businesses.

The cost of labor market inequality can be very substantial for an economy. A UNFPA Study for Latin America showed that ending gender inequality in the labor market would increase national output by 5%.

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4. Demography and Women’s Health in South Asia

Women’s reproductive health is of particular importance in South Asia due to the prevalence of comparatively easily preventable diseases or conditions like Anemia, under-nutrition, low birth weight, etc. Low access to birth control options for women is complicating their lives manifold. An adolescent population of 73 million girls (WB 2009) is compounding the already existing population boom and the increased life expectancy has translated into lower quality per capita health services available for aged women.

A comparison of the anticipated and actual status in terms of MDGs regarding reproductive health goals reveals that it poses great challenges for Bangladesh, India, Nepal and Pakistan. Maternal mortality is two to five times higher than the targets set for 2015 and the rate of child malnutrition is alarming. If we consider Sri Lanka as a standard against which to compare to, we find that family planning exposure falls short by 25 to 60 percent (WB 2009). Low ages of marriage and childbearing and poor levels of antenatal care are among other reasons responsible for the appalling condition of women’s health in South Asia. Developed nations have exemplified how health interventions can be utilized towards the betterment of a country. A detailed WHO study on Great Britain showed approximately 30% of economic growth was due to improvements in health and nutrition.

5. Vulnerability to Violence

In South Asia women are typically expected to maintain their roles in the household as care givers and not participate in the community outside the home; and men maintain their role as the breadwinners. As a result, women have been deprived of their rights which have now become imbedded in the community (Figure 5).

Figure 5: Lack of Protection of Physical Integrity (2010)
[Higher score implies less protection for women]
Violence against Women is a major issue in South Asia and it can come in various shapes and forms including physical violence and psychological trauma resulting from mental acts of violence.

In terms of lack of access to health care, some of the reasons are lack of transport and the inability to travel without being accompanied by a man (Das MB 2007). Sex selective abortions have also become a common practice in the region which is yet another form of discrimination. Typically, families prefer to have male children over female children as it is often believed that boys are a future investment in terms of earning for the family whereas girls are seen as a financial drain. (Figure 6).

(Figure 6: Preference for Son Child (2010)
[Higher Score implies more preference for male child]

Source: OECD Atlas of Gender & Development

According to the Lack of Protection of Physical Integrity Index 2010, women from Afghanistan are the most vulnerable to violence while Sri Lanka has the highest level of physical security in this region. The score for Afghanistan is slightly higher than 0.5 and that of Sri Lanka is only 0.2 on a scale of 0 to 1 (OECD Atlas of Gender & Development Report 2010). In Bangladesh, 30 % of younger women (15-25 years) and 24 % of older women (45-60) reported having experienced violence by their spouses (SASDI 2006).

The cost of gender-based violence is considerable. While no study in the context of South Asia estimating the cost was found, gender-based violence in the US is estimated to cost US $4 billion annually. Health and nutrition are also part of human capital which needs adequate provisions. A detailed WHO study on Great Britain showed approximately 30% of economic growth was due to improvements in health and nutrition. In theory, similar results can be expected in South Asia given improvements in such areas.
6. Women’s Education and Literacy

In general, the parents of children in South Asia often do a cost benefit analysis when deciding whether or not to educate their children. The education of children is perceived as an investment. The benefits of educating daughters seem minimal because traditionally it is the son’s responsibility to provide care for the parents when they reach old age. The effective cost of educating girls is higher compared to boys because of the insecurities associated with commuting to and from school. Teasing and other forms of violence are frequently faced by female students on their commute to school. Moreover, since girls are found to be more helpful in household chores, parents view having their daughters attend school as an opportunity cost. The prevalence of dowry in certain regions has made it even more difficult for parents to take the decision to educate their daughters. (Herz B 2006).

Figure 7: South Asian Literacy Rates (%) 2011

![Chart showing literacy rates in South Asian countries]

Source: UNFPA SWP Report 2011

Women have a higher literacy rate (Figure 7) in Bangladesh and Sri Lanka while in Pakistan, Bhutan, India and Nepal, women fall far behind men in education (UNFPA SWP Report 2011). With regard to Primary school enrollment; Bangladesh has the best record while the Maldives excel in secondary school enrollment.

The progressive work of NGOs such as BRAC have contributed to the high enrollment rate of girls in Bangladesh. BRAC’s primarily targets women experiencing poverty. More than 98% of their members and over 95% of their volunteer members are women. BRAC has developed support services for the following sectors: healthcare, education, financial empowerment and prevention of violence against women. It is committed to alleviating poverty and aims to transform the lives of impoverished women. BRAC sets out to do so by empowering them with skills that will allow them to contribute positively to the workforce – ranging from handicraft to agricultural sector. This has greatly improved women’s economic status as theirs possession of assets increase.
7. Political Participation

In South Asia, there is a high presence of female political leaders. This is encouraging as it paves the way forward for female leadership and places women in decision making roles. For example, in Bangladesh, the leader and current Prime Minister of Bangladesh is Ms. Sheikh Hasina who is female and even her opposition party leader Begum Khaleda Zia is a woman.

However, many of these political leaders have inherited their power from a deceased ancestor where another male had not existed at the time to fill the role.

8. Some Comparisons and the Way Forward

If we compare all of South Asia collectively with other developed countries or regions we see that bridging the gender divide remains an arduous task (Table 1).

Table 1: Comparison of demographic scenario (The World Bank 2012)\(^{11}\)

<table>
<thead>
<tr>
<th>Area of Comparison</th>
<th>South Asia</th>
<th>Australia</th>
<th>US</th>
<th>Europe &amp; Central Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of women in total non-agricultural employment (2009)</td>
<td>18%</td>
<td>47%</td>
<td>48%</td>
<td>48%</td>
</tr>
<tr>
<td>Maternal mortality ratio (modeled estimate, per 100,000 live births) in 2010</td>
<td>220</td>
<td>7</td>
<td>21</td>
<td>32</td>
</tr>
<tr>
<td>Proportion of seats held by women in national parliaments (%)</td>
<td>20%*</td>
<td>25%</td>
<td>17%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Source: The World Bank

Key recommendations can be classified across different stakeholders in the following way:

Encouraging Economic Participation

- The Government: The government needs to formalize the informal service sector work including domestic work. In Bangladesh, the government explicitly recognizes, in its Sixth Five Year Plan, the necessity of formalization of the service sector. However, specific policies need to be adopted in order to formalize women working in the domestic arena and the informal service sector. The government must also ensure an equal reward for work done by both men and women and not create any gender based difference.
- The private sector: Business organizations must ensure an equitable workplace. Wage rates need to be fair for both men and women. Gender-specific needs such as maternity benefits must be recognized. The financial sector should take steps for financial inclusion. Women as individuals, entrepreneurs, or workers should be provided with

\(^{11}\) The table is compiled from different subpages under WB Genderstats

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basic financial services. Their specific needs should be catered to and not discarded simply due to gender.

- Civil Society: Society in general should raise awareness about the rights of women. Society needs to work together to ensure better land rights for women.

- Better Health for Women
  - The government needs to ensure adequate service delivery and special programs for reproductive health. Preventive policies against domestic violence, etc. must be strengthened. The government should also provide for the aging female population and assist with their special needs.
  - The private sector needs to incorporate female health in their CSR-related programs.
  - Civil society should run awareness campaigns to change the perceptions of people about desirability of male children as well as to make them further aware of the problem of gender-based violence.

- Education for Women
  - The government should introduce/continue affirmative policies towards women’s education.
  - Private sector organizations should adopt HR policies seeking to create a high-value female workforce, internship, recruitment, training & development designed to create a pool of female leadership.
  - Civil societies can raise awareness about the benefits of providing education for female children.

- Civil and Political Empowerment
  - The Government: Political organizations should develop policies for creating female leadership from the lower echelons.
  - Private Sector: Female representation in the leadership of chambers and associations should be encouraged.
  - Civil Society can motivate women to become more empowered.

Although some countries are improving more than others on the issue of gender disparity in South Asia, the region as a whole is still lagging behind many other parts of the world. The government, the private sector and the civil society all need to assist in helping decrease gender disparity. Narrowing the gender gap will culminate in both immediate benefits and future outcomes for the nations and the region of South Asia as a whole. As we take steps towards these initiatives, we have to keep in mind that small improvements are not eroded by other developments and trends that might bring the gender disparity back to where it started. In understanding the demographics of this region we must address the pressing issue of gender disparity if the region is to prosper and ensure basic rights to their female populations.
References


Section C: Regional Trade
Trade Normalization between India and Pakistan: Prospects for South Asia

Shahid Ahmed

Introduction

The South Asia region comprises eight countries – Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka – which are members of the South Asian Association for Regional Cooperation (SAARC). Notwithstanding the recent global financial crisis, the South Asia region is still one of the fastest growing regions in the world, with a growth rate in the range of 5% to 7%. Among South Asian economies, India is the largest and the fastest growing economy - growing at a rate of around 7 per cent (in real term) since 2001.

Pakistan and India are the two largest economies in South Asia. Together, they account for 90 percent of the gross domestic product (GDP) and 85 percent of the population of the region. The collaboration between Pakistan and India will be a win-win situation for both sides and will be beneficial for South Asia. Pakistan will have easy access to one of the largest markets in the world while India’s gains are multi-fold including transit to many other economies.

Trade regimes of countries in South Asia have gone through significant changes over recent years through liberalisation of the tariff structure with increasingly deeper integration with the global economy. Although bilateral trade relations among SAARC countries have registered some growth over time, intra-regional trade in South Asia has continued to remain rather insignificant, particularly when compared to other regional trading blocs. Intra-regional trade remained around 5% as against 27% in the case of Association of South East Asian Nations (ASEAN) in 2011. One of the major constraints is stagnant trade relations between India and Pakistan, two big economies of this region. The other is trade costs in South Asia resulting from the lack of trade facilitation and lack of availability of physical infrastructure. Trade costs between India and Pakistan is highest in this region.

The objectives of the SAARC treaty are sought to be achieved by eliminating barriers to trade and facilitating cross border movement of goods, promoting conditions of fair competition and ensuring equitable benefits, taking into account their respective levels and patterns of economic development; creating effective mechanisms for the implementation and application of the agreement, for its joint administration and the resolution of disputes and establishing a framework for further regional cooperation to expand and enhance mutual benefits. Despite noble objectives, poor investment and trade linkages at the regional level, coupled with various constraints, economic and political, have severely limited the scope of trade and investment and also the opportunity for development of integrated production network within the region.

In the SAARC region, there is some evidence of success in terms of trade and investment flows as a result of bilateral engagements. For instance, India-Sri Lanka free trade agreement (FTA) Indo- Sri Lanka Free Trade Agreement (ISFTA) is one such agreement which resulted in higher trade and

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investment flows since it came into full existence from 1 March 2000. In addition to the higher trade flows between India and Sri Lanka, ISFTA resulted in significant flows of investments from India to Sri Lanka, including export-oriented investments by Indian companies in Sri Lanka. The increase of Indian investments to Sri Lanka has demonstrated more visible indirect benefits of ISFTA (Ahmed 2011). In empirical literature, it has been well established that an FTA between large and small economies benefits smaller countries more compared to large ones (e.g. Sri Lanka gaining relatively more from ISFTA and Turkey’s export has gone up to US$ 61 billion to EU as result of the Customs Union Agreement). Similarly, Mexico’s export to NAFTA countries has increased from US $60 billion to US $240 billion per annum since the formation of NAFTA. Less optimistic multilateral and regional track of trade negotiations has diverted attention to constructive bilateral and regional engagements.

Given the significance of India and Pakistan in the SAARC region, it is absolutely necessary to boost trade relations. In this context, this paper has made an attempt to explain the possible hurdles and probable opportunities of trade between India and Pakistan and resultant emerging prospects for the SAARC region. The rest of this paper is organized as follows. Section 2 discusses an overview of India and Pakistan trade. Section 3 presents welfare gains for India and Pakistan. Areas for action and cooperation are discussed in section 4. Section 5 discusses positive actions.

1. An Overview of India and Pakistan Trade

Table 1 shows that India’s imports and exports from the world were US $466 billion and US$366 while Pakistan’s imports from the world were US $0.38 and US$ 2.2 billion in 2013. Although, bilateral trade figures are not impressive despite various complementarities, proximity and cultural similarities exist in both countries. India’s imports and exports from Pakistan stands at merely 0.08% and 0.65% of India’s gross imports and gross exports of the world while Pakistan’s imports and exports constitute 4.28% and 1.60% of Pakistan’s gross imports and gross exports of the world.

**Table 1: India-Pakistan Trade Flows-2013**

<table>
<thead>
<tr>
<th>Reporter</th>
<th>Partner</th>
<th>Trade Flow</th>
<th>Trade Value in US$ Million</th>
<th>% of Gross World</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>Pakistan</td>
<td>Gross Exp.</td>
<td>2176.41</td>
<td>0.65</td>
</tr>
<tr>
<td>India</td>
<td>Pakistan</td>
<td>Gross Imp.</td>
<td>379.16</td>
<td>0.08</td>
</tr>
<tr>
<td>India</td>
<td>World</td>
<td>Gross Exp.</td>
<td>336611.39</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>World</td>
<td>Gross Imp.</td>
<td>466045.57</td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>India</td>
<td>Gross Exp.</td>
<td>402.75</td>
<td>1.60</td>
</tr>
<tr>
<td>Pakistan</td>
<td>India</td>
<td>Gross Imp.</td>
<td>1874.06</td>
<td>4.28</td>
</tr>
<tr>
<td>Pakistan</td>
<td>World</td>
<td>Gross Exp.</td>
<td>25120.88</td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>World</td>
<td>Gross Imp.</td>
<td>43775.18</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Pakistan</td>
<td>Total Trade</td>
<td>2555.57</td>
<td>0.32</td>
</tr>
<tr>
<td>India</td>
<td>World</td>
<td>Total Trade</td>
<td>802656.96</td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>India</td>
<td>Total Trade</td>
<td>2276.81</td>
<td>3.30</td>
</tr>
<tr>
<td>Pakistan</td>
<td>World</td>
<td>Total Trade</td>
<td>68896.07</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Calculation based on UN Comtrade Data extracted from http://wits.worldbank.org/
Table 2 shows Pakistan's exports to India. Eight export items at HS 6 digit level constitute 53% of Pakistan’s gross exports to India in the year 2013. Pakistani dates (fresh/dried) constitute 18.22% of gross Pakistani exports. Portland cement constitutes 7% and beet sugar and chemically pure sucrose constitute about 6% of gross Pakistani exports to India. Table 3 indicates the top 7 Indian exports to Pakistan which constitute 48% of gross Indian exports to Pakistan, out of which cotton alone constitutes about 16.20% of total exports. Table 3 and 4 highlight a very limited range of exports; hence there are large numbers of market opportunities for diversification of the export base.

Table 2: Pakistan's Top Gross Exports to India-2013

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Trade in US$ Millions</th>
<th>%</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>80410</td>
<td>734.13</td>
<td>18.22</td>
<td>Dates, fresh/dried</td>
</tr>
<tr>
<td>170199</td>
<td>26.99</td>
<td>6.70</td>
<td>Other cane or beet sugar and chemically pure sucrose</td>
</tr>
<tr>
<td>252329</td>
<td>24.59</td>
<td>6.10</td>
<td>Portland cement ( excl. white )</td>
</tr>
<tr>
<td>520100</td>
<td>20.1</td>
<td>4.99</td>
<td>Cotton, neither carded nor combed</td>
</tr>
<tr>
<td>120740</td>
<td>18.48</td>
<td>4.59</td>
<td>Sesamum seeds, whether or not broken</td>
</tr>
<tr>
<td>271019</td>
<td>18.48</td>
<td>4.58</td>
<td>Other petroleum oils and oils obtained from bituminous minerals and preparations</td>
</tr>
<tr>
<td>290321</td>
<td>15.03</td>
<td>3.73</td>
<td>Vinyl chloride &quot;chloroethylene&quot;</td>
</tr>
<tr>
<td>252010</td>
<td>14.84</td>
<td>3.69</td>
<td>Gypsum; anhydrite</td>
</tr>
</tbody>
</table>

Source: Source: Author’s Calculation based on UN Comtrade Data extracted from http://wits.worldbank.org/

Table 3: Top Indian Gross Exports to Pakistan-2013

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Trade in US$ Millions</th>
<th>% of Total Trade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>520100</td>
<td>217.64</td>
<td>16.19</td>
<td>Cotton, not carded/combed</td>
</tr>
<tr>
<td>230400</td>
<td>212.86</td>
<td>9.78</td>
<td>Oil-cake &amp; other solid residues, whether/not ground/in pellets, from extraction of soyabean oil</td>
</tr>
<tr>
<td>290243</td>
<td>150.88</td>
<td>6.93</td>
<td>p-Xylene</td>
</tr>
<tr>
<td>390210</td>
<td>118.76</td>
<td>5.45</td>
<td>Polypropylene</td>
</tr>
<tr>
<td>540710</td>
<td>87.20</td>
<td>4.00</td>
<td>Woven fabrics obt. from high tenacity yarn of nylon/other polyamides/polyesters</td>
</tr>
<tr>
<td>71320</td>
<td>81.68</td>
<td>3.75</td>
<td>Dried chickpeas, shelled</td>
</tr>
<tr>
<td>70200</td>
<td>48.78</td>
<td>2.24</td>
<td>Chemical wood pulp, dissolving grades</td>
</tr>
</tbody>
</table>

Source: Author’s Calculation based on UN Comtrade Data extracted from http://wits.worldbank.org/

2. Welfare Gains for India and Pakistan

To examine potential trade flows as a result of tariff removal by all South Asian Free Trade Agreement (SAFTA) members on imports from each other, our policy simulations are undertaken in GTAP Model on the basis of modified closures for unskilled labour employment. Employment

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13 The Global Trade Analysis Project (GTAP) model is in this class of general equilibrium models. The GTAP
The effects for unskilled labour are very pertinent from the income inequality and poverty reduction perspective. To capture unskilled employment effects while working out simulations, alterations are also made to more accurately reflect the labour markets of India, Pakistan, Bangladesh, Sri Lanka and the rest of South Asia. The results for welfare effects are reported in table 4. Welfare gains for all SAFTA members are positive. India, Bangladesh, Pakistan, Sri Lanka and the rest of South Asia gain by US$ 1350 million, US$ 182, US$785, US $ 513 and US$151 respectively. Reallocation processes of resources as a result of SAFTA are expected to be employment generating for unskilled labour in this region.

It is important to note that both India and Pakistan will benefit from free trade. Welfare gains of India and Pakistan are expected to increase by US $ 206 and US $ 344 million as result of resource allocative efficiency. Reallocation in resources will be more beneficial to Pakistan. Employment of unskilled labour is expected to increase; hence free trade is expected to reduce poverty and inequality in both the nations. Due to the high tariff rate of Pakistan on imports from India, the latter’s welfare gain has been predicted more from gains from the change in terms of trade. It is expected that Pakistan will gain in terms of consumer surplus.

Table 4: Welfare and its Components (US $ Millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SEAsia</td>
<td>-6.1</td>
<td>0</td>
<td>-77.1</td>
<td>1.2</td>
<td>-82</td>
</tr>
<tr>
<td>India</td>
<td>205.7</td>
<td>450.1</td>
<td>581.8</td>
<td>113</td>
<td>1350.6</td>
</tr>
<tr>
<td>Pakistan</td>
<td>343.6</td>
<td>302.7</td>
<td>79.5</td>
<td>59.8</td>
<td>785.5</td>
</tr>
<tr>
<td>R_SouthAsia</td>
<td>58.4</td>
<td>632.8</td>
<td>141.2</td>
<td>14.2</td>
<td>846.5</td>
</tr>
<tr>
<td>N_America</td>
<td>-38.9</td>
<td>0</td>
<td>-92.6</td>
<td>-73.1</td>
<td>-204.6</td>
</tr>
<tr>
<td>EU_25</td>
<td>-251.6</td>
<td>0</td>
<td>-83.4</td>
<td>-55.3</td>
<td>-390.3</td>
</tr>
<tr>
<td>Rest of World</td>
<td>-42.7</td>
<td>0</td>
<td>-428.9</td>
<td>-26.1</td>
<td>-497.7</td>
</tr>
<tr>
<td>Total</td>
<td>274.1</td>
<td>1385.6</td>
<td>-22.5</td>
<td>-4.4</td>
<td>1632.7</td>
</tr>
</tbody>
</table>

The model is essentially a multi-country multi-commodity computable general equilibrium (CGE) model designed for comparative-static analysis of trade policy issues (Adams et al. 1998). The theory of the GTAP model is documented in Hertel (1997). Ahmed (2010, 2011) provides a simplified summary of the model. In the present study, GTAP database version 7, covering 113 countries/regions and 57 sectors, with a base year of 2004, have been used. All the trade flows for the 57 commodity categories are distinguished by their countries/regions of origin and destination, and on the basis of agents such as intermediate demand, final demand by private households, government and investment. It provides a method for allowing for varying import intensities by different economic agents within a country/region. The tariff data is mainly in the form of applied ad valorem rates. In the present analysis, 113 countries/regions are aggregated into 10 countries/regions and 57 commodities are aggregated into 8 commodity groups. The model is solved using Gragg 2-4-6 extrapolation methods.
3. **Areas for Action and Cooperation**

3.1 **Increasing Linkages through Sharing Knowledge**

There are many areas where cooperation between India and Pakistan can be enhanced including strengthening academic exchanges and sharing knowledge as well as forming deeper linkages through educational and research institutes in both countries. This will have a positive impact on the youth of India and Pakistan and will create mutual trust between the countries. There are many areas for research collaborations between both countries such as agriculture, biotechnology, climate change and environmental issues, etc. Both countries can collaborate on technology transfer in areas which do not pose any security concern.

3.2 **Removal of Visa Restrictions**

To facilitate trade in goods and services, there is a need to extend the SAARC VISA in the SAFTA region on the lines of Schengen Visa of EU countries. In the case of India and Pakistan, prevailing VISA rules and its governance certainly act as NTB in mutual and also in regional trade. A liberal visa regime is a prerequisite for better relations in the future. The agreement on a liberalised visa regime, signed during the external affairs minister S M Krishna's visit to Pakistan, is a logical, and welcome step towards the goal of normalizing India-Pakistan economic relations. The visa agreement signed between both countries will enable citizens over the age of 65 years from both countries to receive a visa on arrival while crossing the border at Wahaga or Atari. It is hoped that the efforts made by both foreign ministers will be extended to all land borders, sea borders and aviation routes.

3.3 **The Media**

In addition there remains, a strong need for the media to play a constructive role in building India-Pakistan relations through positive messages using various media platforms about bi-lateral relations between India and Pakistan.

3.4 **Importance of Treaties/Agreements**

Either at the SAARC level or at a bilateral level, there is a need for a mutual recognition agreement for skilled labour market integration. This will help trade in services in both countries. With or without the choice of policy makers of this region; the trade in services in health and tourism sector is increasing. SAARC as a region needs to move forward with liberalizing trade in health, tourism and education immediately.

The Regional Motor Vehicle Treaty needs to be negotiated and implemented to reduce trade costs and save time. SAARC leaders agreed on negotiations to finalize the two agreements on Motor Vehicles and Railways to improve physical connectivity through enhanced infrastructure linkages within the region. A SAARC Investment Promotion and Protection Agreement that is pending since 2007 needs to be finalised at the earliest. If it is not possible, the Investment Promotion and Protection Agreement may be signed by both countries bilaterally. This will boost regional and bilateral investment.
3.5 Cooperation in the Energy Sector

Pakistan and India comprehensively discussed avenues for energy cooperation, including trans-regional projects, notably Turkmenistan-Afghanistan-Pakistan-India (TAPI) Gas Pipeline Project. India and Pakistan should prioritize cooperation on joint energy-related ventures and assess the feasibility of a bilateral and energy grid.

3.6 Water

Many of the problems afflicting both countries are a natural consequence of population growth and profligate use of water. Water scarcity has serious consequences not only for the health of human beings but also for regional security and stability. The Indus Waters Treaty of 1960, has successfully regulated the distribution of a precious resource between the two countries for over five decades. Agricultural universities of both countries may collaborate for efficient utilization of water resources.

3.7 Development of Regional Associations

It is important for sectoral associations of both countries to collaborate with each other. Presently, there is some collaboration at the SAARC Level in the form of the SAARC Chamber of Commerce and Industries. Sectoral associations may be formed such as the Regional South Asian Leather Association, Regional Textile Association, Regional Electronics Association, Regional Association of Small and Medium Enterprises, Regional Teachers Association, and many more of such nature. People in these associations can understand with more clarity sectoral barriers and further mutual business interests regionally and outside. Joint regional legislation on rules of doing business may also be taken up at some stage.

Pakistan must open its market and grant most favoured nation (MFN) status to India. According to Pakistan the import of 1209 goods from India or of Indian origin shall not be importable. The goods other than those shall be importable from India subject to the same conditions and requirements as prescribed under this order wherever applicable. Items importable from India through land route from Wahgah have also been restricted to 137 items only. Even if MFN status is implemented in spirit, the issues related to compliance and documentations on either side remains and there is a need to work on them to facilitate trade.

There are many perceptional and actual hurdles in both countries that need to be addressed. It has been reported that traders on the pretext of security concerns are harassed which is a serious matter. Unnecessary delay in the clearance of Indian and Pakistani goods at ports, unavailability of labour on the other side, TBT measure, bureaucratic attitudes, etc. all cause problems for traders. For instance, Indian and Pakistani trucks return without off-loading due to unavailability of labour on the other side, causing exporters huge losses in the form of extra transportation charges. It is desirable for authorities to ensure enough labour force to offload consignments in their customs yard. Due to the absence of a regional and motor vehicle treaty, movement of dumpers and trucks to either side create hurdles for exporters. For instance, Indian and Pakistani customs authorities only allow 10-wheeler trucks and hydraulic dumpers for the shifting of goods. Twelve- and 14-wheeler trucks should also be allowed to cross the border.

15 Ibid
While signing SAFTA, the countries region restricted trade in the items in the sensitive list on grounds of protecting domestic producers. These lists were prepared by economists using static methodology such as revealed comparative indices, unit value analysis and consultations with few business groups. These measures restrict trade and limit the scope for future gains in terms of foreign direct investment (FDI), services and supply chain management. If SAFTA has an objective of trade creation, a forward looking approach is needed for dynamic gains. Kumar and Ahmed (2014) show that the impact of tariff reduction (sensitive product under SAFTA) by Pakistan on trade from India is US$ 46 million. Out of this, trade creation is US$ 21.57 million and trade diversion is US$25.09 million. In the case of Pakistan, the impact of tariff reduction (sensitive product under SAFTA) in India on imports from Pakistan would generate an increase in trade of US$ 5.52 million. Out of this trade, creation is US$ 4.24 million and trade diversion is US$ 1.27 million. Scholars and policy makers are aware that a long sensitive/negative list doesn’t help to protect the stated objective of protecting vulnerable domestic producers rather a long sensitive list promotes illegal and informal trade in the region. While deciding on the sensitive list of items, consumer interest along with producer interest need to be taken into consideration. Ideally both countries should remove all items from the sensitive list.

In the long term, fiscal and monetary policies coordination in the region is needed if South Asia is to progress towards deeper integration. This will help in tackling the problem of inflation, the exchange rate, fiscal deficit, etc.

4. **Positive Actions**

Recently, both countries have taken many positive and concrete steps to deepen their trade and economic relations. Pakistan has granted MFN Status to India in principle but this has not materialized so far. The government of India has reviewed its FDI policy and decided to permit citizens of Pakistan or an entity incorporated in Pakistan to make investments in India. Both countries are in the process of negotiating the Customs Cooperation Agreement, which will avoid arbitrary stoppages of goods at each other’s ports; the Mutual Recognition Agreement for acceptance of certificates of internationally-accredited laboratories; and Redressal of Grievances Agreement will be referred to in case of a disagreement.

To deepen trade relations in South Asia, India has taken a major step by unilaterally reducing its sensitive list for Least Developed Countries (LDCs) under SAFTA, in November 2011, to 25 tariff lines thus allowing all other imports at zero customs duty. Afghanistan, Bangladesh, Bhutan, Maldives and Nepal benefited as a result of this tariff reduction move. India has also announced that it will reduce 30 percent reduction in its SAFTA negative list. This is a positive decision aimed at increasing regional trade. India has already allowed tariff reductions on 264 SAFTA items, which would mainly benefit Pakistani exporters as India’s trade with Sri Lanka, the other developing country, is mostly governed by the India Sri Lanka Free Trade Agreement (ISFTA) and not by SAFTA. This shall reduce India’s sensitive list for Pakistan from 878 to 614 tariff lines. Ultimately the aim of both countries should be to continue forging positive trade relations through cooperation and trust.
References


Modeling Global and Regional Changes: An Illustration from Pakistan

Antoine Bouet\textsuperscript{16}, David Laborde\textsuperscript{17}, Marcelle Thomas\textsuperscript{18}

Introduction

Pakistan’s economy faces major issues both internally and externally. The trade landscape has changed: the lack of a compromise between the World Trade Organization (WTO) members on the Doha Development Agenda (DDA), has switched international trade negotiations from being WTO-based to relying on regional and bilateral agreements; and emerging economies are increasingly becoming the main drivers of this changing landscape. Pakistan has been conservative in its adherence to regional and bilateral trade agreements and has focused relatively more on unilateral and multilateral liberalization.

As the country embarks on a series of reforms towards increased trade integration, it is vital for Pakistan to assess the possible gains and losses from various trade options ranging from the draft proposals currently being negotiated at the WTO level, to the implementation of current Free Trade Agreements (FTAs) as well as the changing policies of developed countries regarding trade preferences to developing countries.

Pakistan is also experiencing environmental damage (another cause of economic stress) due to warmer temperatures causing floods and extreme climate conditions such as rainfall and winds. As a Net Food Importing Developing Country (NFIDC) with one of the highest population growth in South Asia, Pakistan is facing environmental stress which will have long term consequences on its agriculture, welfare and food security. Given the importance of agriculture in Pakistan’s economy as food provider (cereals) and export earnings (cotton), the trade and environmental futures of Pakistan are closely interconnected.

The researchers at the International Food Policy Research Institute (IFPRI) have applied improved modeling, data and measurement tools to estimate the economy wide effects on Pakistan of a changing trade environment. We identify the trade policies that would best serve the country in taking advantage of new trade opportunities: namely, the Modeling International Relationships in Applied General Equilibrium (MIRAGE) model—a multi-sector, dynamic, multi-region computable general equilibrium model that focuses on trade policy analysis; data on economic structure and trade from the Global Trade Analysis Project (GTAP) database version 7 (Narayanan and Walmsley 2008); and data on trade policies, including preferential tariff levels, from the MAcMapHS6 version 2 database (Boumellassa, Laborde, and Mitaritonna 2009). In combination with other models\textsuperscript{19} we evaluated the consequences of possible climate change outcomes on Pakistan’s agriculture and assessed the role trade would play in mitigating these negative effects.

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\textsuperscript{19} They include climate change Global Circulation Models (GCMs), and IFPRI’s International Model for Policy Analysis of Agricultural Commodities and Trade, IMPACT (Laborde et al. 2010).
This paper will illustrate our research effort with the next section devoted to the impact assessment of various potential trade agreements on Pakistan while section three will focus on the potential impact of climate change with an examination of the mitigation role trade policy could play.

1. Changing Trade Policies: Multilateral, Regional and Unilateral Perspectives

For many developing countries, the trade environment is changing very fast. At the multilateral level the Doha negotiations have progressed very slowly while Regional Trade Agreements (RTA) have proliferated to 511 notifications to the WTO, of which 319 were in force as of January 2012 (WTO 2012). This means that developing countries could become members in many trade agreements, each with its own schedule, rules of origin, and standards.

In addition, developed countries, namely the United States (US) and the European Union (EU), are unilaterally granting preferences under the General System of Preferences (GSP) to eligible developing countries, eliminating or reducing significantly import duties. This too is changing, where countries may lose their eligibility to the program due to changing income requirements, or move to bilateral free trade agreements where they would need to reciprocate in granting the same preferences. Even for eligible countries, these programs are subject to stringent rules of origin, which may reduce utilization rates and exempt sectors that are important to developing countries such as agriculture, textile and wearing apparel.

These trade agreements at the multilateral, regional or unilateral level may generate benefits for its members through increased access to foreign markets, more competitive markets, economies of scale for producers and lower prices for consumers. Or they may cause unintended losses through trade diversion, preference erosion and adverse terms of trade. For each individual country, the net effect is an empirical question that will depend on economic characteristics such as the level of development, the structures of production, trade, tariffs and the initial level of integration it enjoys.

A country’s trade structure reveals how dependent it is on its trade partners and traded commodities. The higher the dependency, the more vulnerable the country is to global changes and the less flexibility it has to respond to these changes. Pakistan displays a trade structure with high geographical and sectoral concentration. Pakistan’s top 5 partners accounted for over 65% of total exports in 2011, and 60% of imports: these figures are relatively high from an international point of view. The EU and the US dominated Pakistan’s exports covering 40% of total exports in 2011, while United Arab Emirates (which provide more than a third of Pakistan imports of fuels and oils) and China dominated imports—both countries covering 30% of total imports (Figure 1). This pattern has not changed significantly since 2004, but Pakistan is slightly more diversified in imports than in exports (Figure 2).

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RTA are defined by WTO as reciprocal trade agreements between two or more partners.
Sector wise, the top 5 exports account for 61% of total exports in 2011, dominated by cotton, textile, and wearing apparel which make up 50% of the total. The top 5 imports account for 60% of total imports in 2011, with fuels and oils contributing up to 30% (Figure 3 and 4). This also highlights a lack of diversification.
Agricultural production in Pakistan is also concentrated on a few dominant crops: sugar and wheat covered 65% of total agricultural production in 2010, rice 7%, and cotton around 10% (Figure 5).
2. **Tariff Structure**

Pakistan has been a member of the World Trade Organization (WTO) since 1995 and has entered into several trade agreements that came into force recently: FTAs with Sri Lanka (2005), the South Asian Free Trade Area (SAFTA) in 2006, China (2007 for goods and 2009 for services), and Malaysia (2008); and Preferential Trade Agreements with limited concessions with Mauritius (2007) and Iran (2006).

Pakistan also benefits from General System of Preferences (GSP) programs with the US and the EU. Yet, in spite of the preferences, Pakistan’s exports to the EU are submitted to an average positive GSP tariff, higher than for any of the other GSP countries. This is in part due to the textiles and garments sectors that have a positive GSP tariff of 5.4% and 9.2%, respectively. Under the US GSP, Pakistan benefits from duty free access on $US200 million worth, equivalent to just 5% of its total exports to the US and 1.6% of the US total GSP imports.

Protection applied by Pakistan across HS (Harmonized System) chapters in 2004 and 2009 is shown in Figure 6. In 2009 average protection by HS chapters mostly ranges from 10 to 25% with high protection in beverages (Chapter 22 – 72%) and in cars (Chapter 87 – 41%). There was clearly a process of liberalization during the 2000 decade, in particular in the most protected sectors. However for some sectors like Dairy Products (Chapter 4) protection has been raised where protection on many tariff lines increased from 25% to 35%. Nevertheless, the Ministry of Commerce has recently recommended continuation of tariff liberalization until 2015 (see Chaudhry 2011).

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21 Current members: Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.
Earlier estimates have shown that on average Pakistan faces an average tariff rate of 10% on its exports worldwide. At the sectoral level, in 2007, the country faced on average a tariff rate of 31% on agriculture, 8% on textile and 6% on wearing apparel. These numbers suggest that the impact of extending the current system of preference to agriculture and textile and wearing apparel could be notable for Pakistan because of the importance of these sectors for the economy.

The lack of diversity in trade and production increases Pakistan’s vulnerability to global changes. The current economic downturn of Pakistan’s main export destinations, the US and the EU, has reduced import demand by these two countries; India may not represent a regional alternative due to expected economic contraction. The prominence of cotton and textile and wearing apparel in exports continue to present a challenge given that these sectors are usually heavily protected or left out of preferences emerging from FTAs and GSPs. Finally, Pakistan’s agricultural production pattern may render the country more sensitive to the consequences of climate change on its main staple, wheat, which constitutes 25% of agricultural production.

Trade policies that are more likely to generate benefits for Pakistan are examined in the context of current and proposed trade initiatives. At the multilateral level, short of a compromise on the DDA, under what conditions can the proposed modalities on market access still deliver benefits for Pakistan? Would regional integration in the context of SAFTA be a stepping stone toward greater integration worldwide or too discriminatory and limited by the exemption of sensitive products to contribute to the country’s economic growth? Is Pakistan drawing all the benefit from the system?

22 These estimates are based on MACMapHS6 version 2 database.
of trade preferences offered by developed countries? We study the impact on Pakistan of a potential Doha agenda, then the SAFTA, and finally the Duty Free-Quota Free (DFQF) regime given by rich countries to Least Developed Countries (LDCs).

3. The Doha Development Agenda

WTO negotiations on market access rely on formal draft proposals negotiated by WTO members including Pakistan. The proposed modalities are based on a tiered formula for agricultural market access (AMA) and the non-linear tariff cutting formula or Swiss formula for non-agricultural market access (NAMA). Cutting formulas apply to bound tariffs and they target highest tariffs with higher cuts. But the implementation of the modalities is subject to “flexibilities” which exempt some countries and products from the general formulas (Laborde and Martin 2011a and 2011b).

For many developing countries like Pakistan, given the large binding overhang, the formulas are more effective in reducing bound rates than applied ones, especially in agriculture. Table 1 shows that Pakistan displays initially higher protection on average than the group of low- and middle-income countries and the world but lower than India. Under DDA modalities agricultural bound rates are greatly reduced, especially without taking into account the flexibilities, but applied rates are barely affected.

In non-agriculture, where the modalities would actually reduce applied rates, bound rate cuts are not affected by the flexibilities but applied rates are. Pakistan faces tariffs in agriculture that are twice as high as non-agriculture and in non-agriculture Pakistan faces tariffs that are much higher on average than those faced by India and the world. Implementing the formulas would greatly reduce the tariffs faced by Pakistan, more so in NAMA. Yet, in AMA the reduced tariffs faced are much less discriminating than initially, while in NAMA the distribution is still biased against Pakistan even after the reductions (Table 1).

Table 1: Average tariff rates before and after implementation of DDA 2008 modalities.

<table>
<thead>
<tr>
<th></th>
<th>Bound rates</th>
<th></th>
<th>Applied rates</th>
<th></th>
<th>Faced applied rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Formula</td>
<td>Formula</td>
<td>Formula</td>
<td>Formula</td>
<td>Formula</td>
</tr>
<tr>
<td></td>
<td>Base w/o flex</td>
<td>with flex</td>
<td>Base w/o flex</td>
<td>with flex</td>
<td>Base w/o flex</td>
</tr>
<tr>
<td>AMA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>107.0</td>
<td>67.0</td>
<td>101.5</td>
<td>20.9</td>
<td>20.7</td>
</tr>
<tr>
<td>India</td>
<td>161.3</td>
<td>100.3</td>
<td>128.3</td>
<td>59.2</td>
<td>54.6</td>
</tr>
<tr>
<td>low-and middle-income countries (non LDC)</td>
<td>53.0</td>
<td>33.0</td>
<td>45.4</td>
<td>13.3</td>
<td>11.3</td>
</tr>
<tr>
<td>World</td>
<td>40.3</td>
<td>20.7</td>
<td>29.9</td>
<td>14.6</td>
<td>9.0</td>
</tr>
<tr>
<td>NAMA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>41.5</td>
<td>23.0</td>
<td>23.0</td>
<td>15.3</td>
<td>11.0</td>
</tr>
<tr>
<td>India</td>
<td>32.2</td>
<td>12.8</td>
<td>13.3</td>
<td>12.9</td>
<td>11.7</td>
</tr>
<tr>
<td>low-and middle-income countries (non LDC)</td>
<td>22.3</td>
<td>10.9</td>
<td>12.3</td>
<td>6.1</td>
<td>4.6</td>
</tr>
<tr>
<td>World</td>
<td>9.9</td>
<td>4.7</td>
<td>5.3</td>
<td>2.9</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Sources: Laborde and Martin (2011a and 2011b).
Notes: Tiered formula for AMA (Agricultural Market Access) and Swiss formula for NAMA (Non Agricultural Market Access) - No sectoral initiatives; w/o flex stands for without flexibilities.
The tariff reductions from implementing the DDA modalities shown in Table 1 translate into income gains for Pakistan of 0.9 $billion in 2025. The gains only capture 20% of the full potential of total liberalization, but when expressed in percentage deviation from the baseline (without modalities) it represents 0.43%, a higher increase than India (0.28%) and the group of low-and middle-income countries (0.33%). When the flexibilities are taken into account, income gains are reduced drastically, capturing only 2% of total liberalization. These welfare results point to the role of “flexibilities” in limiting the benefits from the tariff rate formula for Pakistan which, when the flexibilities are taken into account, realizes barely a tenth of the potential gains from the modalities (Table 2).

Interestingly, gains for Pakistan are concentrated in NAMA. Indeed, concerning agriculture the limited gains from reforms of developed countries are offset by adverse terms of trade effects coming from the accrued demand of some developing countries on world markets.

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Liberalization</th>
<th>Doha formula cuts</th>
<th>Doha with flexibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>4.6</td>
<td>0.9</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>(2.25)</td>
<td>(0.43)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>India</td>
<td>24.3</td>
<td>6.1</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>(1.12)</td>
<td>(0.28)</td>
<td>(0.11)</td>
</tr>
<tr>
<td>Low-and middle-income countries (non LDC)</td>
<td>241.2</td>
<td>61.5</td>
<td>30.7</td>
</tr>
<tr>
<td></td>
<td>(1.30)</td>
<td>(0.33)</td>
<td>(0.17)</td>
</tr>
<tr>
<td>World</td>
<td>725.2</td>
<td>202.1</td>
<td>121.4</td>
</tr>
<tr>
<td></td>
<td>(1.31)</td>
<td>(0.37)</td>
<td>(0.22)</td>
</tr>
</tbody>
</table>

Sources: Laborde, Martin, and van der Mensbrughe (2011).
Notes: Results are expressed as deviations from the baseline: in $ billion and in percentage change in parenthesis.

In addition to the core modalities, sectoral initiatives have been considered: they would require more drastic cuts than the formulas (full tariff elimination by developed countries and bound tariffs of 3-5% by developing countries) on specific commodities and the support of enough countries to represent 80% of world trade in the specific commodity. Laborde (2011) demonstrates that these added initiatives can potentially deliver large market-access gains and increase the income gains generated by the core modalities.

For the purpose of the analysis, the sectoral initiatives are organized into three groupings (Table 3) with regard to their level of support: S33 include sectors supported by countries representing more than 33% of world imports, S25 (representing between 25% and 33%), and the remaining category (representing less than 25%). As shown in Table 3 Pakistan benefits from core modalities cuts of the DDA on NAMA: 0.28% in welfare and 0.64% in terms of trade relative to the baseline. Although not a participant in sectoral initiatives (i.e. not granting new tariff concessions), Pakistan stands to gain from it since the concessions under the initiative are granted to all WTO members. In 23 The authors use an optimal weighting approach that takes into account the impact of changes in the product weights as tariffs are reduced (Laborde, Martin, and van der Mensbrughe 2011).
particular, the implementation of initiative S25, which is on textile and wearing apparel, generates additional tariff cuts that nearly double the gains in welfare and terms of trade for Pakistan.

Table 3: Gains from implementing sectoral initiatives in the DDA by 2025 (in percentage change from baseline)

<table>
<thead>
<tr>
<th></th>
<th>Welfare effects</th>
<th>Terms of trade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Core modalities cut</td>
<td>Additional cut S33%</td>
</tr>
<tr>
<td>Core modalities cut</td>
<td>Core modalities cut</td>
<td>Additional cut S33%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.28</td>
<td>0.28</td>
</tr>
<tr>
<td>India</td>
<td>0.08</td>
<td>0.12</td>
</tr>
<tr>
<td>Low-and middle-income countries (non LDC)</td>
<td>0.15</td>
<td>0.29</td>
</tr>
<tr>
<td>World</td>
<td>0.15</td>
<td>0.23</td>
</tr>
</tbody>
</table>

Sources: Laborde (2011).

Notes: S33 contains chemicals, electronics, machinery; S25 contains textile, clothing and footwear; and the remaining includes vehicles and raw materials. The impact of Core modalities cut concerns only NAMA.

Pakistan would claim potential benefits from the DDA in terms of welfare effects but for any particular country what is being included or left out of the proposed negotiations matters. With exports depending heavily on textile and wearing apparel, Pakistan stands to face higher tariffs than countries with a more diversified export structure. Consequently, it stands to gain when these sectors are being liberalized globally. This is illustrated by examining the role “flexibilities” and sectoral initiatives play in the magnitude of the gains Pakistan can obtain from the current draft proposals being considered under the DDA.

4. Regional Trade Policy: an Assessment for SAFTA

Presently, the Agreement on SAFTA is a promising agreement in the South Asia region (Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka). Entered into force in 2006, the implementation has nearly completed Phase II which required non LDC members (India, Pakistan, and Sri Lanka) to reduce tariffs to less than 5% toward LDC members (Bangladesh, Bhutan, the Maldives, and Nepal) by 2009 and to other members by 2012. LDC members are given a longer implementation period extending to 2016.

In Bouët and Corong (2009), the assessment of the SAFTA agreement goes beyond the customary estimations of gains and losses and explores the role of the agreement in mitigating the food price implications of global export restrictions, which surged during the 2007-2008 food crisis.

To that end, the authors test various policy strategies in combination with a detailed study of the SAFTA agreement, including the inclusion or not of Sensitive Products. To assess the potential mitigation role of the agreement two scenarios are studied, a cooperative scenario, where the regional agreement is implemented with the imposition of export restrictions (through a 100% export tax applied by major exporters of rice, wheat and other cereals – a scenario called SAFTA – BANS) and a global non-cooperative scenarios, where the same export restrictions are simulated without implementation of SAFTA (scenario called BANS).
Results from the full implementation of SAFTA confirm earlier studies (see scenario SAFTA on Table 4): gains in real income are small but positive for all countries in South Asia, except for Bangladesh. After Sri Lanka, Pakistan is one of largest gainers with 0.13% gain stemming from positive terms of trade gains and allocation efficiency gains (Table 4).

SAFTA also produces improvements in factor prices for Pakistan, except for the decline in returns to natural resources. Wages of unskilled agricultural labor increase relative to unskilled wages in non-agriculture. Employment in agro-food sector increases, but falls slightly in the non-agricultural sector (Table 5).

An important component of the SAFTA agreement is the exemption of products (sensitive list) from the trade liberalization process, which can restrict significantly the benefits from the regional trade agreement. Pakistan lists 1,190 or 23% of tariff lines as sensitive products and faces large exemptions from other South Asian countries ranging from 13% to 25% of tariff lines. The sensitive lists are also concentrated on a few items with high protection rates: for example clothing and apparel with tariffs ranging from 15% in India to 32% in Bangladesh.

Removing the exemption on sensitive products increases income gains for Pakistan and doubles both exports and imports gains (Table 4). Factor prices increase slightly more than under the current agreement due to greater expansion in trade. Unskilled wages in agriculture increase by three times as much as unskilled wages in non-agricultural wages and employment shift from non-agriculture sectors to agriculture and food sectors (Table 5).

Table 4: Macroeconomic effects of liberalization scenarios based on Pakistan by 2020 (in percentage change from baseline)

<table>
<thead>
<tr>
<th></th>
<th>Real Income</th>
<th>Terms of trade gains</th>
<th>Allocation efficiency gains</th>
<th>All other gains</th>
<th>Exports</th>
<th>Imports</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAFTA</td>
<td>0.13</td>
<td>0.06</td>
<td>0.05</td>
<td>0.01</td>
<td>2.15</td>
<td>1.62</td>
<td>0.11</td>
</tr>
<tr>
<td>SAFTA-PLUS</td>
<td>0.30</td>
<td>0.19</td>
<td>0.11</td>
<td>0.00</td>
<td>5.26</td>
<td>4.06</td>
<td>0.26</td>
</tr>
<tr>
<td>Initial (vol)</td>
<td>40.63</td>
<td>27.23</td>
<td>94.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Bouët and Corong (2009).
Note: Initial (vol) is in $US millions in 2006. GDP refers to Gross Domestic Product.

In terms of intra-regional trade, Pakistan's trade within the region increases due to the removal of tariff barriers by SAFTA members. Exports to Bangladesh with increases ranging from 78% under SAFTA and 268% under SAFTA-PLUS, and imports from India with increases ranging between 55% and 113% under SAFTA and SAFTA-PLUS, respectively benefit the most (in relative terms) from the liberalization scenarios, especially under SAFTA-PLUS. However these changes are with respect to very low base levels (for more details see Bouët and Corong 2009). Also, the increase in intra-regional trade comes at the expense of trade with non SAFTA members making the agreement trade diverting.
Table 5: Effects of liberalization scenarios on return to factors in Pakistan by 2020 (in percentage change from baseline)

<table>
<thead>
<tr>
<th></th>
<th>Return to factors</th>
<th>Unskilled labor wages</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>capital</td>
<td>land</td>
<td>Natural Resources</td>
</tr>
<tr>
<td>SAFTA</td>
<td>0.13</td>
<td>0.28</td>
<td>-0.66</td>
</tr>
<tr>
<td>SAFTA-PLUS</td>
<td>0.08</td>
<td>1.32</td>
<td>-1.96</td>
</tr>
</tbody>
</table>

Source: Bouét and Corong (2009).

The role of SAFTA in alleviating the price effect of export bans is examined by imposing a 100% export taxes on paddy rice, processed rice, wheat and cereals by major exporters of these commodities in 2007 and 2008. The effects on world and domestic prices are traced from 2004-2020. At the world level, prices for the selected commodities increase between 24% (wheat) and 68% (cereals) whether under the export restrictions alone (BANS) or in combination with SAFTA (SAFTA-BANS). Not surprisingly, SAFTA is not instrumental in mitigating the augmentation of world prices faced by South Asian countries, given the region’s small share in world trade.

At the national level, under the BANS scenario the Consumer Price Index (CPI) drops slightly for exporters in South Asia such as Pakistan and India and increases for importers like Bangladesh and Sri Lanka but the assessed impacts of SAFTA are very small. The changes are driven by changes in the domestic price of the selected commodities subject to export taxes. In particular, under the BANS scenario rice prices in Pakistan drop by 13% (paddy) and 19% (processed). These are important exports for Pakistan and under the export bans the country reallocates its exports toward domestic markets driving domestic prices down due to the increased domestic supply. Under SAFTA-BANS, the drop in prices is slightly less drastic and for wheat and cereals, they increase by 1.5% and 2.4%, respectively. Globally implementing the SAFTA agreement does not change the consumer price index in South Asia countries by more than 0.5%.

SAFTA has been shown to be beneficial to Pakistan, but the exemption of sensitive products from the FTA is keeping the region as a whole and Pakistan in particular from real substantial gains. As phase II of the agreement came to an end early 2012, members states agreed on a 20% reduction in the sensitive lists and are presently working on modalities of further reductions of the lists (SAARC 2012). This would go a long way toward realizing the full benefits of the agreement for the member states. Finally, the SAFTA agreement alone would not counter the effects of high global food prices, due to the region’s small share in world trade but in Pakistan it could have a slightly dampening effect on domestic price variations of the affected commodities.

5. **An Example of Unilateral Policy Reform by Trade Partners: Costs and Benefits for Pakistan**

The high-income members of the Organization for Economic Cooperation and Development (OECD), and increasingly advanced developing countries as well, provide preferential market access for developing countries, but even the more generous programs for LDCs often contain exceptions. The exceptions are usually concentrated in a narrow range of products where LDCs

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24 Some members have opted for higher reductions: the Maldives, 78% reduction; and India, 95% reduction with regard to LDC.
have comparative advantage, especially agricultural commodities (often sugar, rice, meat, and dairy) and labour-intensive manufactures, such as textiles, apparel, and footwear. These exclusions, which are politically motivated, can hurt the economies of LDCs, which are generally not very diversified and even a small number of product exclusions can rob preference programs of much of the potential benefit (Bouët et al. 2012).

Currently, the exclusion of textile and wearing apparel from trade preference schemes offered by developed countries has limited the benefits that Pakistan can draw from these schemes. The implicit discrimination against a sector that represents a vital source of foreign exchange earnings and employment for Pakistan is measured here in the context of assessing the merits of a DFQF initiative. The DFQF as it stands, only covers 97% of tariff lines, is provided by OECD countries, and only addresses LDCs. Bouët et al. (2012) explore the consequences of amending the DFQF proposal by extending coverage to all products, by including additional recipients that are not LDCs, and by adding emerging economies such as Brazil, China, and India to the list of providers.

Including 100% of tariff lines in the DFQF initiative may lead to preference erosion by non LDCs but the loss would be very small on average. As other non LDC in South Asian, Pakistan experiences minor losses in total export of -0.04% (expressed as percentage deviations from baseline by 2020). Among the most affected sectors are oil seeds and vegetable oils and fats with losses of 19% and 0.46%, respectively. On the other hand, wheat, sugar and vegetable & fruit gain slightly by 1%, 0.23% and 0.25%, respectively, due to increased demand in neighboring LDC countries benefiting from the agreement.

If the preferences from DFQF are extended to other low income countries (excluding Pakistan) Pakistan’s exports suffer small but negative effects. In addition to exports, the inclusion of emerging markets as providers has slightly more negative effects across all economy-wide variables: Gross Domestic Product (GDP), terms of trade and welfare (Bouët et al. 2012). Not surprisingly, when the 100% DFQF is extended to Pakistan, we see substantial gains in exports of 12%. The South Asian experience confirms the general conclusions of the study, namely that extending DFQF access to other countries such as Pakistan or Sri Lanka, has little impact on existing LDC recipients like Bangladesh but large benefits for the newly included countries (Table 6).

Table 6: Effects of various DFQF scenarios on total export value for selected South Asian countries by 2020 (in percentage change from baseline)

<table>
<thead>
<tr>
<th>100% DFQF granted</th>
<th>LDC only</th>
<th>LDC plus small LICS</th>
<th>LDC plus all LICS (Vietnam and Pakistan)</th>
<th>LDC plus other small and poor (Bolivia, Paraguay, and Sri Lanka)</th>
<th>OECD plus Emerging economies (Brazil, China, India)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>-0.04</td>
<td>-0.06</td>
<td>11.90</td>
<td>-0.05</td>
<td>-0.06</td>
</tr>
<tr>
<td>India</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.04</td>
<td>-0.04</td>
<td>0.64</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>-0.01</td>
<td>-0.05</td>
<td>-0.27</td>
<td>20.94</td>
<td>-0.05</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>4.16</td>
<td>4.07</td>
<td>3.38</td>
<td>3.46</td>
<td>4.82</td>
</tr>
</tbody>
</table>

Source: Bouët et al. (2012).

While the DFQF initiative is not currently open to Pakistan, the country is a beneficiary of the General System of Preference (GSP) with the EU and the US. These programs currently offer few benefits for Pakistan due to the limited product coverage and stringent rules of origins. Under the
GSP reforms by the EU and the US, some countries considered to have reached a certain level of development may lose their preferences. For example countries such as India may be removed from the list of beneficiaries in both the EU and the US. None of these reforms include greater coverage of products, unless Pakistan becomes eligible for the GSP+—an EU program that offers additional tariff-free benefits to GSP countries that implement 27 international conventions in the fields of human and labor rights, sustainable development and good governance.

Since the major difference between the GSP and GSP+ is the inclusion of textiles and wearing apparels in commodities covered by the latter, this could have an important impact on Pakistan for which exports of this sector represent 84% of total exports. With respect to the US, an FTA is being considered which would make the preferences reciprocal, but might be a better option given the limitation of the current US GSP.

The various studies just summarized show that for Pakistan gains from trade negotiations, more is better and the devil is in the detail. Short of a full trade liberalization, the gains in real income from various trade liberalization scenarios are limited whether in the context of multilateral, regional, or unilateral trade negotiations. A narrowly diversified country in trade and production, Pakistan's gains will depend on which sectors are included and which are not included in the trade liberalization options. So the DDA modalities can generate larger gains for Pakistan without flexibilities or if they are augmented by sectoral initiatives that include textile and wearing apparel.

At the regional level, eliminating the exemption of sensitive products from the SAFTA agreement double real income gains and is pro-poor benefitting unskilled workers in agriculture the most. Finally, non-reciprocal preferences received by Pakistan are impacted if the coverage extends to 100% of products. For Pakistan to use trade as a development tool it should pursue short-term strategies to improve market access for its main exports. In the long run it should diversify its export base to take advantage of a changing trade environment.

6. Changing Climate: Investigating Long-Term Consequences for Global and Regional Markets

Climate change affects, among other things, water availability and temperature which in turn impacts crop yields and production. These changes in crop productivity may raise challenges for South Asia. While the region has managed to cope with increasing demand by improving yields for key cereals and other staple foods such as pulses, it is not as a whole a grain exporter. And some countries, Pakistan and Sri Lanka, are net food importing countries.

To assess the economy-wide effects of climate change, (Laborde et al. 2011) use an upgraded and adapted version of the global Computable General Equilibrium (CGE) model, MIRAGE. The model integrates changes in yields derived from climate change GCMs and the IFPRI IMPACT model. The GCMs translate different greenhouse gas emissions into variations of temperature and precipitation along 12 possible climate paths that range from cool and dry conditions to more humid and warmer conditions. The two models are combined to project the yield consequences of temperature and precipitation changes.

6.1 Crop Yields and Production

With the exception of pulses, yields in the major grains have steadily increased, especially for maize. High yields in rice have allowed Pakistan to maintain self-sufficiency and the surge in the
yield of maize in 2003 have resulted in increased maize self-sufficiency in 2007. On the other hand, wheat production has barely kept up with increased consumption, resulting in decreased self-sufficiency.

The link between changes in yields and self-sufficiency ratios (Production/Consumption) is shown to be strong only in the case of wheat but much less pronounced in rice. No strong relationship is found in the case of maize and pulses, suggesting that other factors such as area planted, fluctuations in food demand, and interventionist grain policies are more likely than yield changes to impact on the ability of the country to attain self-sufficiency.

The role of trade in supplementing shortfalls in production is examined by linking yield changes with net exports. The link is strong only for pulses, so trade is more likely to be used to supplement shortfalls in production. This is not surprising given that Pakistan applies relatively low tariffs of half or less on pulses than those applied on the other crops. For wheat and rice, public policies combined with a high level of protection largely disconnects national markets from international markets.

6.2 Biophysical Consequences of Climate Change on Yields

Before analyzing the effects of climate change impacts on agriculture in economic terms, it is important to understand the biophysical impacts of these changes. Results from applying the GCM's 12 alternative climate change scenarios to changes in yields show that among South Asian countries, Pakistan stand to be the most affected with yield losses, averaging 9.6% across scenarios (expressed as percentage change from a baseline by 2020). The highest losses are suffered by rice (35.1%) and groundnuts (49%).

In case of increased water scarcity, climate change will have a stronger impact on rainfed rather than irrigated crops (see Figure 7). In irrigated areas, water is assumed to be sufficient and used optimally so only changes in temperature will be the main driver affecting crop yields, while yields in rainfed areas will be affected by both changes in precipitations and temperature. In Pakistan, where more than 70% of agricultural land is irrigated, this pattern is found in groundnuts yields showing smaller decreases on average across all scenarios in irrigated areas than in rainfed areas.

On the other hand, in the case of rice and wheat, the effect on yields is more dependent on climate change scenarios. Under relatively cooler and drier climate scenario, yields suffer more in rainfed areas, while under more humid and warm climate scenarios, yields in irrigated areas are more affected. Finally, in the case of maize, certain climate change scenarios lead to a decrease in yields in irrigated areas and an increase in rainfed areas (Figure 7).
Using the version of the MIRACE CGE model (MIRAGE-CC) to investigate climate change related issues, we can assess the economic wide impacts of these biophysical changes, and see how alternative trade policies can be used to mitigate the adverse effects of climate change.

### 6.3 Economic Impacts of Potential Climatic Scenarios

The effects on yields of different scenarios can be very heterogeneous due to alternative assumptions about the level of CO2 emissions and the way that different GCM models will translate them in regionalized changes in temperature and rainfalls. The economic assessment captures this heterogeneity. For instance, depending on the scenarios, developing countries can win or lose from the incoming changes. Climate change represents a major change for the planet but some countries will benefit from a better climate for their agricultural production when others will face harder conditions. However, our results show that Pakistan is always negatively affected and in larger proportions than most of the other regions and countries in the world. Pakistan experiences the largest loss in income, 4% on average across all scenarios, while India benefits from a slight
increase in real income (Figure 8). Measuring such impacts but also showing the degree of uncertainty surrounding climate change is an important result of such a modeling exercise.

Figure 8: Real Income impacts of alternative climate change scenarios for selected regions by 2050 (in percentage change from baseline)

Source: Laborde et al. (2011).

Note: The horizontal axis refers to different climate change scenarios – for a complete description see Laborde et al. (2011).

Looking at the consequences of climate change on agricultural trade, Pakistan will have to rely on additional imports in all projected cases (Figure 9). The increase will be more concentrated on staple food products ranging from 7.5% to 22.6%. Since trade will be a spontaneous response to the new agro-economic situation of Pakistan, assuming no specific adaptive technological progress, and a key element to its future food security, it is meaningful to see how alternative trade policy options can be a mitigation option.
6.4 Trade Policy: A Mitigation Option?

Trade policy can potentially shape the effect of climate change in different ways. Because protection on agriculture is usually higher than in non-agriculture, trade liberalization would have relatively greater effect on agriculture, the sector that is most vulnerable to climate change. With so many potential outcomes from climate change on crops, trade policy in South Asia and Pakistan in particular, can be a powerful tool to mitigate an uncertain future. Using the MIRAGE-CC model, eight trade policy scenarios, mixing regional, unilateral and global tariff reductions are assessed under each possible outcome of climate change and results on production, income, and trade are compared across scenarios. Overall, the different trade policy scenarios have limited effects on the average macroeconomic consequences of climate change scenarios.

6.5 Impact on Production

First, out of all the South Asian countries, the combined effects of climate change and trade policies are most damaging to Pakistan’s production. Average yield changes from climate change scenarios result in production decline ranging from -6.5% to -5.4% for agro-foods and from -8.7% to -8.4% in staple production, across the different liberalization scenarios. In comparison, Bangladesh, the second worse off country, has production shortfall ranging from -4.1% to -3.8% in agro-food and -5% in staple.

Second, trade policy options do not matter significantly for Pakistan: global liberalization and an FTA in the Asia-Oceania region would perform slightly better than SAFTA or unilateral liberalization by reducing the decline in agro-food production. Similarly, losses in staples are not affected by various trade liberalization options.
At the sectoral level, changes in crop production are the result of yield shocks, trade relocation effects, inelastic demand and competition for land between crops. For example, in Pakistan oilseeds and rice are the most negatively affected, and start losing resources (land) to the more attractive wheat sector. Trade policy options have mixed but small effects on specific crops: oilseeds suffer less under global and unilateral liberalization while rice, pulses and vegetables and fruits are slightly worse off under SAFTA (Table 7).

Table 7: Changes in production for alternative trade policy options by 2050: simple average across climate change scenarios (in percentage change from baseline)

<table>
<thead>
<tr>
<th></th>
<th>No changes</th>
<th>SAFTA</th>
<th>Full FTA among SAFTA countries</th>
<th>Unilateral liberalization of SAFTA countries, All goods</th>
<th>Unilateral liberalization of SAFTA countries with sensitive products</th>
<th>Asia-Oceania wide FTA</th>
<th>Global liberalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agro food</td>
<td>-</td>
<td>6.5%</td>
<td>-6.0%</td>
<td>-6.1%</td>
<td>-6.1%</td>
<td>-5.4%</td>
<td>-5.4%</td>
</tr>
<tr>
<td>Average</td>
<td>-</td>
<td>8.5%</td>
<td>-8.6%</td>
<td>-8.6%</td>
<td>-8.6%</td>
<td>-8.7%</td>
<td>-8.7%</td>
</tr>
<tr>
<td>Staple</td>
<td>-</td>
<td>35.1%</td>
<td>-35.0%</td>
<td>-34.8%</td>
<td>-35.1%</td>
<td>-34.7%</td>
<td>-34.6%</td>
</tr>
<tr>
<td>Average</td>
<td>-</td>
<td>32.7%</td>
<td>-32.6%</td>
<td>-32.6%</td>
<td>-32.6%</td>
<td>-33.2%</td>
<td>-33.5%</td>
</tr>
<tr>
<td>Oilseeds</td>
<td>-</td>
<td>27.6%</td>
<td>-27.6%</td>
<td>-27.7%</td>
<td>-27.7%</td>
<td>-27.6%</td>
<td>-27.6%</td>
</tr>
<tr>
<td>Cotton</td>
<td>-</td>
<td>27.2%</td>
<td>-27.4%</td>
<td>-27.3%</td>
<td>-27.3%</td>
<td>-27.4%</td>
<td>-27.3%</td>
</tr>
<tr>
<td>Pulses</td>
<td>-</td>
<td>22.2%</td>
<td>-22.2%</td>
<td>-22.3%</td>
<td>-22.2%</td>
<td>-22.6%</td>
<td>-22.6%</td>
</tr>
<tr>
<td>Vegetables and Fruits</td>
<td>-</td>
<td>21.7%</td>
<td>-21.7%</td>
<td>-21.7%</td>
<td>-21.7%</td>
<td>-21.7%</td>
<td>-21.7%</td>
</tr>
</tbody>
</table>

Source: Laborde et al. (2011).

6.6 Impact on Poor People’s Income

In the MIRAGE-CC model, the impact on poor people’s income is traced through the real rate of return to unskilled labor. The evolution of the real unskilled labor wage reflects the combined impact of productivity shocks in agriculture (a large user of unskilled labor), the overall price index in the economy, and the mobility of unskilled labor across sectors.
If trade policy options have a limited effect on the macroeconomic consequences of climate changes, they may play a significant role for mitigating their negative impacts on the most vulnerable people, even if their impact is not that great. For Pakistan the average effects of increased liberalization across scenarios is slightly positive on the income of the poorest, reducing the losses from -5.9% to -5.3%. The effect is even more significant under the worst case climate change scenario reducing losses from -8.2% to -7.4% (Figure 10). In other words, trade openness plays the role of a partial insurance for the poor.

Figure 10: Changes in real unskilled labor income in Pakistan by 2050 (in percentage change from baseline)

Source: Laborde et al. (2011).

Notes: Changes expressed as percentage changes in 2050 relative to the baseline in each trade policy alternative.

Laborde et al. (2011) show that Pakistan is not only the most negatively affected of the South Asian countries but the negative impacts of climate change on unskilled labor wages exceed those on skilled labor irrespective of the trade liberalization alternatives. This suggests an increase in inequality among income groups. Yet, while the various trade policy scenarios have no effect on average income losses, income of unskilled labor suffers losses under global liberalization that are slightly less pronounced.

6.7 Sensitivity Analysis

Results from model simulations are dependent on assumptions regarding growth projections on indicators such as GDP and population. Assuming a more pessimistic trend in GDP, which would set world GDP growth rate at 55% of its original 2050 target, there would be a decrease in country GDP growth rates of 69% for India and 32% for Pakistan of their respective 2050 targets. Lower GDP growth means less income losses from climate change because the reduction in yields is relative to a lower level of productivity in the baseline. Assuming higher population growth decreases the price of labor (under the model’s assumption of full employment) and provides an incentive to use labor intensive production technologies. This would shift the production structure towards more labor intensive activities/sectors. The negative climate change shock on crop yields translate into a significant decline in the marginal labor productivity due to the characteristics of the production functions in the model. This leads to a decline in real wages making the assumption of higher population growth an even more adverse situation for the poor (Laborde et al. 2011).
Relative to other countries in South Asia, Pakistan is by far the most sensitive to changes in the baseline assumptions. Lower GDP growth reduces the effect of climate change on total real income and especially on unskilled worker real wages while population growth has the reverse effect. A more liberalized environment (for example the global multilateral liberalization scenario) mitigates these effects not just for Pakistan but also for India, at least in the case of unskilled worker real wage (Laborde et al. 2011).

7. Conclusion

Determining the potential impact of global and regional changes on Pakistan has been possible due to improvement of existing techniques of modeling and measurements. Pakistan displays production and trade structures that are narrowly diversified sector wise and partner wise in the case of trade. Consequently, the country does not have much flexibility when facing the potential negative effects from global trade policies and climate change.

Under the current Doha proposals, Pakistan captures some of the benefits from trade liberalization but not if certain flexibilities, such as the exclusion of sensitive and special products, remain. The exclusion of textile and wearing apparel in particular would limit not only the benefits from multilateral trade liberalization for Pakistan but also those from non-reciprocal preferences granted by developed countries. Preliminary results on the effects of climate change, lead to diverging estimations regarding its impact on real income, production, and trade for developing countries, but in the case of Pakistan, it depicts a gloomy future.

As mentioned above, the impact on Pakistan is the strongest among South Asian countries. The country suffers from loss in real income and an increase in income inequality due to stronger negative effects on lower income groups. These effects occur across all climate change scenarios and all selected trade policy alternatives. While trade policy does not noticeably mitigate the effects from climate change, losses in real unskilled labor income are slightly lower under increased liberalization. This dampening effect is more pronounced in the worst case climate change scenario suggesting that trade openness could potentially serve as partial insurance for the poor.
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Liberalization of Services Trade in South Asia

Dilli Raj Khanal

The services trade is very diverse with wide-ranging areas and numerous activities. But the limited flow of information or data gap poses problems for the deeper analysis on the pattern and direction of services trade liberalization among South Asian countries. Nonetheless, based on the available information from different sources, we focus here on the importance of the services trade, current trends and barriers to the services trade and the gain that could be made to sub-sectors after barriers are brought down, potential areas of services trade expansion and lessons to be learned especially from the standpoint of making services trade growth inclusive and sustainable. The status, areas of comparative advantages, major constraining factors and prospects of services trade from Nepal’s viewpoint is also covered in this chapter.

1. Liberalization of Trade in Services in South Asia

Several services sub-sectors are central to economic performance, both as dominant activities and through the intermediation function they perform across all sectors of the modern economy, from agriculture, manufacturing to across various services sectors and sub-sectors. Many studies based on country experiences point out that the gains from services liberalization could be greater than the gains from goods liberalization as services liberalization generally is found to remove bottlenecks in infrastructural services, lowering the prices of services, and improving the quality of services leading to productivity and dynamic gains (Francois and Hoekman, 2010 and Hoekman, 2011). The diverse or wide-ranging nature of services and their potential efficiency enhancing role including their lower cost of adjustment in the reform process is additionally considered to be contributory to inclusive growth and its sustainability.

The agreement on services trade in 2010 shows that South Asian Association for Regional Cooperation (SAARC) member countries, although lately, have realized the importance of services trade liberalization in enhancing mutual gains. Therefore, there is a need to identify the major barriers to services trade for tapping such a huge potential among South Asian countries.

1.1 Current Trend in Interregional Trade

Since the last two decades, the services sector is emerging as particularly dynamic in terms of output growth, employment and exports including Foreign Direct Investment (FDI) inflows or attraction. The share of services value added and employment in developed countries has reached in the region of 75 percent with a narrow gap in its respective contribution. In East Asia and the Pacific countries, the respective share surpassed 65 and 39 percent in 2008.

In South Asia the share of services in value added is far less at almost 55 percent on average. The share of employment is still very low, 28 percent in 2005. Although the share of services trade of SAARC in Global Gross Domestic Product (GDP) reached 15 percent in 2010 surpassing an average global share of 12 percent, the share of commercial services export of SAARC remains in the region

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of 3 percent which was 1 percent in 2001. On the other hand, the share of commercial export services of Organization for Economic Cooperation and Development (OECD) and East Asia and Pacific was 70 and 23 percent respectively in 2010 (Sauve, P, Pasadilla, G and Mimic, Mia 2011). The more worrying phenomenon is that no perceptible expansion in the interregional trade in both goods and services is taking place within the SAARC countries (Pandey, 2009 and Jayaraman and Choong, 2011).

Although the services trade agreement of SAARC countries in 2010 has opened a new window of opportunities, no satisfactory progress is visible as available information indicates. One additional noticeable feature is that the share of single country share in SARRC services trade is very dominant indicating lack of diversification in the composition of services trade (Pandey, 2009 and Jayaraman and Choong, 2011). This also indicates that trade creation which is the key for ensuring gains has also not taken place noticeably.

Another interrelated distinct phenomenon often ignored or generalized is that land locked countries like Nepal and Bhutan are highly integrated with the SSARC countries as their trade share with SAARC member countries ranges from 70 to as high as 95 to 97 percent. This adds another important dimension on our trade issue i.e. apparent high trade share and or trade integration indices alone cannot reflect that it has contributed fair or equitable gains to be helpful or contributory to the member countries toward making growth inclusive and sustainable. Therefore, while debating on trade integration, it is also equally necessary that the asymmetrical tendencies are also taken into special consideration.

1.2 Explicit or Implicit Barriers to Services Trade

Despite SAARC services trade agreement incorporating the clauses already agreed under the General Agreement on Trade in Services (GATS), there are certain weak spots as some assessments indicate (Sharma, 2012). As countries like Nepal have made more liberal commitments in GATS than other South Asian countries, this means that the gap, even in terms of commitments among the member countries, still persists. The most noticeable phenomenon is that trade restrictions or barriers are a major hurdle in the services trade (Sharma, 2012 and Ratna, 2010). Interestingly, even after the agreement in 2010, no major steps have been taken to liberalize the services trade. Lack of trust, negligence to comply with commitments, no attention or omission of issues related to non-tariff barriers and other restrictive rules including rules of origin and stringent regulations are found to be the main obstacles. As stated by Rahman (2010), various measures in the areas of prices, finance, licensing, monopoly and technical matters are important restrictive practices under non-tariff barriers.

It is also worth noting that lack of adequate attention to fulfill initial conditions including logistics have been equally constraining factors to augment the services trade. It is clear that for promoting services trade capacity enhancement in legal and institutional framework, human, technological, financial, information technology, telecommunications and transport networks are required. No such comprehensive or coordinated approach has been followed so far. The geographical disadvantages and transit problems are additional constraints affecting, particularly, trade capacity and competitiveness of land locked countries like Nepal.

As evident from past experiences, for the services trade strong regulation and regulatory capacity is needed but it should be guided by an enabling environment. Therefore, trade facilitation in customs and border areas including availability of infrastructures and promptness in clearing procedural
matters should also be part and parcel of initiatives to bring about reforms in services trade. At both fronts, there are serious problems in the South Asian region. Even the movement of people is highly restricted or discouraged.

The problem of access to education, health, infrastructure and financial services to all people of the member countries is also constraining services trade which at the same time is key for inclusive growth and sustainable development in the member countries. From inclusive and equity perspectives, a new kind of natural monopoly and oligopolistic tendencies, inadequate consumer information, increased tendencies of capturing opportunity or benefits are added problems leading to market failures.

2. **Gains from Reducing Barriers to Services Trade**

The present status accompanied by various constraints indicates that more concerted efforts will be needed to liberalize services trade which also contributes to augment growth with sustainability. For this certain reforms have to be initiated at both the regional and country specific level in a coordinated way. At the regional level, the problem of non-tariff barriers, adverse regulatory environment, lack of adequate trade facilitation, transit facility problems, institutional and capacity constraints have to be addressed with priority involving entrepreneurial and business community and other concerned stakeholders of respected fields. While doing so, the focus should be on those services which have comparative or competitive advantages of the member countries. Access to finance and credit has also to be considered seriously at the regional level to encourage business in general and small businesses in particular that could benefit farmers as well. This is essential for inclusive growth and sustainable development.

For enhancing regional trade in services trade, reduction in cost of services trade is essential. For this, in addition to the above reforms, improvement in roads and ports facilities and strengthening of connectivity added by promotion of health and education services trade will also be critically important.

At the country specific levels, the trade restrictions practices must be narrowed down, waved or simplified. In this context, regulatory reform is key for stimulating competition, securing pro-poor outcomes and improving resilience to global shocks as the financial crisis and developments in the aftermath indicate. Similarly, promotion to the FDI by member countries has to be encouraged with priority to invest in the potential areas of least developed countries having more spillover effects across member countries.

Similarly, there is huge scope for promoting Mode 4 trade among member countries. In addition to some preferential arrangements, it is necessary that the visa system is highly liberalized as that could also help to augment business services and above all augment tourism among member countries. From the specific country perspective, it is necessary that the focus is on removing supply constraints, enhancing supply capacity and reducing transaction costs including transport costs that could also simultaneously help to improve an investment climate for maximizing trade opportunities.

3. **Potential Areas of Services Trade Expansion**

The business services, tourism/travel, energy/electricity, health, education, information technology, labor, financial services, construction and engineering, distribution, recreation /culture
and transport services are most promising for services as revealed by various regional and country specific studies.

However, as suggested during the discussion, a step by step approach could be most appropriate. It is proposed that energy and tourism should get first priority. If considered closely, these could be justified from the standpoint of harnessing huge potentials and also meeting growing demand within the SAARC countries.

4. **Status and Prospect of Services Trade from Nepal's Standpoint**

Nepal is one of the most liberalized countries among SAARC members in the services trade. Sectors such as the banking sector, insurance companies and other numerous services have been highly liberalized. Three fourths of equity of foreign investors has been already granted to the banking sector. Similarly, 100 percent equity has been allowed in subsidiaries of foreign insurance companies. As a part of WTO membership obligations, 100 percent foreign equity participation has been allowed in wholesale banking. More recently the tourism sector has been further liberalized and others are in the process of further liberalization. No restriction is applicable to the Nepalese and Indian nationals to travel from one country to another. Visa facilities to the rest of the member countries are also much better.

Apart from such measures to liberalize the services trade, Nepal has also taken various measures recently to create an enabling environment to both domestic and foreign investors. In the last fiscal year 2011/12, a high level investment board was established under the chairmanship of the Prime Minister with the aim of attracting domestic and foreign investors by providing various facilities and incentives through a one window mechanism. Similarly, despite opposition from various quarters, a Bilateral Investment Promotion and Protection Agreement (BIPPA) was made by the government of Nepal with India in 2011 for attracting investment from India. Nepal has also declared year 2012 and 2013 as investment years. Given its tremendous potentials, tourism is one of the highest priority areas of development.

However, despite speedy in trade liberation including services trade liberalization, Nepal's trade performance is highly disappointing due to, among others, lapses in trade liberalization added by supply side constraints and bilateral trade relations (Khanal, 2012). For instance, the share of total trade comprising goods and services trade was 55.8 percent of GDP in 2001. This ratio reduced to 42.9 percent in 2012. The irony is that such a reduction was not due to deceleration in imports but was primarily due to a sharp fall in the share of exports which reduced to 9.9 percent of GDP in 2012 from 22.6 percent of GDP in 2001.

Despite some marginal pick up in services export from 3.9 percent of GDP in 2011 to 4.7 percent of GDP in 2012, it is still very low compared to its share of GDP at 6.8 percent in 2001. Consequently, the total trade gap of good and services rose to 23 percent of GDP from 10.7 percent during the same period. Noticeably, as a result of 65 to 70 percent of Nepal's trade taking place with India, a deficit in the tune of Rs 250 billion out of a total deficit of Rs 358 billion was registered in 2012 (MoF, 2012 and NRB, 2012). Obviously, such a trend is highly unsustainable.

Nepal's experience indicates that trade liberalization has to be accompanied by policies and programs that could contribute to enhancing production and supply capacity side by side. Some of the studies examining the direction of causality of reforms indicate that in Nepal's context the sequencing was from trade to others on the expectations of big spillover effects. That could not
materialize as there was no investment in trade capacity enhancing sectors (Khanal and Shrestha, 2008) despite Nepal having tremendous potential with comparative advantages and competitive strengths in many areas (MOCS, 2010). It is a well-established fact that water resources and tourism are areas with the most potential from Nepal's long term development point of view apart from the possibilities of promoting agro and other industries given the richness in bio-diversity.

From Nepal’s stand point there are many other potential areas of services trade. Among them, the most important include travel, health and education, financial services and labor. At the same time, transit trade via Nepal also has prospects as it may contribute to reduce trade costs considerably of countries like India and China if their trade takes place via Nepal.

Based on past experiences, the time has come for SAARC member countries to enhance trade and economic integration through augmenting investment in potential sectors of member countries which could facilitate trade expansion in a more sustainable way while at the same time ensuring more equitable gains to the member countries.

5. **The Way Forward**

Amidst intensification in trade liberalization worldwide, the gap between commodity producing and the services sectors has widened, fueled by speculation led fictitious capital which is additionally contributing to debt, food, energy and environmental crisis. Amidst such a tendency, inequality is rising massively in various countries with a threat of increased antagonism or confrontation between labor and capital. Therefore, it is essential that while liberalizing services trade, these developments are taken into consideration. This, in turn, underscores the importance of inclusive growth and sustainable development.

For strengthening such a course through services trade, removal of infrastructural services bottlenecks, minimization of services cost in production and raising of quality of services will be critically important in the process of services trade liberalization. As services trade is different from goods trade and is largely governed by commitments made on the modes and interrelated regulatory system, trade facilitation is the key which has to be complemented by regulatory reforms for both sectoral and economy wide improvements in performance and the generation of pro-poor growth.

Based on experience, it is also essential that increased monopolistic tendencies are curbed which have to be accompanied by regulatory and other reforms that could provide special incentives or work as safeguards to small businesses in different services activities. If SAARC member countries make breakthroughs in trade and economic integration through a comprehensive framework that ensures more equitable gains to all member countries in general and less developed countries in particular by helping to tap their potentials, it will really help to augment growth and make it inclusive and sustainable in all South Asian countries at the same time.
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Trade Liberalization in Services: Prospects for Pakistan

Zafar Mahmood

Introduction

Why are services so important for the economy in general and trade in particular? Currently, it is viewed as the single most dynamic activity for any economy. The world’s modern economies are now rightly branded as services economies. Tradable services broadly including construction, transport, distribution, domestic commerce, finance, tourism, education and health, etc., account for more than half of the gross domestic production (GDP) in most of the South Asian economies.

The services sector has a two-way relationship with commodity producing sectors. It serves as an input for production and value addition in manufacturing. Conversely, growth and expansion of the services sector has been facilitated by industrial and technological development. It is important to note that services are also sold in the form of goods that embody them. Thus, both goods and services complement each other. The close inter-linkage between services and goods production is also fostering rapid expansion in services trade. As manufacturing becomes sophisticated and complex, its services content, in terms of designing, marketing, storage, transportation, advertising, etc., increases too. Both supply and value chains will not be in sync unless goods and services complement each other.

Driven by innovations in information and communications technology (ICT), the services industry is becoming increasingly diverse and specialized. With deregulation and liberalization of the services sector, trade in services has grown faster than trade in goods.

Accordingly, an efficient services sector, functioning under liberalized environment, has become a pre-condition for overall economic growth and development of a country. Without efficient services, a country finds it difficult to foster investment and hence economic growth. Services provide the bulk of employment, income and are vital for producing other goods and services.

Jointly, trade and Foreign Direct Investment (FDI) play a crucial role in developing the services sector. Growing openness and global integration is helping trade in services. It is made possible by trade liberalization in services either through unilateral actions or through commitments made in the General Agreement on Trade in Services (GATS). Trade liberalization aimed to establish rules and disciplines for trade in services. It is thus imperative for us to orchestrate support from deregulation (liberalization) for services’ growth impetus. Trade liberalization needs to be quid pro quo; at the same time we must ensure legal security and new market access opportunities abroad for our services supplies companies.

All in all, technological advancements and regulatory changes have greatly expanded the range and scope of trade in services, especially in the context of increasing share of knowledge-intensive services. With trade liberalization, domestic monopolies have been challenged and competition in the markets has resulted in improved efficiency and productivity. Trade openings have allowed countries to benefit from economies of scale and scope in terms of bigger services and their variety and of course lower prices. Private sector participation has also increased in services sectors where the public sector had the monopoly.

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This chapter, within the above perspective, examines Pakistan's trade liberalization experience in services. The rest of the paper is composed of seven sections. Section 2 looks at trends, growth, and the structure of services and their exports. Section 3 discusses barriers to services trade. Incentives for exports in services are reviewed in section 4. Liberalization of services trade is examined in section 5. The impact of trade liberalization in services is discussed in section 6. Challenges and issues in services trade are identified in section 7. Finally, section 8 makes some recommendations.

1. The Condition of the Services Sector in Pakistan

The services sector occupies a critical position in the Pakistan economy. Its share in Gross Domestic Product (GDP) rose from 47% in FY1981 to 54% in FY2012. The services sector GDP is growing at a faster pace than the commodity producing sectors. Likewise, between FY2005 and FY2010, exports of the services sector grew at an annual average rate of 9.52% as compared to 6.44% of the commodity producing sector (Table 1).

Most of the services produced in Pakistan are non-tradable. During FY2012, only 5% of the domestically produced services were exported. Accordingly, the services trade in Pakistan is not very open. It may be noted that during FY2012, the share of total services trade (exports + imports) in the GDP was also only 5%. In the same year, exports of services were 37% less than imports of services. Pakistan was able to reduce the gap between exports and imports of services. It may be noted that in FY2008, exports of services were 64% less than the imports of services. Afterwards, this situation started improving. Consequently, the trade deficit in commercial services declined from $6,457 million in FY2008 to $1,940 million in FY2011. Pakistan has a meager share in global services exports. It was 0.08% in 2008.

<table>
<thead>
<tr>
<th>Trade</th>
<th>Value</th>
<th>Share in total trade</th>
<th>Average annual change (FY2005 to FY2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchandise</td>
<td>FY2005</td>
<td>FY2010</td>
<td>FY2005</td>
</tr>
<tr>
<td></td>
<td>14401</td>
<td>19673</td>
<td>81.3%</td>
</tr>
<tr>
<td>Commercial services</td>
<td>FY2005</td>
<td>FY2010</td>
<td>FY2005</td>
</tr>
<tr>
<td></td>
<td>3319</td>
<td>5229</td>
<td>18.7%</td>
</tr>
<tr>
<td>Total</td>
<td>FY2005</td>
<td>FY2010</td>
<td>FY2005</td>
</tr>
<tr>
<td></td>
<td>17720</td>
<td>24902</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Author’s estimates.

Figure 1 depicts the shares of different services sectors and the commodity producing sector in the GDP of Pakistan.
The leading export in services is government services (i.e., remittances received by foreign missions in Pakistan, military units and agencies and international organizations). As a percent of commercial services exports, it was 48.5 in FY2010; which rose from 39.6% in FY2005 at an annual growth rate of 14.0% (Table 2). It was followed by transportation exports, whose share was 24.5 in FY2010, a growth rate of 3.8%. Its share has declined in total services’ exports. Other major exports include: travel, communication (postal and telecommunication), computer & information services and other business. Of these services, travel, computer & information and other business services are growing very fast. Interestingly, these are among the more liberalized services sectors. Minor services’ exports include: construction, insurance, financial, royalties and license fees, and personal, cultural, and recreational services.

Services trade in communication, computer and information services, insurance services, personnel, cultural and recreational services and government services stood in surplus. But trade in transport services, tourism, financial, construction, royalties and license fees were in deficit.
Table 2: Composition of Commercial Services Exports

<table>
<thead>
<tr>
<th>Services export sector</th>
<th>Value</th>
<th>Share in exports of commercial services (%)</th>
<th>Average annual change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY2005</td>
<td>FY2010</td>
<td>FY2005</td>
</tr>
<tr>
<td>Transportation</td>
<td>1062</td>
<td>1279</td>
<td>32.0</td>
</tr>
<tr>
<td>Travel</td>
<td>177</td>
<td>287</td>
<td>5.33</td>
</tr>
<tr>
<td>Communication</td>
<td>331</td>
<td>246</td>
<td>9.97</td>
</tr>
<tr>
<td>Construction</td>
<td>24</td>
<td>16</td>
<td>0.72</td>
</tr>
<tr>
<td>Insurance</td>
<td>25</td>
<td>42</td>
<td>0.75</td>
</tr>
<tr>
<td>Financial</td>
<td>39</td>
<td>90</td>
<td>1.18</td>
</tr>
<tr>
<td>Computer &amp; information</td>
<td>47</td>
<td>188</td>
<td>1.42</td>
</tr>
<tr>
<td>Royalties and license fees</td>
<td>13</td>
<td>6</td>
<td>0.39</td>
</tr>
<tr>
<td>Other business services</td>
<td>285</td>
<td>536</td>
<td>8.59</td>
</tr>
<tr>
<td>Personal, cultural &amp; recreational services</td>
<td>1.5</td>
<td>5</td>
<td>0.05</td>
</tr>
<tr>
<td>Government services</td>
<td>1315</td>
<td>2535</td>
<td>39.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3319</strong></td>
<td><strong>5229</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Author’s estimates.

Services GDP minus services exports is $116,449 million. This roughly reflects that a large part of the services sector remains unexplored in the international market and services of this amount can possibly be exported from Pakistan.

Table 3 shows the changing competitiveness and strength of Pakistan’s services exports. Estimates are based on the revealed comparative advantage (RCA) analysis. It may be noted that Pakistan has a comparative advantage in exports of transport, communications and government services. Pakistan’s export competitiveness in transport is increasing over time. In communications and government services, it is very high and is increasing as well. In financial services competitiveness is weak but gradually improving. In computer and information services, it is moderately low and rising rapidly. Interestingly, these are the sectors that are being liberalized. For personal travel and construction services competitiveness is not only low but falling too. Similarly, Pakistan’s competitiveness in other business services is low and falling. Competitiveness in royalty and licensing fee, and personal and cultural services is extremely low.
## Table 3: RCA Index by Category of Export of Services

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</thead>
<tbody>
<tr>
<td>2006</td>
<td>1.52</td>
<td>0.32</td>
<td>1.93</td>
<td>0.34</td>
<td>0.28</td>
<td>0.21</td>
<td>0.56</td>
<td>0.19</td>
<td>0.50</td>
<td>0.0</td>
<td>14.1</td>
</tr>
<tr>
<td>2007</td>
<td>1.21</td>
<td>0.32</td>
<td>1.38</td>
<td>0.60</td>
<td>0.42</td>
<td>0.16</td>
<td>0.66</td>
<td>0.11</td>
<td>0.44</td>
<td>2</td>
<td>6</td>
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<tr>
<td>2008</td>
<td>1.20</td>
<td>0.32</td>
<td>0.86</td>
<td>0.32</td>
<td>0.69</td>
<td>0.13</td>
<td>0.79</td>
<td>0.10</td>
<td>0.41</td>
<td>0.0</td>
<td>16.1</td>
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<tr>
<td>2009</td>
<td>1.41</td>
<td>0.30</td>
<td>2.92</td>
<td>0.14</td>
<td>0.43</td>
<td>0.29</td>
<td>0.81</td>
<td>0.01</td>
<td>0.44</td>
<td>4</td>
<td>7</td>
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<tr>
<td>2010</td>
<td>1.56</td>
<td>0.28</td>
<td>9.54</td>
<td>0.06</td>
<td>0.26</td>
<td>0.61</td>
<td>0.81</td>
<td>0.00</td>
<td>0.45</td>
<td>0.0</td>
<td>18.3</td>
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<tr>
<td>2011</td>
<td>1.46</td>
<td>0.28</td>
<td>8.36</td>
<td>0.02</td>
<td>0.41</td>
<td>0.56</td>
<td>0.93</td>
<td>0.06</td>
<td>0.42</td>
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<td>0.0</td>
<td>15.3</td>
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<td>0.0</td>
<td>12.5</td>
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<td>0.0</td>
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<td>4</td>
<td>7</td>
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</tbody>
</table>


### 2. Barriers to Services Trade

Services are traded via the movement of people and/or capital; therefore, the transaction of services typically takes place behind the border. Even when cross-border trade takes place via e-commerce, it is not easily observed by customs officials and hence is a major source of illicit trade. In addition, Hundi, illegal migrants and even multinational corporations by-pass the national system to avoid services trade measures and domestic taxes. Therefore, such services transactions are not open to border protection. Accordingly, services trade barriers are typically non-price regulatory measures. Services trade barriers are typically used to:

1. ‘specifically’ discriminate against foreign suppliers — either against their entry, or against the nature and scope of their operations once they have entered the home market,
2. protect incumbent services providers by discriminating against all new suppliers, be they domestic or foreign — either by restricting their entry, or by restricting the nature and scope of their operations, and
3. protect morals, health, security, consumer interests and privacy.

In general, barriers to services may consist of "prohibitions, quantitative restrictions, government regulations, "but more specifically they may take any of the following forms:

- Regulatory barriers, they need not discriminate against foreigners.
- Barriers to market access are designed to protect incumbent firms from new firms (domestic or foreign).
• Barriers to commercial establishment: Restrictions on types of commercial presence and number/type of services that can be provided (branches vs. subsidiaries for banking, for example).
• Restrictions on FDI. Participation of foreign capital in terms of a maximum percentage limit of foreign shareholding.
• Restrictions on the value of transactions or assets.
• Restrictions on the total quantity of services output.
• Barriers to ongoing operation: restriction on raising funds, for example.
• Barriers on the number of natural persons that may be employed.
• Discriminatory registration requirements and licensing procedures,
• Discriminatory nationality and residency requirements
• Economic needs tests: the main criteria is the assessment of the relevant market situation in the member state or the region where the service is to be provided, including with respect to the number of, and the impact on, existing services suppliers.
• Discriminatory treatment giving advantage to domestic firms over the foreign ones.
• Monopoly or oligopolistic market structure.
• Prudential supervision – regulatory oversight by the authority.
• Red tape and bureaucratic hurdles.

3. Incentives for Exports in Services

The following incentives are offered by the government of Pakistan to promote the export of services:

1. 35% of export proceeds can be held in foreign currency accounts in Pakistan. The amount can be used for a wide range of legitimate purposes (e.g., for promotion and market studies) without the State Bank of Pakistan (SBP)’s approval.
2. A number of sector-specific schemes also assist export of services. For instance, exports of computer software and IT-related services are exempted from income tax until 2016.
3. A separate cell is established at the Trade Development Authority of Pakistan (TDAP) to function as a facilitator between the services sector and various arms of the government. It aims to convert services potential into actual export. It is mandated to build capacity, assist with quality initiatives and improve market access abroad. It intends to conduct research in the five priority areas: information technology, health/medical services, financial services, professional services construction and architectural services.
4. To support the services industry, a Services Export Development Fund is being established to provide assistance in the form of reimbursable grants to services exporters for tendering or negotiating international projects and for conducting prefeasibility or feasibility studies for international projects.

4. Liberalization of Services Trade

Regulations are necessary to ensure consumer protection, services standards and several other public interest objectives. But they act as restrictions and curtail the market access granted to
foreign services suppliers in any trade agreement. Thus domestic regulations present a very complex issue in services trade policy formulation; therefore, it should be a critical element in the liberalization of services trade.

Pakistan is committed to liberalization of trade in the services sector in terms of new entrants (local as well as foreign). It realizes that gains are likely to stem from increased competition and efficiency of production; as it has experienced in telecommunications, financial services, and transport sectors.

A negative effect of trade liberalization in services has been rarely reported. Because of this, it is increasingly felt that by locking in our commitments in the services sector, the government will be reinforcing its policy in both the ‘goods’ and ‘services’ sectors and it will be giving the right signals to international investors and communities of its predictable, transparent and stable business environment.

In 1990, Pakistan embarked on a program of major economic reforms, although it was initiated in the mid-1980s: namely the exchange rate, payments reforms, privatization, trade deregulation, and financial sector reforms. Pakistan liberalized its services trade regime unilaterally, bilaterally and multilaterally. In the Pakistan-Sri Lanka Free Trade Agreement (FTA) both parties have agreed to include services and investment in the agreement. Likewise, Pakistan-Malaysia Preferential Trade Agreement (PTA) includes investment and services. In fact, the number of countries having bilateral investment treaties with Pakistan is about 50 countries.[27] With WTO Pakistan submitted its schedule of specific commitments in 1994, 1995, 1997 and 1998. As a result of these reforms, Pakistan has substantially liberalized its services sector in terms of market access in telecom, banking, legal, engineering services, transport, construction, computer and information services.

4.1 GATS-related Trade Liberalization

GATS recognizes 12 main sectors for the purpose of classification of services as follows: business, communication, financial, construction/engineering, health, tourism/travel, distribution, education, environment, recreation/culture/sporting, transport and others. The 12 main sectors, in turn, are comprised of 154 sub-sectors.

In 1994, Pakistan made commitments in six sectors; namely, business, financial, communication services, health and related services, construction and related engineering services, tourism, and travel related services. A total of 42 sub-sectors were scheduled with limitations.

Pakistan’s initial services offer under the current Doha Round of multilateral negotiations was submitted in May 2005 and covers 65 activities up from 42 initial commitments. Pakistan has not submitted a revised offer.

Pakistan’s certain general commitments (i.e., horizontal) market-access and national-treatment limitations relate to commercial presence (Mode 3) or the presence of natural persons (Mode 4, e.g., presence of foreign executives/specialists).

Cross-border supply of services (Mode 1) is unbound (which means that, at least at this stage, 27Both South Asian Free Trade Agreement (SAFTA) and Economic Cooperation Organization Trade Agreement (ECOTA) exclude services trade.
Pakistan maintains its’ freedom to modify regulations and possibly change the conditions of entry for foreign services providers concerning a specific mode of supply) for all sectors.

In the Doha Round of negotiations a request-offer approach is adopted. According to this approach member countries made their initial requests to other countries for opening up their services sectors. Pakistan received initial requests from 19 countries, including: United States, European Union, Australia, China, Japan, Korea, Switzerland, Hong Kong, Norway, Poland, Mauritius, Malaysia, Singapore, Canada, India, Malaysia, Egypt and Bahrain.

Pakistan's initial offer has taken into consideration the market access initial requests as well as revised requests recently made by its trading partners inter alia Australia, European Union, Switzerland, Singapore, and United States. Pakistan's initial offer has been submitted. A caveat is that this offer is conditional to the market access Pakistan receives in other areas of negotiations as well and retains the right to add, remove or modify any element of the offer until a final agreement that means Pakistan's objectives are reached.

The highlights of Pakistan's initial offer are:

a) Foreign equity limit increased from 51% to 60% unless specified otherwise.
b) No restriction on acquisition of real estate by non-Pakistani entities.
c) Categories for ‘intra corporate transferees’ and ‘business visitors’ have been defined to facilitate the temporary entry of business visitors and other services suppliers. Reasonable time periods have been allocated to facilitate such temporary ‘stays’ and ‘visits’.
d) New commitments have been proposed in 22 sub-sectors: business services, distribution services, educational services, environmental services. In business services category, legal services and accounting, auditing and bookkeeping services, architectural services, veterinary services and services provided by midwives, nurses, physiotherapists and paramedics are proposed. Furthermore, computer-related services, research & development services, rental and leasing services, printing & publishing, agriculture storage facilities and range land services have been proposed for making commitments. In communications, commitments have been proposed in courier services. While in distribution services, retail and wholesale services are proposed for making commitments.

5. Sectoral Trade Liberalization

5.1 Financial Services

The financial sector has undergone major reforms almost unilaterally. The control of the predominantly state-owned banking system has been taken over by the private sector. The legislative framework and the State Bank's prudential supervisory capacity has been improved substantially. Its supervisory capacity has been enhanced broadly in line with the Basel Core Principles for Effective Banking Supervision. More specifically, all the nationalized commercial banks have been privatized. A number of regulatory measures have been put in place to ensure transparent corporate governance. Minimum paid-up capital requirements of banks has been raised from Rs. 50 million to Rs. 2 billion. This has led to several mergers and consolidation of banks.

28The SBP retains prudential supervision and licensing of commercial banks, development financial institutions, and microfinance banks.
Foreign branches and wholly foreign-owned locally incorporated subsidiaries are permitted, provided that the foreign bank's home country belongs to a regional grouping in which Pakistan is a member and/or it has global tier 1 minimum paid-up capital of US$5 billion. Otherwise, foreign banks may operate only as a locally incorporated subsidiary, with foreign equity capped at 49%. Pakistan permits most favoured nation (MFN) exemptions in financial services to preserve reciprocity requirements, Islamic financing transactions, and joint ventures among Economic Cooperation Organization countries. Existing foreign banks as well as those formed under the above criteria are allowed to open up to 100 branches as per Branch Expansion Plans submitted and approved by the SBP. Commercial banks with over 100 branches must open 20% of their branches in regional centres where no bank branch exists. There is no limit on volume of deposits and funds mobilized by foreign banks. ATMs are not treated as separate branches. Transmission of permissible funds, including foreign currency, can be effected through banks that having authorized dealers’ licenses. Commercial banks incorporated in Pakistan and branches of foreign banks are allowed to undertake leasing business provided it is not their core and major line of business. Financial institutions can undertake portfolio management services through their locally incorporated subsidiaries, and financial and investment advisory services through subsidiary companies.

Foreign life and non-life insurance firms must be locally incorporated; fully foreign-owned firms are permitted following removal of the 51% foreign equity cap in 2006 and are accorded national treatment. Foreign companies must bring in foreign exchange of $4 million in equity towards minimum capital requirements; the balance may be raised locally. Residents are generally prohibited from getting insured with overseas companies.

The foreign exchange regime is liberalized. Whereas, the current account is fully convertible, the capital account is almost convertible. The Pakistani corporate sector has been allowed to acquire equity abroad. Foreign registered investors can bring in and take back their capital, profits, dividends, remittances, royalties, etc., free from any restriction. Restrictions imposed on banks to allow consumer financing have been removed. This results in a major stimulus to the domestic manufacture of consumer durables. New recovery laws have been enforced to ensure the right of purchase and sale of mortgaged property with or without the intervention of the courts to avoid delays in the recovery of defaulted loans. To provide access to credit by small and medium enterprises (SME), an SME bank has been established. To ease access of credit in rural areas, licensing and regulatory environments have been made less stringent for micro financing.

Financial reforms have improved efficiency and contributed to economic performance. They seem essential for Pakistan's successful economic restructuring and long-term development, since an efficient financial sector allocates savings into more productive investments. The banking sector has been restructured and transformed from a predominantly weak, state-owned system to a sound, market-based one with private ownership. Pakistan is still a moderately intermediated economy, and requires further financial deepening.

5.2 Telecommunications

The fixed-line monopoly held by the state-owned Pakistan telecommunication company limited (PTCL) on local, long-distance and international services was terminated in 2003. The policy aimed to liberalize the sector by encouraging "fair" competition and maintaining an effective international best practice regulatory regime. Many companies now compete with PTCL in providing fixed-line,
long-distance and international services (LDI licences) and local calls (local loop or LL licences) using PTCL’s network. There are six mobile carriers.

Liberal rules govern foreign investment in telecommunications: 100% foreign equity is allowed in all telecommunication services, including the liberalized basic telephony services. There are no joint-venture requirements or foreign-equity caps. The minimum foreign equity investment in services, which was reduced from US$0.5 million to US$0.3 million in 2000 and further lowered to US$0.15 million in 2004, was removed from telecommunications in 2004. Pakistan listed MFN exemptions in telecommunications, favouring countries/operators with bilateral agreements with PTCL on accounting rates. Further, in the telecommunication services a number of restrictions in Modes 1, 2, 3 have been removed. Online services and mobile telephone services have been offered as new proposed commitments. Besides deregulation, the government provides several tax incentives to attract investments.

Reforms in telecommunications have increased competition and contributed to its growth; they have also raised private participation, and improved access to better quality services at reduced prices.

5.3 Transport

Efforts have been made to reform transport policies to improve the sector’s efficiency. An integrated transport policy has been developed. The Government has launched a national trade corridor initiative, aimed at revamping the whole transport sector, including ports, roads, railways and aviation.

Ships (including floating craft, tugs, dredgers, survey vessels) bought or chartered by a Pakistani entity and flying the country’s flag are exempt from import duties and surcharges until 2020, provided they are not demolished within five years. No restrictions apply to foreign carriers operating from or into Pakistani ports. Pakistani flagged vessels have been able to transport cargo from Indian ports or third-country cargoes destined for India since December 2006 when maritime transport between the two countries was liberalized on a non-discriminatory basis (protocol on shipping services between Pakistan and India, 14 December 2006).

Pakistan did not make any commitments on transport services in the Uruguay Round but has made “initial offers” under the current Doha Development Agenda (DDA) that are “conditional” and would become “commitments” only upon the satisfactory conclusion of DDA. These may be withdrawn or amended at any point in time before finalization and have not been made “public” and “official” yet. Pakistan has been reportedly asked to take on commitments in all sub-sectors of transport services. At present Pakistan is considering taking commitments in maritime, land (road and rail) and pipeline transport services in all four modes of supply with limited restrictions on market access except foreign equity requirements, limitations on national treatment and minimum investment requirements. Other than this, further information is not forthcoming since further commitments are in the process of negotiations and this information cannot be made publicly available.

Domestic carriers (passenger and freight) must be controlled by Pakistani investors; foreign equity is capped at 49%. Domestic carriers must also operate a minimum of two trunk routes (one of which must be Peshawar, Quetta, Multan or Faisalabad), and serve a minimum of two weekly services on a defined socio-economic or tertiary route, or pay a monthly royalty of PRs 500,000 to
Pakistan International Airlines (PIA). Cabotage (cargo and passengers) is prohibited. Government subsidies apply to certain of PIA’s loss-making socio-economic routes.

Pakistan continues to allocate international routes according to a bilateral "open skies" policy based on reciprocity of "5th freedom" air landing rights; selective concessions may be made to quality airlines. It has concluded 94 bilateral air services agreements, but many are non-operative. Unused PIA entitlements may be re-allocated to private airlines, including on routes where it is designated the national carrier. The Civil Aviation Authority (CAA) aims to maintain "fair and reasonable" competition for Pakistani carriers from foreign airlines. Foreigners exercising Pakistan traffic rights to operate charter flights in or out of the country must charge fares no lower than ordinarily charged by a regular airline on the route (or on a comparable route or distance). Pakistan pursues unilateral "open skies" policies and charter flights are unrestricted. Passenger chartered flights, including by foreigners, are unrestricted on routes not adequately covered by scheduled airlines. There are no restrictions on foreign suppliers of aircraft ground services.

In December 2005, Pakistan signed an agreement with India to allow limited bus services between Nankana and Amritsar; cabotage is excluded. Pakistan’s operations to India are provided exclusively by the state-owned Pakistan Tourism Development Authority. In October 2005, Pakistan ratified Economic and Social Commission for Asia and the Pacific (ESCAP)’s Inter-Governmental Agreement on Asian Highway Network designed to promote regional international road transport.

5.4  Tourism

Pakistan has declared tourism as an industry and has allowed 100% foreign equity in this sector. No permission is required for setting-up tourism projects in the private sector. Market access limitations are proposed to be removed in Modes 1 and 2.

5.5  Information Technology and Software Development

Pakistan has continued to promote development of information technology and computer software, with a focus on exports. Development has been assisted by several tax, financial, and regulatory incentives, e.g., exemption from income tax on software exports until end-June 2016, allowing 100% foreign equity, and promotion by the Pakistan Software Export Board. In Computer and related services limitation on Mode 1 removed.

The media is open to companies subject to the condition that the majority of shares are owned or controlled by domestic entity or individuals.

Integrated engineering; in this sector foreign equity limit is raised from 40% to 51% and equity and joint partnership restrictions are removed for companies registered with the Securities and Exchange Commission of Pakistan.

In construction and related engineering services the foreign equity limit is raised from 40% to 51% and restrictions are removed in Mode 2.
6. Impacts of Trade Liberalization

Broad impacts of trade liberalization in services are:

(i) Removal of barriers to services trade has lowered prices, expanded services, and improved quality and competitiveness.
(ii) Improved consumer welfare is reported as reduced prices have increased consumers’ surplus.
(iii) Membership of GATS has helped Pakistan to pursue liberalization in many services.
(iv) Increased market access to foreign markets in the aftermath of trade liberalization is benefiting export-oriented services industries who in turn favor further liberalization in the services trade.

7. Challenges in Services Sector Trade

While liberalizing trade, Pakistan and the South Asia region are facing the following issues and challenges unilaterally as well as multilaterally: (i) reforming domestic regulations and behavior of public monopolies; (ii) ensuring transparency in relevant laws and regulations; (iii) removal of MFN exemptions reciprocally; (iv) mutual recognition of certification of foreign services suppliers, recognition of license, education and experience; (v) harmonization of policies regarding payments and international transfer for services; and (vi) resolution of issues of subsidies, safeguards and government procurement.

Mode 4 liberalization has not progressed in developed countries in a way that allows developing countries like Pakistan to use comparative advantage in low and medium skill-intensive services because of strict and discretionary visa and licensing requirements, lack of recognition of qualifications, and economic need tests act as barriers. Lack of progress on Mode 4 is a major issue for all of us. In fact, it is one of the stumbling blocks to the successful conclusion of the Doha round.

South Asia is an energy deficit region. It needs to establish regional grids to trade electricity. It also needs to lay down pipelines for trade in natural gas. Before, energy trade takes place across the region or countries provide transit facilities to each other there is a need to establish rules and discipline in this context. So far not much effort has been made in this regard because of the lack of trust in the region. Countries are currently restricted due to security concerns in the region.

8. Recommendations

Pakistan and South Asia have vast trade potential in services, which can easily be converted into real trade by taking more liberalized measures for trade in services. We recommend the following measures:

(i) South Asia should remain pro-actively engaged in negotiating services compacts bilaterally, regionally and multilaterally that should permit it to benefit from its potential advantages in services trade.
(ii) South Asia needs to widen the scope of commitments with the GATS in future rounds of multilateral negotiations, of course, if *quid pro quo* market access is offered by others.

(iii) A careful monitoring of commitments made by the regional countries and others is needed to avoid any disadvantage to local firms.

(iv) In order to reduce the trade deficit, there is a need to expand trade in services especially under GATS Mode-1 (cross-border), Mode-4 (temporary movement of natural persons), and by attracting more foreign investment (Mode-3).

(v) Pakistan has tabled a paper on Mode-4 issues along with a group of other developing countries. This paper offers practical suggestions on how developed countries can make substantial Mode 4 commitments without worrying about security related issues or the apprehension that these short term workers may turn into illegal immigrants. South Asia needs to join hands in convincing developed countries in permitting the movement of unskilled and semi-skilled workers into their countries.

(vi) South Asia often perceives developed countries as seeking concessions on services trade in exchange for removal of the latter’s existing and potential barriers on trade in goods, rather than establishing *quid pro quo* within the services compact itself. South Asian countries should collectively continue multilateral negotiations for concessions under the GATS.

(vii) Trade liberalization in the services sector, especially to address bottlenecks, excessive regulatory controls and labor market rigidities, needs to be continued and deepened for improving international competitiveness.

(viii) Service providers often need to be at the same place as where the services are used. Therefore, policies related to services trade and FDI should be developed in harmony; they should not be developed in isolation.

(ix) Trade liberalization needs to be supported by trade facilitation – without it the potential from trade in services would remain locked.

(x) State monopolies need to be curtailed for the promotion of trade in services.

(xi) Reduce foreign equity restrictions, this will facilitate trade in services.
Regional Trade in Agriculture: Prospects for South Asia

Pradeep Kumar Shrestha

Introduction

Today, the South Asian economies are trying to position themselves as an emerging economic power. The opportunity and prospects of future growth is tremendous. Of all the potential sectors such as industrial, tourism, infrastructure, etc, the development pace is still very negligible therefore leaving a vast space for growth and development. With our present development trend it will still take decades for us to reach our expected growth and development trajectory.

Reports by the World Bank and Asian Development Bank show that in 2006 the South Asian Economies (SAEs) agricultural trade amounted to US$ 26 billion (Approximately 4% of world agricultural trade). Our South Asian economies represent almost quarter of the global population but only 1.5 % of world GDP.

Comparatively since the 1970's when SAEs were protected with high tariffs and non-tariff barriers and now since the establishment of World Trade Organization (WTO), the traffic structure has been made simple and controls on exchanges accessible. Due to this, SAEs regional trade understanding in agriculture sector has also increased. Table 1 indicates a substantial share of agriculture in the South Asian trade structure.

Table 1: Agriculture and South Asian Economies

| Source: World Development Indicators |
| The World Bank’s statistics indicate |

29 Vice President-SAARC Chamber of Commerce and Industries, Nepal
Global food prices increased 10% between June and July 2012 with staples such as wheat increasing 25%.

In South Asia, households who previously were living not far above the poverty line are likely to have fallen into poverty as a result of higher food prices.

Also as per *Food Price Watch*, global food prices increased 10% between June and July 2012 with staples such as wheat increasing 25% in the period. The calamity continues to have effects on food and nutrition security throughout South Asia. Bad weather, trade curbs, oil prices and bio-fuel diversions have all led to higher food prices, which destabilizes the incomes and food security of millions across the region.

In 2007-2008 global food price jumped to levels not seen earlier and coupled with global economic slacking, food prices pushed an estimated 100 million population into hunger increasing the undernourished population to over 1 billion. The Asian Development Bank (ADB) report *Global Price Inflation and Developing Asia* shows global food prices hit a peak in February 2011 and predicts that the subsequent rise in domestic food price inflation in developing Asia could cause 64 million more Asians to become poor. This unparalleled global food price surge exposes food and nutrition insecurities not only of South Asian households but also governments.

1. **A Challenging Scenario**

Two thirds of the world’s hungry reside in Asia and the Pacific and rising food prices are causing food shortages and malnutrition for millions of people. In response to this crisis, all governments in the SAEs are focusing on agriculture and food security with the goal of curbing food shortages. India and Pakistan are among the leading food grain exporting countries and require cooperation from other SAEs for sustainable agriculture.

The central challenge for rural development in Nepal is to shift from subsistence to a commercial economy in an environment characterized by widespread food insecurity. Agriculture is the principle source of food, income, and employment for the majority, particularly the poorest. Growth in agriculture is, therefore important for reducing poverty, and preliminary findings of a living standards survey indicate that despite the insurgency, the sector has made a significant contribution to poverty reduction.

However agriculture is largely based on low value cereals and subsistence production, with a mere 13% of output traded in markets (2011). The sector’s current 33% share in the national GDP is declining, although there is considerable scope for increased productivity and value-added products. Nepal Living Standard Survey 2012 showed the population dependent on agriculture declined from 78% in 2003/04 to 64% in 2009/10.

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*World Development Indicators*
Nearly 2 decades ago Nepal was a food exporting country and today it has turned into a food importing country. This trend is prominent in a few other South Asian countries as well. The SAEs need to learn from India and Pakistan and examine how they followed a more scientific and systematic agriculture pattern of cultivation to increase productivity.

Today considering the huge market potential in agriculture on a global scale, there is an increased interest in the sector with businesses investing in high tech agriculture farming. This trend now requires upscaling and certainly there are various regional cooperation models that can help.

2. Opportunities

South Asia with its rich biodiversity, growing and developing markets, its abundant fertile land, plentiful manpower and unmanaged water has still remained poor. SAEs should be looking into why these countries are importing rice and wheat from countries like USA and Australia or importing vegetable and foods from Israel. We all know that because of scientific farming, the use of hybrid seeds and due to advanced technology this sector remains highly competitive. At least 30% of South Asian Population i.e. (500 million) is still living below the absolute poverty line i.e. $1.25 per day (Table 2). If this bar is raised to $2/day more than 60% of the population would fall below the poverty line.

Table 2: Change in the % of poor based on $1.25-a-day poverty line

<table>
<thead>
<tr>
<th>Country</th>
<th>Survey period</th>
<th>Percentage of poor</th>
<th>Annual growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base</td>
<td>Terminal</td>
<td>Base</td>
</tr>
<tr>
<td>Armenia</td>
<td>2005</td>
<td>2000</td>
<td>3.96</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>2001</td>
<td>2008</td>
<td>6.32</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2005</td>
<td>2010</td>
<td>50.47</td>
</tr>
<tr>
<td>China, People’s Rep. of–Urban</td>
<td>2005</td>
<td>2008</td>
<td>1.71</td>
</tr>
<tr>
<td>Fiji</td>
<td>2002-03</td>
<td>2000–09</td>
<td>15.96</td>
</tr>
<tr>
<td>Georgia</td>
<td>2005</td>
<td>2008</td>
<td>43.83</td>
</tr>
<tr>
<td>India–Rural</td>
<td>2004–05</td>
<td>2010</td>
<td>34.16</td>
</tr>
<tr>
<td>India–Urban</td>
<td>2004–05</td>
<td>2010</td>
<td>24.91</td>
</tr>
<tr>
<td>Indonesia–Rural</td>
<td>2005</td>
<td>2010</td>
<td>10.67</td>
</tr>
<tr>
<td>Indonesia–Urban</td>
<td>2005</td>
<td>2010</td>
<td>0.43</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>2006</td>
<td>2009</td>
<td>6.16</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>2006</td>
<td>2009</td>
<td>4.54</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>2002</td>
<td>2008</td>
<td>43.96</td>
</tr>
<tr>
<td>Nepal</td>
<td>2003</td>
<td>2010</td>
<td>53.13</td>
</tr>
<tr>
<td>Pakistan</td>
<td>2004–05</td>
<td>2007–08</td>
<td>22.39</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>2002</td>
<td>2006–07</td>
<td>13.95</td>
</tr>
<tr>
<td>Thailand</td>
<td>2006</td>
<td>2009</td>
<td>1.81</td>
</tr>
</tbody>
</table>

Most South Asian countries claim to be agrarian based economies but we still depend on importing agricultural raw material, machinery, inputs and outputs to fulfill the demand. Production of food grain using modern technology and improved variety of seeds is required to grow and also has ample potential in this region. Increasing the productivity through economies of scale by using modern technology, hybrid seeds and non-interventionist government policy can put agriculture on
the right track. Diversifying the production basket within agriculture should also be a goal. Furthermore livestock contributes over 50% in agriculture’s value addition and there is very little regional cooperation in the livestock sector. There must be concerted efforts at cooperation in agriculture taking into account livestock, forestry and fisheries.

Regarding food security, this region has continued to ignore its various facets which is recently impacting the quality of the labour force. In the last decade we have seen substantial focus on increasing food production but not enough attention has been given to quality of production (e.g. nutrients). Table 3 exhibits South Asia and Asian global hunger rank for 2010. A lower rank implies better performance in curtailing hunger.

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>68</td>
</tr>
<tr>
<td>India</td>
<td>67</td>
</tr>
<tr>
<td>Nepal</td>
<td>56</td>
</tr>
<tr>
<td>Pakistan</td>
<td>52</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>38</td>
</tr>
<tr>
<td>China</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Global Hunger Index

When the MDGs were initiated, global leaders had promised to cut hunger by 50% until 2015, but we are not even close to the target at the moment. In several South Asian countries the household budget share on food has been on the rise in recent years. Coping strategies employed by the poor include reduction in food intake but also cuts on other important household budget heads such as education and health in order to meet rising prices of daily food intake.

Agricultural production itself will not produce much change until complimentary improvements in: a) domestic markets and b) sub regional market linkages are brought about. Western and many European economies had shown that reduced barriers to regional level market access were shown to lower the likelihood of significant volatilities in domestic prices.

3. Challenges

A key challenge to market efficiency in the SAEs is infrastructure development. The reforms of physical connectivity i.e. building better roads, bridges, communication networks could contribute substantially to sustainable growth. Another challenge is a range of institutional constraints, such as poor access to credit for agricultural traders, the high cost of obtaining market information and linking buyers and sellers. Limited storage capacity and poor access to formal financing often lead to volatile prices. Also we need to focus on trade related infrastructure, particularly to deal with sanitary and phyto-sanitary and technical barriers to trade for increased farm export from South
Asian Association for Regional Cooperation (SAARC) countries as well as for favorable market access opportunities for all.

South Asian’s lacking supply chain management capacity and this is an important aspect for future productivity improvement and product placement, as many agriculture producers do not have accessibility, the right information, or timely availability of market data. A supply chain where the mechanism in which the goods are moved from the local producer to the final consumer is important in identifying the impediments that the stakeholders face today. Getting the products from the producer to the local village market does not require a high tech marketing mechanism to work, but in order to get the products from rural inaccessible village in remote Nepal into the hands of the final consumer in Kathmandu or into the export market in Karachi, many middlemen are required to facilitate trade and match the potential buyers and sellers to each other.

Each of the market actors plays a unique role in trade facilitation and is also constrained by a unique set of market impediments. Presently the variance in quality and unavailability of reliable transportation infrastructure is impeding the flow of goods in the region, and adding significant cost to logistics operations. Modern supply chain capability can address some of these challenges and drive economic growth. We must be proactive in creating and implementing long-term strategy to build sustainable supply chain competency, therefore, we must pursue excellence in supply chain education and research at the university and technical education institutions. SAARC Chamber of Commerce and SAARC Human Resource Development Centre can devise a strategy in this regard.

4. Climate Concerns

Climate change will alter the existing pattern of comparative and competitive advantage in agricultural trade. It will either increase or decrease trade flows depending on the biophysical determinants of relative advantage and socioeconomic determinants of demand. A sudden rise or fall in price due to supply/demand dynamics might disturb the agricultural trade flow, and ultimately production, as farmers tend to shift production to those crops that fetch a high price in the market.

Various natural disasters are now endorsing the acuteness of global warming. For example, some regions have experienced extremely cold winters, while others have experienced heavy rain. Near to home we have the melting of glaciers in the Himalayas’ snow packed mountains. The rising sea level causing the submerging of island countries like Maldives and parts of Bangladesh will create extra food production pressure. Even a temperature rise by 2 degree Celsius above preindustrial level, which is the minimum the world is likely to experience, could result in a permanent reduction in annual per capita GDP by 4-5% in South.

We have seen the perennial water resources from the thawing snow during the dry season and if such water can be stored on the Himalayan mountain areas from Kashmir to Assam in India than there would not be flooding in the Terai region of Nepal nor will there be water shortage for drinking and irrigation in the dry season. The same storage water could create High Dam Hydro
Project and share the cheap electricity and environment friendly energy to substitute high petroleum import costs.

5. Competitive Advantages

The SAARC food bank provides several advantages. We need to make periodic estimations of food demand and undertake measures to increase the storage capacity. Also we will have to remove stringent rules and withdrawal conditions and restock requirements of the bank on a need to need basis. We will also have to set up a central information system which will provide timely data on the level of scarcity, inaccessible region mapping and preparing a vulnerability calendar for effective distribution of food and response systems. We will also have to set-up a reporting committee for price determination and disputes. Also SAARC debt fund should be utilized and maintained.

Recently SAARC nations have decided to set up a SAARC seed bank in a bid to boost agriculture production and productivity in the region and SAARC countries are all set to establish the ‘SAARC Seed Bank’ during the forthcoming summit of the association. The idea of the seed bank was proposed by Bangladeshi Prime Minister Sheikh Hasina at the 16th SAARC Summit held in Thimpu, Bhutan, in 2010 and was incorporated in the Thimpu Declaration. This is a positive step. The bank will ensure an effective long term mechanism of production, exchange and use of community and environment friendly high yield quality seed which will be within the domain of public and private sectors and most importantly will be extremely useful to farmers.

We should also collaborate with projects intra or inter region to encourage farmer to farmer exchange as well as partnership activities with scientists, breeders and other private groups. The academia and think tanks promoting track-II dialogue can play a role in ensuring such interactions.

6. Non-Tariff Barriers

Non-tariff barriers (NTBs) are becoming increasingly important determinants of agricultural trade. NTBs generally refer to any measures that restrict imports but are not in the usual form of a tariff. It is a well-known fact that the least develop countries (LDCs) have been enjoying preferential market access to developed country markets but what needs to be noted is that although preferential market access has reduced the tariff barriers for most of the agricultural products exported by LDCs, the prevalence of the NTBs are limiting export from the preference receiving countries.

A research conducted by (Bacchetta and Bora, 2001) reported the frequency of NTBs faced by LDCs for their agricultural exports. Two important messages are evident from their research:

- The frequency of non-tariff measures is generally higher for agricultural products than for manufactures, and minerals and fuels
- In the agricultural products, developed countries and Quad countries (United States, Canada, the European Union and Japan) have a higher frequency of NTBs than that of other countries.
7. Conclusion

A study by the United Nations Conference on Trade and Development and ADB estimates that the South Asian intra-regional trade in the agriculture sector is 38% higher compared to other trading items and the majority of this is found in the largest South Asian countries. SAARC Agriculture Center, SAARC Food Bank and seed bank are key determinants to agricultural prosperity in this region. They are strategic tools which must be taken advantage of in order for us to advance and foster intraregional trade in agriculture.

We should place emphasis on food security as key for agricultural trade and advancement as food security and poverty reduction are inseparable. Although food security alone does not eradicate poverty, any strategy to fight poverty must be integrated with policies to ensure food security and to offer the best chance of reducing mass poverty and hunger.

There must also be a focus on the betterment of agricultural productivity for ensuring long term prospect for agriculture trade. It is essential and very important to transfer modern farm technology to increase land efficiency which can produce major increases in farm yields. By using modern methods we can minimize food wastage eventually raising output of agricultural product. This inventory of modern methods may be established at the regional level.

As mentioned earlier we have to think outside the box by using innovative and green technology methods that may be using hybrid seeds or by adapting advance field technologies. This in turn will enhance our agricultural productivity and help our farmers earn more and simultaneously fight the impacts of global warming. We will also have to promote rural development as this will bring about focus on the poor regions as they are the ones who are using primitive forms of agriculture practices that do not yield enough to support them and their families.

Investing in agriculture research is important in increasing productivity. With advancement in agro technology we can produce efficient and sustainable use of our scarce water resource, but also develop crops that are high yielding, with greater nutrition package and are resistant to severe climate conditions and insects.

It is important to note that the water and food nexus is very important for our livelihood. The consequences of improper management of water can affect the availability of fresh water for drinking, generation of electricity and for irrigating cultivable land. If per capita water availability is less than 1700 cubic meters per year, the country is categorized as water stressed and if availability is less than 1000 cubic meters it is considered as water scarce. If we are not conscious and proactive on this issue than the water consumption is projected to reduce to 14,000 cubic meters by the next decade.

Statistic shows 225 billion of cubic meters of water flows from Nepal to India, contributing over 70% of fresh water to North India. The snowed capped mountain in the North with its steep gradient provides tremendous potential for big hydro power development. If collection and storage
facilities were to be built in the Himalayan region, huge potential for hydropower generation can be optimally acquired and managed 12 months of the year. With this we can meet the demand of electricity scarcity and also provide water for irrigation during the dry season. This will eventually increase the agriculture production hence protecting against the calamities of floods and droughts.

It has been said, “an up-to-date farmer yields sustainability”, and so it is very important that we invest in human capital of the agricultural sector. We need to create an intraregional program that focuses on providing the right tools on time to farmers so that they are fully aware of the latest development in farming techniques, agricultural management and other agro based advancements. This has also to be coupled with domestic and regional market reforms so that South Asian governments stop making distortive interventions in farmer’s production incentives.
Section D:
Food Security in South Asia
Food Security: Challenges and the Way Forward

David Orden

In addressing questions of food security, it is important to start from a comprehensive definition. The definition adopted at the World Food Summit in 1996 is that “Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.” As explained by Diaz-Bonilla (2012), there are four components of this definition: availability (which depends on domestic supply and trade); access (which is influenced by income, employment, and poverty); utilization (which depends on the quality of food, but also on factors such as health and sanitation, infrastructure and services, education and women’s empowerment); and stability (so that physical and economic access takes place at all times).

This paper focuses primarily on the availability and stability dimensions within the four components that determine food security. Specifically, it examines the role of world markets and international trade in helping provide food security worldwide at low cost. It also addresses the question of what is possible, and what is not, for national food security policies in the short-term and long-term with respect to setting domestic market prices given the developments in world markets. As evident from the definition above, these components form only part of the food security challenge and every component deserves careful analysis and policy development.

The first section of the paper provides a background discussion of a long-term vision of the role of world markets in contributing to food security, the gap between the long-term goal and the existing policy reality, and the policy challenges faced in bridging this gap. The second section of the paper illustrates these concepts in a specific context. This section draws on an insightful recent analysis of the relationship during 1997-2011 between wholesale rice prices in Dhaka, Bangladesh and their import parity equivalents from India and Thailand completed by two of my IFPRI colleagues (Dorosh and Rashid, 2012).

1. The Role of International Trade in Providing Food Security

There is voluminous analytic and policy-oriented literature on the role that international markets should play in helping achieve food security worldwide at least cost, and on the impediments to achieving this objective. One basic concept is that non-distorted world markets on which countries can rely should serve to augment the domestic supply on a regular basis, when domestic demand consistently exceeds supply, and as a shock absorber to complement domestic production, when local supplies are temporarily disrupted. In this view, an efficient pattern of global agricultural production that contributes to food security through an interplay of domestic production and trade is the long-run policy goal for world agriculture. Relative to this basic concept, the empirical effects of specific trade-distorting interventions that various countries employ are often complex. Impacts are diverse among different groups of countries (as exporters and importers), different segments of their populations (as net food producers or buyers), and under changing market conditions. In this context, non-distorted world markets, complemented with appropriate investments in a growing food supply and availability of social safety-nets for those at nutritional risk, is a steadfast anchor for the design of the global food system.

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One early monograph that set out these arguments was D. Gale Johnson’s *World Agriculture in Disarray*. Published in 1973 just before the onset of a period of sharp increases in world agricultural prices, this monograph laid out a core premise: that developed countries supported their agriculture too much while developing countries often discriminated against agricultural production. The result was a systematic pattern of too much production in the developed countries but, in developing counties, too little investment in agriculture and too little agricultural production. This disarray undermined economic growth and the contribution of domestic agriculture to achieving food security in developing countries. The trade and farm-sector policies creating this global situation also undermined world markets as a reliable supply source and market shock absorber that countries could count upon to stabilize their food supplies. All of this had high economic cost. Johnson called for a new set of agricultural policies that would reduce the distortions in the pattern of production and expand trade. In today’s terms, we would say that the goal is vibrant markets that call forth private investments and new technologies to efficiently provide the world food supply, public investments in common goods such as transportation, information networks and basic technology that provide the foundation for well-functioning food markets, and food assistance targeted to low-income and at-risk people, which is more feasible than ever with new information technologies.

When world agricultural prices rose sharply in 1974, it looked like Johnson’s assessment of production disarray had missed the mark, even if his prescriptions for efficient production and for world markets to play a key role in ensuring food security were still germane. Levels of subsidies to agriculture in developed countries fell with higher prices in the mid-1970s and concerns were expressed about a pending era of food shortages that called for planting “fence row to fence row.” Had those high prices lasted, we would have observed over the ensuing years an historical path of how agricultural policies would have evolved among countries that can only be speculated about. Instead, agricultural prices returned to relatively low levels from the late 1970s to the late 2000s. Johnson’s concerns with world agriculture in disarray came to dominate the debate about agricultural policies within countries and between them.

Some progress has been made over the ensuing nearly 40 years toward reducing trade barriers and domestic support so that these policies do less to cause disarray in world agriculture. As documented by Anderson et al. (2009), policies in the developed countries became less distortionary and discrimination against agriculture declined in the developing world. Still, it continues to be the case across a wide range of countries that agriculture is marred by many and diverse border interventions and domestic support programs that distort production and trade. This undermines achieving global food security on a collective basis, even if the existence of these policies can be understood in terms of the centrality of food security concerns within individual countries, the volatility of world food prices that are subject to sharp but temporary spikes, and substantial uncertainty at this time about the trend levels and annual volatility of food prices in the future.

2. **Illustration of the Concepts: Bangladesh Rice Prices and Imports Since 1997**

These abstract but important concepts can be illustrated in the specific regional case of rice imports and prices in Bangladesh since the mid-1990s. For this discussion, I draw on an insightful analysis by Dorosh and Rashid (2012) of wholesale rice prices in Dhaka. These wholesale prices are compared to three equivalent import parity prices (equivalent meaning the prices in each case are
adjusted for transportation and processing costs to the level they would be in Dhaka). The three import parity prices are based on wholesale prices of rice in Delhi, India’s Below Poverty Line (subsidized) prices, and world markets as represented by prices from Bangkok, Thailand.

The levels of Bangladesh imports and the four price series from 1997-2011 are shown in Figure 1, which is reproduced from Dorosh and Rashid. The figure breaks down into two distinct periods: the period before world prices rose sharply in 2008 and the subsequent period of relatively higher world prices.

In the first period, there are a number of years when Bangladesh imports substantial quantities of rice to complement domestic production and other years where imports are minimal because domestic supply is adequate to meet demand. From 1997 to 2000, prices were quite stable, with the wholesale price in Dhaka slightly below the corresponding import parity prices from Delhi or Bangkok. Then, from 2000 until world prices rose sharply in 2008, the Dhaka wholesale price closely tracked the BPL India import parity price. These two prices fall below import parity levels based on the wholesale prices in Delhi and Bangkok. The latter two prices continued to move reasonably closely together, with the Delhi price slightly above the Bangkok price in several years. Clearly what is occurring is that when Bangladesh imports rice, it is receiving the BPL price, which holds the Dhaka wholesale price at an equivalent level.

The question is whether maintaining this low price (below world price levels) can be thought to provide food security? Certainly, during this period rice prices to Bangladesh food consumers are lower than otherwise. In addition, prices are stable for seven years. No doubt, from the perspective of policy makers in Bangladesh this could have appeared to be a sustainable food security policy in which their country benefited from low prices and essentially an income transfer provided by India. One cost of this outcome is that prices to farmers in Bangladesh are held below world levels, reducing their revenue and net incomes and thus their incentives to invest in agriculture and expand the domestic supply.

Rice prices in world markets rose sharply in 2008, as shown by the upward spike in Bangkok import parity prices in Figure 1. India insulated its domestic market from most of this price increase but the policy under which Bangladesh was receiving imports at the BPL prices of India breaks down. As a consequence, the wholesale price in Bangladesh increased to the import parity Delhi wholesale price. From the Bangladesh perspective, the period of stable rice prices ended, so the previous policy for achieving food security no longer looked as beneficial as it had. Dorosh and Rashid evaluate what level of stocks Bangladesh might have maintained in order to have been able to keep its domestic rice wholesale price from rising in 2008. Larger stocks held prior to 2008 would have served that purpose during the sharp price spike. This would have entailed a different food security policy, with the cost of maintaining stocks sufficient to avoid a one-year price increase being offset in terms of food security by being able to keep prices at the low level of previous years. For the targeted population of the BPL, India had the physical rice stocks available and incurred the government fiscal cost of keeping its price level stable through the time of the spike in world prices. This policy provided stability for India but contributed to the volatility of prices on world markets.

By 2009, the world price of rice had come down from its peak, but to a level that has been sustained in subsequent years much higher than in the late 1990s and early 2000s and somewhat above the mid-2000s prices. The Dhaka wholesale price also dropped in 2009 and without substantial imports was briefly back almost to the BPL level. But this lower price was not sustained. Instead, the Dhaka price moved back up to a level at or just below the Bangkok import parity price. Domestic
production was generally sufficient to keep Dhaka wholesale prices below import parity in this period and as a consequence imports have been minimal since 2009.

What do these last few years indicate about the feasibility of food security policies? Bangladesh is no longer able to keep its wholesale prices at the low level of the BPL import parity. Even if stocks had been sufficient to avoid the price increase in 2008 (which would have been a case of providing stability in terms of the food security definition) keeping prices at that level in subsequent years would have required further intervention that worked against market developments. Specifically, unless India again made rice available to Bangladesh at the BPL price, keeping prices in Bangladesh at that level would have required imports being brought in and sold by the government at a loss (purchased at world prices and sold at the lower BPL import parity price). This would require both increased reliance on the world market, even at the higher prices than policy makers in Bangladesh would like to see occurring, and a large fiscal expenditure by the government.

3. Continued Trade-Distorting Interventions in Agriculture

This brief presentation and paper have highlighted the potential role of non-distorted world markets as an anchor for attaining food security worldwide at least the cost and the political difficulty of achieving this potential. The high economic costs of excessive support for agriculture in developed countries combined with disprotection of agriculture in many developing countries was highlighted nearly 40 years ago by D. Gale Johnson. Each intervention creates a constituency of beneficiaries and given the central importance of food security it becomes difficult for governments to change policies, even if collectively their interventions are not optimal. Even with the large gap between the desired long-run goal of non-distorted markets and the reality of today’s policies, the world market exerts a large influence on what is feasible, and what is not, in terms of policy actions countries can take to achieve their food security. The case of wholesale rice prices in Bangladesh illustrates these core concepts. While Bangladesh was able to maintain relatively low wholesale rice prices through the early and mid-2000s as a result of imports at subsidized prices provided by India, that regime broke down when world prices spiked upward in 2008. A policy of maintaining somewhat larger stocks prior to 2008 might have allowed Bangladesh to avoid its wholesale prices rising sharply that year, However, without drawing on world markets and providing significant fiscal subsidies, Bangladesh cannot avoid having its domestic wholesale prices reflect the higher world rice prices that have prevailed since 2009.

There has been some progress over the last 40 years in reducing the many policies across a wide range of countries that cause distortions affecting agricultural production and trade. However, movement in a coordinated multilateral manner toward the objective of undistorted markets suffered a blow with demise since 2008 of the World Trade Organization (WTO) Doha Round negotiations. These negotiations were intended to build on the earlier 1994 WTO Agreement on Agriculture to reduce trade distortions by achieving “substantial progressive reductions in agricultural support and protection,” while leaving latitude (in the category known as the “green box”) for non-distorting support through government services, food security programs, and producer income support decoupled from production decisions.

In the absence of a new WTO agreement, constraints on distortionary agricultural support remain lax. For example, as described by Bureau, Laborde and Orden (forthcoming 2013) the new US farm bill under debate in 2012 may well be a casualty of failure of the Doha Round, with programs enacted under the existing commitments making it harder in the future for the US to agree to support reductions such as those envisioned but not locked in by Doha. Likewise in the EU, a
continuation of high subsidies is planned through 2020 and new distortionary support options are being considered. Support for agriculture has also increased in large emerging market economies and elsewhere with the higher market prices since 2008 (Brink, Orden and Datz, forthcoming 2013). And with these higher prices, a number of countries have restricted their exports, as India did in 2008, which exacerbates international price volatility and undermines world markets as a reliable source of supply.

All of this leaves the state of agricultural policies far from the desirable outcomes in terms of world markets contributing to food security by being a reliable source of supply that countries can count upon to complement their domestic food production without disadvantaging either their domestic farmers or food consumers. Thus, there is still much to be done in this area of food security policy. There is also much to do in the policy areas addressing other components that are integral parts of the providing food security, but that this short paper has not addressed.

**Figure 1: Bangladesh Rice Imports and Rice Prices Compared to India and Thailand, 1997-2011**

![Graph showing Bangladesh rice imports and rice prices compared to India and Thailand from 1997 to 2011.](image)

Source: Dorosh and Rashid, 2012.
References


Food Security in South Asia: An Indian Perspective

Indra Nath Mukherji

Introduction

The world food prices have seen substantial volatility in the past decade resulting in food shortages, price hikes and socio economic challenges such as malnutrition among women and children. The World Food Price Index, having remained low since the early 1990s, showed an upward trend from 2003, peaking in 2008. A sharp decline since then was short-lived as the index marked a steep increase in 2010 and 2011. Between 2011 and 2012 decline has set in, but the index remains twice as high as between 2002-04. (FAO 2012)

Global food prices soared by 10 per cent in July 2012, with maize and soybean reaching all-time peaks because of an unprecedented summer of droughts and high temperatures in both the United States and Eastern Europe, according to the World Bank Group’s latest Food Price Watch Report, released on August 30 2012 (World Bank 2012).

From June to July, maize and wheat rose by 25 per cent each, soybeans by 17 per cent, and only rice went down, by four per cent. Overall, the World Bank's Food Price Index, which tracks the price of internationally traded food commodities, was six per cent higher than in July 2011, and one per cent over the previous peak of February 2011(Ibid).

A severe drought in the United States, has sharply cut corn and soybean yields, while a dry summer in Russia, Ukraine and Kazakhstan has hurt wheat output. The World Bank experts while not foreseeing the repeat of 2008 food price spike, that triggered riots in 34 countries, are nevertheless concerned with a number of negative factors that could lead to a tipping point resulting in the situation in 2008. (Ibid).

After examining the global food scenario, the next section examines the food scenario in India and the likely tradable surpluses in cereals. The third section brings out the typology of food insecurity in India. The fourth section discusses the major food policy interventions in India and the fifth section talks of complementarities in food products trade with India as a supplier and Bangladesh and Pakistan as markets. The last section throws some light on the way forward, particularly with reference to India’s role.

1. India and Food Security

With the launching of major reforms in 1991, India has grown out of a period of acute shortages and heavy dependence on food aid. India has emerged as the largest producer of milk, second largest producer of fruits and vegetables, paddy rice, sugarcane, wheat, groundnuts and certain fresh vegetables. In 2011-12 India achieved record grain production of 257 m.t. Today India has accumulated grain reserves of around 80 m.t. in its central reserve.

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In the year 2012-13 however, agricultural prospects appeared to be less optimistic. Early August 2012 the Indian Meteorology Department (IMD) confirmed the first drought in three years as monsoon rains were likely to be less than 90 percent of the long term average. The cultivated acreage was expected to be down by 21 percent. As per a report available from Indian Meteorological Department (2012), for the country as a whole, seasonal rainfall up to 26 September 2012 was 7 per cent below the long period average with near normal rainfall over all its four homogeneous regions. The late monsoons led to the retention of moisture in the soil which provided a good opportunity for following rabi\textsuperscript{33} season which could somewhat compensate for the lower kharif\textsuperscript{34} output.

Notwithstanding the prevailing drought conditions, it is estimated that the burgeoning food stocks available with the government in its central pool give ample opportunity not only to meet the domestic demand, but provide ample scope for exports. This is the reason why the Indian Government has largely freed its exports of cereals following which considerable exports have taken place, making India a large player in the international grains (particularly rice) market. Table 1 gives the estimates of India’s tradable food products.

<table>
<thead>
<tr>
<th>Items</th>
<th>Exportable Products</th>
<th>Import Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity (Million Tonnes)</td>
<td>Estimated Value (US $ Billion)</td>
</tr>
<tr>
<td>Rice</td>
<td>7 (5 Non-Basmati, 2 Basmati)</td>
<td>4</td>
</tr>
<tr>
<td>Wheat</td>
<td>7 (2 private, 5 central Pool)</td>
<td>2.1</td>
</tr>
<tr>
<td>Sugar</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Corn</td>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td>Oilseeds</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Total Exportable</td>
<td>12.1</td>
<td></td>
</tr>
<tr>
<td>Pulses</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Edible Oil</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Total Importable</td>
<td></td>
<td>12.9</td>
</tr>
</tbody>
</table>

Source: Estimates by Tejender Narang (2012)

The statistics on domestic production and utilisation of cereals in India as developed by Food and Agriculture Organisation has been presented in Figure 1. It will be seen that since 2010-11 the gap between domestic production and utilisation in cereals has been widening, pointing to the emerging exportable surpluses in cereals. This gets further reflected in Figure 2 which shows the steep increase in India’s cereal exports since 2010-11.

\textsuperscript{33} Winter crops
\textsuperscript{34} Summer crops
Figure 1: India: Production and Utilisation of Cereals

Source: Food and Agriculture Organisation

Figure 2: India: Export and Import of Cereals

Source: Food and Agriculture Organisation
2. Typology of Indian Food Insecurity

Thus the issue of food insecurity in India does not arise from insufficient availability of food grains (at the national level) since the country is the net exporter of food (cereals). India is deficient in protein supply that needs to be imported in almost equal measure in terms of value. Nevertheless surpluses within agriculture on account of cereals enables the country to finance its agricultural products in which it is import-dependent, viz. pulses and oilseeds. The main problem the country faces is to provide its vast marginalized population accessibility and assimilation of sufficient food.

With nearly 22 percent of India's population being undernourished, 43 percent of children under the age of 5 being underweight and 50 percent of pregnant women being anemic, the nutritional security of children and women is a matter for serious concern.

India is ranked 66 in the list of 105 countries, scoring slightly higher in the category of “availability” than in the other two categories “affordability” and “quality and safety” according to Global Food Security Index (2012), developed by the Economic Intelligence Unit and commissioned by an American chemical company DuPont. Although India's food security level is lower than China's (ranked 39), and Sri Lanka's (62), it is better than Pakistan's (75) and Bangladesh's (81). High level of poverty, lower income, less public spending on farm research, poor infrastructure, inadequate supply of quality protein are some of the key challenges India needs to address. However the presence of food security programmes and access to farm credit has helped the country to achieve some level of food security. (India Today: 2012).

The other major challenge is how India's public distribution system could be rationalized so that major leakages in the system are plugged and food is delivered to the truly needy. There is also the need to rationalize the subsidy system, particularly in energy use, fertilizers and other inputs and to transfer the same to productive capital investment in agriculture.

3. Major Food Policy Interventions

3.1 Public Distribution of Food grains

The primary Policy objective of the Department of Food & Public Distribution is to ensure food security for the country through timely and efficient procurement and distribution of food grains. This involves procurement of various food grains, building up and maintenance of food stocks, their storage, movement and delivery to the distributing agencies and monitoring of production, stock and price levels of food grains. The focus is on incentivizing farmers through fair value of their produce by way of the Minimum Support Price mechanism, distribution of food grains to Below Poverty Line (BPL) families and covering poor households at the risk of hunger under Antyodaya Anna Yojana (AAY)35 establishing grain banks in food scarce areas and involvement of Panchayati Raj36 Institutions in Public Distribution System (PDS). (Department of Food and Public Distribution 2012).

35 Antyodaya Anna Yojana was launched on the 25th December, 2000. This scheme reflected the commitment of the Government of India to ensure food security for all to create a hunger free India for the following few years and to reform and improve the Public Distribution System so as to serve the poorest of the poor in rural and urban areas. It is for the poorest of poor estimated at 5 per cent of the total population, that the Antyodya Anna Yojana was conceived for targeting (http://www.karmayog.org/publicdistributionsystem/publicdistributionsystem_2619.htm).
36 Local self-governing institutions in India
The Central Government extends price support to paddy, coarse grains and wheat through the Food Corporation of India and the State Agencies. All the food grains conforming to the prescribed specifications i.e. Fair Average Quality norms offered for sale at specified centres are bought by the public procurement agencies. The producers have the option to sell their produce to FCI/State Agencies at support prices or in the open market as is advantageous to them. The procurement policy is open ended and no targets, as such, are fixed for the procurement of food grains. (Ibid.)

3.2 The National Food Security Bill

The National Food Security Bill, 2011 was introduced in the Lok Sabha on December 22, 2011 by the Minister for Consumer Affairs, Food and Public Distribution. The Bill sought to provide legal entitlement for food and nutritional security by providing specific entitlements to certain groups.

The Bill specified that up to 75 percent of the rural population and 50 percent of the urban population would be entitled to food grains. Of these, at least 46 percent and 28 percent, respectively, would be categorised as priority groups (the rest are “general”).

The central government was to prescribe guidelines for identification of priority households, general households, and exclusion criteria. Identification was to be done by state governments or such other agencies as decided by the central government. The list of identified priority and general households was to be displayed prominently in the public domain. Entitlements provided to these groups and others are listed in the table below.

<table>
<thead>
<tr>
<th>Group</th>
<th>Entitlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority</td>
<td>7 kg. food grains per person per month at Rs. 3/kg. for wheat, Rs. 2/kg. for rice, and Rs.1/kg. for coarse grains</td>
</tr>
<tr>
<td>General</td>
<td>3 kg. food grains per person per month at 50 percent of minimum support price (MSP)</td>
</tr>
<tr>
<td>Pregnant women and lactating mothers</td>
<td>Meal during pregnancy and 6 months thereafter, and Rs. 1000 for 6 months</td>
</tr>
<tr>
<td>Children, 6 months to 6 years</td>
<td>Free meal at local anganwadi</td>
</tr>
<tr>
<td>Children, 6-14 years</td>
<td>Mid-day meal at school</td>
</tr>
<tr>
<td>Destitute persons</td>
<td>One free meal per day</td>
</tr>
<tr>
<td>Homeless persons</td>
<td>Affordable meals at community kitchens</td>
</tr>
<tr>
<td>Starving persons</td>
<td>Two free meals per day for 6 months</td>
</tr>
</tbody>
</table>

Source: Bill Summary PRS Legislative Research (2011)

The national FSB proposed national legislation that has generated immense debate and argumentation on the subject. One strand of thinking was to make the entitlement universal. This was particularly so since the government or local bodies have, in the past, failed to correctly and impartially identify the poor. As a result both types of error: Type 1: rejecting beneficiaries who were genuine; and Type 2 error: accepting beneficiaries who were non-deserving.
A non-discriminating approach while obviating the mismatch, would also serve a very basic human right. It has been argued that the additional food procurement involved would only be marginally higher than the existing 55 million metric tonnes (mmt) to 61 mmt. Given the overflowing stocks that were being held by the government in its warehouses and also heaps of food grains rotting in open spaces for want of warehousing facilities, this task of additional procurement should be attainable. Regarding the budgetary provision, the view expressed was that an increase of food subsidy from the existing US$ 11.35 million to S$ 14.37 million would not pose an insurmountable budgetary challenge. (Karat 2012)

At the other spectrum were the naysayers who considered that the additional procurement would prove an insurmountable budgetary commitment for the government and beyond the administrative capacity of the country’s fledgling public distribution system.

3.3 Agricultural Produce Marketing Control (APMC) Act

While agricultural production is largely free from state control, the same cannot be said of agricultural marketing. Legal provisions in most of the states restrict marketing arrangements. The Agricultural Produce Marketing Control (APMC) Act prevailing in a number of states prohibits direct marketing of produce to traders or processors and gives the state the exclusive right to establish markets and makes it mandatory for the producers to sell their produce in designated markets. Agricultural Produce Marketing Committees have not been able to stop collusion among traders. Further, farmers are subject to taxes and levies without receiving commensurate benefits (PMEAC. 2012, 60).

On the other hand, wherever the producers are given freedom to dispose of their products directly to the consumers, as is being experimented in a number of states, including Andhra Pradesh and Karnataka, they have benefitted the farmers.

<table>
<thead>
<tr>
<th>Status of APMC Act</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>States yet to amend</td>
<td>Uttar Pradesh, West Bengal, Meghalaya, J &amp; K, and Delhi</td>
</tr>
<tr>
<td>States that have partially amended</td>
<td>Punjab, Haryana (only contract farming)</td>
</tr>
<tr>
<td>States that never had APMC Act</td>
<td>Bihar, Manipur and Kerala</td>
</tr>
<tr>
<td>States that have implemented reforms in APMC Act</td>
<td>Andhra, Orissa, Madhya Pradesh, Chattisgarh, Jharkhand, Maharasthra, Karnataka, Tamil Nadu, Gujarart, Rajasthan, Uttarakhand, Assam, Arunachal Pradesh, Tripura, Mizoram, Nagaland, Sikkim</td>
</tr>
</tbody>
</table>

Source: Based on Banikinkar Pattanayak, “Food for Thought” Financial Express, 29 July, 2012 as obtained from Ministry of Agriculture, Government of India.

4. Easing Restrictions on Agricultural Trade

India removed export restrictions on wheat which were put under Open General Licensing on 12 March 2012. With respect to rice, the minimum export price was reduced and finally removed on 12 February, 2012 and official permission for non-basmati rice exports to continue was granted.
Further, India was permitted to export rice through the India-Bangladesh, India-Nepal border on non-electronic data interchange at Land Customs Stations. State enterprises were allowed to export non-basmati rice under Food Aid and to Maldives on a government to government basis. India imposes no restrictions on food grains trade with Nepal and Bhutan under its bilateral free trade agreements with them. Budgetary allocation raised allocation to the "Bridging the Green Revolution in Eastern India" (BGREI) programme by USD 115 million to USD 192 million on 12 March, 2012. Part of the budgetary allocation also includes plans to raise irrigation and storage capacity as well as greater agricultural disbursements. (FAO 2012).

Based on the Rangarajan Committee's recommendations, India further removed quantitative export restrictions on sugar for the year 2012/13. As a consequence of easing export restrictions, in 2011-12 India has so far exported 3.5 million tonnes of sugar, 10 million tonnes of rice, and 2.5 million tonnes of wheat. (The Economic Times, New Delhi, 10 October, 2012).

5. National Initiative on Climate Resilient Agriculture Launched

Indian Minister for Agriculture and Food Processing Industries launched the ‘National Initiative on Climate Resilient Agriculture’ during the 82nd Annual General Meeting of the Indian Council of Agricultural Research Society on 2 February 2011. This initiative primarily enhanced the resilience of Indian Agriculture covering crops, livestock and fisheries.

Adopting a holistic approach and proactive mode, seven major research institutes of the Council would work in unison to evolve coping technologies with the Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad as the lead centre. With a budget outlay of USD 70 million, state-of-the-art research facilities of international standards would come up at identified research institutes for developing adaptation and mitigation strategies.

Best-bet and cost-effective technologies to cope with climate variability were planned to be demonstrated on farmers' fields in 100 most vulnerable districts of the country. The technologies included rain water harvesting and its judicious use, in-situ moisture conservation, drought management strategies, seed and fodder banks, timely and precision agriculture, effective agro-advisory system using ICT kiosks. Small and marginal farmers in rain-fed, coastal and hill areas would benefit more due to an increased focus attention in these regions.

Capacity building of scientists in frontier areas was another core activity of the project. To prepare all stakeholders to face challenges, multi-pronged awareness generation programs on issues of climate change were planned. (Indian Council of Agricultural Research: 2011).

6. Complementarities in Food Products Trade

India is a large exporter of food products to the South Asian region and this has generally been rising. By contrast, it is a minor importer of such products as may be seen in Figure 3.

Figure 3: India's Food Products Trade with South Asian Association for Regional Cooperation (SAARC) Region (USD Million)

Food products are taken as those products classified under Chapters 01-24 of the Harmonised System of Classification.
India’s major export food products are cereals, both rice and wheat as indicated in Table 4. The major importers of rice are Afghanistan, Bangladesh, Maldives and Nepal.

Table 4: World Export- Import of Cereals in South Asia (Thousand Tonnes)

<table>
<thead>
<tr>
<th>Exporting Country</th>
<th>Importing Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>Afghanistan</td>
</tr>
<tr>
<td>6,975</td>
<td>1,107</td>
</tr>
<tr>
<td>(AV. 2007/08-2011/12)</td>
<td>(2010/11)</td>
</tr>
<tr>
<td>11,225</td>
<td>2,250</td>
</tr>
<tr>
<td>(2011/12)</td>
<td>(2011/12)</td>
</tr>
<tr>
<td>13,325</td>
<td>1,862</td>
</tr>
<tr>
<td></td>
<td>(2011/12: Estimate)</td>
</tr>
<tr>
<td></td>
<td>(2011/12)</td>
</tr>
<tr>
<td></td>
<td>(2012/13” forecast)</td>
</tr>
</tbody>
</table>

| India             | Bangladesh         |
| 4,042             | 45                 |
| (AV.2006/07-2011/11) | (2009/10)         |
| 5,816             | 45                 |
| (2010/11)         | (2010/11)           |
| 3,390             | 45                 |
| (2011/12)         | (2011/12)           |
| 2,250             | 45                 |
| (2010/11)         | (2011/12)           |
| 2,250             | 45                 |
| (2010/11)         | (2011/12)           |
| 2,250             | 45                 |
| (2010/11)         | (2011/12)           |
| 2,250             | 45                 |
| (2010/11)         | (2011/12)           |
| 2,250             | 45                 |
| (2010/11)         | (2011/12)           |

Notes: total cereal includes rice in milled form. Split years refer to individual crop marketing years.

Table 5 presents India’s potential exports\(^{38}\) to Pakistan in food products in 2011. It can be observed that India’s export (or market access) potential with Pakistan in this year was highest with respect of other black tea, chickpeas, other cane or beet sugar, vegetable fats and oils, ginger, other food preparations, etc\(^{39}\).

\(^{38}\) Potential exports are given as the minimum of supplying country’s world exports, importing country’s world imports, less supplying country’s existing exports. Potential exports is given as: \([\text{Min}(\text{SE}_i, \text{MI}_i) - \text{ET}_i]\) where \(\text{SE}_i\) = Suppliers’ Global Exports, \(\text{MI}_i\) = Market’s Global Imports, \(\text{ET}_i\) = Existing Bilateral Exports of the supplier of product i. By matching the import demand with export supply, it gives the possibility of trade expansion of product i under most favourable competitive conditions after netting the existing trade and assuming supplies as given. The estimates portray a notional outer limit market access frontier. The actual trade expansion will be much more modest depending on price and substitution elasticities of the liberalized products being exchanged.

\(^{39}\) The potential exports of Pakistan to India in food products for 2011 were also estimated by the author. The estimates for top ten are (with HS code and potential exports in USD million in brackets): ethyl alcohol
Table 5: India’s Potential Exports to Pakistan in Food Products: 2011 (US $ Thousand)

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Product Description</th>
<th>India’s World Exports (Supply)</th>
<th>Pakistan’s World Imports (Demand)</th>
<th>India’s Exports to Pakistan (Existing exports)</th>
<th>Export Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>090240</td>
<td>Other black tea (fermented) and other partly fermented tea</td>
<td>7,29,470</td>
<td>3,41,500</td>
<td>35,066</td>
<td>3,06,433</td>
</tr>
<tr>
<td>071320</td>
<td>Chickpeas (garbanzos)</td>
<td>2,24,104</td>
<td>1,84,322</td>
<td>41,809</td>
<td>1,42,513</td>
</tr>
<tr>
<td>170199</td>
<td>Other cane or beet sugar, chemically pure sucrose</td>
<td>12,91,758</td>
<td>83,994</td>
<td>27,393</td>
<td>56,601</td>
</tr>
<tr>
<td>151620</td>
<td>Vegetable fats and oils and their fraction</td>
<td>86,895</td>
<td>53,106</td>
<td>172</td>
<td>52,933</td>
</tr>
<tr>
<td>091010</td>
<td>Ginger</td>
<td>55,246</td>
<td>51,015</td>
<td>616</td>
<td>50,398</td>
</tr>
<tr>
<td>210690</td>
<td>Other food preparations</td>
<td>1,16,183</td>
<td>36,075</td>
<td>129</td>
<td>35,945</td>
</tr>
<tr>
<td>190110</td>
<td>Preparations for infant use, put up</td>
<td>33,827</td>
<td>46,765</td>
<td>25</td>
<td>33,802</td>
</tr>
<tr>
<td>230990</td>
<td>Other preparations of a kind used in animal feeding</td>
<td>51,680</td>
<td>29,408</td>
<td>12</td>
<td>29,396</td>
</tr>
<tr>
<td>100610</td>
<td>Rice in the husk (paddy or rough)</td>
<td>23,799</td>
<td>29,259</td>
<td>0</td>
<td>23,799</td>
</tr>
<tr>
<td>230400</td>
<td>Oil-cake and other solid residues,</td>
<td>22,18,661</td>
<td>1,86,703</td>
<td>1,68,321</td>
<td>18,382</td>
</tr>
</tbody>
</table>

Source: Estimated from UN Comtrade data as obtained from World Bank: World Integrated Trade Solution (WITS).

India’s potential exports to Bangladesh in food products in 2011 have been presented in Table 6. It will be observed that India’s highest potential exports to Bangladesh in 2011 was in respect of raw sugar, semi-milled or wholly-milled rice, seed white, chickpeas, other cane or beet sugar, preparations for animal feed, etc\(^{40}\).

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\(^{40}\) Bangladesh’s potential exports to India were also estimated for 2011 by the author. The estimates for top ten are (with HS code and potential exports in USD million in brackets): Tobacco (240120, 10.34), frozen shrimps (030613, 5.72), other baker’s wares (190550, 5.07), other black tea (090240, 2.00), coral (050800, 1.50), cigarettes (240220, 1.50), fruit juice (200980, 1.40), sweet corn (070990, 1.40), fruit fresh (081090, 1.3), starches (110813, 1.0).
Table 6: India’s Potential Exports to Bangladesh in Food Products: 2011 (US $ Thousand)

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Product Description</th>
<th>India’s World Exports (Supply)</th>
<th>Bangladesh’s World Imports (Demand)</th>
<th>India’s Exports to Bangladesh (ET)</th>
<th>Export Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>170111</td>
<td>Raw sugar not containing added flavour</td>
<td>6,01,322</td>
<td>7,06,503</td>
<td>58,340</td>
<td>5,42,982</td>
</tr>
<tr>
<td>100630</td>
<td>Semi-milled or wholly milled rice,</td>
<td>39,83,311</td>
<td>4,45,278</td>
<td>55,783</td>
<td>3,89,495</td>
</tr>
<tr>
<td>100190</td>
<td>Seed, white, other</td>
<td>77,324</td>
<td>7,25,238</td>
<td>16,746</td>
<td>60,578</td>
</tr>
<tr>
<td>071320</td>
<td>Chickpeas (garbanzos)</td>
<td>2,24,104</td>
<td>54,397</td>
<td>1</td>
<td>54,395</td>
</tr>
<tr>
<td>170199</td>
<td>Other cane or beet sugar, chemically pure sucrose</td>
<td>12,91,758</td>
<td>1,64,727</td>
<td>1,25,595</td>
<td>39,131</td>
</tr>
<tr>
<td>230990</td>
<td>Other preparations of a kind used in animal feeding</td>
<td>51,680</td>
<td>47,689</td>
<td>8,571</td>
<td>39,118</td>
</tr>
<tr>
<td>091010</td>
<td>Ginger</td>
<td>55,246</td>
<td>33,967</td>
<td>5,451</td>
<td>28,515</td>
</tr>
<tr>
<td>100110</td>
<td>Durum wheat</td>
<td>67,835</td>
<td>2,40,798</td>
<td>46,962</td>
<td>20,873</td>
</tr>
<tr>
<td>120100</td>
<td>Soya beans, whether or not broken.</td>
<td>18,578</td>
<td>40,507</td>
<td>32</td>
<td>18,546</td>
</tr>
<tr>
<td>210690</td>
<td>Other food preparations</td>
<td>1,16,183</td>
<td>24,174</td>
<td>8,687</td>
<td>15,487</td>
</tr>
</tbody>
</table>

Source: Estimated from UN Comtrade data as obtained from World Bank: World Integrated Trade Solution (WITS).

7. **The Way Forward**

- The current practice under the South Asian Free Trade Agreement (SAFTA) Trade Liberalisation Programme could particularly factor in the food / agricultural products, a large number of which dominate the Sensitive Lists of SAARC Members (as in case of ASEAN). Some potential food products that could be liberalized have been identified in this study.

- The operational requirements of the SAARC Food Bank need to be rationalized so that conditions for its use are simplified. Its activities need to be broadened in order to take more active monitoring of climate and crop prospects are taken in advance so as to avoid panic stocking and speculative trading. Again the Association of South East Asian Nations (ASEAN) initiatives in this regard are worth noting.

- Under the Agreement establishing a SAARC Food Bank, the Bank has been authorised to start functioning with a total reserve of 241,580 tons of food grains, of which India, Pakistan, Bangladesh, Nepal, Sri Lanka, Afghanistan, Bhutan and Maldives are to contribute 153,000 tons, 40,000 tons, 40,000 tons, 4,000 tons, 4,000 tons, 1,420 tons, 200 tons and 180 tons respectively. There are proposals to augment the strategic food reserves to at least 400,000 metric tons.
Given India's comfortable reserves of food stocks, it can offer to play a leading role in augmentation of regional Food Bank's stocks.

- India is going to remain a large exporter of food grains, notwithstanding the implementation of the pending Food Security Bill, and occasional deviation of monsoon rainfall from normal. At the same time, many of India's neighbouring countries would continue to remain net importers of food grains till such times as food self-sufficiency is achieved. Till such times, India would continue to remain one of the cheapest suppliers of food grains to this region. It is noteworthy that it was largely due to India's substantial release of rice stocks for exports that unlike other food crops, international rice prices remained subdued or even declining in 2012.

- However even though India has removed quantitative restrictions on exports of major food grains, its hitherto “on” and “off” policy with respect to food grains exports need to be substituted by a more long term and stable policy. Its ad hoc food grains export policies have enabled its competitors such as Thailand and Vietnam to increase steadily their global market shares in global food grains trade. India should endeavour to build up its warehousing space so that in years of less than normal rainfall, it can draw on these reserves to meet the domestic demand, rather than curb exports to its neighbours who may be facing shortages and price hikes in essential food grains. This will also obviate the need for speculative build-up of food stocks by such countries.
References


Food Security in Pakistan: Challenges and Options

Abid Qaiyum Suleri and Shakeel Ahmed Ramay

1. State of Food Security in South Asia

Although food insecurity is one of the major global concerns, its extent and severity vary across regions and countries. Developing countries are home to about 13.5 per cent food insecure people. World Food Program states that about 66 million children across the world go hungry to school and 100 million children are underweight along with one in four stunted. In addition, malnutrition leads to about 45 per cent children’s deaths across the globe WFP, 2014. In regional classification, Sub-Saharan Africa and South Asia are among the top food insecure regions. According to FAO, IFAD & WFP (2014), about 276 million people (or 15.8% of its population) are facing the problem of undernourishment in South Asia.

Despite an increase in food production, per capita food availability in South Asia remains nonsatisfactory partly because of rapid increase in population, and partly because of shrinking economic access. South Asia is home to almost 1.671 billion people with a significant percentage falling in the age bracket of 15-30. Food insecurity leads to a situation where household expenditures on education and health are diverted to food. Reduced expenditures on education and health in turn result in lower quality of human capital, a situation where productive potential of the youth cannot be realized. High incidence of poverty is another major concern for the region. Poverty has a cyclic relation with food insecurity. Poverty increases the food insecurity, which exacerbates the poverty situation.

Another dimension of the problem is unequal distribution of food security both within and across the countries. This inequality turns it more complicated to address food insecurity.

State of Food Security in Pakistan

Food security is traditionally measured through three indicators, i.e. food availability, access and utilization. The inclusion of these indicators in the definition of food security by FAO in 1996 is a global testimony that food security is a multifaceted phenomenon. In line with the FAO’s definition, Pakistan is also using these indicators to measure national food security. In 2003, Pakistan made its

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41 This paper is an updated version of SDPI’s presentation made in the SAES 2012. At the time of SAES, the study Food Security Analysis 2013 was under way. At the time of compilation of this anthology the study is concluded and thus the chapter is updated accordingly.

42 http://www.wfp.org/hunger/stats


44 About 24.5 percent people live below the poverty line of $1.25 per day and this figure would be increase substantially if we change the poverty line to $2 per day. (Poverty and equity, http://povertydata.worldbank.org/poverty/region/SAS.)


first organized attempt to measure the state of food security, a joint effort of SDPI and World Food Program (WFP).

Food insecurity in the country has exhibited a rising trend during the last two decades. Findings of the first report on food security in 2003 showed that 37.6 per cent population was food insecure (SDPI, WFP 2004). According to 2009 report, about 48 per cent population was food insecure (SDPI, WFP, SDC 2010). Latest report on the subject was produced in 2013, which examined the nutrition status of the country as well.

The report ranked districts of Pakistan, Pakistani Administred Kashmir (PAK) and FATA according to their level of food security and also measured their state of nutrition. The report derived its results from the findings of secondary and primary data. Secondary data was collected from federal, provincial and district governments while primary data was collected by conducting a survey with a sample size of 14,355 households. Highlights of the report were released as SDPI Policy Review in 2014.  

**Food Availability**

Three elements primarily determine food availability. They are production, stocks and net trade of food items. Based on these three indicators, it can be argued that food availability in Pakistan at national level is fairly good. However, there is an unequal regional distribution. For example, production of staple food has shown a positive trend in recent years but there are regional inconsistencies. Production of cereal or crop based food is heavily concentrated in the Punjab and Sindh while Balochistan lags behind crop based food production. However, animal based food production has increased in Balochistan. KPK is dependent on the Punjab, Sindh or imports to meet its demand for food.

National figures show the cumulative production or estimates of production but they do not represent the complete picture. Local level data tells us an entirely different story. Results from the study show that majority of Pakistani districts are food insecure in terms of food availability. Nationwide, out of 114 districts, 82 fall in the category of extremely deficit. 21 districts fall between very deficit to deficit, only 31 districts are food surplus, and 10 have sufficient food (Figure 1).

Apart from the Punjab, food availability at provincial level is alarming. The Punjab has 21 food surplus districts and 9 food deficient districts. The province has the highest food availability in the country. Contrary to this, Balochistan, PAK, FATA and GB have the largest number of food deficient districts. Balochistan has 30 food deficient districts of which 22 are extremely food deficient. Ten districts in PAK and six in GB fall in the category of extremely deficient. Sindh is experiencing a relative balance between food sufficient and deficient districts, with nine districts experiencing food sufficiency or surplus and seven extremely deficient districts.

District is an administrative unit and their number increased from 136 in 2009 to 144 in 2013, hence an exact comparison may not be possible. However, comparing the trends of provincial food availability ranking of 2013 with that of 2009 (Figure 2), it is evident that food availability in the Punjab (which is major food basket of Pakistan) slightly improved, while it decreased in case of Sindh. In Balochistan, KPK, FATA, GB, and PAK it is almost stagnant during this period.

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Figure 1: Food Availability by Province and District
Source: State of Food Security in Pakistan and policy options (SDPI, 2014).

Figure 2: Food Availability by Province and District
Source: Food Security Analysis 2009, (SDPI, WFP, SDC, 2010)
2.2 Food Access

Food access is a major concern for Pakistan. Poverty, which has been on the rise, is the leading contributor to limiting access to food. The World Bank report of 2013 indicates that about 60 per cent of population lives below the poverty line\(^a\). Incidence of poverty has increased in Pakistan due to a variety of reasons, which include periodic floods, energy crises, bad governance, stagnant industrial growth, war on terror, etc.

Poverty has also limited the kinds of food people can access a consequence of which is unbalanced nutrition. In Pakistan, food diversification is very narrow, especially for people in the lower socio-economic strata. Our study results showed that poor people experienced fixed and limited patterns of food consumption with minimum access to fruits and meat (Table-1).

<table>
<thead>
<tr>
<th>Population</th>
<th>Average percentage of calories from staples</th>
<th>% pop with share of cereal &gt; 60%</th>
<th>Household Dietary Diversity Score</th>
<th>% pop with dietary diversity score &lt;=5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>51.2</td>
<td>24.3</td>
<td>6.4</td>
<td>24.3</td>
</tr>
<tr>
<td>Urban</td>
<td>51.2</td>
<td>23.6</td>
<td>6.5</td>
<td>20.8</td>
</tr>
<tr>
<td>Rural</td>
<td>51.3</td>
<td>25.1</td>
<td>6.3</td>
<td>26.0</td>
</tr>
<tr>
<td>Province/regions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punjab</td>
<td>49.9</td>
<td>19.5</td>
<td>6.4</td>
<td>24.8</td>
</tr>
<tr>
<td>Sindh</td>
<td>56.</td>
<td>42.7</td>
<td>5.9</td>
<td>36.1</td>
</tr>
<tr>
<td>KPK</td>
<td>51.6</td>
<td>23.3</td>
<td>6.5</td>
<td>18.8</td>
</tr>
<tr>
<td>Balochistan</td>
<td>49.2</td>
<td>23.2</td>
<td>6.4</td>
<td>22.4</td>
</tr>
<tr>
<td>Islamabad</td>
<td>46.6</td>
<td>6.6</td>
<td>6.8</td>
<td>7.8</td>
</tr>
<tr>
<td>FATA</td>
<td>46.6</td>
<td>14.5</td>
<td>6.6</td>
<td>17.9</td>
</tr>
<tr>
<td>Gilgit-Baltistan</td>
<td>53.9</td>
<td>29.6</td>
<td>6.4</td>
<td>24.5</td>
</tr>
<tr>
<td>PAK</td>
<td>49.8</td>
<td>14.0</td>
<td>6.2</td>
<td>27.9</td>
</tr>
</tbody>
</table>

A review of food access in the country reveals a grim reality. Based on the scale utilized by our study, only 15 districts have acceptable to moderate access to food and rest of the districts fall under the categories of extremely low (54), and low (75). Balochistan is the worst hit province with 28 districts falling under the category of extremely low access to food. In Balochistan, only one district can be qualified as having moderately low food access and no district can be classified as reasonable. Food access in FATA is comparable to that of Balochistan, with all 13 districts experiencing very low access to food out of which 11 districts falling under the category of “extremely low.” Majority of the districts in Sindh fall in low (14) to extremely low (6) category with only one district with reasonable access. Situation in the Punjab is interesting because of low access to food besides the province has the highest availability of food. Twenty one districts in the Punjab have surplus food. However, only four districts in the Punjab fall under the category of reasonable access and eight are with moderate access. Remainder districts of the Punjab come under the categories of low (23) and extremely low (1).

\(^{a}\)http://www.brecorder.com/money-a-banking/198/1187220/
Results from the Punjab strengthen the argument that food availability cannot singularly determine food access or security. In the case of the Punjab, limited food access despite food availability can be attributed to the phenomenon that staples are being treated as cash crops; most of the farmers sell half of their produce to buy the inputs for next crop while keep half of it for their domestic consumption, which does not last for whole year. However, in urban Punjab food hoarding, market distortion, and fuel inflation lead to food inflation.

Reflecting on the trends of access to food in 2009 and 2013, it is evident that access to food in the Punjab and Sindh provinces has dropped significantly whereas it is almost stagnant in rest of Pakistan. The devastating floods of 2010 may be one of the contributing factors in eroding people’s access to food in these provinces, as they were the worst affected by floods.
2.3 Utilization of Food

Utilization or food absorption is the way the body makes the most of various nutrients in food. Sufficient energy and nutrient intake by individuals is the combined result of good care and feeding practices, food preparation, and diversity of the diet and intra-household distribution of food. Combined with good biological utilization of food consumed, this determines the nutritional status of individuals. Since this dimension of food security is dependent on the biological ability of the individual to make use of the nutrients consumed, issues such as access to safe drinking water & sanitation coupled with health status and literacy rate implicate food utilization ability.

According to our latest report, only five per cent districts were found having reasonable absorption, compared to 21 per cent that were experiencing extremely low absorption. The highest proportion of districts (32.6%) was found having very low food absorption within Pakistan. These figures also indicated a worsening situation of food absorption since FSA2009, where eight per cent districts were found having reasonable food absorption, and only 15 per cent were then found experiencing extremely low level of food absorption.

![Figure 5: Food Absorption in Pakistan 2013](source)

**2.4 Status of Nutrition**

The poor status of food availability, its access and utilization, has led to an overall poor nutrition in the country. Micro-nutritional deficiencies in vast percentage of population were pointed out by National Nutritional Survey 2011 (Figure 6).
Figure 6: Micronutrient deficiencies in Pakistan

The food insecurity and nutritional deficiency has led to the prevalence of wasting and stunting in most parts of Pakistan. The stunting ("height for age" value to be less than two standard deviations of the WHO Child Growth Standards median) is prevalent in provinces with more food insecurity.

Figure 7: Prevalence of stunting and wasting in Pakistan

2.5 Overall Food Security

Based on the criteria of 2100 KCal/day, about 58 per cent of the population of Pakistan is food insecure (SDPI 2014). Analysis of the historic trends reveals that extreme food insecurity decreased between 2009 (22.4%) and 2013 (17.4%). However, the overall food insecurity increased from 48.6 per cent in 2009 to 58 per cent in 2013 (Figure 7).
The national state of food insecurity is in-line with the individual indicators of food security (availability, access and utilization). Results show that only 27.1 per cent population is adequately food secure while the rest of the population is borderline (14.5%), moderate deficit (25.7%), very deficit (15.2%) and severely deficit (17.4%). Balochistan, Sindh, KPK, FATA and PAK are the most food insecure regions of Pakistan, while the Punjab, and Islamabad (the federal capital) enjoy a relatively high level of food security.

Source: State of Food Security in Pakistan and Policy Options (SDPI 2014)

1. Institutional Framework for Food Security in Pakistan

In April 2010, parliament passed the historic 18th constitutional amendment, which along with many other changes stopped the Federal Government to legislate on 47 subjects. These subjects were part of the concurrent list and were being concurrently looked after by the federal and provincial governments. Most areas of social sector development, including agriculture, livestock and fisheries, etc. were part of the concurrent list. Through 18th amendment, legislation on these subjects was mandated to the provinces.

As a result of 18th amendment, the functions of Federal Ministry of Food, Agriculture, and Livestock (MINFAL) were also devolved to provinces. MINFAL was more focused on food availability aspects, but it had major say in issues like import/export of wheat, rice and sugar, and fixing of support price for public procurement of wheat, etc. Abolishing MINFAL from the center created an institutional vacuum for any coordinated work on food security at central level.

Article 38-d of the Constitution of Pakistan (1973) obli ges the state as a whole to “provide basic necessities of life, such as food, clothing, housing, education, and medical relief, for all such citizens, irrespective of sex, caste, creed or race, as are permanently or temporarily unable to...
earn their livelihood on account of infirmity, sickness or unemployment”. To fulfill this obligation, the Federal Government established a National Ministry of Food Security and Research in October 2011.

The ministry had three major goals, i.e. 1) National Zero Hunger Program, 2) Formulation of Food Security Policy, and 3) Rearranging the Institutional Framework for Food Security. However, it was (and still is) difficult for the former employees of MINFAL to take off their “food availability through production” hat and wear the new cap of ensuring “availability, access, and utilization”.

In March 2012, the then prime minister Syed Yousuf Raza Gillani launched the Zero Hunger Program with a stated objective of providing midday school meals, fortified and ready to use food supplements for the expecting and breastfeeding mothers, opening of zero-hunger food shops, and many other such initiatives. However, the program could never take off due to lack of ownership by the Ministry of Finance. Very similar initiatives were announced by Federal Finance Minister Ishaq Dar in his Federal Budget 2014-15 speech. However, again most of these initiatives were devoid of fiscal allocation and hence could not take off. One also hoped that a central food security policy at federal level would pave the way for policy guidelines for federal and provincial governments. However, the draft food security policy is more focused on food availability than access to food or food utilization aspects.

Instead of MNFSR, socio-economic access to food, to some extent, is being catered through Central Social Safety Net Scheme, Benazir Income Support Program (BISP). This is a cash support program through which 5.3 million families living below poverty line (selected through poverty scorecard) are paid $15 per month.

Ensuring smooth provision of the prerequisites for food utilization (such as health, education, clean drinking water, sanitation, etc.) is again beyond the mandate of MNFSR. After 18th amendment, provinces are responsible for taking care of above-mentioned services and there are capacity issues among different provinces.

Figure 8: Multidimensionality of food security and problems of having a central institutional framework.

As illustrated in Figure 8, the three pillars of food security stand alone and there is no formal mechanism for ministries to coordinate with each other to achieve food security in the country.

2. Conclusion and Recommendations

Despite notable advancement in the production of local commodities a too high segment of the population is food insecure and under-nourished. The burden of food insecurity and under-nutrition falls on the poorest, most vulnerable, the displaced, and those subject to repeated shocks. These parts of the population are unable to achieve an adequate and diverse diet, despite Pakistan’s adequate production of staple food. Resorting to negative coping mechanisms in the absence of access and availability of food, the cycle of hunger, under-nutrition and vulnerability is perpetuated. The extent of food insecurity and under-nutrition is a critical feature of the current socio-economic landscape.

The findings of our 2013 analysis show that even with a comfortable level of food availability measured by total national agricultural output, significant geographic disparities exist for each of the three dimensions of food security and the scale and magnitude of food insecurity, based on the composite index of those three dimensions is at a critical level, negatively affecting close to 60 per cent of Pakistanis.

Following are some key recommendations based on the study:
1. Given the state of food insecurity, enhancing food production in the country, particularly in food insecure areas, can play an important role in promoting food security and reducing the risks among the most vulnerable.

2. Food access is the most important factor limiting food security in Pakistan. The economic access to food is limited for a large part of population, particularly those in low-income brackets. Initiative to enhance access to food and economic and livelihood opportunities are urgently needed, alongside the development of social safety nets and for the most vulnerable.

3. The rise in food prices over the last several years combined with persistent inflation in commodity markets, energy shortages, and the cost of recurrent shocks has contributed to low levels of economic growth and reduced purchasing power amongst the poorest segments of society impairing people’s ability to acquire even the most basic food commodities to fend off hunger. Measures are needed to manage higher food prices bringing them back within reasonable range and/or provision of food at affordable prices, for the poor as part of a social safety net program.

4. Food utilization/absorption is yet another important limiting factor. This needs to be addressed by promoting education at the community and household levels with additional emphasis on female education, improving access to safe drinking water and sanitation facilities and introducing nutrition programs.

5. Achieving food security and nutrition for Pakistan demands a coordinated approach across multiple sectors, including agriculture, health, education, infrastructure, social welfare, peace and security. Considering the high cost of hunger and under-nutrition, the formulation and implementation of a national policy for food security and nutrition, alongside provincial level legislation to stem these trends is both an economic and social imperative for the Government of Pakistan.
Regional Seed Bank and Material Transfer Arrangements in South Asia

Kamalesh Adhikari

The Context

The impacts of the global food and economic crises that started in 2008 and the continuing increase in world food prices have brought food security into focus in South Asia. A report of the Food and Agriculture Organization of the United Nations (FAO) and the South Asian Association of Regional Cooperation (SAARC) estimates that South Asia has the highest concentration of poverty and is the most food-insecure region in the world. Despite significant potentials for development, especially in agriculture in rural areas, it is a misfortune that the region houses 40 percent of the world’s poor and 35 percent of the world’s under-nourished.

This situation is likely to be more severe as according to World Bank estimates by 2050, South Asia’s population, 70 percent of which currently lives in rural areas, is likely to exceed 2.2 billion from 1.5 billion. As most of the rural poor depend on subsistence agriculture for their livelihoods, SAARC Member States face significant challenges to improve their livelihood conditions and reduce poverty. One such challenge is an extreme seed and food insecurity, coupled with additional and complex challenges created by climate change impacts on agriculture and seed systems.

Devising strategies to conserve seeds in ex situ and in situ conditions to developing mechanisms to promote exchange of seeds for research and breeding of varieties important for food security and climate change adaptation are major policy issues for South Asia. If we see the developments in global agriculture or seed systems, we identify that until the introduction of private property rights, genetic resources or seeds used to be treated either as public goods or common pool resources. Farmers, as users, custodians and owners of their seeds, used to select the most suitable local varieties for breeding and it was with their traditional knowledge that they not only conserved a wide base of genetic resources but also promoted breeding of varieties of their preferences and needs.

In many developing and least-developed countries, these traditional agricultural practices—termed as the informal seed sector—still form the basis of livelihood and agriculture. For example in South Asia alone, the informal sector still contributes between 70 percent and 90 percent to total seed use.
and availability among farmers. However, today's global governance of genetic resources, mostly
due to the corporate lobby from the North, has shifted completely from the principle of common
heritage to a strong system of private property rights, allowing privatization of resources and
seeds. As countries across all regions have implemented or are in the process of implementing
global rules of intellectual property rights, the resource poor farmers in counties like South Asia are
facing a risk of being deprived of their traditional rights, for example, their rights to save, exchange,
reuse and sell farm-saved seeds.

Against the backdrop of these issues, a consensus by South Asian governments to promote
cooperation for a regional seed bank in South Asia in April 2010 and their final decision to sign onto
the SAARC Seed Bank Agreement and the Framework for Material Transfer Agreement at the 17th
SAARC Summit in November 2011 indicate a progressive realization towards seed and food
security in the region (see the box). However, for a majority of poor South Asian farmers who rely
on informal systems of seed use and exchange and for whom agriculture is a way of their life rather
than a business, the case is different.

1. **Assessing the SAARC Seed Bank Agreement and the Framework for Material
Transfer Agreement**

According to an FAO report, more than 1750 individual genebanks and 2500 botanical gardens
worldwide have substantial ex situ collections for promoting conservation and use of genetic
resources. Interestingly, while genebanks are located in all continents, the largest collections by the
Consortium of International Agriculture Research (CGIAR) centres have now been brought under
the multilateral system of access and benefit sharing of the International Treaty on Plant Genetic
Resources for Food and Agriculture (ITPGRFA). This is the first international treaty to have
identified farmers' rights to seeds and traditional knowledge, including their rights to save,
exchange, reuse and sell farm-saved seeds.

The SAARC Seed Bank Agreement and the Framework for Material Transfer Agreement could have
been used as a means to enhance the potential to benefit from such global mechanisms, for
example, by making institutional arrangements to establish and protect farmers' rights to seeds and
traditional knowledge, mostly with the view of protecting them from the onslaught of the
 corporatization of resources. Regionally also, South Asian governments could have made
arrangements within their agreements to expand and strengthen linkages with community seed
banks that are locally managed by South Asian farmers to conserve genetic resources, protect
traditional knowledge, and promote breeding of varieties important for food security and climate
change adaptation.

However, if we assess the provisions of these documents, mainly from the view point of small
farmers and locally-managed community seed banks of the region, there are concerns that these
regional arrangements would emerge as a bane rather than a boon for South Asian farmers. If they

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Rome: Food and Agriculture Organization of the United Nations.
are implemented in their current forms, it will not only affect the functioning of the traditionally-managed informal seed system but will also undermine all efforts geared towards creating an enabling environment for the sustainability of community seed banks and the realization of farmers’ rights to seeds and traditional knowledge.

Table 1

<table>
<thead>
<tr>
<th>Objectives of the SAARC Seed Bank Agreement and the Framework for Material Transfer Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the SAARC Seed Bank Agreement to be administered by the SAARC Seed Bank Board (Article I), South Asian governments have recognized “the importance of regional and sub-regional collective self-reliance in agriculture with respect to attaining seed security as a means of food security”. They have also recognized that the establishment of such a regional seed bank may, among others, contribute to the objective of harmonized seed testing and certification and facilitate seed trade within the region.</td>
</tr>
<tr>
<td>In the preamble of this Framework, South Asian governments have realized that there is a dearth of quality seed availability in the region and that exchange of genetic materials could contribute to enhancing productivity. Expressing their desire to operate a Seed Bank, they have also agreed to address the matter of exchange of materials from the Seed Bank among the Member States.</td>
</tr>
<tr>
<td>According to Article II of the Agreement, the objectives of the SAARC Seed Bank are: (a) to provide regional support to national seed security efforts; address regional seed shortages through collective actions and foster inter-country partnerships; (b) to promote increase of Seed Replacement Rate with appropriate varieties at a faster rate as far as possible so that the use of quality seed for crop production can be ensured; and (c) to act as a regional seed security reserve for Member States of SAARC.</td>
</tr>
<tr>
<td>The objective of this Framework is to facilitate supply/exchange of seeds of common varieties among the Member Countries so that they achieve food security in the region. The Framework mentions that it will be implemented in accordance with the existing laws, regulations and guidelines of SAARC Member States and the ITPGRFA. The Framework also includes a format for material transfer agreement which Member Countries have to use for the purpose of exchanging materials within the system of the Seed Bank.</td>
</tr>
</tbody>
</table>

2. Implementation Concerns

In their attempt to attain seed security as a means of ensuring food security, the Agreement on SAARC Seed Bank and the Framework for Material Transfer Agreement will be beneficial if certain corrective measures are taken in their implementation process. As South Asian farming is characterized by fragmented lands and small landholdings by poor farmers who reply significantly on informal (traditional) system of farmer-to-farmer exchange of seeds, the following policy concerns remain critical to protect the interests of South Asian farmers and locally-managed community seed banks.
3. Why only modern varieties?

The current objective of the SAARC Seed Bank Agreement has only focused on promoting the increase of Seed Replacement Rate with appropriate varieties at a faster rate. Even the provisions of the Agreement have not focused on how conservation of genetic resources can be promoted to empower local farmers to benefit from the local seed system. This mainly means that South Asian governments only want to promote the dissemination of modern seeds that have been certified and registered under seed and plant variety protection rules. This will exclude local and farmers' varieties from the regional seed bank system, undermining farmers’ rights to seeds and the significance of community seed banks that conserve and promote the exchange of local varieties and traditional knowledge. Thus, whether South Asian governments view the regional seed bank only for improved (modern) varieties or whether they will also mobilize this system as a reliable mechanism to promote conservation and use of local varieties is an issue to be addressed during the implementation of the SAARC Seed Bank Agreement.

4. How to Conserve Local/Indigenous Varieties

While developing a list of common varieties, Article IV of the Seed Bank Agreement recognizes that there is a need to preserve local/indigenous varieties. However, it is not clear how and through what mechanisms the Agreement will adopt a community interest-driven conservation approach for such varieties. This aspect is important not only to protect such varieties but also promote their use and further development along with the associated traditional knowledge.

Hence, the Seed Bank Board will have to work on this issue and come up with a plan of action for promoting conservation, use and development of such varieties and associated traditional knowledge. Also, this work has to be mainstreamed keeping in view the need to create effective mechanisms for regulating biopiracy and promoting fair and equitable access to and benefit sharing from the commercial use of local/indigenous varieties and associated traditional knowledge. This will not only facilitate the implementation of farmers’ rights to seeds and traditional knowledge but will also promote the work of community seed banks that rely on and develop local seeds and knowledge.

5. Why a limited seed reserve?

The Agreement calls for the maintenance of the Seed Reserve under the Seed Bank, consisting of quality seeds of common varieties of rice, wheat, maize, pulses and oilseeds (Article VI). The Agreement mentions that initially, governments would collaborate with rice, wheat, pulses and oilseeds, and gradually other crops may be considered.

South Asian governments might have made such provisions for the sake of easing the implementation of the Seed Bank in its initial phase. However, the coverage of the seed reserve has to have better coordination with demands by farmers in local contexts and with food security and climate change adaptation needs in specific conditions at local and national levels. Also, as the multilateral system of seed exchange within the ITPGRFA has already covered 64 plant genetic resources (food and forages) that are fundamental to food security, a limited coverage within the regional seed system does not make much sense.
In addition to this, there is also a need to focus on how each national government will be required to contribute its seeds to the seed reserve for promoting access to seeds and exchange of genetic materials, and what mechanisms would be promoted for the linkages of the regional seed reserve with the national seed reserve, including local seed reserves, for example, that are within the management of community seed banks.

6. **How to Ensure Quality Compliance**

The Seed Bank Agreement calls for maintaining quality standards of seeds under the Seed Bank system but it remains a major constraint for local and poor farmers in the region. If and under what terms and conditions of quality standards farmers’ varieties will be included within the Seed Bank system is a major concern from the viewpoint of strengthening the informal seed system as well as the work of community seed banks. Though harmonized seed testing/certification and facilitation of seed trade within the region is one of the features of the Seed Bank Agreement, how South Asian governments will develop strategies to promote seed testing/certification of local varieties and facilitate their trade is another important concern to address. The SAARC Seed Bank Board will thus have to work with local farmers’ groups and community seed banks to devise quality standard-related options so that local varieties are able to meet quality standards and are promoted through the formal system of exchange and trade.

7. **What mechanisms are there for adequate pricing and supply of seeds?**

There are provisions for the withdrawal, release and replenishment of seeds within the system of the Seed Bank but how country-specific situations and their level of development, mainly in view of the state of poor and vulnerable farmers, would be considered in this process is critical in examining the issue of adequate pricing and supply of seeds. The decision regarding terms and conditions of the pricing and supply of seeds also has to take into account the types of seeds that the seed reserve will include, as South Asia is yet to regionally address many issues concerned with, for example, genetically modified seeds and seeds under patent or plant variety protection. At least, in this process, regional efforts are needed towards the protection of farmers’ rights to seeds and traditional knowledge, which, for example, India has already done to some extent through its Plant Variety Protection and Farmers’ Rights Act 2001.

8. **What measures are in place for compliance with global regimes?**

Regional arrangements regarding the seed bank and material transfer are almost silent about compliance with related global regimes. Only the Framework for Material Transfer Agreement mentions that it will be in accordance with the ITPGRFA. Hence, how the implementation of these regional mechanisms will be initiated to balance the interests of subsistence farmers and the commercial seed sector is an important concern. South Asian governments will therefore have to ensure a balancing approach to safeguard the interest of its farmers from the impacts of intellectual property. The Seed Bank Board has to reflect upon the farmers’ rights provisions of the ITPGRFA as well as the equity principles of another important international agreement, the Convention on Biological Diversity (CBD). Compliance with the CBD, including the Nagoya Protocol on Access and
Benefit Sharing that has been introduced as part of the negotiations under it, is important mainly to capitalize on provisions regarding the protection of traditional knowledge, promoting access to and ensuring benefit sharing from commercial uses of genetic resources, and regulations on biopiracy.

9. **Research, development and breeding**

It seems that the Seed Bank Agreement has been considered for implementation only in view of the need to supply seeds in times of immediate needs and crises, making the whole system only a short-term arrangement to address the region's climate change adaptation challenges and deepening problems of food and seed insecurity. Needless to say that a limited focus on agriculture research and development, including breeding of varieties that ensure food security and effective climate change adaptation, will not be in the region's long-term interest. The role of the Seed Bank in the expansion of agriculture research and development, including breeding of varieties, needs to be strengthened through guidelines by the Seed Bank Board, for example, by promoting participatory plant breeding and variety selection programmes, documentation of traditional and technical knowledge about the traits and use of genetic resources, and development and transfer of appropriate technologies, including traditional ones.

10. **The link between national and community systems of seed conservation, exchange and use**

The operationalization of the Seed Bank and the Framework for Material Transfer Agreement is at the formal level and it is important to note that the informal seed system in the region has a major role to play in advancing farmers’ rights to seeds and traditional knowledge. A mere focus on increasing the Seed Replacement Rate would mean that community seed banks that focus on the conservation and use of local landraces will have limited options to promote agriculture biodiversity management at local and national levels and to contribute to the realization of farmers' rights. The SAARC Seed Bank should not drive out the community seed system but should strengthen it for an enabling environment for the realization of farmers’ rights to seeds and traditional knowledge. Hence, the Seed Bank Board will have to develop guidelines to promote linkages between the regional seed bank and the informal seed system, including the community seed banks that work with many common and different objectives and modalities. A better option would be to engage in a regional mapping of community seed banks of different types and needs, and finally make a strategic plan of progress towards strengthening their linkages with national gene banks and agriculture research stations, the regional seed bank and international gene banks, including the multilateral system of the ITPGRFA.

Also a major focus is needed towards making the Framework for Material Transfer Agreement more favourable to farmers and community seed banks, considering their capacity to access as well as contribute to the pool of genetic resources at national and regional levels. An enabling environment for farmers and community seed banks to access and contribute to the regional seed reserve and exchange system will not only promote conservation, use and exchange of genetic resources but will also promote research and development, including breeding of varieties important for the region's food security and climate resilience.
11. The Way Forward

Intellectual property rights may support biodiversity conservation and agricultural development, however, they also impact traditional patterns of farming. Thus, the intellectual property regime needs to be made favourable to the conditions within each country, keeping in view the specific development needs and priorities in areas such as biodiversity management, food and seed security, and climate change adaptation. It is in the interest of South Asia to seek options within the regional seed bank and material transfer arrangements to protect farmers’ rights to seeds and traditional knowledge, and thereby create an enabling environment for the expansion and sustainability of institutions like community seed banks.

Along with a substantial focus on how the seed systems in the countries of the region have evolved over the period of time, priority should also be given to examining what roles the informal seed system in particular have played towards the protection of the rights of farmers and the conservation, use and exchange of genetic resources at household, local, national and regional levels. The South Asian Seed Bank Agreement and the Framework for Material Transfer Agreement need to strengthen the informal seed system and farmers’ rights, and in this context, adequate strategies are also needed for the coordinated linkages with community seed banks that have evolved in different capacities to serve the purpose of conservation, use and exchange of genetic resources, as well as food security at local and national levels.

In addition to holding dialogues within the SAARC Seed Forum, South Asian nations, mainly Agriculture Ministers and the Seed Board, will have to consult with national agriculture research institutions, and importantly South Asian farmers’ organizations and community seed banks to devise mechanisms to create and strengthen linkages with the national and community systems of seed conservation, use and development. The SAARC Seed Bank Board in particular can assist with guidelines for such linkages. The main issue is, the SAARC Seed Bank and the Framework for Material Transfer Agreement should emerge as a boon and not a bane for South Asian farmers, including the community seed banks that have been contributing to conservation and sustainable use of genetic resources and traditional knowledge since generations.
Section E: Regional Cooperation in Energy and Water
Energy Cooperation in South Asia: Towards Sustainable Energy Choices

Deepti Mahajan Mittal

Energy, with its linkages with life and livelihood concerns, is a priority policy concern in the South Asian region. The region is witnessing exponential growth in energy demand. This implies mounting energy challenges as the region is largely energy deficient, with the exception of huge potential for development of hydro-resources in Bhutan and Nepal. The countries in this region are heavily import dependent and face grave supply shortages even as large parts of the population do not have access to modern forms of energy. The focus on sustainability has added a new dimension to energy decision-making; it is widely recognised that clean energy options provide opportunities for enhancing energy security, while allowing co-benefits for environment protection and climate change mitigation.

South Asian countries share many energy concerns, and there exist complementarities that hold out promise for cooperation, despite the absence of large indigenous energy reserves. This paper examines the possibilities for energy cooperation in the region. It provides a brief overview of the region’s energy situation, and delineates areas of cooperation with a focus on the move towards sustainable energy choices. It looks into opportunities in natural gas (seen as a transition fuel towards a renewables-dominant energy mix), renewable energy (including hydropower) and energy efficiency.

1. Energy in South Asia

Energy security, linked with the four ‘A’s of energy availability, accessibility, affordability and acceptability, is a key policy concern for countries in South Asia. Maintaining adequate energy supply in the economy; ensuring that modern, lifeline energy reaches all; determining prices such that the poor can afford energy without creating perverse incentives for inefficient energy consumption by rich households; and responding to the call to make sustainable energy choices, are all integral to countries' energy objectives.

The energy-growth-development linkage is integral to policymaking. Figure 1 maps the HDI values of countries in the region against the country figures for per capita energy consumption. It can be seen that, most frequently, countries with higher per capita energy consumption are better placed on the human development index. This is of particular significance for South Asian countries, as the region is home to a large populace without access to modern energy. Energy has strong linkages

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with growth and development parameters. It is essential for income generation and employment creation, and for the provision of welfare services including health, education and sanitation.

The South Asian energy mix is dominated by fossil fuels. The non-commercial energy sector is marked by predominant use of traditional fuels such as biomass. See Figure 2 for the regional energy mix. Renewables form an insignificant part of the commercial energy mix, and point to the need for continuing efforts directed towards developing renewable energy resources. Diversification of the energy mix towards renewable energy sources is essential to reduce growing imports of fossil fuels (see Figure 3 for import dependence in the region) and to decrease the environmental externalities of energy production and use. According to UNEP (2010), the prioritisation of renewable energy and energy efficiency action “can be the quickest and most effective means to achieve energy security in developing countries.”

Figure 1: A comparison of countries' per capita energy consumption figures and HDI values
Sources: UNDP 2011; UNSD 2012

Figure 2: South Asia’s regional energy mix, 2009
*Afghanistan, Bhutan and Maldives are not included
Data source: IEA (2011)
Gross import dependence is the proportion of Imports in Total Consumption; Net import dependence is the proportion of Net Imports (i.e. Imports - Exports) in Total Consumption.

In developing countries per-capita energy consumption levels and the quality of the supply of energy is much lower than in developed countries. Thus, in addition to the need to secure low-cost and uninterrupted supply of a diversified set of energy supplies, a significant dimension of energy security enhancement is meeting basic needs of their populations at the household level (UNEP 2010). As existing supply lines struggle to meet current energy demand, it needs to be noted that energy access remains a challenge in the South Asian region (See Figure 4). Lack of access to energy goods and services has a bearing on productivity of human resources and their potential to generate income. Energy access is, therefore, a dimension of socio-economic vulnerability, and a strategy for energy provision is integral to the formulation of a strategy for poverty alleviation. Energy has a vital link with the development objectives enshrined in the Millennium Development Goals, and lack of energy access hampers the achievement of these objectives. Women often bear the brunt of reliance on traditional biomass such as walking long distances to collect firewood for the household, which impacts their ability to seek education and employment.

A review of the energy situation in the region suggests that most countries in the region are precariously positioned. Indigenous conventional fuels are fast depleting. Energy access, including access to electricity is limited. Where power is available, it is often intermittent, and power outages paralyse industrial activity and daily living in many parts of the region. There is a need to diversify
the energy mix away from coal and oil, and exploit the available renewable energy resources that remain unutilised. Action is required at multiple levels: enhancement of domestic supply and creation of appropriate energy infrastructure to ensure efficient production and delivery of energy services; effective management of import dependence; uptake and upscaling of renewables; enhancement in efficiency of energy use in all major consumption sectors including transport, industry, buildings, agriculture, and residential and commercial sectors; and delineation of the right energy pricing signals to guide consumer choices and attract investment in the sector.

2. Possibilities for Energy Cooperation: Charting a Sustainable Pathway

Energy, by its inherent nature – given diverse resource profiles and energy capabilities - involves international engagement. Ease of trade and infrastructure development due to geographical proximity, and similar socio-economic contexts, make the ‘region’ an optimal policy space for energy interactions. Regional actors also need to cooperate in the building of infrastructure projects that help tap resources available outside the region. A number of regional and sub-regional energy initiatives have been launched in the last few decades, including those under the umbrella of the South Asian Association for Regional Cooperation (SAARC) and Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). Yet intra-regional energy trade and other forms of energy engagement in South Asia, though prevalent, have not been exploited to their full potential. Regional cooperation, therefore, needs to be foregrounded in the domain of energy. The following driving forces for cooperation can be cited:

- the prospect of effectively utilising unequally distributed resources (through trade and collaborative resource development);
- development of adequate infrastructure;
- the need to address energy access concerns;
- creation of efficient regional energy markets; and
- promotion of sustainable energy choices and practices.

In the South Asian region, bilateral and plurilateral power exchange and export of hydro-based power from Bhutan and Nepal and export of petroleum products from India, are the main opportunities available for trade. In the domains of renewable energy and energy efficiency, a range of program-based collaborations can be built, in addition to collaborative R&D. Lack of adequate and state-of-the-art infrastructure (in the form of transmission lines and pipelines) remains a major impediment for both the countries’ domestic and regional energy development, and can be discussed in a collaborative framework. As countries in the region chart their energy pathways, they are cognizant of the need to factor in the impact of their energy decisions on the environment and the need to deploy clean energy sources. Clean energy options also provide for the diversification of the energy mix, thus, enhancing supply security. The deployment of renewable energy is also a potent tool to improve energy access through decentralised energy solutions. Keeping in view the importance of factoring in sustainability in energy planning, the following section of the paper examines regional cooperation possibilities held out by three key areas in the move towards sustainable energy. These include natural gas, renewable energy and energy efficiency. These areas of intervention are critical for increasing energy supply and addressing energy access concerns.

3. The Transition to Renewables

Bangladesh, India and Pakistan, though home to gas reserves, are currently facing a shortage of gas due to large domestic demand. Thought to have a gas-surplus at one time, Bangladesh has seen
growing demand for gas at home; over 80% of Bangladesh’s commercial energy requirements are met by gas. For a long time, a cloud of uncertainty has marked gas reserves in Bangladesh. Inadequate information on reserves can prove to be a significant impediment to effective energy planning. Given that there is lack of accurate information on reserves in the South Asian region, this is an area of intervention that offers potential for countries to pool technology and capacities. Oil and gas companies in the region can play a role in determining recoverable gas reserves in Bangladesh. Increased production of natural gas in the country would be a boon not only for energy-deficient Bangladesh but also for surrounding countries which have large unmet energy requirements, particularly in fuelling the power and fertilizer sectors.

Gas trade into the region is limited. India is the only country with LNG import facilities. No gas pipelines currently mark the region or link it with extra-regional gas suppliers. The laying down of pipelines for gas trade comprises an initiative in the area of energy infrastructure that assumes inter-state collaboration as a prerequisite. This is evident in the case of the pipelines proposed for gas trade in the region: the Iran-Pakistan-India pipeline, the Turkmenistan-Afghanistan-Pakistan-India pipeline, and the Myanmar-Bangladesh-India pipeline. A 2007 World Bank study stated that piped gas is competitive with LNG imports and regasification up to a distance of 3500 km (World Bank, 2007). The distance between gas-rich Central/West Asian countries and India falls in this range. The Myanmar-Bangladesh-India pipeline witnessed delays, and was eventually put on the back-burner, due to differences between Bangladesh and India. While the discussions on the IPI pipeline have taken more of a bilateral character – limited to Iran and Pakistan, the TAPI – though recently at the centre of attention, is not expected to materialise very soon.

The Myanmar-Bangladesh-India pipeline was slated to bring gas from Rakhine, Myanmar, to Kolkata, India, through Mizoram and Tripura in India, and the territory of Bangladesh. For India, Myanmar offered a rich source of gas, and with the grant of right-of-way, Bangladesh was set to earn significant revenue from the project, yet the project did not come to fruition. The Iran-Pakistan-India gas pipeline project planned to tap gas from Iran’s South Pars field. The project envisaged the laying of a pipeline from Assaluyah in Iran to the Pakistan border, covering a distance of 1115 km, and a further 760 km through the territory of Pakistan to the Indian border. The pipeline was to traverse further a distance of 900 km, within Indian territory, to connect with the north Indian gas market (Batra, 2007). The process of determining the price of gas to be paid by India and Pakistan was characterised by protracted consultations. India harboured significant security concerns; the pipeline would pass the volatile Punjab-Baloch border region, and expecting the use of energy as a strategic instrument, India was hesitant about depending on Pakistan as a transit nation. The US-Iran conflict put further pressure on India to back out of the IPI project. With India’s continuing reluctance to join, Iran and Pakistan have shifted focus to pursuing the project bilaterally.

57 Bangladesh brought in a package of demands into the negotiations that pushed India to back-track: Dhaka asked India for a free trade corridor to Nepal, allowing purchase of power from Nepal and Bhutan, and removal of all trade barriers (Kumar 2005, Bose 2007). India did not approve of free transnational movement through the Siliguri corridor. In addition, it is also suggested that China acted faster than India on agreeing on details of pricing of gas, and infrastructural requirements and costs, trumping India. Though the areas of disagreement between Bangladesh and India no longer remain valid, and the pipeline has been part of bilateral consultations amongst the three countries, the availability of resources in Myanmar for export to India/Bangladesh will need to be assessed.
On the Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline, the four participating countries recently signed the Gas Sale Purchase Agreement. Afghanistan and Pakistan are both gas importers as well as transit countries, and India is the final import destination for the project. The contract price of the pipeline gas is linked to a formula that contains indices based on fuel basket and other indices not as volatile as crude oil (The Hindu, 2012). The Indian government agreed recently to pay 50 cents per mmBtu to Pakistan and Afghanistan as transit fees. The 1680 km-long pipeline is expected to transport 90 mmscmd of gas, out of which 38 mmscmd each will be India's and Pakistan's allocation, and the remaining gas will be for Afghanistan. The project plan envisages that the pipeline, extending from the Yolotan-Osman gas fields to Fazilka at the Pakistan-India border, will be operational by 2017. The project, with multiple country partners, is a promising development for the strengthening of regional ties but a number of issues remain to be resolved, particularly security concerns, with the pipeline passing through volatile Afghanistan and Pakistan. The pipeline projects discussed above highlight the strategic importance of regional countries that emerge as import routes for enhancing energy connectivity. Besides the transnational pipelines, a bilateral gas project has been proposed between India and Pakistan. According to the Gas Authority of India Limited (GAIL), its recently commissioned gas pipeline from India's west coast to Bhatinda can be extended further to Lahore (PTI 2012). GAIL has plans to import LNG at the Dahej or Hazira import terminals, and move this gas through the Dahej-Vijaipur-Dadri-Bawana-Nangal-Bhatinda pipeline to Punjab and further into Pakistan. Since Pakistan does not have any LNG import terminals, this provides an important LNG import option to Pakistan which is expected to face severe shortages of gas in the near future. However, before this proposal is formally made by the gas utility, it will need the endorsement of the Indian Ministry of External Affairs (PTI 2012).


The South Asian region offers large renewable energy potential, with some countries endowed with large hydropower potential and the region receiving abundant solar radiation. Renewable sources of energy (solar, wind, hydro, tidal, biomass and geothermal energy) provide important sources of meeting the region's burgeoning demand. Table 1 provides a snapshot of hydropower potential in the region. Though the potential is large, utilisation remains fairly limited. Both hydropower development in the region and intra-regional hydropower trade offer scope for countries in the region to work together for mutual benefits.

<table>
<thead>
<tr>
<th></th>
<th>Hydro potential (GWh/year)</th>
<th>Actual generation (GWh)</th>
<th>Installed capacity (GW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>394,000</td>
<td>1,000</td>
<td>0.4 (2008)</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>4,000</td>
<td>1,300</td>
<td>0.230</td>
</tr>
<tr>
<td>Bhutan</td>
<td>263,000</td>
<td>7,134</td>
<td>1.49</td>
</tr>
<tr>
<td>India</td>
<td>2,638,000</td>
<td>114,827</td>
<td>37.3</td>
</tr>
<tr>
<td>Maldives</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Nepal</td>
<td>733,000</td>
<td>2,759</td>
<td>0.65 (2011)</td>
</tr>
<tr>
<td>Pakistan</td>
<td>475,000</td>
<td>27,701</td>
<td>6.52 (2009)</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>21,000</td>
<td>4,128</td>
<td>1.39 (2008)</td>
</tr>
</tbody>
</table>

58 This paper includes both large and small hydro in the ambit of renewable energy resources. It suggests that the design and implementation of dams for large hydropower projects need to be informed by their environmental and social impacts.
Two dots (..) indicate that data is not applicable or available. Hydropower potential figures are for the year 2008. For purposes of comparison, actual generation figures for the year 2008 are given here. Unless otherwise mentioned, installed capacity figures are for 2010.

**Sources:** REEGLE (2012); WEC (2010)

Development of hydropower plants in Afghanistan, Bhutan and Nepal, with the assistance of regional actors not only improve supply in the host countries but also open up further possibilities for trade, creating opportunities for these countries to increase their export earnings. India has assisted Bhutan in developing its hydro resources which today has surplus capacity. Hydropower contributes about 40% of its export earnings. India has contributed to Bhutan’s energy sector with the provision of technical and financial assistance, including project design and engineering services, construction supervision services for hydro projects and transmission lines, and easy finance. The countries have worked together on the 336 MW Chukha hydelp project, on the 60 MW Kurichhu project, and the 1020 MW Tala project, amongst other cooperation initiatives. In 2009, Bhutan signed a Framework Agreement with India wherein India committed to develop 10,000 MW of installed capacity in Bhutan by the year 2020 and buy a minimum of 50% of it. The 1200 MW Punatsangchhu-I Hydroelectric Project is already under construction and is expected to be commissioned by 2015. Various other projects are under discussion. India has also been assisting Nepal in the development of some small hydropower projects including Pokhara, Trisuli, Western Gandak and Devighat, while some large projects Pancheshwar (5600 MW), Saptapokhi (3300 MW) and Kamali (10800MW), are being discussed by the two countries.

A major driver for power trade, there is clear seasonality in hydropower generation in the region. The peak months for hydro-power generation are the monsoon months of August-September while the lean period is between January and June. Hydro-power from Nepal and Bhutan can potentially meet the high power demand in India and Pakistan during the summer monsoons, while Nepal can import base load capacity during dry winter months (Lama, 2004). Power transmission linkages between Pakistan, India and hydropower surplus countries in the region will help augment power supply in the subcontinent which is reeling under power deficits. Even variations in demand within a day can be a source of complementarity (Nanda and Goswami, 2008).

Power trade across borders in the region is deterred by inadequate infrastructure – plants and transmission lines, and inadequate coordination on regulatory frameworks and technical standards. Regulatory and technological interventions will have to be made domestically as well as at the regional level to facilitate trade. Also, development plans for hydropower need to take into account the environmental and socio-economic impacts of such projects. Displacement and loss of livelihoods, along with impacts on land, river flows and biodiversity, need to be factored in. This brings into focus small, run-of-the-river, hydropower projects that can be encouraged in the region instead of investing in large projects alone. Run-of-the-river projects help avoid conflicts between upstream and downstream countries as storage of large amounts of water is not a requirement.

Along with hydro, solar, wind and biomass, offering significant scope in South Asia, decentralised renewable energy systems are a boon for power-starved countries in the region where access is a pressing concern. Globally, 1.3 billion people are without access to electricity. Of these 289 m are in India, and 96 m and 64 m are in Bangladesh and Pakistan respectively (IEA, 2011). Renewable energy is an important means of bringing modern energy to these people. Decentralised generation is operationalised with modular power generation technologies, mostly based on locally available renewable sources, and can even be integrated with the grid (Mathur, Cherail & Mahajan, 2009). India’s strengths in the alternative energy sector can be harnessed for regional energy security. The
The country's manufacturing base in solar PV modules and solar thermal systems, can form the basis for regional renewable energy advancement. Biomass gasifiers have been installed for community-based power production in many parts of the South Asian region, and this technology can be upscaled, particularly for agrarian or farm-based communities. Also, with a large number of people in the region reliant on agrarian or farm-based communities. Also, with a large number of people in the region reliant on traditional fuels for cooking, cleaner use of traditional fuels is a policy priority. India's lead in development of clean cookstoves should be seen as an opportunity for technology dissemination.

A number of non-governmental and governmental initiatives have been launched in different countries in South Asia that hold lessons for others. These include, but are not limited to, SELCO (India), the Lighting a Billion Lives campaign (India), Solar Home Systems program (Bangladesh), and Accelerated Rural Electrification program (Bhutan). A systematic effort needs to be made to record and disseminate the knowledge generated from these initiatives. This could be achieved with the creation of a knowledge management system that would make available information on energy access and renewable energy programs, financing mechanisms deployed, technological breakthroughs, and investment opportunities (Srivastava and Misra, 2007).

In order to pursue collaborative clean technology development, the institution of a regional clean fossil fuels and renewable energy fund may also be considered. This could receive differential contributions from countries in the region. The fund can be used to support R&D efforts and renewable energy pilot projects. In addition, the countries would gain immensely from the establishment of a regional energy R&D incubation centre that would nurture scientific innovations in sustainable energy. The establishment of such a centre will also allow scientific communities from different countries to interact with each other and foster regional research partnerships.

5. **Energy Efficiency: Promoting Sustainable Consumption**

Along with ensuring adequate and quality supply, demand side management is crucial for energy security. Interventions are called for in the range of energy consuming sectors. Though it is difficult to move the transport sector away from dependence on oil, energy savings can be affected with the introduction of fuel efficiency norms, and promotion of public transport. In some countries in the region, including India, Pakistan and Sri Lanka, efficiency initiatives have been taken in the building sector. Building codes have been developed and are being implemented. Also, standards have been set for industry efficiency and industrial waste discharge. In India, the Perform, Achieve and Trade mechanism included in the National Mission on Enhanced Energy Efficiency part of the National Action Plan on Climate Change, requires 700 of the most energy intensive industry/power units in the country to be mandated to decrease their energy consumption by a unique specified percentage respectively. The energy savings certificates issued to these units would be tradable amongst the mandated units. It is important that energy efficiency best practices – technological interventions, regulatory changes, appliance labelling and standards, and fiscal instruments, are shared across the region for widespread adoption.

Awareness creation and capacity building are essential for energy efficiency programs, and these can effectively be pursued on a regional platform. Efficient production and use of energy requires technical capacities to be built across stakeholders, ranging from government officials, power utilities and local government bodies, to energy service companies and consumers. Technical experts from different sectors need to be engaged in the process; for instance, in order to promote energy efficiency practices in construction of buildings, and introduce appropriate space conditioning and lighting provisions, architects, builders and relevant product manufacturers, need
to be trained. At the same time, no such program can be successful without buy-in from consumers. Since energy efficiency interventions may add to upfront costs of products/services, consumers need to be made aware of the long-term energy, and thus money, savings involved. Locally relevant technology R&D too needs to be encouraged. Though some cross-border programs have been initiated by regional organisations and forums, a stronger inter-governmental push is required on energy efficiency. One such example is that of the Regional Centre for Lighting in Sri Lanka, supported by United States Agency for International Development (USAID), which acts as a research hub for the development of new, efficient lighting technologies for South Asia (Regional Centre for Lighting, 2010).

6. **Defining Multi-level Energy Frameworks**

Though a range of possibilities for cooperation can be identified in the region, and governments have often articulated their willingness to harness these opportunities, these possibilities have not translated into functional projects with benefits for the region’s people. While energy frameworks established as part of SAARC, BIMSTEC, USAID-SARI/Energy, and South Asia Sub regional Economic Cooperation, need to be reinvigorated, countries need to pursue bilateral and plurilateral projects under agreed legal-institutional frameworks that help countries move beyond existing mistrust and protect joint investments. Multilateral institutions such as the World Bank and Asian Development Bank may be invited to finance and/or oversee implementation of major pipeline and transmission line projects. A regional impetus is required for the development of both domestic and cross-country infrastructure. For instance, any efforts towards promoting international power trade through cross-border transmission lines need to proceed simultaneously with domestic energy planning: synchronisation of grids and technical standards, establishment of financially sustainable power sector entities, cost-reflective pricing of services, promotion of competition, and establishment of a predictable regulatory environment.

Particularly for sharing knowledge on energy access, renewable energy programs and efficiency efforts, a central knowledge repository needs to be created with participation from country energy ministries. As discussed above, a clean energy fund will allow the region to pool financial resources for R&D efforts in, and deployment of, renewable energy and cleaner fossil fuels. Also, a technology incubation centre will further the spirit of energy research and innovation, and elevate the region’s scientific energy research profile. Since capacity building is essential for any domestic/regional energy transformation, countries in the region should place special emphasis on developing technical, logistical and managerial capacities amongst stakeholders across the region.

Recognition of energy as a “human security” concern with inter-linkages with economic growth, poverty alleviation, gender equality and socio-economic wellbeing, can drive countries to tap complementarities and arrive at win-win energy solutions. Economic engagement, particularly in a vital sector such as energy, has the potential to alter the contours of the geopolitical discourse in the region.
References


Regional Energy Trade Potential: Key Issues in South Asia

Faisal Jamil59

Introduction

A reliable, accessible and affordable supply of energy produced in a sustainable manner is imperative for the development of a modern society. South Asia is an under-developed and energy resources deficient region. It makes up about 23% of world population but its share in world Gross Domestic Product (GDP) is merely 3%. The region also contains the highest number of people not connected to the electricity grid amounting to 612 million (World Energy Outlook, 2010). Per capita energy consumption in the region is very low that is about 3% of per capita energy consumption in the US.

South Asian countries are facing rapidly rising energy demand especially electricity and gas demand vis-à-vis fragile supply infrastructure resulting in frequent shortages and extensive pricing and subsidy issues. In short, heavy load shedding, rising tariff rates and excessive distribution losses despite the provision of huge government subsidies are the general features of energy sectors of almost all the regional countries. Commercial energy supply is generally under strict government control. The private sector can participate only in electricity generation and independent power producers (IPPs) generate electricity to sell it to public distribution companies. In South Asia, the share of private participation in electricity generation is the highest in Pakistan (around 35%) and the lowest in Afghanistan and Bhutan where it is nil. Under-investment and poor governance in public electric utilities results in inadequate and inefficient transmission and distribution infrastructure which is a major constraint to operations and thus compromises on reliability, affordability and the quality of energy supply in the regional countries. Traditional energy sources such as biomass contribute significantly to the energy mix especially in rural areas of all the countries. In some countries such as Afghanistan, Bhutan, and Nepal, traditional fuels contribute to about 85% of the total energy requirements (Rahman, et al., 2011).

Intra-regional trade as a share of GDP is the lowest in South Asia due to production of similar primary products, infrastructural and logistic constraints, and political turmoil, which also shows that politics dominates economics in the region. A few studies in the past focus on identifying intra-regional energy trade in South Asia (see, for example, ESMAP, 2008; SRETS, 2010; Óbaidullah, 2010; and, Rahman, et al., 2011). These studies identified several energy cooperation potentials including investment and trade in hydroelectricity, joint gas import projects, renewable technologies, and trade in petroleum products. However, it has been identified that trade potential can be fully exploited by the implementation of energy reforms in all the countries to create a conducive environment for regional cooperation including the establishment of an integrated electricity grid.

The remainder of the paper is organized as follows. The next section provides an illustration of energy security and demand-supply profile of the countries. The section after that specifically

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focuses on energy supplies in Pakistan, while Section 3 traces the link between energy trade and regional energy security. Section 4 outlines the prospects of regional energy cooperation and key issues culminating in the study are concluded in Section 5.

1. Energy Security and Regional Energy Demand-Supply Profile

Energy and the policies that promote its security continue to remain a priority on the list of political and scientific debates worldwide. As energy security concerns mount, researchers give various definitions for the concept (see, for example, Bielecki, 2002; Kruyt et al., 2009; Hughes, 2009; and, Chester, 2010). In general, energy security can be classified into four elements namely;

- Availability – relating to geological existence of energy sources
- Accessibility – geopolitical elements
- Affordability – economic elements
- Acceptability – environmental and societal acceptance

Chester (2010) maintains that global access to energy sources in the future relies on global markets and availability of vast cross-border infrastructure networks. It is so because there is a relatively small group of fossil fuel suppliers that cater disproportionately to a large number of countries whose demand is increasing more and more with economic growth. There is a variation in energy resource endowments including coal, oil and natural gas as well as hydropower and renewable energy in all South Asian countries. Increasing energy shortage is a major concern faced by many regional countries. Electricity and gas use is constrained by lack of available supply and their shortages are a common phenomenon in the region especially in peak seasonal demand periods.

Economic development and population growth are generally considered major drivers of energy demand. Fortunately, few South Asian countries have experienced rapid economic growth during the last two decades but unfortunately, energy supplies cannot keep pace with rising energy demand driven by economic growth. Most of the regional countries are either energy resource deficient or resources are not developed, which essentially require huge capital investment. This especially is the case with hydroelectric and renewable energy resources. SAARC Energy Center (2009) report on renewable energy sources development indicates that there is lack of integration of energy technology development and overall development which is essential for making small size renewable energy projects especially biogas or solar projects economically viable (SAARC Energy Center, 2009).

South Asia has huge untapped hydropower potential. Only Pakistan, Bhutan and Nepal have techno-economically feasible hydropower potentials of 50 GW, 23.7 GW and 42 GW respectively (see, ESMAP, 2008; Jamil, 2011). Geopolitics is a hurdle in Nepal’s hydel capacity additions and the choice of trade partners for the small regional economies in the region is sometimes considered a political decision. Bangladesh and Sri Lanka have exhausted their hydropower source to a large extent. Table 1 clearly shows the vast resource potential that cannot be tapped due to political or financial constraints. Table 2 shows that all South Asian countries face on average a shortage of 15% to 30% of electricity with respect to peak load demand. The situation in Nepal is the worst, where a power cut of up to 20 hours takes place in peak demand periods of winter and the capability or dependable capacity is half of the peak electricity demand.

Electricity demand due to rapid economic growth and depletion of domestic gas reservoirs is key to the energy crisis in Bangladesh. Sri Lanka is handling the shortage by generating and selling
expensive electricity to its consumers. Pakistan has enormous hydel generation potential and can export surplus electricity to these countries by tapping its huge potential.

Regional electricity trade may be an option to mitigate the shortfalls in South Asia. In Nepal, the peak demand months are in winter whereas, in most other countries peak demand takes place in the summer. Trade of electricity on a small scale is already taking place in the region. For example, India is importing around 1,200 MW of electricity from Bhutan. Pakistan is importing electricity in small quantities from Iran. Nepal is importing electricity from India. At present, Bhutan is the only country with surplus electricity around the year and power export is contributing almost 45% of Bhutan’s annual revenues.

<table>
<thead>
<tr>
<th>Country</th>
<th>Estimated Hydro-power Potential</th>
<th>Currently Exploited Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>149 GW</td>
<td>25%</td>
</tr>
<tr>
<td>Nepal</td>
<td>83 GW</td>
<td>1%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>50 GW</td>
<td>13%</td>
</tr>
<tr>
<td>Bhutan</td>
<td>30 GW</td>
<td>1.5%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0.8 GW</td>
<td>28%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>2 GW</td>
<td>60%</td>
</tr>
<tr>
<td>Total</td>
<td>305.8 GW</td>
<td>6%</td>
</tr>
</tbody>
</table>

Sources: Websites of public utilities in respective countries.

<table>
<thead>
<tr>
<th>Items</th>
<th>India</th>
<th>Pakistan</th>
<th>Bangladesh</th>
<th>Nepal</th>
<th>Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installed Capacity (MW)</td>
<td>176,990</td>
<td>20,921</td>
<td>6,837</td>
<td>549</td>
<td>2,811</td>
</tr>
<tr>
<td>Thermal:</td>
<td>115,649</td>
<td>13,978</td>
<td>5693</td>
<td>53</td>
<td>1636</td>
</tr>
<tr>
<td>Hydel:</td>
<td>38,106</td>
<td>6,481</td>
<td>230</td>
<td>496</td>
<td>1060</td>
</tr>
<tr>
<td>Nuclear:</td>
<td>4,780</td>
<td>462</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Renewables:</td>
<td>18,455</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>115</td>
</tr>
<tr>
<td>Electricity Shortfall/ Load Shedding (%)</td>
<td>14%</td>
<td>30%</td>
<td>25%</td>
<td>92%</td>
<td>37%</td>
</tr>
<tr>
<td>Electricity Generated (GWh)</td>
<td>771,600</td>
<td>95,358</td>
<td>29,247</td>
<td>3,077</td>
<td>3,603</td>
</tr>
<tr>
<td>Per Capita Electricity Generation (KWh)</td>
<td>640</td>
<td>560</td>
<td>210</td>
<td>110</td>
<td>180</td>
</tr>
<tr>
<td>Net electricity Import (MW)</td>
<td>1,200</td>
<td>39</td>
<td>0</td>
<td>613</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: Data obtained from websites of national electric utilities. Most of the figures are for the period Jan-Sep 2011, India, 2011, Nepal Electricity Authority (NEA), 2010

Like hydroelectricity, there is a general neglect of electricity generation from other renewable
sources in South Asia, although huge potential exists for wind power, especially in coastal areas of India and Pakistan. However, India is taking the lead in developing wind energy in the region. The installed capacity of wind power in India of 2 GW (out of 43 GW gross potential) is the 5th largest wind power installed capacity in the world. Renewable capacity is generally added to the off-grid systems based on small hydro power or solar /wind/biomass power plants in some countries. To sum up, it is evident that energy supplies are inadequate in all the regional countries. Table 3 gives a glimpse of energy indicators in major South Asian countries.

Table 3: Comparison of Key Energy Indicators over time Across South Asian Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (Million)</th>
<th>Energy Production (Million TOE)</th>
<th>Energy Use (Million TOE)</th>
<th>Net Energy Imports of Energy Use (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>858</td>
<td>1141</td>
<td>291.8</td>
<td>468.3</td>
</tr>
<tr>
<td>Pakistan</td>
<td>119</td>
<td>178</td>
<td>34.3</td>
<td>63.3</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>112</td>
<td>151</td>
<td>10.8</td>
<td>23.4</td>
</tr>
<tr>
<td>Nepal</td>
<td>19</td>
<td>28</td>
<td>5.5</td>
<td>8.7</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>17</td>
<td>21</td>
<td>4.2</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Source: World Development Indicators 2011.

2. Energy Supplies in Pakistan

Natural gas contributes 48% to Pakistan’s energy requirements (Figure 1). At present, gas demand is met through indigenous gas production. Gas is distributed by two public utilities namely Sui Southern Gas Company Limited (SSGCL) and Sui Northern Gas Pipelines Limited (SNGPL). The country has 28 trillion cubic feet (TCF) of conventional gas as well as proven reserves of 100 TCF of Shale and tight gas (EIA, 2011; Jamil, 2012). Moreover, shale gas potential reserves in Pakistan amount to 280 TCF (EIA, 2011).

National gas consumption has grown at an annual rate of 8.5 percent during the last two decades. Future annual demand growth forecasts are about 7 percent. Domestic production is expected to decline after 2013 that may result in huge supply shortfalls. It is in this context that import options through pipelines from Iran, Central Asia, and LNG imports are being pursued (ESMAP, 2008). Pakistan has a huge pipeline infrastructure for gas distribution and its economy. The textile sector, in particular, heavily relies on natural gas. In the absence of phenomenal investment in the upstream sector and/or gas imports, gas shortages will exacerbate, which will make all economic sectors suffer. There are a host of issues ranging from policy and economic conditions of the country to security problems, which needs further detailed research.

Pakistan, Afghanistan and India have agreed to import natural gas from Turkmenistan. Gas can be imported either in the form of liquefied natural gas (LNG) or through pipeline network. Imports through pipeline exhibit significant economies of scale. Especially when the costs are shared, the pipeline may enable lower prices of natural gas for the recipient countries. By sharing the pipeline and obtaining transit fees this will enable Afghan and Pakistani consumers to obtain cheaper gas than from a lower capacity pipeline for their exclusive use. The plan to import LNG is also underway as the government is initiating development of infrastructure at the Karachi port. Figure 2 shows the planned natural gas projects of Pakistan.
As far as electricity is concerned, the country is facing acute shortages since 2006. The crisis stems partly from capacity shortfall and partly due to cash flow failure or circular debt. Gas shortages for the power sector have important implications for the electricity crisis in Pakistan, since thermal plants have to use expensive fuel oil instead of inexpensive natural gas. Non-availability of gas to power generators during the last few years raises the cost of generation. When electricity is generated at higher costs, the utilities are pressed to sell it at escalated prices. However, the ability of the government to pass on and recover this additional cost from the consumers is constrained by political considerations. Hence, governments partially bear the burden of expensive electricity generation and supply and provide subsidies to distribution companies. The subsidy burden in the face of fiscal constraints of the government may result in delays in payments to the utilities that culminate and build up accumulated circular debt. At present, 31% power is generated through hydroelectricity power stations while 67% comes from thermal stations. Thermal power generation uses 44% gas and 56% oil, whereas the share of coal in electricity generation is negligible. However, nuclear power plants contribute 3% to grid electricity. The country has substantial renewable potential mainly in solid waste and wind power.

Moreover, the substantial Thar coal reserves are yet to be exploited, which requires judicious policy to attract investment in clean coal technologies. The solution to Pakistan’s energy problem seems to be in diversification and more reliance on indigenous resource predominantly hydro, coal and renewables. Inadequate refining capacity also puts pressure on public exchequers as imports of petroleum products have gradually risen from 6.17 Million tons in 2005-06 to 12.50 million tons in 2010-11 whereas, import of crude oil is declining from 8.89 million tons to 6.88 million tons in the same period (HDIP, 2011).

Figure 1: Energy Supplies by Source in Pakistan
3. Regional Energy Trade and Energy Security

3.1 Diversification

One of the major energy security concerns in South Asia is the structure of their primary energy supplies. All the countries heavily rely on a single source for example, Afghanistan (78%), Maldives (100%), Nepal (67%) and Sri Lanka (79%) rely on oil; Bangladesh (74%) and Pakistan (48%) rely on natural gas, and India (53%) relies on coal. The more vulnerable energy sectors belong to those countries that import a single energy source. Diversification can be achieved by gradually developing indigenous energy sources especially hydel and renewables. Abundant coal resources available in the region need to be used judiciously in the face of environmental concerns. Similarly nuclear electricity generation should be developed keeping in view the issues regarding the safety of the individuals living in densely populated regions.

3.2 Minimizing Cost of Energy Supply

There is great potential for the growth of regional interdependence offered by massive water resources of the Himalayas, which flows through Bangladesh, Bhutan, India, Nepal and Pakistan. Close cooperation is necessary among these countries to harness Himalayan water resources for flood prevention and management of water flow for electricity generation (Dash, 1996). Moreover, emerging trends in energy markets, volatile fossil fuel prices, increased awareness and concerns of climate change, and increased attention to water management and regional integration, have greatly highlighted the value proposition of hydropower in development. Through regional cooperation, hydroelectricity proves to be a source of inexpensive electricity to the region (SRETS, 2010).

India provided assistance to Bhutan in completing its hydroelectric projects including Tala Electric power and Chukha Electric power projects and now India is importing power from Bhutan. Apart from Bhutan and India, such projects have the potential to benefit Bangladesh and Nepal. Similarly, through cooperation between India, Nepal, Pakistan and Bangladesh, it is possible to develop
hydropower projects, which will provide electricity in the long run and ease the energy crisis in this region. Energy trade and cooperation require interconnected transmission networks. Cooperation will stem from interconnecting electricity grids. Moreover, harnessing the hydroelectric potentials and imports may also bring down the unsustainably rising electricity tariffs in South Asia.

3.3 Self Sufficiency or the Choice to Import

The energy infrastructure requires huge capital investments. There is little room for private energy utilities to operate as the sector is predominantly state controlled in all South Asian countries. Due to poor financial conditions of public utilities and the regulatory setup, the required investment in the energy sector of some of the regional countries is not forthcoming. Trade provides the choice to a deficit country to either produce it itself or import it from a surplus country.

Electricity trade through inter-connecting the electricity grids may enable the countries to share the seasonal generation and demand gaps, especially in the case of hydroelectricity. India, Pakistan and Nepal can reap the benefit of this seasonal complementarity. Similarly, time difference and variation in electricity demand within a day can be a source of cooperation among inter-connected grids. This may offer the choice of either generating expensive electricity through thermal sources or purchasing it from a surplus country at that point in time. The same is the case with refining capacity shortfall in all South Asia countries except India.

4. Prospects and Issues in Regional Energy Integration

South Asian countries have the potential of pooling their energy endowments in order to reduce dependence on highly volatile oil imports (Singh, 2009). Major potential lies in hydroelectricity and gas trade through joint pipelines from eastern markets (Myanmar) and western markets (Iran, Turkmenistan). Keeping in view the national energy security concerns of regional countries, both inter-regional as well as intra-regional energy trade seems inevitable. Key potential exporters in regional energy cooperation include Central Asia, Iran, Bhutan, Nepal and Myanmar while India, Pakistan, Bangladesh, Sri Lanka and Afghanistan are net importers.

Energy Sector Management Assistance Program (ESMAP) (2008) showed that electricity demand is expected to grow at 6.6% - 11.5% during the next 15-20 years. Most of this demand growth is expected from developing countries. South Asia is already facing acute electricity shortages. Gas demand is also on the rise particularly in India and Pakistan. India is already importing liquefied natural gas (LNG). Both India and Pakistan have been considering gas pipeline projects for many years including Turkmenistan-Afghanistan-Pakistan-India (TAPI) project and Iran-Pakistan-India (IPI). The TAPI project is about to begin, which envisages an import of 3150 million cubic feet per day (mmcfd) gas from Turkmenistan. That will be shared by Afghanistan 500 mmcfd, Pakistan 1325 mmcfd and India 1325 mmcfd. Imports through pipelines will essentially provide economies of scale and lower gas prices for both countries. Pakistani consumers may obtain more economical gas than from a lower capacity pipeline for their exclusive use as well as, will benefit from transit fees paid by India (Tongia and Arunachalam, 1999). It essentially requires strong political will and a culture of trust amongst the nations.

In addition to gas, the Central Asia South Asia (CASA-1000) project linking the electricity grids of Central Asia and South Asia is in preliminary phase of its implementation. However, it is quite difficult due to the deteriorating infrastructure in the main transit country which is Afghanistan. As discussed in the last section, hydroelectricity potential, if tapped properly, may enable a few
countries to become net electricity importers. Moreover, joint inter-regional trade in natural gas through pipeline and crude oil and oil products may ensure economies of scale for importing countries. Neighbors of South Asia in the west like Iran and Turkmenistan and Myanmar in the east have enormous reported gas reserves. Wickramasinghe (2001) emphasizes market reforms in individual countries for optimal utilization of regional energy resources through regional cooperation. ESMAP (2008) must also support the reforming process because it is important for effectively interconnecting electricity grids. The reforms may start with unbundling utility operations and the determination of the electricity tariff by function (generation, transmission, and distribution) as it will be beneficial through helping third-party access to the transmission system and for transparent and predictable transmission tariffs.

Power sector reforms in all South Asian countries were initiated on the prescription of international financial institutions due to unsustainably growing subsidy burdens. As a result, public investment in this sector was not able to keep pace with growing demand for electricity. The public sector also invited private investment in electricity (Singh, 2006).

5. Conclusion

Efficient use of natural resources and environmental conservation need to be the main concerns of regional countries to meet their growing needs of energy besides alleviating risks associated with energy use. The study concludes that energy sectors in the region are facing capacity shortfalls and are mostly relying on thermal (hydrocarbons) sources which are either depleting domestically or becoming costly due to rising crude oil prices. The issue can be resolved by tapping domestic hydroelectric potentials and choosing the appropriate fuel mix (lesser imports) and diversification in thermal electricity generation sources. It will reduce vulnerability of electricity supplies with international energy prices and make electricity affordable, which is fundamental for economic growth in the region. There is huge potential for regional energy trade in hydroelectricity, renewable technologies and petroleum products. In a nutshell, intra-regional trade can be increased if the following suggestions are considered:

- Reforms need to be introduced in the energy sector in all South Asian countries to move towards a sustainable energy trade path. Obviously, implementation of successful reforms and interconnecting grids require the political will for openness.
- There is a need to focus and share knowledge in renewable technologies especially biomass and wind in which, many countries have plenty of potential.
- All the South Asian countries need to diversify primary energy supplies and sources of electricity generation in order to reduce vulnerability from supply disruption or a price hike.
- The volume of regional trade in petroleum products should be increased. India has surplus refining capacity while most other countries have a capacity deficit. Nepal and Bhutan depend on India for their needs. Sri Lanka and Bangladesh also import from India. The petroleum products trade between Pakistan and India may be beneficial.
- India-Pakistan relations will determine the progress of regional energy cooperation. These two countries have to take the lead and act judiciously to set the region on the development path.
- The integration of regional energy markets will ensue on successfully completing the above mentioned steps.
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Hydropower Development in Teesta River Basin & Lessons for Regional Cooperation

Neena Rao61 and Anjal Prakash62

Introduction

If energy cooperation is to take centre stage for the South-Asian regional cooperation agenda, it is hydropower that can be of immense importance. Its huge potential especially in the upstream riparian countries of the subcontinent namely, Afghanistan in the Northwest and Bhutan and Nepal in the North East has been well recognised. These are landlocked countries and with few options available for rapid economic growth. Developing their hydropower potential and feeding it to the neighbouring energy starved subcontinent offers an opportunity to alter and rapidly develop their economies. India too is endowed with some of these upstream riparian areas which comprise of its north eastern states and the state of Himachal Pradesh.

Table 1: Hydropower Potential, Installed Capacity and Utilization

<table>
<thead>
<tr>
<th>Country</th>
<th>Hydropower Potential Mega watts</th>
<th>Installed Capacity</th>
<th>Utilization %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>775</td>
<td>230</td>
<td>30</td>
</tr>
<tr>
<td>Bhutan</td>
<td>50000</td>
<td>120</td>
<td>1.4</td>
</tr>
<tr>
<td>India</td>
<td>300100</td>
<td>29500</td>
<td>10.5</td>
</tr>
<tr>
<td>Maldives</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nepal</td>
<td>42915</td>
<td>527</td>
<td>1.2</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>2000</td>
<td>1250</td>
<td>62.5</td>
</tr>
<tr>
<td>Pakistan</td>
<td>40000</td>
<td>6500</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,94,330</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from Sankar et al SARI/Energy report based on country reports up to 2004

Hydropower Potential, installed capacity and utilization (Table 1) in some of the South Asian Association for Regional Cooperation (SAARC) countries were considered as the major drivers of development on a global scale. Countries at various stages of development were looking at hydropower development as an option that facilitated the use of their own natural resources for the growth and modernisation of their economies during this period. However, the fact that hydropower development comes with the baggage of negative environmental and social costs such as; displacement of large numbers of people, excess silt accumulation in reservoirs and inadequate hydrological assessment started to become apparent in the 1980s. ‘Narmada Bachao Agitation’ is a

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major mile stone in this context with reference to India. That the benefits through this development driver do not necessarily trickle down to the poorest became a growing concern leading to development of new paradigms with respect to benefit sharing vis-a-vis hydropower projects. Sharing of benefits in the long run became a guiding principle and broadening of the focus from mere power generation to integrated water and land resource management were advocated as best practices in the hydropower sector.

Albeit, despite several negative externalities and social costs, associated with hydropower generation it continues to remain the largest renewable energy contributor in the world. There are countries in the world such as Brazil and Norway that remain completely dependent on hydropower generation to meet their energy needs even today. In India too, one can witness an increasing thrust towards hydropower development since the 1990s. Consequently, there is a simultaneous evolution of a benefit sharing mechanism. Thus in the context of hydropower generation there is a need to evolve an integrated approach. Such an approach should look at the river basin as one whole unit and involve basin wide multi-stakeholder consultations at various levels and at various stages right from the planning stage, designing to execution of such projects if viability and long term sustainability are to be important objectives. It is a well-known fact that action or excess utilization or appropriation of water in one part of the basin can have a disproportionately negative impact on other parts of the basin thus making the integrated river basin approach essential in planning designing and implementation of any hydropower project; be it a storage project or run of the river.

This paper focusses on these issues and illustrates various concerns that need attention if regional cooperation is to work. It does so by examining the Teesta V, a run of the river Hydropower Project on Teesta River in Sikkim in eastern India. This paper is divided into three sections. Section 1 focusses on the energy needs and demands of South Asia and places hydropower development in India in this context. Section 2 discusses hydropower development in the Sikkim state of India and outlines the major issues and concerns. Section 3 looks at the sustainable hydropower development alternative based on lessons from Teesta V from the regional cooperation perspective.

1. **Energy Needs and Demands of South Asia**

South Asia experienced sound economic growth in the decade 2000-2010. Due to this, despite the traditionally, very low per capita energy use rate, the demand has been growing at a rate of five percent (Siddiqui 2008). It is estimated that South Asia’s energy needs are likely to rise three times compared to today in the next 15-20 years. (Gippner 2010; Ahmad 2010) (see table 2). In the wake of this energy need and with the certain countries like Bhutan, Nepal and Afghanistan having the potential for energy surplus, regional cooperation becomes an area of high priority. However, due to the politics of the region and ongoing conflicts, regional cooperation is certainly not an easy proposition. Currently, the hydropower trade in SAARC countries is limited to 5620 Giga Watt Hours (GWH) between Bhutan- India and 339 (GWH) between India and Nepal (SRETS: 2010).

In principle there is recognition and acceptance of this need. However, not enough effort is being made and not enough options are being explored in this direction barring a few exceptions such as the ones mentioned above. Despite a number of studies on regional cooperation for energy, very few go beyond recommending negotiations at the national level amongst the diplomats and policy makers. For instance, a study such as SRET recommends regional trade and cooperation agreement amongst SAARC countries along with legal regulatory frameworks and reliable data base building to promote energy trade. (SRET: 2010). The Regional Report Energy for South Asia, recommends strengthening of SAARC Energy Centre to facilitate regional, planning, research, training and trade.
It also recommends setting up financial institutions to support infrastructure development in SAARC countries, (Energy for South Asia, Regional Report: 2005). A few studies spell out the need for setting up dispute resolution centres and/or attributing some role to civil society organizations. (Obaidullah: 2010 and Tripathi: 2012). However, in the context of energy cooperation especially in the case of hydropower an integrated river basin approach that involves stakeholders at multiple levels is a necessary prerequisite.

### Table 2 Commercial Energy Demand by 2020 in South Asia

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Afghanistan</th>
<th>Bangladesh</th>
<th>Bhutan</th>
<th>India</th>
<th>Maldives</th>
<th>Nepal</th>
<th>Pakistan</th>
<th>Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity Demand Forecast (2020)</td>
<td>MkWh</td>
<td>3877</td>
<td>72791</td>
<td>6876</td>
<td>1755685</td>
<td>1571</td>
<td>8076</td>
<td>251039</td>
<td>23867</td>
</tr>
<tr>
<td></td>
<td>TJ</td>
<td>13957.2</td>
<td>262047.6</td>
<td>24753600</td>
<td>24753.6</td>
<td>5655.6</td>
<td>29073.6</td>
<td>903740.4</td>
<td>85921.2</td>
</tr>
<tr>
<td>Oil Demand Forecast (2020)</td>
<td>mtoe</td>
<td>3.483</td>
<td>11.6</td>
<td>0.62</td>
<td>246.9</td>
<td>1.661</td>
<td>1.61</td>
<td>30.94</td>
<td>7.82</td>
</tr>
<tr>
<td></td>
<td>TJ</td>
<td>145826.244</td>
<td>485668.8</td>
<td>25958.16</td>
<td>10337209.2</td>
<td>69542.748</td>
<td>67407.48</td>
<td>1295395.92</td>
<td>331594.56</td>
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<tr>
<td>Gas Demand Forecast (2020)</td>
<td>mtoe</td>
<td>0.92</td>
<td>44.03</td>
<td>0.0</td>
<td>101.88</td>
<td>0.0</td>
<td>0.0</td>
<td>72.75</td>
<td>0.0</td>
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<td></td>
<td>GJ</td>
<td>38518.56</td>
<td>1643448.04</td>
<td>0.0</td>
<td>4265511.84</td>
<td>0.0</td>
<td>0.0</td>
<td>3045897</td>
<td>0.0</td>
</tr>
<tr>
<td>Coal Demand Forecast (2020)</td>
<td>mtoe</td>
<td>0.0</td>
<td>0.9</td>
<td>0.11</td>
<td>447.6</td>
<td>0.0</td>
<td>0.78</td>
<td>13.9</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>GJ</td>
<td>0.0</td>
<td>37681.2</td>
<td>4605.48</td>
<td>18740116.8</td>
<td>0.0</td>
<td>32657.04</td>
<td>581965.2</td>
<td>293076</td>
</tr>
</tbody>
</table>

Source: Adapted from Tripathi, 2011.

#### 2. Hydropower Development in India

In the global context, water has been used for mechanical power since ancient times. However, water mills came into vogue during the industrial revolution period in Europe and it was only in the second half of the 19th century that generation of electricity through water and its transmission became a practical possibility. In India, the first hydropower project was set up, on Cavuery River in South India that started transmitting electricity in 1902 to gold mines owned by the consortium of British Companies that were 90 miles away from the power station. From the 1900s to 1970 hydropower was considered as one of the major drivers of development in the world.

In India, the demand for power has been growing at the rate of 5.74% in recent years. During 2005-2006 the demand was 632 BU in terms of energy and 93.21 (GW) in terms of peak power requirements. The availability of power has been continually falling short of the demand and, as a result, the country is experiencing power shortages of varying degrees in different states or regions (Rao: 2006)). Around 2005-06, 84% of the houses were electrified however, only 43.5% of the households had access to electricity with per capita consumption of electricity relatively low of the order of 600 kilowatt per hour (Ramnathan and Abheyagunavardhana, 2007).

Although India has immense economically exploitable hydropower potential of over 84,000 MW at 60% load factor (148700 MW installed capacity), and stands fifth highest in the world in terms of its hydropower potential, (Ramnathan and Abheyagunavaradana, 2007). Of this enormous potential, it has harnessed only about 15% until the first five years of the twenty first century, with another 7% in the pipeline. Although the ideal Hydro: Thermal power mix for India has been recommended to be at 60:40(Sharma, 2010). 78% of the potential remains un-harnessed due to many issues and barriers involved in large-scale development of Hydropower in the subcontinent (AHEC 2006). Recognizing the energy needs of the country and the untapped hydropower potential, the Government of Independent India started utilizing its hydropower potential as early as the
1960s, which was in tune with the global trend at that time. This is clear from the fact that in the early years after independence India’s hydropower share in the energy mix in 1963 was 50%. However, this declined to about 21% by 2010 (Saxena and Kumar 2010).

Once again, in order to correct this hydro-thermal power mix ratio to meet the grid requirements and peak power shortages, the Government of India started undertaking several measures and as part of such measures, announced a hydropower policy first in 1998 and thereafter in 2007. The government began to promote hydropower development during this period which became apparent through the policy and some of the recommendations made by various committees appointed to accelerate this process. For instance, the projects that involved a lesser risk element and entail lesser capital investment were to be considered for development in the private sector. The public sector was to take up (a) multipurpose projects (b) projects involving inter-state issues and in inter-state river systems, (c) projects involving cooperation with neighbouring countries (d) projects for complementary peaking with regional benefits and (e) projects in the north-eastern region etc. (Standing Committee, 2005). Many hydro projects are located in troubled areas and infested by militancy and terrorist activities. Recognizing this, an urgent need was expressed to off-load indirect cost components by amendments with regard to security expenditure being charged on to the project cost. Only, the recurring expenditure incurred on security, once a project goes on stream was to be charged on the project developer (AHEC, 2006). These recommendations of the standing committee clearly show the eagerness with which the policy makers were trying to woo private players as well as the public sector hydropower developers. Which in turn led to the overlooking of several provisions for public participation and consultation for transparency and lack of adherence to environmental safeguards while setting up the projects.

2.1 Hydropower Development in the North East India

As is clear from the above discussion, hydropower development has been given high priority in India’s development plans since the last two decades. Within this new strategic plan the Northeast has been given priority attention. Hydropower development is considered desirable or rather necessary for the region from two perspectives. First, for the well-being of the people of the region and for its potential contribution to the Indian economy. Second, to the fostering of links and economic relations with neighbouring countries. Table 3 shows the extent to which capacity addition was done during the 11th five year plan in the northeast region of India. As per the demarcation of regional power grids in India, the north eastern power grid comprises of seven states whereas the Sikkim the eighth state comes under the eastern regional grid. Sikkim contributes the maximum in this grid to the tune of 510 megawatt of energy.

Table 3: Target vs Achievement of Hydropower Capacity Addition in North East Region & Sikkim in 11th Five Year Plan, India

<table>
<thead>
<tr>
<th>State</th>
<th>Target</th>
<th>Achievement as on 30-9 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assam</td>
<td>537</td>
<td>0</td>
</tr>
<tr>
<td>Arunachal Pradesh</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Meghalaya</td>
<td>126</td>
<td>0</td>
</tr>
<tr>
<td>Tripura</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Manipur</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nagaland</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mizoram</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total NER</td>
<td>663</td>
<td>21</td>
</tr>
<tr>
<td>Sikkim</td>
<td>1209</td>
<td>510</td>
</tr>
</tbody>
</table>

The River originating in China flows through the two Indian states of Sikkim & West Bengal before entering Bangladesh and spilling itself into the Bay of Bengal. En-route it supports diverse ecosystems fostering a variety of socio-economic, cultural and political milieu. The current hydropower development approach that is in place certainly doesn't acknowledge the variety of geographies and ecosystems of the region and it can certainly go much further in addressing the diverse socio-cultural and economic needs of the people in the region. This issue is covered in next section.

2.2 Spurt of Hydropower Projects on Teesta & Its Socio-economic and Environmental Impact

Sikkim has innumerable streams and rivers flowing down the glaciers, providing abundant potential of hydroelectric power projects. The river Teesta, which is the main river of Sikkim falls from an elevation of about 3600 m to about 300 m over a distance of 175 km. It is estimated that Sikkim has a potential to produce 8000 MW seasonally and about 3000 MW power during winter months (see table 4). Earlier, most of the projects were under a joint venture between state run corporations. However, the new trend is to privatize the sector with private parties bidding for contracts.

Table 4: Number of schemes on Teesta River with installed capacity

<table>
<thead>
<tr>
<th>Name of the Scheme</th>
<th>Installed Capacity [MW]</th>
<th>Year of commissioning</th>
<th>Being developed under</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teesta I</td>
<td>280</td>
<td>2011-12</td>
<td>JV</td>
</tr>
<tr>
<td>Teesta II</td>
<td>330</td>
<td>2011-12</td>
<td>JV</td>
</tr>
<tr>
<td>Teesta III</td>
<td>1200</td>
<td>2011-12</td>
<td>JV</td>
</tr>
<tr>
<td>Teesta IV</td>
<td>495</td>
<td>2011-12</td>
<td>JV</td>
</tr>
<tr>
<td>Teesta VI</td>
<td>500</td>
<td>2011-12</td>
<td>JV</td>
</tr>
<tr>
<td>Teesta V</td>
<td>510</td>
<td>2011-12</td>
<td>JV</td>
</tr>
<tr>
<td>Lachen</td>
<td>210</td>
<td>2011-12</td>
<td>CPSU</td>
</tr>
<tr>
<td>Panan</td>
<td>300</td>
<td>2011-12</td>
<td>CPSU</td>
</tr>
<tr>
<td>Rangyong</td>
<td>117</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Rongmichu</td>
<td>96</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Sada Mangder</td>
<td>71</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Chuachen</td>
<td>99</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Bhasmey</td>
<td>32</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Rolep</td>
<td>36</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Chakhungchu</td>
<td>50</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Baling</td>
<td>40</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Rangit II</td>
<td>60</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Rangit IV</td>
<td>120</td>
<td>2011-12</td>
<td>JV</td>
</tr>
<tr>
<td>Dikchu</td>
<td>54</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Jorethang Loop</td>
<td>96</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Lingza</td>
<td>120</td>
<td>2011-12</td>
<td>MoU not signed</td>
</tr>
<tr>
<td>Thankgchi</td>
<td>40</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Bimkyong</td>
<td>99</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Bop</td>
<td>90</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Ting</td>
<td>70</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Rateychu Bakcha chu</td>
<td>40</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td>Tashiding</td>
<td>60</td>
<td>2011-12</td>
<td>Private</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5248</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

JV: Joint Venture, CPSU: Central Public Sector Undertaking
However, the spurt of hydropower projects in Sikkim began to spread discontentment among the common people of the state soon after its initiation (Bhutia: 2012 and ACT, 2013). The root cause of this could be attributed to the neglect of provisions for involvement of the affected people and lack of transparency in this development process. Also equally important was the negative socio-economic and environmental impacts that began to manifest as a fallout of this development. In order to understand the perceptions of people affected directly by the hydropower projects a study was conducted in the area directly affected by NHPC (National Hydro power Corporation) Teesta V and two other private developers, namely Lanco and Madhya Bharat Corporations. The study was conducted via a household survey, focused group discussions and key informant interviews. Although with a small sample size of 40 households within a total of 54 sq km from upstream and downstream of the immediately project affected area, the study gathered project affected peoples' perceptions on a variety of issues. These issues ranged from their livelihoods to their health, culture and surrounding ecosystem. For example their perceptions regarding the hazards from the project were as follows (Figure 1):

Figure 1: Respondent's perception on impact of project activities

![Figure 1: Respondent's perception on impact of project activities](source: Rao, 2013.)

Out of total respondents surveyed, 35% revealed that there is an increase in the number of landslides and soil erosion, while, 30% of the respondents were of the opinion that the frequency of flash floods have increased owing to frequent release of water from the hydel dams.

95% of the respondents were of the opinion that the effect of negative externalities are increasing in the form of landslides, soil erosion, pollution, accidents and deaths incidents in and around the project areas. Of the total upstream and downstream respondents surveyed 97% of the respondents acknowledged that traffic congestion has increased due to influx of people and movements of light and heavy vehicles carrying load in the projects / construction sites. About 94% of the respondents opined that pollution has increased in the last 5-6 years. While 69% of the respondents are of the view that road accidents have increased over the last 5 years. However, only 40% of the respondents believe that deaths have increased, while 60% think that it has not increased. In a major accident, 8 people were killed due to the collapse of the Rangchang Bridge near Dikchu as a consequence of the heavy-weight vehicle (80 tonnes) of the Hydropower Company while crossing the bridge.
These are run of the river projects and are supposed to be environmentally benign. However, for instance in case the project under study for 510 MW capacity project a 17km long tunnel has been dug, it bypasses 23km long river course. 80% of the respondents expressed that local water sources particularly rural springs / streams have disappeared completely in the last 5 years due to heavy tunnelling and explosive activities. The locals perceived that ground water has been lost due to leakage from the tunnels. Besides this the locals also expressed that agricultural yield in return has declined significantly over that last 5-6 years. Around 40-50% of the respondents indicated that the water resources have decreased both in terms of flow and numbers (springs and springs). 77% of the upstream/downstream respondents complained that their health conditions have deteriorated due to increased pollution and contamination of the water sources.

All the respondents strongly argued that the tunnelling and explosion during tunnel construction have triggered landslides, mud slides, and created cracks in the cliffs or in the agriculture field and/or in the forest areas. The impacts of tunnels still continue especially in cultivated ecosystems, agroforestry systems and in the surrounding forest ecosystems. People have also observed changes in the phenology of some of the socio-economically important species.

Although these are only peoples’ perceptions and more scientific studies need to be undertaken to assess the impact on the ecosystem especially the declining water resources and consequent deterioration of biodiversity and agriculture productivity, one can safely conclude from the study that there are mixed feelings among different stakeholders about the impacts of projects on their lives. In fact it is only after protests and a continuous struggle by the affected citizens with the help of various civil society organizations that the Government of Sikkim seems to have woken up to respond to some of their demands. Several studies done by civil society organizations such as the independent people’s tribunal on Dams, Displacement and Environment and several other media reports are a testimony to this. (Bhutia 2012, ACT 2013, Vagholikar & Das 2010)

Yet there is still much to be desired in terms of proactive policies and strict monitoring of existing policies with regard to environmental safeguards and peoples’ participation from the government and power developers. Many demands with respect to adequate level of peoples’ participation in design, planning and implementation of the project have not been addressed. Stricter provisions for monitoring, transparency, acknowledgement and redressal of the negative impact of the project on the ecosystem will demonstrate the sensitivity of the government and power developers towards the livelihoods and health of the people.

3. **Lessons for Regional Cooperation**

If one looks at the development of hydropower from the country’s energy needs at large, it is not difficult to understand the zest with which Governments are forging ahead to set up these power plants and why they are wooing private investors for investment. Situated in remote areas with little infrastructure it indeed is a challenge to bring in investment and set up these power plants. As a result, compliance with the environmental safeguards, public hearings, public consultations with participatory approach which are supposed to be an integral part of the implementation process still remain a far cry. Even if these processes are mandatory on paper, the actual implementation is not done with sincerity and in the true spirit. They remain sheer formalities.

The need for power generation is hardly a matter of debate. However, the way in which these power plants are being set up, the execution of these projects - right from the planning, design, to construction and operations - is a matter of concern amongst the local population and within the
neighbouring states. However, if regional cooperation is to be the goal then acknowledgement and a proactive approach to address the concerns would be of the utmost importance. It will demand strong political will and multi-stakeholder involvement with an “integrated river basin” approach. This in turn will involve joint committees and shared vision. If the study above is looked at as a microcosm of the larger hydropower development scenario in the South Asian region there are a lot of lessons that can be drawn from it for the larger sub continental picture especially with its implications for its viability/success, long term sustainability and as a tool to foster regional cooperation. For instance, currently, water is a state subject as per the Indian constitution and hydropower development is in the concurrent list. During the study there was no record found at the state level which showed any consideration of the impact of hydropower projects in the downstream areas in the neighbouring state of West Bengal or extreme downstream riparian areas of Bangladesh. In order to engender regional cooperation and the viability and long term sustainability of the projects authentic basin wide impact assessments are highly desirable.

Another important aspect would be multi stakeholder participation in the entire process. In the case of Teesta river basin it is not only the Government of India but also the state Governments of Sikkim, West Bengal and Bangladesh along with their affected people need to be involved at various stages in the process via various means such as multi stakeholder consultations. These consultations if present only at the level of technical details and technical solutions pose a danger of becoming obsolete or redundant especially when they are not acceptable to the affected people. As witnessed in the case of Teesta V, projects developed without adequate consideration of their impact on the affected people lead to discontent among the people. Lack of their engagement and enthusiasm results in long delays in execution and tend to be highly inefficient/unattractive in terms of revenue earnings to the developers and the states as well.

In order to assure success and long term sustainability it is very important that a holistic approach is adopted that will consider the socio-economic, cultural and environmental aspects cutting across different sections of the affected people. In order to have meaningful multi-stakeholder participation, availability of authentic data and information regarding water flows, rainfall, sediment deposits, flood forecasting, and warnings becomes essential. This is an area that needs to be improved upon. Benefit sharing at the local level as well as at the transboundary level could be another way to foster regional cooperation. Nile Basin initiative is often quoted as perhaps the best example where benefits are shared equitably amongst the basin countries with a focus on sustainable development rather than on water alone (Salehin, Khan, Prakash & Gurung Goodrich, 2011).

Apart from this the world has seen successful models with respect to energy and regional cooperation such as the model in Europe as well as in South Africa. (Tripathi 2011). The South African model – South Africa Power Pool was started in 1995 with twelve member countries to promote regional integration by putting energy development at the centre. Although initially there were a lot of doubts about its viability, today it has proved to be a successful model and thus lessons can be drawn for the South Asian subcontinent especially due to many similarities between the two regions in terms of economic backwardness, ongoing conflict etc.

Already India has entered into successful hydropower cooperation with its neighbouring country Bhutan. Many lessons can be drawn from this model as well. Thus in a region like South Asia which is ridden with continuous disputes and conflicts over geopolitics, if regional cooperation with regard to hydropower has to be successful and long-lasting it will take much more than negotiations among the diplomats and policy makers at the higher echelons of neighbouring
countries of the region. Recognizing that such a vital area requires focused attention, a specialised working group was formed in 2004 (SAARC). Since its formation the working group met five times and made important recommendations. As a result of these efforts the establishment of SAARC Energy Centre was announced through the Dhaka Declaration in 2005. It started its work in Islamabad in 2006. The concept of the SAARC energy ring was also floated during the 12th SARRC summit. Cross border electricity interconnection is one of the focus areas of the SARCC energy ring. During the fifteenth SAARC summit in 2008 in Colombo, Srilanka this vision to establish the energy ring was discussed and the need was again reiterated (Raza 2013).

However, such efforts alone are not going to lead to the desired results. A multipronged approach is the need of the hour. Track two and track three diplomacy could also be used for this purpose wherein efforts are made to educate and sensitize stakeholders at multiple levels with regard to the importance of regional cooperation. Hydropower generation like the African model can in turn be a central theme for regional cooperation (Rahman et al. 2011; South African Power Pool, n.d.). We can attempt to generate a virtuous cycle – one where regional cooperation leads to hydropower potential development – and the latter in turn fosters regional cooperation.
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Energy and Tax Reforms: Household Analysis from Pakistan

Vaqar Ahmed
Muhammad Adnan

1. Background

Pakistan’s economy has been confronted with low growth equilibrium since 2008. The national income has been growing at a dismal average annual rate of 2.9% since 2009. The investment to GDP ratio is one of the lowest across the Asian countries and was recorded at 14.8% in 2013. While there have been recent analyses on the binding constraints to economic growth, however most of these point out towards the country’s inability to design and execute important structural reforms related to energy, taxation, loss making public sector enterprises, deregulation, and privatization (GoP 2011 & Ahmed et al. 2013).

Out of the past 28 years, Pakistan remained under an International Monetary Fund (IMF) programme for 23 years. This prolonged relationship has been primarily a result of the poor fiscal discipline. Total revenue collected by the government, using tax and other measures, is around 13% of GDP, which is the lowest among all emerging economies. The revenue collected is not nearly sufficient to meet public expenditures, which has averaged 20% of GDP over the past five years. The result is high government borrowing that has led the country into a 'debt-trap'.

The lack of fiscal space has also not allowed the state machinery to invest in infrastructure and social services. Pakistan spends 0.7% of GDP on health. This is less than half of what other governments in lower middle-income countries spend on health. On elementary education, Pakistan spends less than 2% of GDP. This is also low when compared with countries with similar income levels. The energy crisis remains under the regulated control of the government, which in turn is unable to provide the liquidity even for the maintenance of existing power plants.

The low public spending on welfare and disruptive inputs for growth has resulted in Pakistan’s poor performance towards MDGs attainment (GoP 2013). Pakistan is off-track in case of 24 out of 34 MDG indicators. This effort is further challenged by two non-economic factors, including: a) increased militancy and deteriorating law and order, and b) recurrent natural disasters. Local conflicts continue to strengthen local incidences of malnutrition and delivery of immunization services, which in turn will have an impact on the productivity of the future labour force in Pakistan.

2. Objectives and Methodology

This paper captures the people’s perceptions about key economic reforms particularly in taxation and energy sectors. Our aim is to gauge household-level public appetite for reforms and the type of reform effort they would be willing to support. We provide a disaggregated analysis by key demographic indicators in order to identify pockets of reform opportunities.

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63 This paper has originally appeared in SDPI Working Paper Series.
64 The authors are Deputy Executive Director and Research Associate at SDPI respectively.
The timing of this survey is important, as it was carried out immediately after the elections of 2013. This exercise, therefore, provides a good benchmark against which people’s expectations from the government can be traced as the tenure proceeds. There is a newly signed and more stringent programme with the IMF under which the government is bound to increase the tax to GDP ratio as well as power and gas tariffs. Both the moves now seem inevitable given the pressures on fiscal deficit, domestic borrowing and exchange rate. However, a critical question we have answered in this paper is whether and by how much people are willing to embrace the painful adjustments in both reform areas. There are specific questions in this survey exercise which probe households’ willingness to pay taxes and electricity tariffs, which reflect full economic cost.

The survey was conducted in seven districts drawn from four provinces. These districts include Faisalabad, Hyderabad, Karachi, Multan, Peshawar, Quetta, and Rawalpindi. We were able to collect a data on 3,800 respondents having a mix of both male and female aging from 18 years and above and living in both rural and urban areas of the above-mentioned districts.

A ‘multistage stratified random sampling by probability proportion to size’ has been used. This sampling technique helps in splitting each stratum into sub-strata and also helps in reducing the heterogeneity of the target population. By using this sampling technique, at the first stage, target population has been divided into four strata (provinces) and later further split into seven substratums (districts). In the second stage, the districts were divided into two regions (urban and rural) and unit of analysis was selected according to the proportion of urban and rural population of respective districts. Household randomized selection was then undertaken for high, medium and low income groups. Interviewing mode in this exercise was face to face on-site interviews. The sampling distribution at a disaggregated level is exhibited in Table 1. In terms of the household incomes distribution, 34% of the respondents earn less than or equal to PKR 10,000. There are 59% in the category of PKR 10,000 – 60,000 and finally 7% fall in the upper income group, i.e. PKR 60,000 and above.

<table>
<thead>
<tr>
<th>Province</th>
<th>Sample Size</th>
<th>Districts</th>
<th>Region</th>
<th>Sample (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punjab</td>
<td>2177</td>
<td>Faisalabad</td>
<td>Rural</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Urban</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rawalpindi</td>
<td>Rural</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Urban</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multan</td>
<td>Rural</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Urban</td>
<td>42</td>
</tr>
<tr>
<td>Sindh</td>
<td>910</td>
<td>Karachi</td>
<td>Rural</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Urban</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hyderabad</td>
<td>Rural</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Urban</td>
<td>51</td>
</tr>
<tr>
<td>Khyber Pakhtunkhwa</td>
<td>514</td>
<td>Peshawar</td>
<td>Rural</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Urban</td>
<td>51</td>
</tr>
<tr>
<td>Balochistan</td>
<td>199</td>
<td>Quetta</td>
<td>Rural</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Urban</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3800</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The next section briefly highlights the people’s expectations from the newly-elected government followed by the sections on the importance that the respondents attached with tax and energy reforms in the country. We conclude with recommendations on improving awareness and confidence in reform measures required to address the ballooning fiscal deficit, rising government debt and pressures on domestic prices and exchange rate.

3. Expectations from New Government
In many respects, the 2013 general elections marked a turning point in the history of democracy in Pakistan. It was the first time since 1947 that a civilian government completed its tenure and power was transferred through elections to another civilian government. This is despite high pre-electoral violence and local conflicts. In the four weeks leading up to the election day, there were 130 attacks, which claimed 150 lives.66 The voter turnout was 55% compared to 44% in 2008 elections.67 A significant factor in the increased turnout was unprecedented youth participation.

Our survey in many respects captures the sentiments of those who voted in the elections. The results indicate that 81% of the respondents in our sample have cast their votes. The average age of our respondents was 38 years out of which 44% were self-employed and 39% were wage recipients. The households survey included both male-headed households (95%), and female-headed households (5%). In terms of regional disaggregation, 48% are from urban areas and 52% are rural households. The mean monthly incomes of our respondents ranged between PKR 15000-30000. The tax threshold as per the statutory rules is around PKR 33,000. In our sample, we have 23% respondents above this threshold. This seems reasonable as the household income and expenditure survey of 2012, published by the Pakistan Bureau of Statistics had 21% observations above this threshold.

For 23% of the respondents, the most important reason to vote was loyalty with the political party even if the candidate was not known (Box 1). The public understanding still seems weak regarding the revival of growth and jobs in Pakistan. About 27% attached economic wellbeing with the redressal of load-shedding issue, and 40% thought that solution to their problems lies in the creation of public sector jobs. There were expectations that facilities like microcredit and vocational training can improve jobs prospect. Only a minority (19%) responded that the government should allow markets to function competitively in turn implying an increase in private sector’s capacity to generate jobs. These perceptions need to be corrected. The government with the help of business associations and chambers should convey a clear message that (in line with its own manifesto) a competitive private sector will be the engine of future economic growth.

67 Election Commission of Pakistan 2013
It is important to note that while respondents associated economic wellbeing (exhibited above) with current challenges such as energy crisis, tax revenues were not associated with economic wellbeing. While it is difficult for households that have far more pressing needs to highlight this link; this also points to lack of understanding that tax evasion can adversely impact the provision of not only energy but also infrastructure and social services in general.
The failure of the past governments in tax revenue collection and building public confidence in the
tax collection system has resulted in the state’s inability to service important expenditure on public
goods and repeated resort to IMF packages. It is important to note that Pakistan has never fully
implemented the reforms it had promised with the IMF under various stand-by and medium-term
arrangements.

4. Are Taxes Important?

Pakistan has the lowest levels of tax collection with respect to income levels in the world, even
compared to countries with similar levels of per capita income such as Bangladesh and India. As
mentioned in the previous section, there is a weak understanding at the household-level of how
dependent any government is on the taxpayers’ contribution for running the state affairs. In our
survey, there is a large proportion which felt that there is no justification of increasing taxes under
a low economic growth. Similarly, there was a substantial proportion (54%) who felt that food and
medicine should be exempted from taxation across the board regardless of the income class. The
knowledge that food and pharmaceuticals are already being subsidized and protected from foreign
competition is missing.

4.1 Trust Deficit

There are 68% respondents who view taxation system in Pakistan as unfair and non-
transparent and suggest that this perception must be corrected if the state wishes to bridge
the current trust deficit with the taxpayer. Around 91% of the respondents were of the view
that their taxes are not effectively utilized and they don’t see how their region benefits from
taxes.
The processes of demand-side accountability were also termed weak. The respondents
agreed that they had not been proactive in inquiring from local authorities regarding the
utilization of taxes in their own region. 93% respondents did not hold the local authorities
accountable on the utilization of taxes in local area development. Many also agreed that
general ignorance on sources of information on tax collection and expenditures is due to
absence of taxpayers’ education.
Evidence from other countries reveals that open budget initiatives have been fundamental
in gaining the taxpayers’ confidence in fiscal transparency. It is important in the post-18th
amendment milieu that the government revenues and spending should be reported in a
disaggregate manner that allows taxpayers to monitor utilization of funds at the lowest tiers
of administration. This in future could also strengthen mechanisms related to citizens’ voice
and monitoring of budget spending.68

4.2 Narrow Tax Base

In a country of around 190 million people, only 2.6 million are NTN holders and around 0.7
million actually paid taxes in 2013. The corporate sector represents only 1% of overall tax
base. Out of over 50,000 companies registered with SECP, only 24,000 are NTN holders. The
agriculture sector, which contributes 1/5th of GDP remains exempted from income taxes
and the same is true for many of the services sectors like wholesale and retail trade.

Owing to the structural transformation in Pakistan’s economy, several new sources of
income have also appeared in the current reporting of national income accounts at the

68 For Pakistan-specific indicators on open budget mechanisms see Open Budget Survey 2012 by International
Budget Partnership (www.internationalbudget.org).
Pakistan Bureau of Statistics. For example, several services sub-sectors, including private doctors, tuition centers, accountants, IT and software houses and beauty parlors fall in this category. According to FBR claims, these sub-sectors are still out of the tax net and many continue to operate for decades in an informal setting.

In our survey, 42% of the respondents (Figure 1) completely agreed to the need to tax the new sub-sectors (particularly in agriculture and services). This indicates an important entry point for the government as the graph below indicates that overall 65% of earning individuals are in favour of levying income taxes on new income sources. Many potential taxpayers can be tapped by simplification of compliance process. Around 25% respondents have indicated that compliance with tax systems was cumbersome and perhaps another reason why many incomes have still not coming under the tax net.

![Figure 1: New Sectors should be brought under Tax Net](image)

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Agree</td>
<td>42%</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>23%</td>
</tr>
<tr>
<td>Neither Agree nor Disagree</td>
<td>18%</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>7%</td>
</tr>
<tr>
<td>Completely Disagree</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Source:** SDPI Survey Unit 2013

Despite the desire to bring new sources of incomes in the tax net, the response in favour of this argument varied across regions. For example, Karachi had the least number of respondents in favour of taxing new sources of incomes (Figure 2). Similarly, the response in Peshawar was also low if compared with other districts such as Hyderabad in Sindh and Faisalabad in the Punjab. One reason for this may be the large rural population in Hyderabad and Faisalabad (as compared to, for example, Karachi). The rural segment carries a strong feeling that the rich are not being taxed optimally.

![Figure 2: Tax New Sources of Incomes](image)

<table>
<thead>
<tr>
<th>City</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rawalpindi</td>
<td>47.0%</td>
</tr>
<tr>
<td>Quetta</td>
<td>85.9%</td>
</tr>
<tr>
<td>Peshawar</td>
<td>30.5%</td>
</tr>
<tr>
<td>Multan</td>
<td>43.0%</td>
</tr>
<tr>
<td>Karachi</td>
<td>16.9%</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>55.3%</td>
</tr>
<tr>
<td>Faisalabad</td>
<td>44.5%</td>
</tr>
</tbody>
</table>

It is not surprising to note that those related to services sub-sectors like hotels, real estate, transportation, lawyers and accountants were not in favour of taxing the new sectors and incomes originating from them (Figure 3). These sub-sectors represent over 60% of value added in the services sector of Pakistan, yet remain out of the income tax net. Many do not register for prolonged periods and continue to operate as informal entities. The income-wise response to the same question (Figure 4) indicates that even in the higher income groups a large proportion, i.e. over 50% are not in favour of bringing new sectors in the tax net.
Is broadening of tax base difficult? Many in Pakistan have argued that this is not the case. For example, data from Pakistan Telecommunication Authority (PTA) shows that there are 102 million mobile phone subscribers in the country. Many have phone bills several times larger than their reported incomes. In 2011, the Finance Ministry had revealed that there are 700,000 untaxed persons, who have multiple sources of income, more than one bank account, own property and regularly travel abroad.
What is stopping the government from bringing the already identified persons in the tax net? The key reason is the government’s own complex legal process that enables easy evasion. Tax defaulters are fined nominal amounts and even that is rarely paid. The high costs of litigation and time involved prevents FBR from an effective trail. FBR, in its recent history, has never been able to get a single defaulter imprisoned. In line with the practice in other countries, Pakistan should adopt ‘Taxpayers Bill of Rights’ to increase transparency and ensure that appeals are settled in the court.

Apart from this, taxation on agriculture income should be debated. New innovative ways to tax either through land revenue or agriculture produce should be introduced together with enhancing capacity of revenue collecting authorities.

A broad based system of Value-Added Tax (VAT) should be introduced that would replace the current General-Sales-Tax (GST) regime together with its implementation and management plan. Such a move will facilitate documentation of economy and thereby bringing new incomes in the tax net.

4.3 Are Exemptions Justified?
A number of tax exemptions are available to different groups of income (e.g. military personnel) under the Income Tax Ordinance 2001 and in the Statutory Regulatory Orders issued from time to time. These include exemptions, concessions, deductible allowances, tax credits, zero rate income bracket, special provisions and certain withholding taxes. Exemptions reduce annual tax collection by three per cent of GDP each year. These exemptions are discretion of the government and are not reviewed by parliament at the time when Finance Bill is being formulated or amended.

We discussed in the beginning that 54% respondents believed that food and medicine should be exempted from any form of taxation regardless of the income class. Furthermore, we specifically probed for agriculture sector, which is exempted from any taxation levy since Pakistan’s first central government budget.

While agriculture incomes still remain exempted, there were 57% respondents, who favoured taxing agriculture sector (Figure 5). In overall terms, districts such as Quetta and Faisalabad had over 50% respondents in favour of taxing agriculture. It is understandable that Multan’s response was relatively low given its large labour force associated with farming activity. Similarly, most rural areas had lesser endorsement for agricultural taxation as compared to the urban parts of the same district (Figure 6 and Figure 7). There were additional 16% respondents who remained indifferent about this matter. On a further probe, most of these respondents said that they favour agricultural taxation, but such a move can lead to discontentment among rural population.
The analysis by income class exhibits that 37% of low income group favoured agriculture taxation. During our qualitative assessment they felt that a large number of farmers falls in the tax net, but they don’t pay taxes.

Going forward it is recommended that the government should refrain itself from indiscriminate use of SROs at FBR, which allow exemption, in turn, leading to revenue loss. There are currently over 1900 SROs, which should be abolished and only parliament should have the authority in future to allow any exemptions.

4.4 Documentation of Taxable Economy
The rising informal sector is a matter of concern for both the federal and provincial governments. These segments largely go untaxed causing loss to the exchequer. In the rural areas (and peri-urban area), there is no established norm of providing documentation (in the form of computer generated or manual receipt) upon transactions. Around half of the population surveyed never gets a receipt while making day to day purchases above PKR
For the urban settlements, this survey exhibits that only 14% transactions at the household level are captured through formal documentation. A good proxy to gauge this is the transactions taking places at the local grocery stores (Figure 8 and Figure 9).

![Figure 8: Is Local Grocery Store Providing Receipt?](image1)

![Figure 9: Are You Demanding Receipt from Local Grocery Store?](image2)

We have explained earlier that a system of full-fledged VAT instead of GST can help in the documentation of economy. VAT will also eliminate current exemptions under GST. The Section 111(4) of the Income Tax Ordinance provides cover to the money remitted in Pakistan. It is recommended that the declaration of income should be compulsory for money remitted to Pakistan. Finally phasing out of presumptive taxes and moving towards a regime of determining taxes after filing of returns can prevent under reporting of tax liabilities.

### 4.5 Tax Administration

More than 95% of the total revenue is collected by FBR. The provinces have yet to fully implement comprehensive resource mobilization strategies. The frequent changes in tax legislation and discretionary powers to the FBR have reduced transparency in the overall tax regime. There are weak controls in terms of taxpayer registration system and penalties for non-compliance are inadequate and expensive to put in practice.

Around 51% of the respondents in our survey view tax machinery as corrupt and non-transparent (Figure 10). On a similar question of how tax revenues may be increased, 50% were of the view that reducing corruption can bring additional taxes (Figure 11). Other recommendations for increasing tax revenues include decreasing tax rates (17%), automation of tax system in a manner that takes account of multiple sources of incomes (7%), and increasing taxpayer’s education and knowledge (6%).

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69 This response is for all households (includes urban and rural).
70 Income Tax Ordinance 2001 amended up to 30th June 2013.
Our respondents were also asked key reasons why the need arises for them to give informal gifts to tax officials (including bribe). As multiple responses were allowed for this question, 40% revealed that they genuinely feared harassment by the officials (including repeated visits or call to tax court) if they did not provide such informal gifts (Figure 12). The other important responses included people’s fear of being charged extra levies and increased time involved in compliance.

It is intuitive that the government cannot afford such low level of taxpayers’ confidence towards the resource mobilization process. Tax Administration Reform Project (TARP) has been the main tax reform of the government between 2005 to 2009. The evaluation of this programme while termed the project progress unsatisfactory, however highlighted several lessons for the future. In order to improve the effectiveness of tax collection, fundamental organizational changes will be required at federal and provincial levels. The legal requirements for such a change should be prepared before the next round of administrative reforms are undertaken. Investment in smarter ICT tools will have to be undertaken, which in turn can minimize human intervention and thereby reducing the level of corruption.
4.6 Willingness to Pay Taxes

42% respondents were willing to pay 10% increased taxes if the collected amount may be invested in local-level education and health initiatives in their region, 19% will be willing if the richest cohort starts paying more tax in Pakistan, and 9% showed willingness only if tax authorities have a transparent mechanism of showing how the overall collection is being spent during the year (Figure 13).

Source: SDPI Survey Unit 2013

This is an important entry point for the government as well as those interested in reform design. The upper income group has exhibited some understanding of how taxes can improve the provision of social goods (Table 2). This group is willing to pay 10% increased direct taxes if they see public investment in social sectors. Furthermore, the same income group wishes greater information from tax authorities as to how their contributions are spent for development purposes. One can also infer that for the lower income group, greater tax education and outreach is required.
Table 2: Willingness to pay tax (income-wise response)

<table>
<thead>
<tr>
<th>You will pay 10% increased tax if:</th>
<th>Lower Income Group</th>
<th>Upper Income Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>The collected amount was invested in a local school in your community</td>
<td>24.1%</td>
<td>26.4%</td>
</tr>
<tr>
<td>The collected amount was invested in a local hospital in your community</td>
<td>17.9%</td>
<td>18.9%</td>
</tr>
<tr>
<td>The tax officials informed you regularly how the money was being spent</td>
<td>5.9%</td>
<td>11.3%</td>
</tr>
<tr>
<td>The rich class starts paying more tax</td>
<td>17.1%</td>
<td>20.4%</td>
</tr>
<tr>
<td>There are better social safety nets for your local community</td>
<td>8.2%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Or you have no reason to pay any more tax</td>
<td>22.5%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Others</td>
<td>4.2%</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

Source: SDPI Survey Unit 2013

The upper income group, in our analysis, includes those earning above PKR 60,000 per month. However, given that the mean income is below the taxation threshold of PKR 33,000 per month, we asked the same questions to the lower income group in order to: a) gauge their perceptions on how fair and just are taxes in Pakistan, and b) see reaction type of future taxpayers.

From the viewpoint of policy design, it is also important to work on the 20% who claim that they have no reason to pay more taxes. It is this segment, which is disillusioned by the lack of public sector outreach towards ensuring transparent use of taxes. Such sentiments are strengthened when 14% of public representatives elected in 2013 do not even have a National Tax Number (NTN). 48% Members of National Assembly (MNAs) paid no tax in 2012.

4.7 Tax Compliance

Around 67% of the respondents falling under the tax net were well aware of the tax filing process, however, 33% showed ignorance. Out of those in the tax net, 77% respondents had paid their taxes in the last fiscal year whereas 23% had not paid.71 None have been inquired in the past 3 years for non-compliance. Around 12% respondent end up seeking external help for filing taxes (e.g. through tax solicitors) and on average these taxpayers paid PKR 10,084 in 2012 towards compliance and related costs. In our sample, 93% of the income taxpayers have never registered any grievance with the tax authorities and neither happens to know the process through which this may be accomplished.

The prompt redressal of taxpayers’ grievances is important in order to safeguard the rights of taxpayers and enforce better standards of accountability of officials. This feedback can provide important insights for the leadership in tax authorities and help them towards better management of human resources.

71 We did not seek any documentary proof. The survey team relied on the response provided by the head of household.
Summary of Tax Reform Measures

- Open Budget Initiatives, such as the one practiced in several Commonwealth countries, can strengthen fiscal transparency and overtime enhance taxpayers' confidence.
- Broadening of tax base in the short to medium term is possible through ‘Taxpayers Bill of Rights’, and innovative ways to tax agricultural and services sectors. For the longer term a strategy for transitioning towards VAT should be put in place.
- Abolish SROs that allow exemptions to select few. Future SROs should be debated in parliament.
- Declaration of income should be mandatory for money remitted to Pakistan.
- Tax administration measures that put in place smart ICT tools can help in minimizing human interference and corruption.
- Outreach programmes for taxpayers can demonstrate proper utilization of tax resource at micro level. These outreach programmes, if carefully designed, can help the public understand how paying taxes can improve public service delivery in social and infrastructure sectors.
- Prompt grievance redressal mechanisms will help bridge the high levels of trust deficit between the state and the taxpayers.

5. What is wrong with Energy Sector?

According to the Economic Survey of Pakistan, during 2011-12 around USD 4.8 billion or 2% of Gross Domestic Product (GDP) was lost due to power sector outages. This is a major factor behind Pakistan’s disappointing economic performance over the past five years, with GDP growth averaging under 3% (GoP 2013).

The key challenges confronting this sector can be categorized into demand-supply gap, inefficiency and pilferage, and affordability. In 2012, the average demand-supply gap was observed at around 5000MW (31.8% of peak demand). Around 44% of power was generated through expensive thermal means. The transmission and distribution (T&D) losses stood at 25% and theft was valued at PKR 140 billion.

In our survey, 53% of the respondents considered that the electricity prices are too high and had minimal idea that they were already receiving electricity on subsidized rates. Similarly, 17% also termed gas prices as exorbitantly high. An interesting analysis of this survey reveals that out of those who term energy prices high, 14% are already spending on alternative sources or coping strategies during spurts of load-shedding. The respondents, to a large extent, are missing the understanding that load-shedding is in fact taking place due to full economic costs not being paid by the consumers.

32% respondents reported facing unscheduled load-shedding spanning over an average of 13 hours daily. Our average respondents are spending PKR 2,980 per month (or USD 29/month) on getting electricity through formal mechanism, i.e. WAPDA installed meter. On average, a household that is using gas for heating and cooking, is spending PKR 960.2 per month (or USD 9.2/month). It is a matter of research interest whether or not it should be justified to have a large tariff variation between various sources of energy reaching the same household.

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72 An exchange rate of PKR 104 is used here for conversion.
5.1 Willingness to Pay

The respondents were asked regarding their willingness to pay additional power bill if they were provided 24 hours uninterrupted electricity. The majority (63%) were biased towards the lowest category, i.e. PKR 100-500 additional bill (Figure 14). The number sharply plummeted to 19% when they were asked to pay an amount greater than PKR 500.

![Figure 14: How much increased monthly bill will you be willing to pay for no load shedding?](image)

Source: SDPI Survey Unit 2013

The higher income group as indicated below has the ability and willingness to pay a larger monthly bill than currently being charged. In lieu of no future load-shedding 12.7% of the upper income group is ready to pay additional PKR 5000 and above as part of the monthly bill (Table 3). It is also important to note that no respondent in our sample declined to pay an increased amount if it was guaranteed that there will be no load-shedding in future. Most of the respondents have already incurred some capital cost towards coping strategies (Figure 15).

![Figure 15: Coping with electricity shortage](image)

Table 3: Willingness to pay for power (income-wise responses)

<table>
<thead>
<tr>
<th>How much increased monthly bill will you be willing to bear for no future load shedding?</th>
<th>Lower Income Group</th>
<th>Upper Income Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>PKR 100-500</td>
<td>75.8%</td>
<td>19.3%</td>
</tr>
<tr>
<td>PKR 501-1000</td>
<td>15.3%</td>
<td>19.3%</td>
</tr>
<tr>
<td>PKR 1001-1500</td>
<td>3.5%</td>
<td>14.3%</td>
</tr>
<tr>
<td>PKR 1501-2000</td>
<td>2.5%</td>
<td>18.5%</td>
</tr>
<tr>
<td>PKR 2001-2500</td>
<td>1.2%</td>
<td>5.8%</td>
</tr>
<tr>
<td>PKR 2501-3000</td>
<td>0.4%</td>
<td>3.5%</td>
</tr>
<tr>
<td>PKR 3001-4000</td>
<td>0.2%</td>
<td>2.7%</td>
</tr>
<tr>
<td>PKR 4001-5000</td>
<td>0.4%</td>
<td>3.9%</td>
</tr>
<tr>
<td>PKR 5001 and Above</td>
<td>0.7%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

Source: SDPI Survey Unit 2013

We split across regions the respondents, who were willing to pay an amount equal to or greater than PKR 2,500 in lieu of no future load-shedding (Table 4). We can observe that Karachi was the only district in our sample where no one agreed to pay beyond PKR 5,000. This is perhaps because of the low incidence of load-shedding being faced by Karachi after
the privatization of Karachi Electric Supply Corporation (KESC). Comparing this with Faisalabad – a city faced with prolonged power outages and resulting riots between Faisalabad Electric Supply Company and industrial workers, one can see 75% of willing respondents having ability to pay beyond PKR 5,000 followed by Rawalpindi and Quetta at 67% and 50% respectively.

**Table 4: Willingness to pay for power (region-wise responses)**

<table>
<thead>
<tr>
<th>How much increased monthly bill will you be willing to bear for no future load shedding?</th>
<th>PKR 2501-3000</th>
<th>PKR 3001-4000</th>
<th>PKR 4001-5000</th>
<th>PKR 5001 and Above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faisalabad</td>
<td>18%</td>
<td>2%</td>
<td>5%</td>
<td>75%</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>35%</td>
<td>11%</td>
<td>15%</td>
<td>39%</td>
</tr>
<tr>
<td>Karachi</td>
<td>42%</td>
<td>25%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Multan</td>
<td>18%</td>
<td>12%</td>
<td>27%</td>
<td>43%</td>
</tr>
<tr>
<td>Peshawar</td>
<td>50%</td>
<td>17%</td>
<td>22%</td>
<td>11%</td>
</tr>
<tr>
<td>Quetta</td>
<td>25%</td>
<td>23%</td>
<td>2%</td>
<td>50%</td>
</tr>
<tr>
<td>Rawalpindi</td>
<td>28%</td>
<td>2%</td>
<td>3%</td>
<td>67%</td>
</tr>
</tbody>
</table>

**Source:** SDPI Survey Unit 2013

We exhibit below OLS estimates of determinants of willingness to pay for a more certain supply of power at the household level. The factors, which negatively impact the willingness to pay (and are statistically significant), include money spending on alternative sources as a coping strategy, as if the respondent is already a taxpayer. The factors that are significant and positively impacting the willingness include income, education and industrial type (Table 5). In broader terms, it is usually the awareness regarding root causes of the issues in energy sector that influences long-term spending decisions (Zorić and Hrovatin 2012).

**Table 5: Factors Influencing Willingness to Pay for Electricity**

<table>
<thead>
<tr>
<th>Dependent Variable: Amount willing to pay for no future load shedding (log)</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-stat</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.815</td>
<td>.277</td>
<td>10.180</td>
<td>.000</td>
</tr>
<tr>
<td>Spending on Coping Strategy (log)</td>
<td>-.411</td>
<td>.067</td>
<td>-6.144</td>
<td>.000</td>
</tr>
<tr>
<td>Province</td>
<td>-.233</td>
<td>.036</td>
<td>-6.428</td>
<td>.000</td>
</tr>
<tr>
<td>District</td>
<td>-.104</td>
<td>.015</td>
<td>-7.017</td>
<td>.000</td>
</tr>
<tr>
<td>Region</td>
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<td>-2.882</td>
<td>.004</td>
</tr>
<tr>
<td>Education (No. of years)</td>
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<td>.007</td>
<td>3.771</td>
<td>.000</td>
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<td>.005</td>
<td>1.532</td>
<td>.126</td>
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<tr>
<td>Income (log)</td>
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</tr>
<tr>
<td>Paid tax in last financial year</td>
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<td>.080</td>
<td>-2.930</td>
<td>.003</td>
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<td>Electricity supply (daily hours)</td>
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<td>.008</td>
<td>-.540</td>
<td>.589</td>
</tr>
<tr>
<td>Voted in Election 2013</td>
<td>.065</td>
<td>.075</td>
<td>.874</td>
<td>.382</td>
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</tbody>
</table>

*Electricity supply and voting behavior are statistically insignificant.

While being a taxpayer and also bearing increased energy costs implies painful short-term adjustment within the household-level budget. However, we see that there were 27%

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73 The coding for industrial type is higher for more sophisticated and skilled work.
respondents who agreed on both, i.e. the crisis of development and energy specifically can be addressed through paying the rightful taxes and full economic cost of energy. This realization certainly varied substantially across regions. These respondents were willing to pay 10% additional tax as well as a PKR 2500/month increase in the power bill (Figure 16).

![Figure 16: Respondents willing to pay additional tax & power charges](source: SDPI Survey Unit 2013)

5.2 Line Losses and Theft

In August 2013, the secretary for the Ministry of Water and Power informed the Senate Standing Committee that Pakistan loses annually PKR 150 billion (USD 1.7 billion) in line losses and power theft. Till August 23, as many as 770 cases of theft were registered and under trial, but only three cases were punished. Moreover, the fine imposed was under PKR 5,000 in each case.

Our survey results show that 71% households in the wake of power outages had no choice but to adjust with the reduced supply of electricity whereas 15% of the respondents, as part of their coping strategy had to reduce their spending on other household expenditure categories as they were unable to reduce their current power usage (Figure 17). Surprisingly, 6% of the respondents confessed to using illegal methods like Kunda to absorb increase in electricity prices. 42% respondents claimed to have known instances of electricity theft in their area (e.g. Kunda method). Furthermore, 17% remained indifferent. It is the higher income group that had relatively greater response of resorting to illegal methods (6.5%) compared to around 6% from the lower income group.
This clearly indicates lacunae in the energy sector accountability mechanism. Amendments in Pakistan Penal Code are required so that there is certainty of effective punishment in the cases of energy theft. The DISCOs also need to work on strengthening their outreach initiatives in order to correct the current perception at the community level that reporting theft may not be of any use as there will be no effective trial on such instances of crime.

5.3 Coping Strategy

As the energy crisis worsened, several coping strategies have been observed at the household and community level. Some were in fact introduced by the small and medium enterprises at the local level. While most of these strategies such as the purchase of UPS and generators are public knowledge, however two interesting examples were seen in the Punjab. First the business community in Shiekhupura started importing coal-fired plants from China to provide localized power and second was cement plants in Chakwal, importing rubber as a substitute fuel. Both examples obviously have implications for the environment. Our interest here is to see how much additional spending was required for the coping strategy and how this spending was made available.

34% respondents incurred additional expenditures as part of any coping strategy. Out of these, 21% purchased UPS and 17% purchased gas/oil generators while 41% resorted to other alternatives.

There were respondents who said that they continued to use the same level of electricity and paid extra for alternate sources. These were asked regarding the household budget head from which they deduct their expenses in order to cope with additional household spending on energy. Among them 29% reported reducing their budget on food in-take (Figure 18). Around 8% reduce their children’s education expenses, and 6% reduces their medical-related expenditures.
While energy is not a public good in any socio-economic sense, its demand is competing with food, education and health. All of these together can in fact weaken the country’s overall goals towards food security, poverty reduction and welfare enhancement. A more comprehensive research should be undertaken to map the impact of ‘energy poverty’ on people’s wellbeing.\(^4\)

### 5.4 Future Outlook of Energy Sector

The new power policy hints towards reforms related to a) bringing about efficiency in generation, transmission and distribution, b) generating competition in the energy market and c) ensure sustainable power in the longer run. While these may be important measures our respondents were more concerned with any short to medium term solutions that the government might use in order to give relief from load-shedding. Our questionnaire had several questions that probed the households of any future tradeoffs they might have to make if the energy crisis continues.

If the electricity load-shedding grows worse and it becomes important (as a short-term solution) to divert gas from certain sectors, around 65% favoured the view that gas supply to public and private transport may be reduced, 13% were of the view that gas supply to households for cooking and heating purposes may be reduced. 48% respondents were of the view that household needs more energy than any other sector, therefore, it should be protected. Around 44% respondents were of the view that industrial sector should be given priority so that industrial jobs can be protected. These mostly included salaried workers whose livelihoods are associated with commodity producing sectors in some manner. The entry point for the government here will be to gradually start reducing the gas supply to transport sector given that a majority see this as a necessary solution in the short-term.

Another question was asked about the single most important step that should be taken by the current government to overcome the energy crisis. Around 51% of the respondents demanded to take action against electricity theft (Box 2). It is interesting to note that these

\(^4\) International Energy Agency defines ‘energy poverty’ as lack of access to modern energy services. These services are defined in terms of household access to electricity and clean cooking facilities.
51% have never reported theft themselves. 13% respondents wished to see the government investing in alternate energy sources. We also had responses in favour of privatizing power sector entities (12%) and there are 9% favouring an increase in subsidies to the energy sector as a whole. As curtailing theft has been a priority for most respondents, the government and civil society organizations can strengthen supply and demand-side accountability measures respectively. The social accountability tools if adopted will help communities in better demanding action against theft.

To a question on the government’s most important priority in the energy sector for the short-term, 29% respondents were of the view that the government should not increase the prices of electricity and try to focus more on improving the supply side. 14% felt that in such circumstances the government must run a campaign throughout the country that may provide information on how to conserve the various forms of energy and certainty of punishment in the event of theft. Over the longer term, 41% were of the view that the government must focus on making investment in hydel power projects. They realized, however, that the capital cost of hydel projects is relatively higher than other options. Out of these respondents, 27% were ready to pay 10% additional direct taxes if public investment in hydel power projects was assured and demonstrated. It is encouraging to note that these citizens recognize their responsibility towards the development of high cost public projects, however they represent only 9.6% of our overall sample size.

**Box 2: Energy Crisis and Reforms**

<table>
<thead>
<tr>
<th>Single most important step that should be taken to overcome the energy crises</th>
</tr>
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<tbody>
<tr>
<td>Others</td>
</tr>
<tr>
<td>3%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Energy Saving Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Others</td>
</tr>
<tr>
<td>2%</td>
</tr>
</tbody>
</table>
The respondents also proposed different measures to conserve energy in their region and 41% of them were in favour of carrying out campaigns to encourage people to use less amount of electricity, 32% recommended that the government should impose tax on those households who use electricity beyond a certain limit, 13% respondents suggested that the government may spend to promote alternatives like solar geysers.

For organizing campaigns to reduce energy use, the newly formed Ministry of Climate Change and ENERCON can take this responsibility for introducing innovative messages to reach the grass roots level. The environmental protection agencies at the provincial levels can then implement such a campaign activity at local levels. The use of print and electronic media should also be considered for this purpose.

As regards respondents who favoured taxing households who use electricity beyond certain limits, the government can exercise a smarter tariff structure whereby there are progressive levies on the use of power. Besides promoting conservation, this can bring additional revenue to the government.

The import of greener technology should be further liberalized. Apart from the tariff rates there are concerns of non-tariff barriers preventing imports of technologies that are more energy efficient (e.g. solar equipment).

**Source: SDPI Survey Unit 2013**
Summary of Energy Reform Measures

- Legal amendments may be undertaken to ensure effective punishment in case of energy theft.
- The government should correct the perceptions at the community level that power sector defaulters are above the law. The Punjab province already has a system governed by local-level committees that keep a check on theft of irrigation water. Perhaps a similar mechanism for energy sector can be institutionalized.
- The communities can better demand improved service delivery in energy sector through the use of local-level social accountability tools. Several civil society organizations are already using these tools for improving service delivery in education, and health.
- Public information channels should inform people that long-term investment in large energy projects (e.g. hydel and coal) are contingent upon people paying their due tax liabilities and energy tariffs that cover full economic cost of generation, transmission and distribution.
- A comprehensive conservation policy can be devised by a properly designed outreach campaign, smarter tariffs that are progressively levied (in line with usage), and liberalization of imports of greener technologies in energy sector (e.g. solar power).
- Deeper research will be required to see a) if it is justified to have a large tariff variation between various sources of energy (power and gas) reaching the same household, and b) how energy poverty is forcing people to trade-off their budgetary requirements towards food intake, education and health.

6. Conclusion

This survey highlights two important connotations with respect to people’s perception regarding energy crisis and tax reforms in Pakistan. First, most of the respondents do not fully understand that fiscal deficit and government borrowings increase when they don’t pay taxes, which in turn create inflation and reduce purchasing power. More recently Pakistan has also witnessed downward pressure on the exchange rate owing to the growing fiscal deficit and rising government debt.

Second, there is a lack of understanding among respondents that the root cause of energy crisis is continuous reliance on subsidies, and power theft. Unfortunately, when subsidies are provided for an indefinite timeline, people start perceiving such benefits as their right. Under a well-managed energy sector, only a lifeline block consuming less than 100 units of power is allowed a subsidy. Contrary to this, we see several layers of subsidies being provided in Pakistan for energy usage in residential, agricultural and industrial sectors.

Going forward this survey provides two important entry points for the policy makers. First, we have exhibited that substantial proportion of population is willing and has ability to pay, a) increased taxes if decent utilization of their contributions is demonstrated, and b) higher power bills if given a certainty of reduction in unscheduled power cuts. Second, any painful future adjustment resulting from economic reforms will also require taking in to confidence those segments of population, who do not trust the current tax administration machinery and energy sector governance. The Ministry of Information and Press Information Department should be tasked with outreach campaigns to inform people about the government policy on taxation and energy reforms.
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Section F: Epilogue
The 5th South Asia Economic Summit took place at a very interesting time for South Asia. First we are reminded that the effects of global financial crisis are here to stay for a little longer. This has been validated by the Euro zone crisis that has already started to impact South Asia. Second is the 17th Conference of the Parties of the United Nations Framework Convention on Climate Change held at Durban which is now being viewed as an important step towards combating global climate change. The third development is regional in nature carrying significant importance for South Asia’s future. The 17th Summit of the heads of South Asian Association for Regional Cooperation (SAARC) was held in Maldives and witnessed the signing of some important agreements between member states. Finally and most concerning of all is that economic growth in the South Asian region has been projected to decline at least for the next two quarters. We briefly discuss these four developments below in order to set in sequence the priorities for the next South Asia Economic Summit.

The origins of the Euro zone crisis were varied for the member countries. Multiple problems arose, culminating in a plethora of challenges for the governments – who now had to deal with toxic financial assets, ballooning budget deficits and restructuring of debt. But going forward some key challenges remain, for example how to rebalance demand within a single currency block. A question which has forced economic managers to rethink how member countries should be selected to form a currency union. Whatever the current state of crisis it has certainly started to impact the South Asian economies. India and Bangladesh have officially reported the status on cancelled export orders. Pakistan is fearing that migrant workers in EU may be laid off in big numbers which in turn may result in a decline in future remittance inflows. Afghanistan has indicated that aid flows from EU may be slashed on account of already high budget deficits being faced by leading member states including France, Italy, and Spain.

The global financial crisis had put the climate change agenda on the backburner due to developed countries envisaging a downward pressure on (restoration of) economic growth in case climate change commitments were observed. The restructuring of the economy into a low carbon mode will imply reduction of output and employment growth in agriculture sub-sectors such as crops, forestry and livestock. The Durban talks however led to an important intellectual breakthrough towards resurrecting climate change negotiations. The Durban Platform for Enhanced Action aims at bringing all greenhouse-gas emitting countries under a common legal regime by 2015. This legal understanding will bind these countries to cut emissions by 2020. A group has been put in place to provide proposals on the financing of Global Climate Fund that is planned to provide $100 billion annually by 2020 to poor countries. Some decisions were also taken with regard to the manner in which carbon offsets should be allocated under the Clean Development Mechanism to carbon capture and storage projects. Finally in the interest of capacity building of developing countries a Climate Technology Center and Network will be established which will ensure systematic transfer of technology.

75 Sustainable Development Policy Institute. This introduction draws from an earlier text by the authors titled: Detailed Concept Note for 5th South Asia Economic Summit.
There have been interesting developments at the regional level during the last few months. The 17th SAARC Summit held in Maldives ended on a positive note. Several agreements were signed which included the SAARC agreement on Rapid Response to Natural Disasters, the SAARC agreement on Multilateral Arrangement on Recognition of Conformity Assessment, the SAARC Seed Bank Agreement and the SAARC Agreement on Implementation of Regional Standards.

A strong resolve was exhibited to continue efforts towards finalizing a framework for improving connectivity through rail and sea which will ultimately also result in a regional railways agreement. It was decided that by the end of next year the formalization of Indian Ocean Cargo, Motor Vehicle agreement and Passenger Ferry Service will also be completed. A demo run of a Bangladesh-India-Nepal container train will soon be initiated. Increased interest was indicated towards inter-governmental agreement for energy cooperation and regional power exchange.

While the usual emphasis on the implementation of South Asian Free Trade Area (SAFTA) was reiterated, it was highlighted that there are significant barriers to intra-regional trade which are hurting producers as well as consumers in the region. A focused effort is required to slash the number of items under sensitive lists, harmonize standards and customs processes, and eliminate non-tariff barriers.

In view of the above mentioned, two of the largest countries in the SAARC region came forward with positive steps towards the regional cooperation agenda. Pakistan announced that it was ready to provide most favored nation status to India and will also reduce its sensitive list by 20 percent and allow tariff concessions on a further 233 items under SAFTA by February 2012. India also announced that its sensitive list for LDCs will now be limited to 25 items.

Going forward the key challenge faced by several South Asian economies will be to restore and sustain economic growth and put it on an inclusive path. In the wake of the Euro zone crisis, international and national projections indicate a downward pressure on growth in SAARC member countries. In India the high interest rates which were maintained to tame inflation have resulted in discouraging investment and have particularly hurt the performance of the industrial sector. The Indian economy is exposed to the troubles facing the European financial sector which in turn has also put the Indian currency under pressure.

In the case of Bangladesh, growth in the real sector has been cradled through market access to readymade garments and rising inflow of remittances. However growth in foreign direct investment, move towards value addition in exports and diversification in overall structure of growth has been slow to come by due to issues related to security, governance, tax structure and vulnerability to natural disasters. These factors threaten the sustainability of growth in the longer term and will also pose challenges to policy objectives related to poverty and inequality improvements.

A similar story in Pakistan suggests that growth will remain depressed on account of the energy crisis facing the industrial sector. Furthermore the negative repercussions of war on terror are thought to keep foreign and domestic investment growth at low levels. The country has benefitted on account of remittances and rising export prices – a trend which is forecasted to saturate in the coming days. To add to these difficulties the country has been facing floods on a recurrent basis which have caused loss of agricultural activity and displacement of a substantial number of people in Punjab and Sindh.
Most South Asian economies are dependent on proceeds from Diaspora, bilateral inflows of foreign assistance, export receipts from commodity-based items—all of which are prone to volatility in the wake of the Euro zone crisis, lack of consensus on global initiatives on trade, investment and climate change, war on terror, and increased political instability in several SAARC member countries. These and other issues that arise from political differences in this region require a collective solution. There has never been a more important time to consider a regional approach towards the common objectives of inclusive and sustainable growth which can in amalgam with micro-level interventions lead to welfare improvement for the people of South Asia.

While from a pure research viewpoint it is important to take regular stock of the above-mentioned challenges and opportunities in South Asia, meetings such as the South Asia Economic Summit also force us not to take a myopic view of regional cooperation. Besides explicit cooperative activities in trade or investment, there is a potential for coordination of positions taken by countries on international negotiations, e.g., on trade, IPRs, climate change, and energy. Finally, there is considerable potential for cooperation with regard to sharing of lessons.

1. Making Growth Inclusive and Sustainable

There is now global realisation that there is a need to look at future challenges and their solutions through the lens of sustainable development. Thinking retrospectively it is now easier to connect the dots and conclude that the various crises that have hit the global socio-economy were linked to each other. A sustainable development framework helps explain these crises as inter-related occurrences. It binds together objectives of economic prosperity, social equity and environmental quality in order to achieve more humane long-term results. For addressing global and regional inequalities sustainable development provides a bridge between the north and the south. It is also an interface between governments, business communities and civil society. When it comes to accounting for production and consumption, sustainable development then allows a bridge between efficiency and equity considerations. The global community this year reinforced its resolve towards sustainable development through the Rio+20 process. It focused on two main themes namely green economy and institutional framework.

On the economic front, while South Asian networks have worked at length over issues related to relaxation in trade barriers there are many facets of cooperation that remain unexplored. It is important to question the pattern of growth in South Asia if this region is to give a human face to economic growth. While the real GDP growth trends have been on an upward trend, it seems that this has been accompanied by rising food insecurity, commodity market bubbles, and rent-seeking activities, regular occurrence of climate change led natural disasters, crime and related social evils.

The rhetoric and to some extent policy practice of inclusive growth has traditionally involved actors which include regulators, civil service, entrepreneurs and civil society organizations (CSOs). However stronger input from two constituencies is still required. These are members of the academia and communities at the micro level. While CSOs claim to represent the wider society, holistic representation of communities is excluded due to barriers related to language, culture and accessibility. It is in this context that cultural diversity is now being advocated as the fourth pillar of the sustainable development framework.

A new insight into inclusive growth is desired which can start by taking account of demographic trends in South Asia, analyze future production, trade and employment patterns. The focus on job creation will be extremely necessary and this need not come from South Asian countries competing
in western markets. A greater level of aggregate demand can be leveraged through cooperation within South Asia. The key sectors to consider here are services such as wholesale and retail, banking and finance, transport and communications, education and health services etc. Finally South Asia has been one of the worst hit due to climatic changes. It is now common to witness recurrent melting of glaciers, floods, earthquakes and region-specific changes which have adversely impacted the eco-system. The fast growth of urbanization in South Asia has not only posed pressures on municipal services but led to environmental and health issues particularly in slum areas. The unprecedented rise in remittances from abroad has been in the literature claimed to have boosted rural productivity, farm output and has led to smoothening of consumption in lower middle and low income households in South Asia. While the origin, source and composition of these remittances in many countries has come under critique, the developing economies have ignored these views attaching greater importance to overall balance of payments security. Recent research in South Asia is now starting to point towards some evidence of ‘Dutch disease’ owing to rising remittance inflows.

Let us now take stock of the situation keeping the following new and upcoming development priorities under consideration.

**Beyond Millennium Development Goals (MDGs):** The Human Development Report 2011 explains at length how the business-as-usual approach towards pressing issues related to production, trade and environment are increasingly making the world an unsustainable place. The report also recognized that power structures and gender inequalities in development countries dictate the access to most basic services. In this context Rio+20 and its follow up will shape a new beyond-MDGs agenda. Any new discourse should focus on the increased value of accountability and democratic processes and community-led approach to development. There is a need to see how institutional processes can be made more inclusive so that due attention can be given to women, minorities and marginalized groups.

**Post-Global Financial Crisis:** The experiences of global financial crisis have shaken the intellectual foundations of capitalism. While the world has gone a long way from ending slavery and towards achieving freedom and basic rights it is still not clear what shape a ‘well-behaved capitalist’ paradigm will take. Leading economists have advised that regulatory environments in sectors such as banking and finance should evolve with the markets. This will require a global effort towards understanding the nature of speculative bubbles and the actors that leverage these bubbles. This is not restricted to banking and finance but also for sectoral markets such as oil and gas. An additional challenge will now be to reform the global commodities market operations. The bitter experiences of 2007-08 have shown how global food shortages can lead to serious implications for food security, health and nutrition. All in all there is now a need to think towards ‘sustainable capitalism’.

**Non-traditional Security Threats:** While the spread of the free market, deregulation of trade and investment, and greater people to people cross-border interaction has increased mobility and allowed people to exercise basic socio-economic rights, this has given rise to several forms of non-traditional security threats. These include (but are not limited to), a) governance, security and justice, b) food security and livelihoods, c) conflict-led and disaster-led migrations, d) health epidemics, e) cross-border and in-country terrorism, and f) environmental security. One of the key

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pre-requisites of inclusive growth are regular efforts to ensure peace and enforce legal contracts in a manner that provides security of assets and profits. Sense of belonging, faith in community and collective security minimize the brain drain and bring more harmony to economic players at all tiers. While the medium term development plans (sometimes referred to as five year development plans) in South Asian countries have mostly focused on accumulation of physical capital, the mention of human capital has only appeared a decade ago. However the more concerning aspect is that plan and policy formulators still have not given due importance to social capital.

**Basic Infrastructure and Social Services:** A resource constraint in the public sector and rising costs of building and maintaining infrastructure (partly due to rising commodities prices) have led to competing demands on otherwise public goods. While the rich and influential manage to gain access to such needs through their privileged channels, there are many who get left behind in the process of economic growth or when growth falls apart. It is these challenges that provide a case for regional cooperation for poverty reduction. A matter of great interest for all South Asian countries is cooperation in energy and water sectors. Such cooperation can create internal economies of scale in the region and also lead to benefits that originate from country-specific specialization in these sectors. In case of social sectors there is a growing body of literature that points towards how inequality in education continues to keep societies poor. It is important to question who are the students that manage to reach university level education in South Asia and how the current structure of higher education continues to strengthen ‘elite capture’ of all forms of national resources.

**Connectivity:** South Asia’s dream of a seamless border still remains to be fulfilled. The key areas that require further work revolve around easing procedures that could facilitate movement of goods and people. In case of the former customs and quality standards procedures need greater harmony. In case of the latter, simple procedural difficulties such as visa issues are holding back aspirations of the people of South Asia. The lack of connectivity is no more limited to road, railways, aviation and port networks in South Asia (which have greatly improved over the past few years) but calls for a deeper understanding between governments to have conducive procedures in place.

**Engaging Youth and Diaspora:** Given the youth bulge it is an ideal opportunity for this region to ride on the energetic and creative productivity of youth in South Asia. This region needs to look towards countries such as Israel, Malaysia, China and Australia who have put in place formal plans and strategies to leverage youth-led innovations. The other player now playing an increasingly important role in economic development of this region are the expatriates. SAES should contemplate on out of the box solutions where by the Diaspora of this region can be steered to take a mentoring role (similar to China).

2. **What Next for SAARC?**

While there have been instances in South Asian history when the governments of SAARC member countries found themselves in a political deadlock, a significant development in the region has been the rise of civil society organizations, many of which have culminated in think tanks of global repute. These organizations help to keep the national governments on track with regard to the multifarious nature of issues involving regional cooperation. Many issues such as these go well beyond politics and economics and include concerns such as food security and livelihoods, climate change induced natural disasters, migration, connectivity of people and places, energy and water cooperation etc.
Despite the intent at people-to-people level towards economic integration in the SAARC region actual progress has been slow. SAARC secretariat, SAARC Chamber of Commerce and Industries and various SAARC level track-II initiatives need to take a closer look at lessons learnt from the past and identify what works and what doesn’t. The fact that for over two years SAARC heads of state meeting has not taken place simply indicates the lack of political will to take the process forward. The leadership in these countries is much more inclined to talk to the Association of South East Asian Nations (ASEAN), the European Union (EU) and related economic partners rather than their own neighbors.

The thinking community also needs to accept its responsibility in shaping political will. Under such a milieu we recommend a strong social accountability charter for SAARC, whereby the people of South Asia should demand progress on past accords. Such an effort should be led by civil society organizations in close liaison with key stakeholders including the business community, consumer associations and media groups in this region.\textsuperscript{77} Models and networks such as the South Asia Economic Summit present a forum where politicians, academia, the business community, consumer and other civil society groups can come together and form a coalition around shared ideas. Such a coalition can then act as a demand side accountability mechanism on South Asian governments.

Such an endeavor has recently borne fruit in East Africa where most countries now have a separate Ministry of Regional Integration – a ministry which is held accountable if no substantial progress is made in terms of business to business and people to people interaction across the region. Such a development is an innovation beyond the traditional regional integration models presented by EU and ASEAN.

\textsuperscript{77} The business community has long raised their voices in the context of weaknesses in SAARC Chamber of Commerce and Industries. They have demanded that this chamber should demonstrate its success expeditiously in resolving cross-border trade and investment constraints. In order to address this SAARC Secretariat has established a relatively new organization SAARC Development Fund (SDF), which will look into financing projects which can be replicated and up scaled across South Asia.
Section G:

Distinguished Speeches at 5th South Asia Economic Summit
Message by H.E. Mr. Ahmed Saleem, Secretary General of SAARC on the Occasion of the 5th South Asia Economic Summit

Excellencies, distinguished participants,

At the outset, I would like to extend warm greetings to the distinguished participants attending the Fifth South Asia Economic Summit being convened in Islamabad from 11 to 13 September 2012. I would also like to take this opportunity to commend the Sustainable Development Policy Institute of Pakistan for taking this exemplary initiative to hold the Summit on a very pertinent theme. The fact that, this event brings together several policy makers, scholars, economists and eminent personalities from the region and beyond, augurs well for its success. Even before assuming charge as the Secretary-General of SAARC in March this year, I had the opportunity to attend the Fourth South Asia Economic Summit held in Dhaka last October. Given its significance and important theme, I was looking forward to personally attending this Summit. Unfortunately, some other important engagements coinciding with this event, prevent my presence in your midst today.

As the distinguished participants may be aware, at the Seventeenth SAARC summit, held in Maldives last November, the Member States had not only renewed their commitment to alleviate poverty and reduce income inequalities within the region's societies, but also had reaffirmed their resolve to improve the quality of life and well-being of the people of the region through people-centered sustainable development.

Given the pronouncement of Member States at that Summit, the theme of the Fifth South Asia Economic Summit, ‘making growth inclusive and sustainable,’ is very relevant in the context of SAARC as well. I, therefore, have every belief that the recommendations of this event, will be very useful for the Member States of SAARC, in pursuing their resolves, made at the Seventeenth Summit.

SAARC, as a regional grouping of eight countries in South Asia, does recognize the importance of growth for the well-being of the people of the region. The Association also recognizes that for the growth to last or to continue smoothly, the vulnerable and the marginalized have also to be taken on board. That is precisely why there are two categories of countries under the Agreement on South Asian Free Trade Area, namely, non-least developed countries or NLDCs and least developed countries or LDCs.

I am glad to inform you that since the convening of the Seventeenth SAARC Summit, appropriate actions have been taken to implement its decisions. For example, the Seventeenth Summit has “directed the SAFTA Ministerial Council to intensify efforts to fully and effectively implement SAFTA and the work on reduction in sensitive lists as well as early resolution of non-tariff barriers and expediting the process of harmonizing standards and customs procedures.”

Accordingly, taking due note of the Summit directive, at the Sixth Meeting of the SAFTA Ministerial council held in Islamabad in February this year, the participating Ministers, while re-affirming their commitment to SAFTA, had expressed happiness over the progress made in the trade liberalization programme under SAFTA. Happily, the Council’s meeting also witnessed the two biggest economies of our region, namely India and Pakistan, deciding to enhance trade and economic cooperation.
between themselves. As many of you are aware, lately, India has decided to reduce the sensitive list for trade under SAFTA by around 30 per cent for non LDCs, including Pakistan.

In this context, I am also pleased to share with the distinguished participants that the relevant officials of the region have already met this year to discuss ways and means to further reduce the sensitive lists for trade under SAFTA. Some ideas for reduction of Sensitive Lists have been floated in this meeting. In the next meeting, it is hoped that the modalities for reduction of Sensitive Lists will be finalized. A special meeting of representatives of Member States to address the question of non-tariff barriers is also being held in the SAARC Secretariat. As SAARC pursues the objective of further reducing the Sensitive Lists to boost trade under SAFTA, I am confident that the inputs of Track II initiatives, including this, will be immensely useful.

The Seventeenth Summit had also directed the SAARC Finance Ministers to chart out a proposal to allow for greater flow of financial capital and intra-regional long-term investment among the countries of the region. Accordingly, the Fifth Meeting of SAARC Finance Ministers held in Dhaka in January this year, has directed a group of experts to come out with suggestions as to how the directive of the Summit could be implemented. Subsequently, the Finance Ministers also met in an informal session in Manila in May on the side-lines of the Governing Board Meeting of the Asian Development Bank and devoted their discussions to the theme, “Eurozone Crisis and Implications on South Asia.”

As many of you are already aware, during the Malé Summit, two regional Agreements, namely, on Multilateral Arrangement on Recognition of Conformity Assessment and on implementation of Regional Standards were signed. Five Sectoral Technical Committees have already been formed to harmonize standards in the areas of food and agricultural products, jute, textiles and leather, building materials, electronics, telecommunication and information technology and chemical and chemical products. These Technical Committees have already held some meetings in an effort to harmonize standards in the identified products. The idea is to eventually develop SAARC standards for various tradable products once the harmonization process is complete.

Before I conclude, I would like to emphasize that SAARC Member States must vigorously pursue greater economic cooperation in order to promote mutual trust and confidence that is indispensable to creating an environment of peace and stability in the region.

With these remarks, I wish the Summit every success. 
Thank you.
Speech by H.E. Mr. Nihal Rodrigo, Former Secretary General, SAARC on the Occasion of 5th South Asia Economic Summit

We are honored by the participation of Her Excellency Hina Rabbani Khar, Foreign Minister of Pakistan at the Closing Plenary Session of this 5th South Asia Economic Summit. Thanks are due to the Sustainable Development Policy Institute (SDPI) here in Pakistan, now completing two decades of activity, and its co-organizers from Bangladesh (CPD), India (RIS), Nepal (SAWTEE and SACEPS) and Sri Lanka (IPS) and other Partners, for excellent collaboration on this 5th SAES in Islamabad.

Concepts of inclusive growth and of sustainable development have been discussed, in all aspects, at this Economic Summit. We have all benefitted over the last 3 days by hearing varying views and candid opinions, even clashing comments among South Asian Ministers, Members of Parliament, the Corporate Sectors, Economic Research Institutes, Civil Society and academics on the complex theme of this Summit.

I take “inclusive growth”, in the SAARC context, to necessarily mean the involvement and engagement of all South Asian countries as well as all the citizens in each country - from the rich and the powerful to the poor and the powerless. People should not be excluded from the economic process, let alone, being victimized by aspects of it. “Sustainable growth” signifies the establishment of stable economic structures that would ensure the continued wellbeing of all citizens free of exploitation. All this needs to be achieved without undue parasitic damage to natural resources such as vital forest reserves and water resources on which millions depend. An ecological balance needs to be nurtured so as to ensure that inclusive economic processes will continue to benefit future generations as well.

In the Declaration of the 17th Summit of SAARC, held in Addu City Maldives last November, Heads of State/Government re-affirmed “their resolve to improve the quality of life and the wellbeing of their people through people-centred and sustainable development.”

In ideal terms, three inter-related aspects are vital for this complex process. First, within each SAARC member-state, there must be frank mutual understanding of complex factors enmeshed in the internal domestic economic equation among political parties, different corporate sectors, minority social groups and others among the disadvantaged “ruled”. Second, among the eight member-states, mutually beneficial engagements, and collaborative relationships on various aspects of regional cooperation should not be sullied by contentious bilateral political issues, some lingering from the colonial past, which obstruct inclusive development. Third, given the current global context and its pervasive influence on the region, a common South Asian perspective needs to be built up to contend with adverse impacts on the region’s economic development and security. All three aspects impact, one on the other, in our collective regional endeavours to achieve truly inclusive and sustainable development in South Asia.

The SAARC Declaration adopted at the 17th Summit in Maldives certainly recognized “the importance of bridging differences, creating understanding, and promoting amity and mutually beneficial and comprehensive cooperation” in order to create and sustain “effective linkages and connectivity for greater movement of people, enhanced investment and trade in the region”. The
Summiteers in their Declaration were, however, equally, clearly “mindful of the plurality of cultures and diversities within the region.”

Currently, all SAARC countries have declared their commitment to democratic governance. Yet, each country has its own multi-party structures and complex divisive, sometimes politically corrosive internal governance problems to confront, internally, within their own borders. This impacts on coordinated national growth. This is so particularly under federal systems. These can also impact on their relations with regional neighbors and create obstacles to regional cooperation. India’s Central Government, for example, for national stability, needs to deal with diverse disruptive competitive political parties/groups within many of its constituent states. India and Sri Lanka have close, long-standing, fruitful and enduring relations in virtually every aspect of bilateral activity, including religious, cultural, and people-to-people linkages.

However, what was described, in India, as “Coalition Compulsions”, impacted adversely on Sri Lanka. India felt compelled to vote against Sri Lanka’s national interests, in a resolution at the United Nations Human Rights Commission in Geneva, to pacify inter-party rivalry within India’s southern-most state, Tamil Nadu. Elements of competing political parties, within Tamil Nadu, encouraged by the UNHRC resolution, display “support” for Tamil ethno-separatism in Sri Lanka long after its violent impact had been stilled. All this, in Tamil Nadu, led to demonstrations and violent attacks by armed thugs on innocent Sri Lankan pilgrims at a religious site as well as against school children, members of a visiting sports team. These groups were forced out of India. The people-to-people aspects of Indo-Sri Lankan relations momentarily thus fell victim to vicious internal political party rivalries emanating within a single state of India. The close relations between the two central Governments are helping to remedy the effects of the terror tactics. The planned visit, on official invitation, to the Sri Lanka President to lay the foundation for a Buddhist University at Sanchi however remains.

With regard to economic coordination, earlier this month, India’s Foreign Minister S.M. Krishna visited Islamabad to review positive progress in the Dialogue Process between India and Pakistan. It must be recalled that he played a major role in SAARC at a time when the KKK issues (not the Ku Klux Klan but the Kabul-Kashmir-Kandhahar complexities) were delaying an already overdue SAARC Summit in Kathmandu and stultifying inter-Governmental action in SAARC. Following a close encounter of the economic kind, Mr. Krishna, then Chief Minister of Karnataka, stepped in to host a successful Economic Conference in 2000 in his state involving corporate entities, diplomats and economic institutions of South Asian countries to continue the economic consultations and coordination despite the disruptive political complexities of the KKK issues.

This 5th SAES takes place shortly after the adoption of the Indo-Pakistan Joint Statement, in which the two Foreign Ministers, inter alia, re-affirmed their joint commitment to “the goals and objectives of SAARC and agreed to make joint efforts to promote cooperation for regional development.”

Many conclusions reached at the last SAARC Summit in Maldives auger well for closer cooperation and strengthening regional responses towards inclusive and substantive economic and social development in the region. Yet, progress towards the major agreed objective to establish a South Asian Economic Union by 2020 has been slow despite the South Asian Preferential Trade Agreement (SAPTA) and the South Asian Free Trade Agreement having been signed. Former Indian Foreign Secretary, Muchkund Dubey, who was Vice-Chairman of the Group of Eminent Persons (GEP) in SAARC, is an important participant at this Plenary. The GEP’s comprehensive Report regrettfully remains unfulfilled on these aspects.
At the Addu City Summit, Indian Prime Minister, Man Mohan Singh stated that "India has a special responsibility that flows from the geography of the region and the size of (her) economy and market". Accordingly, he announced a welcome notification reducing the number of items on India's Sensitive List for the Least Developed SAARC countries, under SAFTA, from 480 tariff lines to a mere 25 with zero basic customs duty on the 455 items now liberalized. Pakistan has agreed to switch, this year to a negative list regime for India which would then be able to export about 6800 items to Pakistan by the end of the year, as against 1950 as at present. The Indian External Affairs Minister described this as “bringing economic content into the political relationship”.

In terms of economic connectivity vital to sustain and nourish regional development, SAARC Finance Ministers have been authorized by the Summit to proceed with greater flows of financial capital and inter-regional investments. The Addu City Declaration also calls for the conclusion of a Regional Railways Agreement, under consideration for a long period, and for a “demonstration run” of a container train connecting Bangladesh, Nepal and India. The India-Sri Lanka Ferry Service temporarily halted is to be resumed and a wider Indian Ocean Cargo and Passenger Ferry Service is planned. Economic connectivity is vital to sustain inclusive regional cooperation and development.

Sessions at this Economic Summit discussed priorities of closer cooperation on water management essential for enduring inclusive growth. At Addu City, the Pakistani Prime Minister had called for a region-wide approach to water issues, including water-shed management and glacier melting. The Bangladesh Prime Minister proposed institutionalized cooperation among riparians of the Brahmaputra and Ganges river basins to better manage scarce water resources in order to help sustain agricultural output and also provide safe drinking water for millions. Follow up action of course needs to be taken. The former UN Secretary General, Kofi Annan's comments of a decade ago holds true for SAARC: “Water problems of our world need not be only a cause of tensions, they can also be a catalyst for cooperation... if we work together, and a secure and sustainable water future can be ours.”

In the critical current stage of globalization, all nations, developed and developing, including in South Asia, need to work on inclusive and sustainable approaches to deal with, and counter, the grave world-wide, exigencies that have arisen. These imperil regional economies, environment, energy, and emigration patterns. Terrorism and non-traditional security threats, including people-smuggling, gun-running and drug-trafficking also endanger security, economic and social well-being in the Indian Ocean region. These threaten inclusive development and relations of South Asian countries with countries beyond the region as well.

All these exigencies also require closer consultation within SAARC, as well as, cautiously, with countries beyond the region, particularly Observer states of the Association which have expressed interest to cooperate in the mutual interest. The Observers are Australia, China, Iran, Japan, Republic of Korea, Mauritius, Myanmar, the United States and the European Union. The Sustainable Development Policy Institute has, in addition to collaboration with co-organisers from the regional Institutes based in Bangladesh, India, Nepal and Sri Lanka, also engaged as partners in the SAES, the World Bank, the Asian Development Bank, the United Nations Development Programme, the Commonwealth Secretariat, the (UK) Department of International Development the (US) East-West Centre and the Asia Foundation. All this has provided a broader perspective to the open discussions and emerging recommendations at this Economic Summit. It is vital to promote collective approaches for inclusive and sustainable cooperation in South Asia in the larger global context as well. Positive approaches and proposals emerging at the Summit need to be considered by State policy makers, rather than moving, on a parallel track without close encounters of the practical kind with decision-making State processes.
In New York’s corporate hub of Wall Street, well-organized mass demonstrations took place, with the participation of thousands of adversely affected youth, united in solidarity, condemning the unscrupulous greed of entrepreneurs who with illegal manipulations had made off with millions of dollars—like Madoff in the United States.

At Addu City, the Sri Lankan President Mahinda Rajapaksa, in his Summit Statement described what was emerging even in parts of South Asia as “a mood of urgency, even impatience, because a large and influential part of our societies consist of younger people, inspired by new ideas, looking forward with enthusiasm to a promising future. They cannot wait long. Patience is not infinite. Social factors also play a part. The Nepali Prime Minister Baburam Bhattarai stated that “the increasing gap between rich and poor has given way to enormous stress on social harmony… peace and security in the region. The challenge demands that poverty alleviation strategies be comprehensive and that socio-economic processes be more people-centred and justice based”. The next Summit of Heads of State/Governments takes place in Kathmandu.

At this Economic Summit, in many sessions, the vital need to engage, rather than enrage or exploit people in economic processes was discussed as essential to deal with the economic threats we face in common. Apart from over-exploitation of environmental assets endangering the livelihoods of those in rural areas, some entrepreneurs, seeking to conveniently minimize corporate costs in transport and distribution, have established factories, in crowded urban settings. Such establishments continue emitting virtually day-long noise pollution as well as poisonous chemical and gas emissions—sometimes with the tacit tolerance of complicit politicians.

At the Addu City Summit, Bhutan’s Prime Minister described human greed as perilously “employing our genius and technology to extract more, and faster; sell, and consume more; waste, and pollute more; (all this) in our singular aim for material person gain and mistaken symbols of success.”

At this Economic Summit, migration issues and freer movements, within, as well as beyond South Asia, were discussed in a specialized panel. Millions of South Asian workers feel the need to migrate to labour “markets” beyond the region, due to livelihood difficulties they face, lacking opportunities for productive employment in their own home countries. Their financial remittances to their families at home are achieved at the cost of much hardship to the migrant workers. Greater coordination among SAARC countries was urged to maximize advantages and minimize social and other threats to workers, most of them women. Some of this suffering was caused by unscrupulous, even unregistered labour recruiting agencies giving false promises to the workers.

Freer movements and liberal visa facilities within the region were also urged in Plenary and Concurrent Sessions. In the Joint Statement between the Foreign Ministers of India and Pakistan, it was decided that travel even across the highly sensitive Line of Control be “expanded on both sides to include visits for tourism and religious pilgrimages…(and that) both sides will facilitate speedy clearance of travel across the line of control”.

It is essential that the conclusions reached at this South Asian Economic Summit be factored for close interactive attention into the decision-making processes in the official Government sectors. While my own comments, in this Concluding Plenary, are a general summary of some of the proceedings, earlier sessions were more detailed in their specialized perceptive analysis of both the constraints and opportunities for inclusive and sustainable growth in South Asia. The South Asian Forum, established within the SAARC framework following its initial meeting, last year, in New...
Delhi, could well play a role as the means to bring diverse stakeholders and governments together for fruitful interaction. At the Addu Summit, Heads of State and governments stressed their recommendation that SAARC “needs to move from looking within, to accepting the logic of interdependence” which is vital for growth of the region to be inclusive and sustainable.
Special Remarks by Prof Mahendra P Lama, Founding Vice Chancellor, Sikkim University, India at the 5th South Asian Economic Summit

Mr. S.N. Qamar, Honorable Defence Minister of Pakistan, distinguished delegates, eminent guests and friends from South Asia

Warmest Greetings from India and from Sikkim University to all the distinguished participants. I am delighted to participate in the 5th South Asia Economic Forum organised by the Sustainable Development Policy Institute of Pakistan. The overarching theme of the Summit “Making Growth Inclusive and Sustainable in South Asia” is crucial to the entire South Asian Community both because the South Asian economies are at cross roads today at the regional and global levels and also because they are willing to act collectively as the region is steadily improving.

The comprehensive concept note prepared for this Summit by the SDPI team does very clearly reflect the diverse and formidable challenges the South Asian community have before them for any substantive move towards inclusive and sustainable growth in the region. Against this back drop, let me suggest a few regional interventions on issues of critical interest.

One of the key elements in the sustainability debate in this region is again refocusing on our traditional strength of knowledge, wisdom and skills. Education, knowledge and wisdom sharing has now become the core basis of both national and global development and the inter-dependence process. It is an inevitable and core link between inclusiveness and sustainability also. Today’s India is debating on very critical issues like the importance of foreign educational institutions; how to raise some of these university standards to international levels without disturbing the autonomy of these institutions; how to create a knowledge network of educational institutions like meta universities, research collaborations and faculty networks; and how to create flexible education systems through academic reforms and linking education to the world of work.

We all have a relatively smaller gross enrolment ratio in higher education and much smaller number of universities. India has set the target of GER of 30 % by 2020 from the present level of 13 %. Therefore, how to link universities to the societies around it such as universities as mentors of school education and universities as problem solvers of the neighborhood and how to attract the best faculty members are emerging as very crucial questions today. We witness similar exercises on educational reforms across South Asia. Could quality education and educational institutions be a core theme of the regional cooperation process for at least the next decade in South Asia?

Our own Sikkim University, a national University, established by an Act of Parliament in July 2007 has been created in such a way so as to make it known for its academic excellence and excellent research, for its all-inclusive institutional character, for refocusing on the rich cultural and natural heritage of the region and for institutionalizing public-private and community partnership programmes. Sikkim University has three distinct interdisciplinary academic programmes consisting of Conventional Programmes, Non-Conventional Programmes and Policy Studies Programmes. The theme of regional cooperation and cross border integration is widely pervasive in the entire direction, orientation and core contents of our University.
It is also high time that we set up a South Asian Commission on Environment primarily to examine the impact of Global warming on South Asia. This will be a good follow up to the two major studies viz., "Greenhouse Effect and its Impact on the Region," and "Study on the Causes and Consequences of Natural Disasters and the Preservation and Protection of Environment" carried out by SAARC in 1992. And also to our collective position in the 17th Conference of the Parties of the United Nations Framework Convention on Climate Change held at Durban. This will also fit very well into the Colombo Declaration for a Common Environment Programme adopted in 1998.

Climate change was the theme of the 16th SAARC Summit in Thimphu in 2010. It initiated programmes to galvanise and consolidate regional endeavours with the objective of making South Asia climate change resilient. In its declarations, it recommended the establishment of institutional linkages among the national institutions in the region to among others, facilitate sharing of knowledge, information and capacity building programmes in climate change related areas.

Receding glaciers, hot winters, and poor regenerative cycles have started occurring with greater frequency. All these may lead to failure of multiple industries. Continuation of environmental scarcity, along with an ever-increasing rural-urban development gap in turn could trigger large-scale displacement and migration like in Rwanda, China and South Africa. The most telling impact is likely to be on hydel power plants primarily fed by the water supplied by the glaciers in the mountain areas. What would happen to the Bhutanese economy which earns over US $ 203 million of revenue annually by selling hydel power and which constitutes over 40 % of national revenue?

Look at the Yellow river in China. This was the mother river in China. By 1997 not a single drop of water reached the sea for a 330 day period. The once mighty river has by now become a small, filthy stream that cannot even flush much of its sediment into the sea.

R Chidambaram’s report of the study group on Himalayan Glaciers led by Anand Patwardhan clearly indicates the huge knowledge gap and limitation of scientific knowledge. “Noting that the length of the available field data are too short to arrive at any statistically reliable estimate of the impact of climate change in Himalayan Glaciers, or to assess separately the impact of natural vis-a-vis anthropogenic factors, long term sustained monitoring of select glaciers should be given top priority.”

Universities in South Asia must come together to develop core competence in the critical issues of cross border implications of climate change. How many cross border environmental injuries will it inflict? Will it make the people insecure? Will it damage the physical and intellectual ecology? For instance two recent books published in China “China’s Water Crisis” by Ma Jun and “China’s Water Warriors” by Andrew C Mertha very clearly indicate the cross border implications of the water crisis related to development dynamics in China.

Ma Jun, a widely known journalist and a good friend of ours, writes “In China we have probably spent more time dealing with water problems than anywhere else on earth. In the past fifty years we built 85000 dams of various sizes in addition to other facilities and our water supply capacity was above 580 billion cubic meters per year. Urban water supplies increased a hundredfold. But both the arid north and humid south had worse water shortages. Why?

Apa Sherpa who scaled Mt Everest for the 21st time in May 2011 and whose village in Thame in Solokhumbu in Nepal was washed away by GLOF in Dig Tsho lake in 1985, made two very interesting observations:
• Imja lake which did not appear in the photographs taken in 1950s has now rapidly grown to over 1 sq km. It has become a threat to the entire region.
• Climate change has been most visible to the climbers. They have noticed big changes. He said "now the snow has reduced and it has become very dangerous especially on the Hillary Step, before the Everest Summit. When you wear cramptons for the snow, you suddenly encounter rocks and it gets very slippery. The rocky patch is increasing rapidly. Since 2007 the ice pinnacles in the Everest area have reduced in height and at the advance base camp. There has been flowing water in the climbing season, a clear indication that ice is melting. You no longer have to melt ice to drink water”.

The very nature, frequency, depth and dimensions of disasters are expected to undergo drastic changes against the impending backdrop of climate change triggered vulnerabilities. The cross border environmental injuries in the entire mountain region emanating from disasters and other calamities are likely to be more serious. No country can work alone to mitigate this. There has to be efforts from the region as a whole. SAARC as an institution has already initiated some projects in this regard through regional centers like on Meteorology. These initiatives have to be implemented immediately. We shall have to manage these disasters also in an integrated manner for which institutional coordination, exchange of information and knowledge on cross border basis and more importantly a regional legal framework are vital.

In the trade front, we feel three major interventions are required.
  o There is a strong need to enlarge and diversify the export basket of the neighbouring countries in order to enable them to participate in the SAFTA process effectively. This should be primarily based on non-traditional goods and services. For instance, we have been striving to put energy in the regional trading basket. This will facilitate the South Asian energy ring and also setup a power pool like that in SADC and NORD.
  o If SAFTA is to be effectively operationalised, the capacity of the various organs/institutions of the regional trade facilitation have to be drastically improved. Therefore, a SAFTA Facilitation Fund may be created to primarily train and build capacities among the stakeholders and actors in South Asian trade practices.
  o The dream of South Asian Community can only be realized if the SAARC member countries transform their perceptions about borders. All the exchanges take place through borders where India is the strategic and key actor. If India’s burgeoning economic growth is to be shared by its South Asian partners, it would happen primarily through borders and cross border linkages. Borders are the most critical channels of social, economic, environmental and cultural exchanges in the region. Borders are also becoming a major source of non-traditional security threats. Therefore, it is very crucial to change the concept of border and borderlands from a security centric perspective to a hub of socio-economic opportunities.

India and Pakistan can take the lead in unfurling these newer potentials of South Asian borders by launching a Smart Border Plan. This plan would essentially comprise of:
  • a seamless border for cross border low risk exchanges
  • a secure natural resources area to be covered by a regional convention and mutual harmonization of each other’s regulatory regimes
  • a common economic space
Most of the SAARC member countries depend heavily on the remittances from abroad. In the last few years, between 2 – 3 lakh workers have gone abroad annually from each of these countries for employment. The SAARC countries could sign a convention to collectively work on the issues of migration outside the SAARC region. By their very nature the migrants from South Asia tend to flock together across the world for purposes of convenient passages and transits, cultural and social similarities, food habits, community services and modes of sending the money. While tackling any difficulties also, they tend to be guided by the South Asian diaspora, each other’s embassies and other South Asian agencies. For instance, in the evacuation of South Asians from Lebanon during the Israeli bombings, the Indian Embassy evacuated maximum South Asians to their respective home countries. This gesture was highly appreciated by other South Asians. The objectives of this Convention should be to:

   a) Protect each other’s migrant community
   b) Coordinate a collective position on immigration policies of the destination countries and make a collective action
   c) Collective bargaining with the developed market economies and other labour importing countries on making the labour market more liberal through mechanisms like the movement of natural persons under Mode IV of the WTO negotiations.
   d) Check human smuggling and irregular migrants
   e) Facilitate the fight against increasing securitization of migrant population among the countries in the North.

This kind of regional convention could bring substantive gains to South Asia. More remittances will increase economic and social stability. South Asian diaspora could also be a major constituency in the regional cooperation, integration process and in any global forum.

We are still not able to make any great leap forward on the issues of Cross Border Connectivity. Unlike China that has grand plans to take huge road networks and railway lines to all the neighbouring countries, we remain strictly within the national security box phenomena. For the last few decades getting access to the North East region through Bangladesh, the transit corridor to Afghanistan and other central Asian countries through Pakistan and access to South East Asian countries through Myanmar and linking more effectively Nepal, Bhutan and Tibet Autonomous Region and other parts of Western China, have remained broad policies without any time bound work plans.

These linkages should include a power grid connection between North East region of India and Bangladesh, Bhutan and Nepal and between Lahore and Amritsar; Bangladesh’s physical access to Nepal and Bhutan through Phulbari corridor; building of major highway from North East region to Myanmar; drastic improvement in the infrastructures at Nathu la, Bomdila and Ladakh and India-Pakistan borders, railway access to Nepal, Bhutan, Bangladesh and Pakistan and overhauling of water ways between North East region of India and Bangladesh. This could even include a land bridge between India and Sri Lanka for which studies have already been carried out.

Several institutions like RIS and JNU in India, CPD in Bangladesh, IPS in Sri Lanka, SDPI and PIDE in Pakistan, IIDS in Nepal and eminent experts and individuals in the region have worked consistently. Today we have one of the best pool of regional experts and a huge reservoir of implementable and
actionable projects that directly relate to inclusive and sustainable growth. However, most of these projects have remained in their embryonic stage. We need to deliver now. And I am sure a Summit like this facilitates and expedites the delivery process. Let us implement at least one project in all areas of cooperation. Ultimately it will make a difference.

Our hearty thanks and deep sense of gratitude to the entire team in SDPI led by Abid Suleri for giving me this opportunity to address such an illustrious gathering.

Thank you once again for your kind indulgence.
Inaugural Speech by H.E. Mr. Rajiva Wijesinha, Member of Parliament Sri Lanka: Enhancing South Asia’s principal asset – its People

I am grateful to the Sustainable Development Policy Institute of Pakistan for inviting me to this Summit, and giving me an opportunity to discuss its theme in relation to Sri Lanka. As you are aware, Sri Lanka recently came out of decades of conflict which had impaired economic development, and in particular the promotion of equity in such development.

Comparatively speaking Sri Lanka did reasonably well with regard to growth, except when there were grave problems, as in 2001. However that growth was lopsided, with almost all the increase in wealth that has propelled us upward from being a low income country into middle income status occurring in the Western Province. Since it was such lopsided development that contributed to a series of youth insurrections in the last four decades, it is vital that we correct this imbalance if we are not to face further disruptive unrest in the future.

Two of those insurrections were by Sinhalese youngsters in the south of the country, which indicates that the neglect from which the majority Tamil Northern Province and the majority Tamil speaking Eastern province suffered was not deliberate. However, in a context in which decisions are made through a majoritarian system of government, it is understandable that shortcomings as to developmental activity were attributed to racism. It is vital therefore that the government not only ensures positive developments in the North and East, as well as in other previously neglected regions, but takes steps to institutionalize these by ensuring decision making processes that respond rapidly, not only to people’s needs, but also to their aspirations.

I should note that this is being attempted in Sri Lanka to some extent, not least I suspect because the present Head of Government in Sri Lanka is the first elected leader who is not from the Western Province. Obviously such origins are not a requirement for commitment to rural development, and we have had three leaders in the past who devoted a lot of time and energy to promoting equity. But their perspectives were limited by a centralized vision, so that there was inadequate attention to promoting local participation in the development process.

Nowhere is this more apparent than in an area you have highlighted in your Concept Paper, namely that ‘inequality in education continues to keep societies poor’. There was a valiant attempt by a visionary Minister of Education in the thirties – when the British ran what they thought were the important departments of government, but allowed us executive power in some areas – to develop centres of excellence in what then seemed regional hubs. But no effort was made to expand these as the demand for education grew, and the quality of the service they provided declined in comparison to what is available in Colombo and a couple of other major towns.
With regard to universities, moving out of Colombo and Kandy did not happen for 25 years after independence, in contrast for instance with the brilliant idea of Institutes of Technology which India set up promptly all over that country. By the time we set up universities in every province, a process which was completed just a decade ago, the staff and the courses these new institutions could offer were stuck in a time warp that precluded job oriented training. In short we were stuck with the old exclusive British model of tertiary education, which the British have themselves long abandoned.

We have also suffered immensely from a statist approach to education. When, through the government elected in 1977, we moved together with several other countries out of the command economy model which our politicians who came to maturity in the thirties had absorbed, we privatized mainly the business sector. Allowing private or non-profit agencies to work in education was considered taboo, though interestingly enough this was permitted in the health sector, which continues to flourish. We were distinguished in South Asia fifty years ago for our excellent health and education indicators, and we still continue to provide better services than I think all the rest in health. But in education, though our literacy and schooling figures are still comparatively excellent, we have rested on our laurels, and produce nothing at the top end of the scale that can compare with what other South Asian countries have achieved.

After the commitment of both state and the private non-profit sector to supply a good education turned into the establishment of a state monopoly, a rot set in. The state simply could not supply enough, and maintain high quality, so we now have the ludicrous situation of additional supply being provided by international schools and by tutores. Unfortunately our doctrinaire statists object to the former, and allow the latter full reign, even though they clearly disrupt the school with great destructiveness, given that many school teachers give tuition and expect their students to come to their classes to get what is not given in school.

Vested interests thus prevent the radical reforms that are required. Fortunately perhaps, the situation has now declined so dramatically that there is a general consensus change is essential, and this theme has been taken up by urban interest groups too. The quiet sustained suffering of rural areas will therefore I hope be alleviated soon. Certainly, at the Divisional level Reconciliation Committees I have set up in the North and East, complaints about education form a high proportion of the criticisms made and contribute to continuing resentments, which it would be so easy to overcome.

Two specific complaints highlight the problem. The first, pervasive at all meetings, is the shortage of teachers for English and Science and Maths. I explain that this is true nationwide, but I can understand the point of view of Tamil communities that, if successive governments have failed to deal with this problem for six decades, those who did not vote for any of them should be given a chance to develop their own systems. In any case it is vital that, in line with practices in other fields following abandonment of a statist model of development, the government should abandon its monolithic hold on teacher training, and allow other suppliers to move in and perhaps do better than the government does, in terms
of quality as well as outreach. But the government continues to stick to methods that have failed repeatedly, with each successive Minister of Education implying that he will achieve what his predecessors failed to do, without understanding that such protracted failure indicates that the system is at fault, not everyone else who has gone before.

We continue then to let our people down, since, as your Concept Paper puts it, ‘plan and policy formulators still have not given due importance to social capital’. This is apparent, and perhaps more upsettingly so, in another area brought to my attention, when a representative of a Women’s Rural Development Society in a remote Division in the North told me that they needed training in marketing. The population was generally appreciative of what the government had done to get agriculture going again so swiftly in areas ravaged by war, the mine clearing, the irrigation work and the road building to improve connectivity that I believe we did more quickly than any other country that had suffered from such a conflict. But we did not do enough to ensure that the perennial problem of our farmers, exploitation by middlemen who pay them little and then make huge profits on a good harvest, was overcome.

Modern farming communities need training, in marketing and value addition, which requires better numeracy and communication skills as well as technical support. We have to do much more in this regard if the immense infrastructural input we have supplied is to lead to rural communities being benefited as they deserve.

Unfortunately we have not moved as swiftly as we should with the high level technical and vocational training that is needed. Our universities still cling to outdated notions of academic excellence, and even the Vocational and Technical University that was set up to overcome this problem has not developed courses that also provide soft skills that could, on a modular basis, allow technicians to obtain degrees. Students have often to travel miles to follow courses in wiring and plumbing, which means that outsiders often get jobs in the construction work that government and other agencies have engaged in at prolific levels to build up the region.

Three years ago, when reconstruction began, we failed to plan comprehensively, and in particular to work on developing human capital. Perhaps we thought that, as had happened in the East, the development of infrastructure and connectivity would stimulate business activity and promote prosperity for all. But, though that worked satisfactorily enough, and the East is certainly a much more prosperous area than previously, we have not done enough to ensure productive employment for younger generations that now have enhanced expectations. And in the war torn areas of the North, where human resources development did not take place to any appreciable extent, given the practice of the LTTE of treating all youngsters, except for a selected elite few, as cannon fodder, we should have seen the need for a much concerted effort.

What the last few decades have taught us emphatically is that the trickle-down effect does not take place in less developed societies (and I suspect elsewhere too, though it might be masked better there), without state intervention and support to promote equity. And as
Amartya Sen, if I am paraphrasing him correctly, pointed out, when assured that equity would be a consequence of growth, it should be the main purpose of growth.

This requires planning with regard to people as much as infrastructure. Education and training has to be modern and comprehensive, with careful attention to the soft skills, of communication and inter-personal relations and general awareness that are essential for employment anywhere and everywhere in the world. Initiative, entrepreneurship, management, presentation skills, should all be made available. The fact that so many of our youngsters do not have the technical expertise and the attitudinal capacity to help the region grow at the levels it is capable of has been highlighted by many of those who are participating in this summit, and we must make sure that the reforms they advocate are internalized and institutionalized by policy makers responsible for education as well as planning.

And we also need to make sure that the administrators who make or contribute to decisions have initiative and flexibility. They should be able to solve problems and make decisions without indulging in procrastination and restrictive reliance on abstract principles and authority. It was I think a renowned Pakistani journalist who noted that, in the years since the countries of South Asia got their independence, the capacity of the bureaucracy has deteriorated more than the incapacity of political parties and personalities. There are of course exceptions, but unless we make sure our decision makers at all levels have the soft skills essential to act swiftly as well as intelligently, all the good the private sector can achieve as the engine of growth will be nullified, so that benefits will be lopsided and doors will continue to be shut to large segments of society.

At a recent workshop of Globalization I recall Senator Pimentel of the Philippines pointing out how the West was anxious for free trade of goods and services and finances, but resolutely opposed the free movement of labour. He noted that they pushed globalization with regard to what they were good at, and suggested that we should question this, and push for globalization of what we are good at, namely people. I believe that we should promote that as policy for all our governments, but we should also ensure that governments serve that great asset better, by enhancing knowledge and skills and capacities as best possible. Without that growth will not be inclusive, and it certainly will not be sustained.
Special Remarks by Saeed Shafqat, Chairperson Board of Governors, Sustainable Development Policy Institute

Distinguished Guests and participants from South Asian States, Executive Director SDPI, Abid Qaiyum Suleri, members Board of Governors, respected Parliamentarians, Distinguished National and International participants, members and representatives from national, regional and international partner organizations, members of the press corps, diplomats, ladies and gentlemen.

I would like to begin by conveying my thanks to all of you for coming out here and being a part of this gathering. Today's proceedings have been sobering, insightful and on some issues painful but enlightening. The 5th South Asia Economic Summit holds immense value for Pakistan and it is heartening to see that SDPI is playing a pivotal role in hosting and organizing it. SDPI continues to be one of the leading non-governmental, non-profit, and oldest policy think tank in Pakistan, and its past discussions on topics have enlightened citizens across Pakistan and South Asia via conferences, publications, interviews and policy dialogues like the 5th Economic Summit.

Distinguished Guests,

Today's deliberations on *Making Growth Inclusive and Sustainable in South Asia* are timely, relevant and invite us to recast and re-imagine issues of economic growth and inclusiveness. In the past few weeks, we have witnessed a new resolve between India and Pakistan, where a set of new initiatives in opening up visa regime, trade and business friendly environment if sustained and pursued with vigor and imagination could lead to new beginnings in economic cooperation in South Asia. Bi-lateral and multi-lateral agreements facilitating economic, cultural, educational, and parliamentary and media exchanges could make South Asia move away from strategic rivalry to deeper economic cooperation. This is a positive trend and could pave the way for a change in mind set – moving us away from hostility and antagonism to harmony, cooperation and peace. The size, scale, levels of South Asian economies and demographic pressures make inclusive and sustainable growth a tough call. This demands investment in infrastructure development and designing globally competitive regulatory framework and institutions. Let me remind us that if we are to truly succeed and make growth inclusive and sustainable in this region, we need to focus on potentialities of developing a shared vision and collective gains rather than bemoan the hardships. I take this opportunity to share some of my thoughts.

First, it appears to me that we need to develop a regional outlook and strategy to combat natural disasters. Natural disasters will uproot even the best of economies, and the precarious ones that many South Asian countries have are particularly susceptible. There are numerous studies that point out that environmental and climatic disturbance play a pivotal role in the downfall of the economy and rise in poverty, and though nature cannot be harnessed, one should be prepared for its very worst wrath. The 17th Conference of the Parties of the United Nations Framework Convention on Climate Change held at Durban has been vowed as an important step towards combating global climate change, and it is here that we see an opportunity present itself. The Durban talks represent an intellectual breakthrough, and countries who stand alongside it promise to cut greenhouse gas emissions by the year 2020. In an attempt to ease the process for poor, the Global Climate Fund plans to provide $100 billion annually by 2020. In addition, some decisions were also taken with regards to the manner in which carbon offsets should be allocated under the Clean Development Mechanism to carbon capture and storage projects. Finally in the interest of
capacity building of developing countries a Climate Technology Center and Network will be established which will ensure systematic transfer of technology. The good news is that SAARC has ventured to adopt some of these recommendations.

Second, increasingly South Asian countries are feeling the pinch of water and energy shortages. This demands not only innovative solutions but also concerted efforts towards seeking solutions that are based on regional consensus and needs. A matter of great interest for all South Asian countries is cooperation in energy and water sectors. Such a co-operation can create internal economies of scale in the region and also lead to benefits that originate from country-specific specialization in these sectors. Engaging China and Central Asian States could ease South Asia’s energy needs.

Third, South Asia is a region split by both domestic and inter-state prejudices and beliefs. A prime example would be the relationship between Pakistan and India. For example, Pakistan granting India the status of ‘Most Favored Nation’ was a gesture of goodwill; the act did not go without receiving intense criticism and sparking controversy within the country. However, as I said earlier the change is in the offing and holds promise for a better future.

Fourth, In case of social sectors there is a growing body of literature that points towards how inequality in education continues to keep societies poor. Making quality education accessible and affordable for most if not all is a desirable goal; however, many South Asian states are lagging behind in achieving this Millennium Development Goal (MDG). It is becoming a critical question how and why current structure of higher education continues to strengthen ‘elite capture’ of all forms of national resources? This would imply that there exist different classes of people throughout South Asia filtered not only through personal finances, but also through their ways of thinking- Is there a shared vision for inclusive growth in South Asia? What are some of the mutual ideas, concepts, values, that could bring the citizens of South Asia closer, so they aspire for peace and curb violence? Surely, the Summit agenda is clearly focused around responding to such tough questions, however, my point is that prevailing conditions in the region are extremely harsh for sustaining any inclusive and balanced in growth. The rhetoric and to some extent policy practice of inclusive growth has traditionally involved actors which include regulators, civil service, entrepreneurs, business groups and civil society organizations (CSOs). However stronger input from two constituencies is still required. These are members of academia and communities at the micro level.

The challenge for academia is to encourage a culture of research that calls for celebration of diversity and creates an intellectual environment for a broad based consensus on these issues. While CSOs claim to represent the wider society, holistic representation of communities is excluded due to barriers related to language, culture and accessibility. It is in this context; it seems to me that a growing body of literature is advocating cultural diversity as the fourth pillar of sustainable development framework. The Human Development Report 2011 explains at length how the business-as-usual approach towards pressing issues related to production; trade and environment are increasingly making the world an unsustainable place. The report also recognized that power structures and gender inequalities in developing countries dictate the access to most basic services. This implies that Rio+20 and its follow up will shape a new beyond-MDGs agenda. Any new discourse should focus on the increased value of accountability and democratic processes and community-led approach to development. There is a need to experiment and explore how institutional processes can be made more inclusive so that due attention can be given to women, minorities and marginalized groups.
Ladies and Gentleman,

The last point that I shall leave you to mull over during next 2 days of deliberation is that for Making Growth Inclusive and Sustainable, South Asian States need to rationalize their defense expenditures. Currently, India is spending about (US dollars) $ 32 billion, which is projected to grow to $80 billion by 2015, while Pakistan is spending slightly over $ 5 billion, which is projected to reach $ 10 billion by 2015. Changing this policy and mind set demands a structural change – a change from an economy of war to an economy of peace and that implies showing preference for trade, investment, freer movement of people and valuing peace. This also means cross border and proxy wars must be replaced by cross-border cooperation. For regional peace, expanding economic opportunity and improving social justice needs to be recognized which takes quality of manpower as a pre-requisite and requires investments in human resources.

Citizen security, citizen welfare and drive for promoting regional harmony and peace would encourage a culture of peace. Incentivize peace for self-growth, community development, internal reform and prosperity so that a culture of peace and economic growth gains momentum. It is only improvement in quality of life which instills the value for life and respect for the well-being of fellow citizen and possibly curbs and deflates the tendency towards violence and terrorism. But most importantly, it is the democratic process that promotes evolutionary change through negotiated settlements and resolves conflicts on resource allocation that could lead to mutually rewarding bi-lateral, multilateral trade agreements promoting an environment of regional harmony and peace. Despite serious challenges the good news is that democratic process is gaining momentum, respectability and wider regional legitimacy and that brightens the prospects for transformation of the South Asian Policy mind set from rivalry, hostility and distrust of the other to harmony, peace and cooperation. The change is in the air; the challenge is staying on course and developing mechanisms to sustain it.

Distinguished Guests ladies and gentleman, I’d like to once again express my gratitude to all those who have come, and applaud the SDPI- researchers and staff for doing an excellent job in hosting and organizing the Summit. I am both humbled and honored to be here and I have no doubt in my mind that this Economic Summit will lead to a strategic shift in intellectual and policy discourse and would prove fruitful for generations across South Asia. Inclusive, equitable and just growth is the only way forward. I wish you all an enjoyable stay and a successful Summit.

Thank you so much.