

India's Exports to Other SAARC Nations: in Context of SAFTA



Pooja Srivastava

Assistant Professor,
Deptt. of Economics,
JTGDC,
University of Allahabad
Allahabad

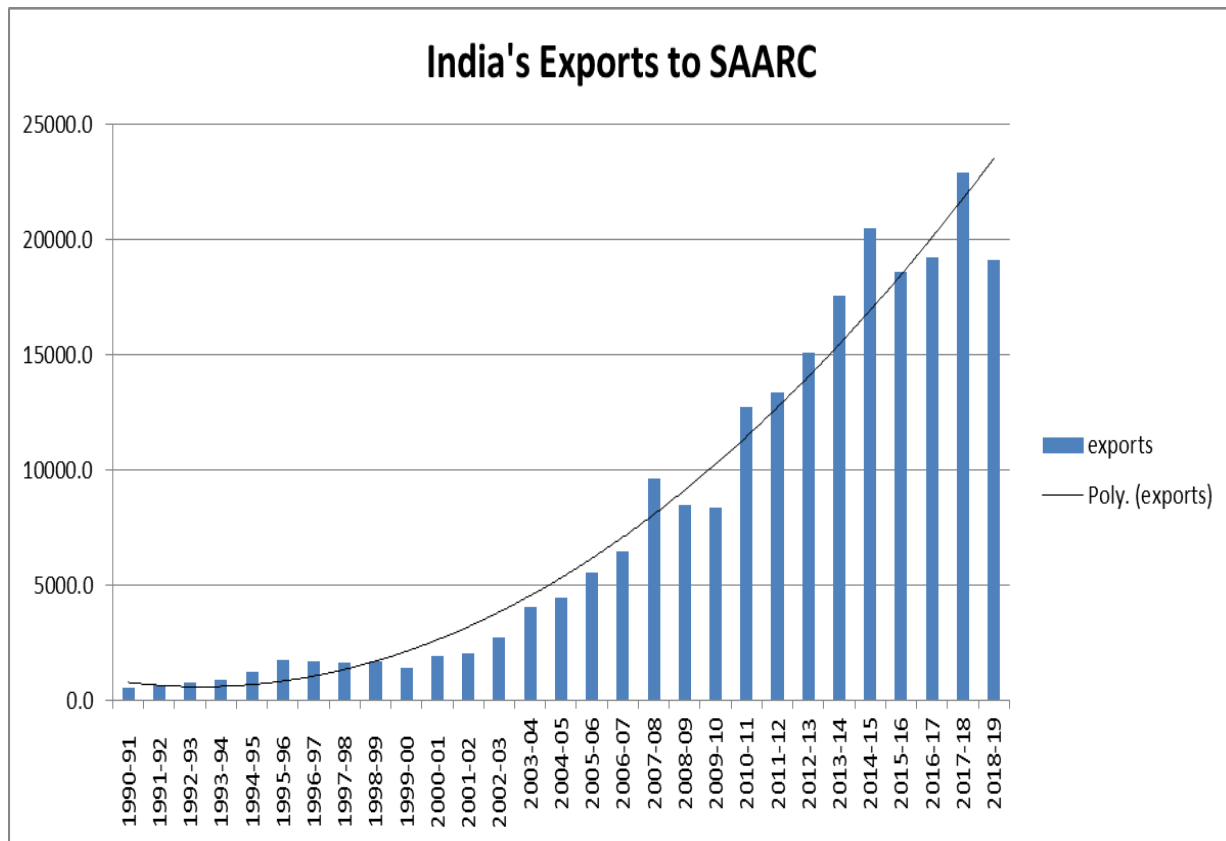
Abstract

South Asia is a varied region comprising of eight different countries. Together they account one fifth of world population. The challenge of South Asia to further accelerate growth is a 'stretch target' but not an impossible to attain. South Asia's transition from low income to middle income status is not only a big economic challenge but also a social and political challenge. This region has two positives i.e. demographic and geographic advantage both of which are still not extracted to its highest level. Thus by taking advantage of this demographic dividend and immense natural resources south Asian region can leave behind western countries. This paper aims at identification of various challenges whether political or economic those are hindering the path of high growth trajectory of this region and preventing it to adopt second generation of economic reforms, by analyzing the relations of different south Asian nations with India. Present study analyses the trade relation of south Asian nations Bangladesh, Pakistan, Bhutan, Sri Lanka, Maldives, Nepal (SAARC Members except Afghanistan) before and after the enforcement of SAFTA (South Asian Free Trade Agreement).

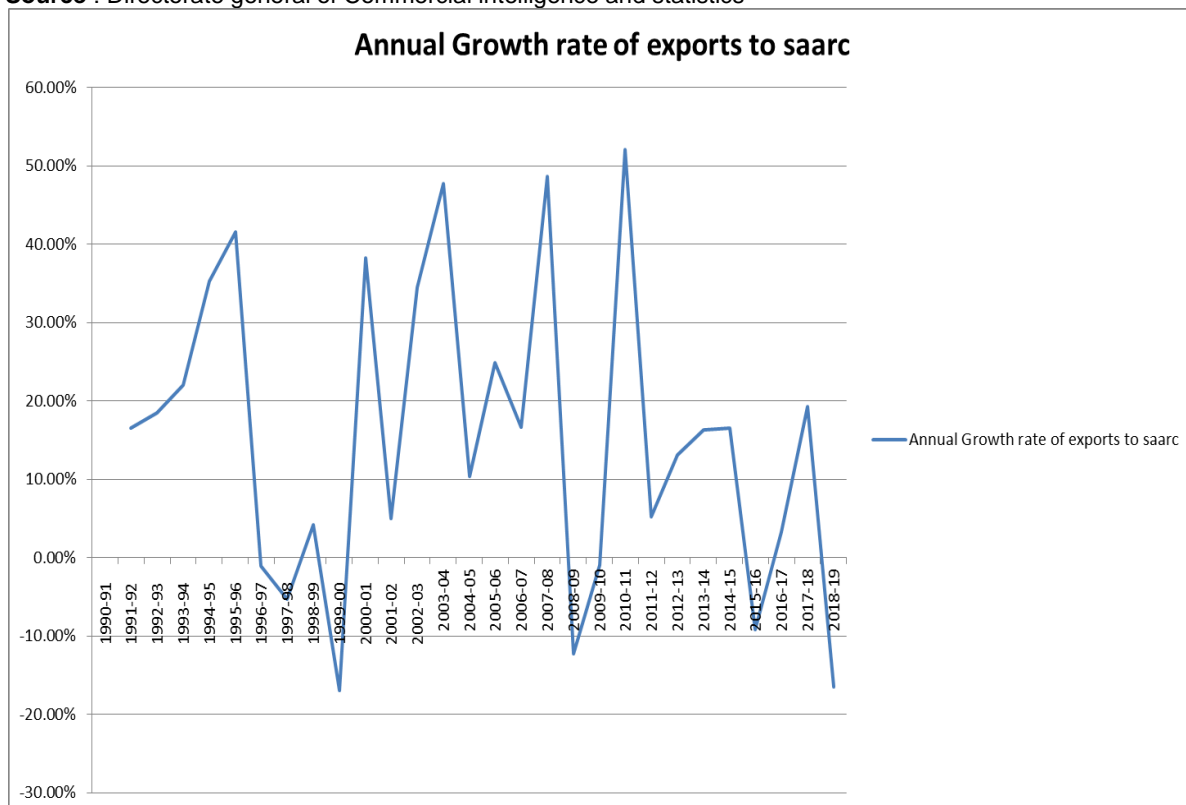
Keywords SAFTA, SAARC, Exports.

Introduction

South Asia, including India, Bhutan, Afghanistan, Pakistan, Sri Lanka, Maldives, Bangladesh, and Nepal, is about the same size as Europe, and has 1.6 billion people that constitute about one-quarter of the world's total, is known for conflict, violence and mutual distrust, border disputes among nations for establishing supremacy whether economic or political over this region. The major challenge of growth of south Asia is the presence of mutual distrust among nations. Each nation is reluctant to collaborate its economic policy with other nation. Although this region has a lot natural resources that can be extracted in cooperation with each other in better manner as some nations have resources but they lack technology some have developed technology but don't have enough resources but none come forward to cooperate in economic manner. Some efforts on the part of India is taken to maintain a balance in this region but these are not enough to sustain this balance. There are political issues among nations of south Asia. Boundary problems between India-Pakistan, continuous aggression on LOC, refugee problem of Bangladesh all these issues are preventing a future positive prospect in economic and political scenario. Competition to become major economic power in region is leading to tensed relation among nation. Recent move of China over South China Sea, its foreign policy on Maldives in conflict with India, all are current reasons behind the stretched relations. Although there are many regional groupings to promote mutual trust, economic development and to resolve political issues but these are not successful due to mutual misunderstanding and non-cooperation among nations. Every nation in south Asia aims at its own benefit and to make their nation a leading power in the region at the cost of other. In this regard SAFTA proved a major breakthrough for the economic development of the region. Therefore it is imperative to study the Impact of SAFTA on the India's Trade relations with other south Asian countries in context of SAFTA.



Source : Directorate general of Commercial intelligence and statistics



Source :Compiled by researcher on the basis of data from Directorate General of Commercial Intelligence and Statistics.

Review of Literature

Mehta, Rajesh; Bhattacharya, Swapan K.(2000) in their paper entitled as , "The South Asian Preferential Trading Arrangement: Impact on Intra Regional Trade" reported that closer economic integration leads to an increase in Intra regional Trade, particularly in manufacturing sector. Thus this paper also provides an optimistic view for the SAFTA.

Jayatileke S. Bandara, Wusheng Yu (2003)in their paper entitled as "How Desirable is the South Asian Free Trade Area? A Quantitative Economic Assessment" tried to enquire about the questions "Will SAFTA create gains for its members or not? Is it better for South Asian countries to promote non- discriminatory trade liberalisation rather than SAFTA? The main objective of their paper was to address the desirability of SAFTA for this purpose they had used a global computable general equilibrium (CGE) model and identified threepoint of vives on the desirability (or viability) of SAFTA: pessimistic, optimistic, and moderate. The results from two policy scenarios (unilateral liberalisation and SAFTA) confirm the pessimistic view and concluded that unilateral liberalisation would benefit South Asian countries much more than preferential liberalisation (SAFTA).

SeekkuwaWasamHirantha (2003) in his paper entitled as "From SAPTA to SAFTA: Gravity Analysis of South Asian Free Trade" had used the gravity model analysis to evaluate the progress of SAPTA and the prospects for SAFTA using trade data for 1996-2002 using both panel and cross sectional data for the analysis. Gravity model results show that there is a significant trade creation effect under SAPTA and there is no evidence of trade diversion effect with the rest of the world. This paper provides optimistic view for the SAFTA and supports the proposition that South Asian Free Trade Area is most likely to promote intra-regional trade through further dismantling of tariff and other non-tariff barriers to trade among member.

Taneja, N.; Prakash S.; Kalita P. (2013) in their working paper "India's role in facilitating trade under SAFTA" opined that concessions given by India under SAFTA for LDCs have greatly benefitted Bangladesh and concessions to non-LDC members have applied to its imports from Pakistan. India has given significant concessions to Sri Lanka and Nepal under bilateral trade agreements and proposed a optimistic view for the efforts under SAFTA would benefit the regional trade integration process much more than before. They had examined the ground covered so far by India and the challenges that remain for it to realize the benefits under SAFTAand proposed to address problems related to liberalisation of tariffs (including trimming sensitive lists), non tariff barriers, transport and transit barriers and customs reforms.

Jamil,M.; Satti,R.; Sultana,M. (2017)in their work Impact of Trade Agreements on Exports: A Cross Country Analysis of Selected SAARC Countries used Gravity model for the study period of 1980 to 2010 and concluded that SAFTA can affect the trade among the SAARC countries and it can play

a big role to boost the exports of countries like India. Their study found positive impact of SAFTA on the Pakistani exports though bilateral agreement tends to have negative impact on the Pakistan's exports.

Abhyaratne, A.; Varma,S.; (2018) in their work "Impact of FTA's on the trade flows: A study of India Sri-lanka Free trade agreement" used the Gravity model for panel data and used weighted least squares. The time period of their study was 1990-2014 and they concluded with the positive impact created by FTA's on the trade of contracting countries. They also found that trade creation effect of FTA's is greater than the trade diversion effect thereby indicating grater welfare gains due to FTA's .

Need of the Study

A strong neighborhood with integrated economy is pertinent for the stable and sustainable growth of any country. SAARC group had contributed economically culturally and politically for the overall growth of this region. Therefore it was pertinent to study the impact on imports from SAARC nations and exports to SAARC nations after the implementation of SAFTA.

Objectives of the Paper

1. To study the changes in India's exports to SAARC before and after SAFTA came into effect
2. To analyze the trade relation of India with other south Asian nations.
3. To identify the major challenges in development of trade relation between India and other countries of South Asia

Hypothesis

The study has been based on the following Hypothesis –

1. H_{01} : There is no significant difference in India's Exports to other SAARC nations exceptAfghanistan before and after SAFTA came into effect
 H_{a1} : there is significant difference in India's Exports toother SAARCNations exceptAfghanistan before and after SAFTA came into effect
2. H_{02} :There is no significant difference in India's exports toBangladeshbefore and after SAFTA came into effect.
 H_{a2} : there is significant difference in India's exports toBangladeshbefore and after SAFTA came into effect.
3. H_{03} :There is no significant difference in India's exports toBhutanbefore and after SAFTA came into effect.
 H_{a3} : there is significant difference in India's exports toBhutanbefore and after SAFTA came into effect.
4. H_{04} :There is no significant difference in India's exports toMaldivesbefore and after SAFTA came into effect.
 H_{a4} : there is significant difference in India's exports toMaldivesbefore and after SAFTA came into effect
5. H_{05} :There is no significant difference in India's exports toNepal before and after SAFTA came into effect

- H_{a5} : there is significant difference in India's exports toNepal.before and after SAFTA came into effect.
6. H₀₆:There is no significant difference in India's exports toPakistan before and after SAFTA came into effect
 H_{a6} : there is significant difference in India's exports toPakistan before and after SAFTA came into effect.
7. H₀₇:There is no significant difference in India's exports toSrilankabefore and after SAFTA came into effect
 H_{a7} : there is significant difference in India's exports toSrilankabefore and after SAFTA came into effect

Research Design

Present work is mainly worked with the use of secondary data obtained from the RBI handbook of statistics on Indian Economy. The research methodology used for the present work is as follows:

1. Exploratory research technique is used and for the purpose of the study Data is collected from various issues from RBI handbook of statistics on Indian economy and online data source on Indiastat, that are officially published by Directorate General of Commercial intelligence and statistics, Ministry of Commerce, GOI.
2. Data collected for the India's exports to SAARC and the member countries viz. Pakistan, Sri-Lanka, Bhutan, Nepal, Maldives and Bangladesh, individually.Afghanistan is excluded from analysis because of data unavailability.
3. export data are collected for the time period 1990-91 to 2018-19 and for the analysis of

Impact of SAFTA on the trade relation the time period is divided as

- i. 1990-91 to 2005-06 : before implementation of SAFTA
- ii. 2006-07 to 2018-19 : After implementation of SAFTA

SAFTA (South Asian Free Trade Agreement)

The SAFTA Agreement was signed in 2004, and cam into force on 1 January 2006 and the Trade Liberalization Programme commenced from 1 July 2006. SAFTA aimed at promoting and enhancing mutual trade and economic cooperation among Contracting States by eliminating barriers to trade in, and facilitating the cross-border movement of goods between the territories of the Concerned States. The main aim of SAFTA was to promote fair competition with in the free trade area and ensure equitable distribution of the benefits across all concerned states considering their respective needs and strategies for economic development. It also aimed for creation of effective mechanism so that this agreement could be implemented and also develop a mechanism to jointly administer and resolve the disputes. It also aimed for establishment of a framework to expand further regional cooperation and develop more instruments that are mutually beneficial.. The SAFTA agreement consists of arrangements related to: tariffs; para-tariffs; non-tariff measures; direct trade measures. This Agreement will be implemented via the instruments like Trade LiberalisationProgramme, Rules of Origin, Institutional Arrangements, Consultations and Dispute Settlement Procedures, Safeguard Measures or Any other instrument that may be agreed upon between the concerned states

Year	India's Exports to SAARC	India's Exports to Bangladesh	India's Exports to Bhutan	India's Exports to Maldives	India's Exports to Nepal	India's Exports to Pakistan	India's Exports to Sri Lanka
1990-91	533.4	305.1	2.2	5.9	48.3	41.0	130.9
1991-92	621.5	324.0	1.2	4.9	77.1	40.1	174.2
1992-93	736.4	355.3	2.2	7.7	72.5	50.8	248
1993-94	898.2	430.2	9.9	7.9	98.1	64.1	288
1994-95	1215.0	644.7	11.1	15.4	120.1	57.2	366.6
1995-96	1720.6	1049.1	17.2	15.7	160.0	76.8	401.7
1996-97	1701.6	869.0	22.0	10.4	165.7	157.2	477.4
1997-98	1610.9	786.5	13.3	8.7	170.0	143.2	489.2
1998-99	1679.2	995.6	9.6	8.4	122.4	106.1	437.1
1999-00	1394.6	636.3	7.6	7.3	151.2	92.9	506.8
2000-01	1928.5	935.0	1.1	24.6	140.8	186.8	640.1
2001-02	2026.0	1002.2	7.6	26.9	214.5	144.0	630.9
2002-03	2724.1	1176.0	39.0	31.6	350.4	206.2	921.0
2003-04	4025.5	1740.74	89.49	42.34	669.35	286.94	1319.2
2004-05	4440.7	1631.12	84.58	47.61	743.14	521.05	1413.18
2005-06	5547.6	1664.36	99.17	67.58	859.97	689.23	2024.67

2006-07	6469.5	1629.57	57.66	68.68	927.4	1350.09	2258.3
2007-08	9617.2	2923.72	86.74	89.72	1507.42	1950.53	2830.43
2008-09	8440.5	2497.87	111.15	127.91	1570.15	1439.88	2425.92
2009-10	8356.5	2433.77	118.86	79.86	1533.31	1573.32	2188.01
2010-11	12706.4	3242.91	176.03	100.14	2168.06	2039.61	3507.51
2011-12	13364.8	3789.21	229.86	124.6	2721.57	1541.57	4378.79
2012-13	15109.7	5144.99	233.22	122.36	3088.84	2064.89	3983.87
2013-14	17575.4	6166.97	355.6	106.07	3592.3	2274.3	4534.35
2014-15	20485.5	6451.48	333.94	152.38	4558.77	1857.29	6703.72
2015-16	18614.2	6309.225	344.77	129.225	4075.535	2065.795	5619.035
2016-17	19222.1	6820.13	509.28	197.79	5453.59	1821.88	3913.15
2017-18	22926.3	8460.34	541.69	217	6597.09	1924.31	4476.33
2018-19	19138.1	7290.15	538.81	176.98	6422.11	1770.49	3896.6

Year	Annual Growth rate of exports to saarc	Annual growth rate of exports to bangladesh	Annual growth rate of exports to Bhutan	Annual growth rate of exports to maldives	Annual growth rate of exports to nepal	Annual growth rate of exports to pakistan	Annual growth rate of exports to srilanka
1990-91	-	-	-	-	-	-	-
1991-92	16.52%	6%	-45%	-17%	60%	-2%	33%
1992-93	18.49%	10%	83%	57%	-6%	27%	42%
1993-94	21.97%	21%	350%	3%	35%	26%	16%
1994-95	35.27%	50%	12%	95%	22%	-11%	27%
1995-96	41.61%	63%	55%	2%	33%	34%	10%
1996-97	-1.10%	-17%	28%	-34%	4%	105%	19%
1997-98	-5.33%	-9%	-39%	-16%	3%	-9%	2%
1998-99	4.24%	27%	-28%	-4%	-28%	-26%	-11%
1999-00	-16.95%	-36%	-21%	-13%	24%	-12%	16%
2000-01	38.28%	47%	-86%	237%	-7%	101%	26%
2001-02	5.05%	7%	606%	9%	52%	-23%	-1%
2002-03	34.46%	17%	414%	18%	63%	43%	46%
2003-04	47.77%	48%	129%	34%	91%	39%	43%
2004-05	10.32%	-6%	-5%	12%	11%	82%	7%
2005-06	24.93%	2%	17%	42%	16%	32%	43%
2006-07	16.62%	-2%	-42%	2%	8%	96%	12%
2007-08	48.65%	79%	50%	31%	63%	44%	25%
2008-09	-12.24%	-15%	28%	43%	4%	-26%	-14%
2009-10	-1.00%	-3%	7%	-38%	-2%	9%	-10%
2010-11	52.05%	33%	48%	25%	41%	30%	60%
2011-12	5.18%	17%	31%	24%	26%	-24%	25%
2012-13	13.06%	36%	1%	-2%	13%	34%	-9%

2013-14	16.32%	20%	52%	-13%	16%	10%	14%
2014-15	16.56%	5%	-6%	44%	27%	-18%	48%
2015-16	-9.13%	-2%	3%	-15%	-11%	11%	-16%
2016-17	3.27%	8%	48%	53%	34%	-12%	-30%
2017-18	19.27%	24%	6%	10%	21%	6%	14%

Source : compiled by researcher on the basis of data from RBI handbook of statistics.

Impact of South Asia Free trade agreement on the India's Exports to other SAARC Nations

AsSAFTA Agreement, signed in 2004, entered into force on 1 January 2006, Researcher has divided the study period (1990-91 to 2018-19) into two parts. First period is 1990-91 to 2004-05 and second period from 2006-07 to 2018-19. It will clearly indicate the impact on the exports from India and imports in India from other SAARC nations after implementation of SAFTA. The first group shows the impact on Trade before the implementation and second group shows after the implementation of SAFTA. Independent 't' test is applied for comparing the differences between sample means of these two groups for testing the hypothesis.

T-Statistic

The T-Statistic is the value used to produce the p-value (Prob Level) based on the T distribution. The formula for the T-Statistic is

$$t = \frac{\bar{X}_1 - \bar{X}_2}{SE_{\bar{X}_1 - \bar{X}_2}}$$

For the unequal variance case:

$$SE_{\bar{X}_1 - \bar{X}_2} = \sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}$$

The degrees of freedom are used to determine the T distribution For the unequal variance case:

$$df = \frac{\left(\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}\right)^2}{\frac{\left(\frac{S_1^2}{n_1}\right)^2}{n_1 - 1} + \frac{\left(\frac{S_2^2}{n_2}\right)^2}{n_2 - 1}}$$

Mean Difference

This is the difference between the sample means, $\bar{X}_1 - \bar{X}_2$

Standard Error

This is the estimated standard deviation of the distribution of differences between independent sample means.

Table 1

India's exports to other SAARC nations	No. of years	Mean	Standard deviation	Standard error
Before SAFTA	16	2050.24	1446.85	361.7
After SAFTA	13	14771.25	5352.07	1484.39

Researcher's calculation based on secondary data

Table 2

Calculated t value*	Degree of freedom	t _{tab} at 5% level of significance	Mean difference
-8.32618	13	2.16	-12721.01

*Significant at 5% level of significance

Table 1 provides the summary statistics of the two sub time periods and table two provides the results of independent t test. The above result indicates that null hypothesis is accepted because the t_{cal}(-8.32) > t_{tab}(2.16)(for two tailed t test only the absolute value is considered). Thus it can be

concluded that there is significant difference in India's Exports to other SAARC nations except Afghanistan before and after SAFTA came into effect. Therefore it can be argued that along with other factors, implementation of SAFTA significantly affected the exports from India to other SAARC nations.

Table 3

		Bangladesh	Bhutan	Maldives	Nepal	Pakistan
Mean	Before SAFTA	909.0782	26.076	20.81	260.22	178.97
	After SAFTA	4858.487	279.82	130.21	3401.2	1821.07
Standard deviation	Before SAFTA	468.69	33.70	18.25	258.5	182.3443
	After SAFTA	2208.79	172.63	45.023	1915.09	275.4441
Calculated t value*		-6.33	-5.22	-8.23	-5.87	-18.45
t _{tab} at 5% level of significance		2.16	2.16	2.13	2.18	2.08
Degree of freedom		13	13	15	12	20
Null hypothesis		rejected	rejected	rejected	rejected	rejected

Table 3 shows the results of independent t test and in reference to all SAARC nations taken into the study has calculated t statistic smaller than the tabulated value of t statistics. So all hypothesis get rejected means there is significant difference in India's

exports to these SAARC nations after implementation of SAFTA.

Conclusion

There is need to develop a vision and a road map to accelerate the growth of lagging regions and

to sustain the growth of more developed regions of South Asia. Some of the challenges relating to this region are sluggish growth, low levels of industrialization, fragile export performance and inadequate job creation. It continues to depend on low-productivity agriculture and majority of working population is engaged in low-income activities in agriculture and informal services. Size of the manufacturing sector is small in South Asia and it has prevented the region from transforming demographic dividend into a window of opportunity. Poor connective infrastructure, low mobility, and conflict have prevented the region from taking advantage of its geography and spatial characteristics. This region is vulnerable to external shocks as shown by the adverse global developments relating to food and fuel. Despite recent reforms, South Asia continues to have the most restrictive tariff policies compared to other regions and most protective agricultural trade policies. Along with these challenges this region suffers from a high degree of conflict, both within and across countries. Nepal witnessed a long-running civil war from 1996 to 2006. There is a problem of many prisoners' dilemmas such as free riding and excessive use of resources, and these problems are due to lack of effective institutions.

Thus there is a need to transform conflict into cooperation and ensure good governance that allows participation and voice of all citizens in the development effort can play a key role in reducing in-country conflicts and provide for better economic cooperation and stronger trade relations that can be helpful in reducing cross-country conflicts. Regional cooperation can be of great help to meet infrastructure investment gap. The priority areas that especially need regional cooperation are telecom and internet, energy, and transport. Along with it there is a need to improve education, innovation, and health, a regional telecom network and a high-bandwidth, high-speed internet-based network could be of great help. A regional network would smooth the flow of ideas, technology, investments, goods, and services. It would facilitate greater interactions between knowledge workers in areas such as high-energy physics, nanotechnology, and medical research. It also could help in the building and sharing of regional databases, and help to address the regional problems and provide fillip to multi-country initiatives such as flood control, disaster management, climate change, and infectious disease control programmes. South Asia would need to remove barriers to trade in ICT services, eliminate restrictions on the flow of intra-regional foreign direct investment (FDI), and remove

visa restrictions on the flow of people; continue reducing political and security tensions; improve commercial performance of the utilities; improve the credibility, competence, and accountability of regulation; adopt sustainable (cost-reflective) tariffs and provide social protection; promote commercialization in energy trade; boost private sector participation by promoting public-private partnership (PPP) structures in cross-border investments; engage in reaching water sharing agreements; get access to international agreements and get integrated with the transit countries.

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