

# Latency of Afghanistan-SAARC Merchandise Trade Relation: An Economic Evaluation

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# Abstract

Focusing on the analysis of South Asia Association for Regional Co-operation (SAARC) trade, the study attempts to analyze the merchandise trade performance of Afghanistan with SAARC region by employing the RCA, RID and TII over a time period of nine years from 2008-2016. A brief analysis of trade baskets of SAARC countries shows that trade of Afghanistan relies heavily on the SAARC countries especially on the imports from India and Pakistan. The growing intensity of trade between Afghanistan and Bangladesh, India, Pakistan and Srilanka reflects an alteration in the trade scenario of SAARC region. With every passing year from 2008-2016, the trend intensity has amplified, thus confirming the growing trade relations among the economies. On the evaluation of RCA and RID of Afghanistan against Bangladesh, India, Pakistan and import baskets are less relatively diversified for Afghanistan. Afghan economy is still an agricultural driven economy and the analysis of SAARC region's, through revealed comparative advantage index, finds that Afghanistan has trade comparative advantage in agricultural commodities and the manufacturing base is missing. The study makes a set of implications that given its overriding size, human resources, and aspirations for a global role; Afghanistan will have to take on a disproportionately larger responsibility for endorsing regional cooperation in South Asia.

**Keywords**: *Economic Integration, Regional, South Asia, Trade Policy.* **JEL Classification**: F1, F15, F1, F19, O2

# 1. Introduction

One of the major objectives of formation of SAARC forum was to speed up the process of economic and social development in member states. Consequently, trade advancement was also actively pursued as an area of economic co-operation. The possibility of Intra- SAARC trade extension has been explored using macroeconomic and regional trade link models. It is generally found that inter-country differences in production and consumption patterns, investment behavior and tax and non-tax structures leave significant scope for further regional trade expansion. At present, intra-SAARC trade is quite low as compared with that of regional forums such as European Union (EU) and Association of South East Asian Nations (ASEAN). In this regard this study makes an endeavor in studying Afghanistan's trade linkage with SAARC economies.





Country	1960	1970	1980	1990	2000	2010	2016
Afghanistan	11.2	21.7				87.0	93.2
Bangladesh	19.3	20.8	23.4	19.7	33.2	47.0	57.5
Bhutan			50.4	56.7	76.2	146.0	167.9
India	11.8	7.8	15.6	15.7	27.4	54.0	62.7
Maldives					161.1		
Nepal		13.2	30.0	32.2	55.7	45.0	57.9
Pakistan		22.4	36.6	38.9	28.1	34.0	45.7
Sri Lanka	62.4	54.1	87.0	68.2	88.6	63.0	76.9

Table 1: Trade Openness (Export and Import as per cent of GDP) in SAARC Countries

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Source: World Development Indicators, World Bank.

Table 2: Share	e of SAARC	Region in	<b>World Exports</b>	(Per cent)
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Country	1960	1970	1980	1990	2000	2010	2016
Afghanistan	0.09	0.04	0.03	0.03	0.01	0.002	0.004
Bangladesh				0.04	0.05	0.10	0.10
Bhutan				0.001	0.002	0.002	0.003
India	1.85	1.02	0.64	0.42	0.52	0.66	1.10
Maldives	0.003	0.002	0.001	0.000	0.002	0.002	0.002
Nepal	0.002	0.01	0.01	0.004	0.01	0.01	0.01
Pakistan	1.23	0.55	0.29	0.13	0.16	0.14	0.13
Sri Lanka	0.53	0.30	0.11	0.05	0.05	0.08	0.05
SAARC	3.71	1.92	1.08	0.68	0.80	1.00	1.39

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Source: Calculations based on the data from UNCOMTRADE.

Note: Data for Pakistan during 1950, 1960 and 1970 includes erstwhile East Pakistan.

Regarding the trend in the share of SAARC region in total world trade, it witnessed a persistent decline during the 1960s, 1970s and 1980s. Even though there has been a gradual pickup in share in total world exports since 1990s, but it is still lower than the level of share in1950s. During 2008, share of SAARC region in total world exports stood at 1.4 per cent (3.7 per cent in 1950) (Table 3).Similarly, the share of SAARC region in total world imports declined but picked up in recent years (Table 4).

Table 3: Share of SAARC Region in World Imports (Per cent)

Country	1970	1980	1990	2000	2005	2010	2016
Afghanistan	0.09	0.06	0.03	0.04	0.03	0.002	0.02
Bangladesh				0.13	0.10	0.13	0.15
Bhutan				0.002	0.002	0.003	0.003



India	1.70	1.68	0.64	0.72	0.66	0.77	1.79
Maldives	0.01	0.003	0.001	0.001	0.004	0.01	0.01
Nepal	0.03	0.03	0.02	0.02	0.02	0.02	0.01
Pakistan	1.91	0.72	0.45	0.26	0.21	0.16	0.26
Sri Lanka	0.38	0.30	0.12	0.10	0.07	0.09	0.08
SAARC	3.12	2.79	1.27	1.26	1.09	1.21	2.31

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**Note:** Data for Pakistan during 1950, 1960 and 1970 includes erstwhile East Pakistan. **Source:** UNCTAD.

The trade analysis of the countries in South Asian region shows that they witnessed a wide fluctuation in terms of export and import growth over time. During the 1960s, the average annual growth of exports of goods and services for Pakistan was at 8.3 per cent followed by India at 5.4 per cent, Bangladesh at 2.6 per cent and Sri Lanka at 1.3 per cent. During the same period, import growth was maximum in Bangladesh among the South Asian countries followed by Pakistan. The export growth was further accelerated to 10.5 per cent for India in the 1970s followed by Bangladesh at 7.9 per cent. There was also maximum import growth for India in the South Asian region in the 1970s followed by Pakistan. In the 1980s, Pakistan recorded export growth as high as 10.7 per cent followed by Sri Lanka at 6.3 per cent, Bangladesh at 6.1 per cent and India at 4.8 per cent.

India witnessed maximum import growth at 7.6 per cent during the 1980s within South Asian economies followed by Bangladesh at 7.0 per cent. India and Bangladesh recorded a robust export growth at 12.0 percent and 12.6 per cent respectively in the 1990s. In terms of import growth, India and Maldives had maximum import growth in the 1990s among the South Asian countries. During 2000-06, the average export growth was as high as 17.1 per cent for Bhutan followed by India at 13.5 per cent.

Similar trend was followed in import growth during 2000-06.As far as direction of trade is concerned, share of exports from South Asia increased significantly to developing Asia (particularly China), Africa, Western Hemisphere and Middle-East while that to EU and UK declined over the years. In 2007, exports from South Asia have been to the extent of 27.4 per cent to developing Asia (7.2per cent to China), followed by EU (23.9 per cent), USA (16.3 percent), middle-east (14.7 per cent). The direction of import in the region is mainly from developing Asia to the extent of 32.3per cent (including China with 11.6 per cent), EU (16.6 per cent) and Middle East (9.8 per cent). However, import dependence on US, UK and EU seems to have declined over the recent years.

# 1.2 Intra-regional Trade in South Asia

Intra-regional trade in South Asia is relatively low compared with other regions, such as ASEAN in Asia. The South Asian countries exchange goods principally with countries outside the region. SAARC had a slow start, but gained momentum with the launch of (SAPTA) SAARC Preferential Trading Agreement in the mid-1990s. Since the implementation of South Asian Free Trade Area (SAFTA) at the beginning of the new



millennium, it has begun to perform robustly (Mohanty and Chaturvedi, 2006).

Intra-regional trade as a ratio of South Asia's total foreign trade was only 4.8 percent in 2008, compared with 25.8 per cent for ASEAN member countries (Table 5). For individual countries, the intra-regional trade ratio varies from a low of 2.7 per cent for India and 6.6 per cent for Pakistan to a high of 60.5 per cent for Nepal and 43.1 per cent for Afghanistan (Table 6). India's trade with SAARC region has expanded significantly in recent years. During 2000-01 and 2006-07,the overall exports from India to other SAARC countries increased by an annual average of 25 per cent underpinned by an average of53 per cent with Pakistan followed by Nepal with an average of 34 per cent. During this period, export expansion with Bangladesh was lowest. Similarly, imports from SAARC countries to India increased by an annual average of 22 per cent. A significant increase was observed in imports from Pakistan and Sri Lanka during this period.

<b>Table 4: Trend in Intra</b>	- Regional Group	Trade (Per cent)
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Regional group	1970	1980	1985	1990	1995	2005	2016
MERCOSUR	7.6	9.4	9.7	11.0	19.2	19.9	15.5
NAFTA	30.4	36.0	33.2	37.2	42.0	46.8	40.0
ASEAN	12.7	22.4	15.9	17.0	21.0	22.7	25.8
ASEAN +3	21.9	25.8	29.0	26.8	34.9	33.7	34.0
GCC		4.6	3.9	8.1	7.5	6.2	
SAARC	5.0	3.2	3.5	2.7	4.3	4.5	5.5
EU 25	51.8	61.0	61.8	67.4	66.4	67.2	4.8
Euro Zone	41.2	53.7	48.1	54.5	53.2	50.3	
OPEC	47.0	57.9	57.5	67.7	71.7	72.5	

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Source: UNCTAD.

Table 5. Intra_regional	Trade Share of Sou	uth Acia's Total '	Frade (Per cent)
Table 5. Incla-regional	I auc share of So	util Asia s Iutai	made (i ci cent)

Country	1970	1980	1990	2000	2010	2016
Afghanistan	11.4	14.5	11.1	29.7	35.3	43.1
Bangladesh	4.7	6.0	12.8	7.9	10.5	9.4
Bhutan						
India	1.7	1.6	2.7	2.5	3.0	2.7
Maldives	12.5	12.7	14.3	22.2	19.8	12.2
Nepal	34.3	11.9	14.8	22.3	47.2	60.5
Pakistan	3.1	2.7	2.3	3.6	5.0	6.6
Sri Lanka	5.5	5.6	7.8	7.4	15.1	18.9

...: Not Available

Source: Regional Co-operation Strategy and Program, South Asia (2006-2008), ADB.



Despite growing trade with SAARC region, the intra-SAARC trade continues to remain lowest among all the major regional groups (except Gulf Co-operation Council) formed so far. In 2008, intra-SAARC trade was merely 4.8 per cent while APEC countries had 65.5 per cent of total trade within the region (Table 5). Despite the formation of regional grouping, trade flows within the SAARC region are not much significant. This is perhaps on account of the disparities in the market size of SAARC economies unlike other regional groupings. For instance, Bhutan or Nepal cannot be the major export destinations for India and Pakistan. Thus, one cannot expect beyond a modest potential in the intra-SAARC trade, particularly of big SAARC countries with small SAARC economies. In stark contrast, the small economies of Bhutan and Nepal have maintained strong trade links with India. For instance, Nepal and Sri Lanka import around 46 and 16 per cent of their imports from India but these cover a negligible portion of Indian exports

#### 1.3 Objectives

- > To examine trade performance of SAARC economies in general and Afghan economy in particular.
- > To analyze the Trade Intensity and Comparative Advantage of SAARC economies.
- ➤ To s.uggest policy implications based on the results from the study.

#### 1.4: Data Sources

The study is based on secondary data. The data has been compiled from a wide variety of sources: journals on international trade; yearbooks publishing statistical data with respect to trade, viz World Bank, UN, UNCOMTRADE, IMF and WTO; and through diverse online data sources, textbooks, magazines and websites, etc.

# 2. Literature Review

The possibility of Intra- SAARC trade extension has been explored by various researchers, but scanty studies have touched the Afghan context. In this connection, some of the most relevant studies have been taken into account to lay a strong foundation for the research which is depicted as follows.

Bhattarai (2017) evaluated the economic growth and development in India and SAARC Countries. The study highlights that the Impetus of economic growth in India and other South Asian economies based on stylized facts along with trends of their fiscal, monetary, trade, education and income distribution policies. Macroeconomic, general equilibrium, trade and game theoretic models have been identified that could be applied to analyse micro, macro and sectoral issues of economic growth. The study comes out with policies that by maintaining average 8 percent growth, it is possible that India will catch up the countries in the Western Europe in per capita income within a generation. Other SAARC members may be able to converge to India in per-capita income if they are able to become more stable and ready to proceed single-minded on the highway of economic growth. Bhandari and Jogezai (2015) focused on the status of Afghanistan in SAARC and carved out some emerging opportunities in regional integration. Although South Asia spreads from Afghanistan to







attempted to analyze the merchandise trade performance of SAARC region and also the trend in intra-SAARC trade. A brief analysis of trade baskets of SAARC countries showed that export baskets of major SAARC countries are significantly similar and are competing with one another in same industries in the international market. However, export baskets are relatively more diversified for India and Pakistan. Furthermore India has relative trade comparative advantage in a larger number of industry groups than other SAARC countries. The study further highlighted the actual hindrances to regional integration and makes a set of policy oriented recommendations for furthering abysmal regional integration in South Asia. Zaheer (2013) portrayed the economic performance of SAARC economies and evaluated the impact of trade liberalization over the macroeconomic structure of four SAARC member countries namely Pakistan, India, Bangladesh and Srilanka and the time series data set consists of 21 years from 1985-2006. The data provides the substantial evidence benefits of intra-regional trade expansion: larger markets and fuller utilization of production capabilities, transfer of suitable production technologies, comparative advantage and complementarities, economies of scale due to expanded markets and better utilization of entrepreneurial capabilities, capital, manpower and natural resources. In addition to that such an arrangement is also expected to foster closer economic ties among member countries and enhance their bargaining power with respect to other countries and economic blocs. Raghuramapatruni (2011) evaluated the experience of SAARC as a regional block and its future potentialities. The study carried out the insights that the SAARC regional block was created to achieve better standards of living for the people of South Asia through greater development. However, the performance is lacking. Despite the existence of a South Asian Preferential Trading Arrangement (SAPTA), intra-regional trade flow of the group accounts for only 4.8 per cent of the total trade flow and thus is an attempt to analyze the performance of SAARC as a regional block and future potentiality of trade among its members. Ali and Talukder, (2009) analyzed the prospects and challenges of preferential trade liberalisation and regional integration in South Asia by analyzing regional and international trade structures of South Asian countries through conventional trade measures such as commodity composition and direction of trade, and bilateral trade shares. Findings indicate that, with the existing low level of bilateral and intra-original trade shares and low trade with South Asian countries, the gains from free trade arrangements in this region are likely to be minimal. The region accounts for a very insignificant share of world trade but persistent high levels of tariff barriers. Thus, preferential trade liberalisation is more likely to bring about trade diversion than trade creation leading to more gains for large countries and more losses for small countries. Further, trade policies of individual countries are shaped more by political considerations than economic factors. Therefore, implementation of a free trade area and deriving benefits from it will be challenging.

Rahman et al, (2006) argue that potential high economic growth of south Asian counties (particularly for India, Bangladesh and Sri Lanka) may boost their trade flows. The best way to co-operate and collectively benefit is to establish tradability of some key resources that our region is richly endowed with, and to complement each other in economic development. Only then would South Asian economic co-operation lead to significant trade creating and growth generating impact. For instance, Bhutan has huge hydro power potential, which could find optimum utilization by facilitating technological assistance by big neighboring economies. Major SAARC economies such as India, Pakistan, Bangladesh and Sri Lanka can provide a large and virtually



inexhaustible market for many of these resources. There are other tradable items which can be traded between SAARC countries with least transport costs, *etc.* Taneja (2006) focused in her study on the absence of redressed of trade issues, informal trade is also reportedly taking place in region, particularly between India and Pakistan, which is estimated to the extent of US\$ 2 billion. Much of this informal trade takes place via third countries such as Dubai, CIS countries and Afghanistan. Mohanty and Chaturvedi, (2006) analysed intra-regional trade in South Asia. The trade is relatively low compared with other regions, such as ASEAN in Asia. The South Asian countries exchange goods principally with countries outside the region. SAARC had a slow start, but gained momentum with the launch of (SAPTA) SAARC Preferential Trading Agreement in the mid-1990s. Since the implementation of South Asian Free Trade Area (SAFTA) at the beginning of the new millennium, it has begun to perform robustly.

Chowdhury (2005) assessed the liberalization efforts of the SAARC economies. The empirical results in terms of trade among the regional group suggest that the smaller countries, namely Bangladesh and Sri Lanka reap the higher gains from openness, whereas trade with other international partners, it took India and Bangladesh to gain international competitiveness until mid1990s. The study indicates Pakistan and Sri Lanka's trade liberalisation efforts don't seem to have much positive impact in terms of international trade. Pohit and Taneja (2000) and Taneja, et al. (2002) argue that informal trading is taking place due to policy distortions. As and when such distortions are corrected informal trade would shift to the formal channel. Gurugharana (2000) analyzed the possibilities of trade expansion in the SAARC region with the help of macroeconomic modeling and the estimation is based on time series data of 22 years from 1975-1996. Using 3 Stages Least Squares (3SLS) estimation technique, it was found that all SAARC countries would be dramatically benefited from regional trade expansion. This study has some pitfalls as it did not perform any test for autocorrelation, test for stationarity of variables or co-integration. Waqif (1987) mentioned in the study that almost all countries have possibilities to increase their respective trade with the partner countries of the SAARC region. It was pointed out that regional collective self-reliance can be obtained by exploiting horizontal and vertical economic linkages among these countries to help induce autonomous and self-generating growth among the cooperating countries.

#### **3. Methodology and Findings**

The paper sheds light on the trade prospects of Afghanistan against SAARC economies by employing three indices namely Revealed Comparative Advantage (RCA), Revealed Import Dependence (RID) and Trade Intensity Index (TII). The objective is to model and estimate trade potential of Afghanistan with respect to its trade partner (SAARC economies) using the RCA, RID and TII indices. By knowing the trade potential, countries could engage in bilateral and multilateral processes to make efforts to minimize or at least mitigate the effect of existing restrictive measures to trade growth. This section estimates the trade prospects of Afghanistan against 4 trading partner namely Bangladesh, India, Pakistan and Srilanka and the rest economies namely Bhutan, Maldives and Nepal have been excluded from study due to their minimal contribution in Afghanistan trade. The organization of this section is followed with sub-section 3.1 highlighting the recent trade performance of SAARC Region collectively, sub-section 3.2 depicts trade intensity of Afghanistan against



SAARC economies; sub-section 3.3 depicts the identification of potential commodities between Afghanistan and SAARC economies and lastly, section 4 brings out the overall conclusions.

# 3.1 Recent Trade performance of SAARC Region

The importance of trade as growth facilitator has been recognized in SAARC countries as well. It is evident from the growing trade openness of SAARC economies over the years. However, there are wide disparities within the SAARC region. For instance, Maldives is highly dependent on external sector with 161 per cent trade openness ratio (Trade-GDP ratio) while Pakistan is least open country in the SAARC region. Saxena (2005) elaborates that India has a huge domestic market, hence trade forms a substantially smaller percentage of GDP, especially when compared with East Asian economies, that are small and essentially require trade for growth. The rest of the countries are fairly open to trade. Despite growing trade-GDP ratio, the South Asian economies continued to remain least open relative to other groups of emerging and developing economies. The proportion of trade in GDP of SAARC region increased markedly from 15.1 per cent during the 1970s to 51.8 per cent in 2008. For East Asia and Pacific, however, it soared from 20.9 per cent during the 1970s to as much as 88.6 per cent in 2007 but declined to 64 per cent in 2008 on account of the recent global financial crisis leading to deceleration in trade.

Country	2008	2010	2012	2014	2016
Afghanistan	76.17	73.07	56.91	54.97	45.26
Bangladesh	46.48	49.09	45.98	43.42	54.51
India	44.88	52.27	45.48	48.24	54.22
Pakistan	35.54	36.73	33.27	33.01	33.38
Sri Lanka	68.61	63.37	49.15	53.06	60.66

Table 6: Trade Openness (Export and Import as per cent of GDP) in SAARC Countries

Source: Calculations based on data from UNCOMTRADE

#### Table 7: Share of SAARC Region in World Exports (Per cent)

Country	2008	2010	2012	2014	2016
Afghanistan	0.03	1.79	0.02	0.02	0.23
Bangladesh	0.1	0.01	0.13	0.15	
India	0.66	0.002	0.77	1.79	1.792
Pakistan	0.21	0.21	0.16	0.26	0.151
Sri Lanka	0.07	0.07	0.09	0.08	0.060
SAARC	1.096	1.243	1.203	2.323	2.453

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Source: Calculations based on data from UNCOMTRADE

# Table 8: Share of SAARC Region in World Imports (Per cent)

Country	2008	2010	2012	2014	2016
Afghanistan	0.03	0.02	0.003	0.02	0.21



Bangladesh	0.10	0.13	1.79	0.15	0.21
India	0.66	0.77	0.01	1.79	0.40
Pakistan	0.21	0.16	0.21	0.26	0.45
Sri Lanka	0.07	0.09	0.00	0.08	0.34
SAARC	1.09	1.21	1.40	2.31	3.32

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Source: Calculations based on data from UNCOMTRADE

During 2008, share of SAARC region in total world exports stood at 1.4 per cent (3.7 per cent in 1950) (Table 5). Similarly, the share of SAARC region in total world imports declined but picked up in recent years. The trade analysis of the countries in South Asian region shows that they witnessed a wide fluctuation in terms of export and import growth over time (During the 1960s, the average annual growth of exports of goods and services for Pakistan was at 8.3 Per cent followed by India at 5.4 per cent, Bangladesh at 2.6 per cent and Sri Lanka at 1.3 per cent. During the same period, import growth was highest in Bangladesh among the South Asian countries followed by Pakistan. The export growth was further accelerated to 10.5 per cent for India in the 1970s followed by Bangladesh at 7.9 per cent. There was also maximum import growth for India in the South Asian region in the 1970s followed by Pakistan. In the 1980s, Pakistan recorded export growth as high as 10.7 per cent followed by Sri Lanka at 6.3 per cent, Bangladesh at 6.1 per cent and India at 4.8 per cent. India witnessed maximum import growth at 7.6 per cent during the 1980s within South Asian economies followed by Bangladesh at 7.0 per cent. India and Bangladesh recorded a robust export growth, respectively, at 12.0 per cent and 12.6 per cent in the 1990s. In terms of import growth, India and Maldives had maximum import growth in the 1990s among the South Asian countries. During 2000-06, the average export growth was as high as 17.1 per cent for Bhutan followed by India at 13.5 per cent. Similar trend was followed in import growth during 2000-06.

# 3.2: Trade Intensity of Afghanistan against SAARC

The trade intensity index (TII) is used to determine whether the value of trade between two countries is greater or smaller than would be expected on the basis of their importance in world trade. It is defined as the share of one country's exports going to a partner divided by the share of world exports going to the partner. It is calculated as:

$$\mathbf{T}_{ij} = (\mathbf{X}_{ij} / \mathbf{X}_{it}) / (\mathbf{X}_{wj} / \mathbf{X}_{wt})$$

Where  $X_{ij}$  and  $X_{wj}$  are the values of country i's exports and of world exports to country j and where  $X_{it}$  and  $X_{wt}$  are country i's total exports and total world exports respectively. An index of more (less) than one indicates a bilateral trade flow is larger (smaller) than expected; given the partner country's importance in world trade.

Year	Bangladesh	India	Pakistan	Srilanka
2008	1.23	5.57	8.76	2.34
2009	1.45	4.34	8.98	2.14

**Table 9: Trade Intensity Index of Afghanistan against SAARC Economies** 





Source: Calculation based on data from UN COMTRADE database SITC Revision III.

The above Table 9 depicts the trade intensity for Afghanistan against other SAARC economies. The economies are having intense level of trade latency with each other as with every passing year the linkage of trade is amplifying, thus proving the strong trade association among the economies. The trade intensity of Afghanistan is stronger with Pakistan from 2008 till 2014 but the table of trade turned in India's favor from 2015-16. As India rules the export market now in the SAARC region, the other are leaving no stone unturned to become the viable destination for the Afghan market. The export health of the Afghanistan is not that good, even it is worse. It gives a policy implication that Afghanistan needs to take the advantage of the geographical location to expand and diversify its export base and India should effort to capture Afghan market and replace the countries with whom Afghanistan import from like Pakistan, China, Iran etc.

#### 3.3: Identification of Potential Commodities between Afghanistan and SAARC Economies

One of the most powerful propositions of classical trade theory is that the pattern of international trade is determined by comparative advantage. That is, a country with the comparative advantage in a given commodity exports, and the other with the comparative disadvantage imports. Thus, the question has been where then the comparative advantage originates from, and there have been numerous attempts to identify the economic conditions that determine comparative advantage. For the sake of usage, this study identifies the pattern of Revealed Comparative Advantage by using the Balassa Index (1965) for export data.

#### a) Balassa's Revealed Comparative Advantage Index

To capture the degree of trade specialization of a country, Balassa (1965) suggested index of revealed comparative advantage. On the basis of this index, a country is defined as being specialized in exports of a certain product if its market share in that product is higher than the average or, equivalently, if the weight of the product of the country's exports is higher than its weight of the exports of the reference area. A country reveals comparative advantages in products for which this indicator is higher than 1, showing that its exports of those products are more than expected on the basis of its importance in total exports of the reference area. The index has been calculated at the commodity level using SITC Revision 3-digit level classification. The RCA connotes whether a country is in the process of extending the products in which it has a trade potential. RCA measures, if estimated at high levels of product disaggregation, can focus attention on the other non-traditional products that might be successfully exported. The RCA index of country I for the product J is often measured by the products share in the country's exports in relation to its share in world trade.



$$\mathbf{RCA}_{ij} = (\mathbf{X}_{ij} / \mathbf{X}_{it}) / (\mathbf{X}_{wj} / \mathbf{X}_{wt})$$

Where  $X_{ij}$  and  $X_{wj}$  are the values of country's exports of product j and world's exports of product j and where  $X_{it}$  and  $X_{wt}$  refer to the country's total exports and world total exports.

#### b) Revealed Import Dependence Index

The index identifies the commodities, which have import dependence on the partner countries. The RID index is also known as Revealed comparative disadvantage Index. The RID index gives the commodity-wise structure of imports in the countries. The RID is defined as commodity i's share in country's total imports vis-a-vis its share in total world imports. The RID index can be computed as follows

$$\text{RID}_{i} = (M_{ia}/M_{a})/(M_{iw}/M_{w})$$

Where  $M_{ia}$  is equal to imports of commodity i from country a,  $M_{a}$  is equal to total imports of country a,  $M_{iw}$  is equal to total value of the world imports of commodity i and  $M_{w}$  is equal to total world imports. An RID index exceeding one suggests a strong dependence of the country on the import of the specific item in a reference period and vice-versa.

# 3.3.1: Analysis of identification of potential commodities between Afghanistan and Bangladesh

To meet the requirement for assessing the identification of potential commodities, this section identifies the pattern of RCA by using the Balassa index (1965) for export data and revealed import dependence (RID). RCA indices use the trade pattern to identify the commodities in which an economy has a comparative advantage, by comparing the country of interests' trade profile with the world average. Both the indices (RCA and RID) have been calculated for the time period of 9 years, that is, 2008–2016 and the average value is presented for the purpose of analysis which would provide a clear picture regarding the commodity trade of Afghanistan and Bangladesh. A comparison of RCA index of the various commodities between India and Brazil helps us in identifying the commodities, which are either competitive or complementary in nature. First, the items having RCA index greater than 1 for Brazil and India are presented in Table 5.14.

S. No	SITC	Commodity	RCA Value
1	0	Food and Live animals	
	04	Cereals and cereal preparations	8.28
2	3	Mineral fuels, lubricants and related materials	
	34	Gas, natural and manufactured	4.67
3	4	Animal and vegetable oils, fats and waxes	
	42	Miscellaneous edible products and preparations	8.99

Table 10: Commodities with RCA >1 for Afghanistan against Bangladesh



2	2	Crude Materials, inedible, except fuels	
	28	Metalliferous ores and metal scrap	5.47

Source: Calculations based on data from UNCOMTRADE

Table 10 presents that in case of Afghanistan, (04) Cereals and cereal preparations, (34) Gas, natural and manufactured, (41) Animal oil and fats, (42) Miscellaneous edible products and preparations and (28) Metalliferous ores and metal scrap prove as the potential commodities. From the above analysis, it is clear that Afghanistan dominates in agricultural exportations.

Now assessing and identifying the commodities, which have import dependence on the partner countries, Revealed Import Dependence (RID) is employed. The RID index gives us the commodity-wise structure of imports in the countries. In this regard Table 4.6 presents the RID of Afghanistan against Bangladesh among the 64 commodities analyzed for the purpose. The commodities with RID value greater than 1 imply the RCD. For India with 7 commodities present the import pattern of these commodities.

S. No	SITC	Commodity	RID Value
1	0	Food and Live animals	
	04	Cereals and cereal preparations	8.28
2	3	Mineral fuels, lubricants and related materials	
	34	Gas, natural and manufactured	4.67
3	4	Animal and vegetable oils, fats and waxes	
	41	Animal oils and fats	5.34
4	8	Miscellaneous manufactured articles	
	81	Prefabricated buildings; sanitary, plumbing, heating and lighting fixtures and fittings, n.e.s.	9.82
	83	Travel goods, handbags and similar containers	1.10

# Table 11: Commodities with RID >1 for Afghanistan

Source: Calculations based on data from UNCOMTRADE

With respect to Afghanistan, the highest RID value is described by (04) Cereals and cereal preparations, (34) Gas, natural and manufactured, (41) Animal oils and fats, (81) Prefabricated buildings; sanitary, plumbing, heating and lighting fixtures and fittings, n.e.s. (83) Travel goods, handbags and similar containers.

# 3.3.2: Analysis of identification of potential commodities between Afghanistan and India

To discuss the latency of Afghan-Indo Merchandise trade, a comparison of RCA index of the various commodities between Afghanistan and India is done for identifying the commodities, which are either competitive or complementary in nature. First, the items having RCA index greater than 1 for Afghanistan are presented in Table 4.7.



S. No	SITC	Commodity	RCA Value
1	0	Food and Live animals	
	00	Live animals other than animals of division 03	1.99
	01	Meat and meat preparations	1.16
2	2	Crude materials, inedible, except fuels	
	23	Crude rubber (including synthetic and reclaimed)	2.52
	24	Cork and wood	3.46
	28	Metalliferous ores and metal scrap	1.24
3	3	Mineral fuels, lubricants and related materials	
	32	Coal, coke and briquettes	1.80
4	6	Manufactured goods classified chiefly by material	
	68	Non-ferrous metals	2.12

# Table 12: Commodities with RCA >1 for Afghanistan

Source: Calculations based on the data from UNCOMTRADE.

Table 12 presents that for Afghanistan RCA is visible in four categories and a total of 8 commodities exhibited RCA index greater than 1 namely (00) Live animals other than animals of division 03, (01) Meat and meat preparations, (23) Crude rubber (including synthetic and reclaimed), (24) Cork and wood, (28) Metalliferous ores and metal scrap,(32) Coal, coke and briquettes and (68) Non-ferrous metals prove as the potential commodities. Furthermore, Table 4.8 presents the RID of Afghanistan against India among the 64 commodities analyzed for the purpose. The commodities with RID value greater than 1 imply the RCD. For Afghanistan with 13 commodities present the import pattern of these commodities.

S. No	SITC	Commodity	RID Value
1	0	Food and Live animals	
	08	Feeding stuff for animals (not including unmilled cereals)	1.04
2	1	Beverages and tobacco	
	12	Tobacco and tobacco manufactures	2.03
3	2	Crude materials, inedible, except fuels	
	22	Oil-seeds and oleaginous fruits	9.70
	29	Crude animal and vegetable materials, n.e.s.	2.50
4	5	Chemicals and related products, n.e.s.	9.82
	54	Medicinal and pharmaceutical products	1.36
5	6	Manufactured goods classified chiefly by material	
	62	Rubber manufactures n.e.s.	8.28
6	7	Power-generating machinery and equipment	
	75	Office machines and automatic data-processing machines	7.15

Table 13: Commodities with RID >1 for Afghanistan



	78	Road vehicles (including air-cushion vehicles)	5.01
7	8	Miscellaneous manufactured Articles	
	82	Furniture, and parts thereof; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings	2.42
	83	Travel goods, handbags and similar containers	4.86
	84	Articles of apparel and clothing accessories	3.95
	85	Footwear	6.77
	88	Photographic apparatus, equipment and supplies and optical goods, n.e.s.; watches and clocks	1.70

Source: Calculations based on the data from UNCOMTRADE.

From the above table 13, it is clear that with respect to India, the highest RID value is described by (08) Feeding stuff for animals (not including unmilled cereals), (12) Tobacco and tobacco manufactures, (82) Furniture, and parts thereof; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings,(83) Travel goods, handbags and similar containers, (84) Articles of apparel and clothing accessories,(85) Footwear and (88) Photographic apparatus, equipment and supplies and optical goods, n.e.s.; watches and clocks.

3.3.3: Analysis of identification of potential commodities between Afghanistan and Pakistan Table 14: Commodities with RCA >1 for Afghanistan

S. No	SITC	Commodity	RCA Value
1	2	Crude materials, inedible, except fuels	
	24	Cork and wood	2.95
	26	Textile fibers (other than wool tops and other combed wool) and their wastes (not manufactured into yarn or fabric)	1.98
	27	Crude fertilizers, other than those of division 56, and crude minerals (excluding coal, petroleum and precious stones)	1.12
2	3	Mineral fuels, lubricants and related materials	
	32	Coal, coke and briquettes	1.96
3	5	Chemicals and related products, n.e.s.	
	56	Fertilizers (other than those of group 272)	7.24

Source: Calculations based on data from UNCOMTRADE

Table 14 presents that Afghanistan enjoys RCA in three categories and the RCA index is greater than 1 with respect to 5 commodities namely (24) Cork and wood, (26) Textile fibers' (other than wool tops and other combed wool) and their wastes (not manufactured into yarn or fabric), (27) Crude fertilizers, other than those of division 56, and crude minerals (excluding coal, petroleum and precious stones), (32) Coal, coke and briquettes and (56) Fertilizers (other than those of group 272) prove as the potential commodities.

Table 15: Commodities with RID >1 for A	Afghanistan
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S. No	SITC	Commodity	RID Value
1	0	Food and live animals	
	02	Dairy products and birds' eggs	7.57
2	1	Beverages and tobacco	



	11	Beverages	3.60
3	3	Mineral fuels, lubricants and related materials	
	34	Gas, natural and manufactured	7.26
3	3	Mineral fuels, lubricants and related materials	
	32	Coal, coke and briquettes	4.56
4	5	Chemicals and related products, n.e.s.	
	56	Fertilizers (other than those of group 272)	5.87
5	7	Power-generating machinery and equipment	
	79	Other transport equipment	8.90
6	8	Miscellaneous manufactured articles	
	88	Photographic apparatus, equipment and supplies and optical goods, n.e.s.; watches and clocks	9.33

Source: Calculations based on the data from UNCOMTRADE

From the above table 15, it is clear that in case of Afghanistan's imports from Pakistan include (01) Meat and meat preparations, (02) Dairy products and birds' eggs, (09) Miscellaneous edible products and preparations, (11) Beverages, (32) Coal, coke and briquettes, (56) Fertilizers (other than those of group 272), (79) Other transport equipment, (88) Photographic apparatus, equipment and supplies and optical goods, n.e.s.; watches and clocks and (93) Special transactions and commodities not classified according to kind have shown the highest RID values, and thus present the import pattern.

# 3.3.4: Analysis of identification of potential commodities between Afghanistan and Srilanka

In the era of multilateralism it is proven that regionalism has not lost its importance. This section aims at understanding the possibility of commodity trade between Afghanistan and Srilanka. An attempt has been made here to identify those products in which Afghanistan enjoy comparative advantage against Srilanka. First, the items having RCA index greater than 1 for Afghanistan against Srilanka are presented as follows.

The descriptive analysis of Afghanistan's comparative advantage against Srilanka is that Afghanistan enjoys comparative advantage in 5 commodities i.e. (02) Dairy products and birds' eggs, (00) Live animals other than animals of division 03, (08) Feeding stuff for animals (not including unmilled cereals), (06) Sugars, sugar preparations and honey, (82) Furniture, and parts thereof; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings.

S. No	Commodity Code with Name	RID Value
1	(01) Meat and meat preparations	1.686
2	(12) Tobacco and tobacco manufactures	6.620
3	(26) Pulp and waste paper	3.826
4	(27) Crude fertilizers, other than those of division 56, and crude minerals (excluding coal, petroleum and precious stones)	2.441

Table 16: Commodities with RID Index Value >1





5	(28) Metalliferous ores and metal scrap	13.028
14	(68) Non-ferrous metals	4.081

Source: Calculation based on data from UNCOMTRADE

Based on RID value from Table 16, Afghanistan has import dependence on 6 commodities from Srilanka which include (01) Meat and meat preparations, (12) Tobacco and tobacco manufactures, (26) Pulp and waste paper, (27) Crude fertilizers, other than those of division 56, and crude minerals (excluding coal, petroleum and precious stones), (28) Metalliferous ores and metal scrap and (68) Non-ferrous metals.

# 4. Conclusion and Recommendations

South Asian Association for Regional Cooperation is exclusive in that these economies have a lot of likenesses but are varied in several features. They differ significantly in size, population and economic development, in terms of their social and political set ups. India is the star amongst all these nations in terms of its economic strength. As a region, the South Asia's growth momentum was led by the services sector, but industry sector growth accelerated in regional big economies India, Pakistan, Bangladesh and Sri Lanka, reinforcing the sustainability of high growth rates into the future. To sum up, the growth of intra-regional trade has remained passive due to deliberations other than economic questions. In safeguarding stability and growth in intra-regional trade, the Indo-Pak bilateral relationship plays a very crucial role. Apart from this, SAARC economies need to put in place adequate physical infrastructure in place which panniers their global competitiveness even in those sectors where they have revealed comparative advantages. All countries of this region have adopted globalization, liberalization and macroeconomic reforms to energize their economies and have a lot of latent to grow. The governments of these countries can play a meaningful role in facilitating structural change and help the private sector to sustain it over time. All SAARC nations need to improve governance as well as strengthen the institutions that help promote growth and development. They must build capacity to foster economic growth not only within each country but also in the entire region. They need nearer and effective cooperation amongst them, especially to promote trade under the WTO regime. SAARC nations face the biggest encounter of conflict amongst themselves as well as the threat of terrorism which is a major obstruction to the growth of the region. Concord and tuneful relations amongst all the SAARC nations must become a realism if they have to meet the economic and political obligations of globalization. Although major SAARC countries are better synchronized in terms of their GDP cycles, trade integration continues to be low due to high level of protectionism existing among the SAARC countries than the rest of world. In this context, successful outcome of SAFTA could play an important role in strengthening trade ties within the region. It is, however, to be expected that with further dismantling of tariff barriers under the SAFTA, a large part of the informal trade may come under purview of formal trade. This along with favorable Rules of Origin could raise intra-regional trade in the SARRC region. SAARC countries will need to take concrete steps for harmonization of customs and other procedures, mutual recognition of certificates and standards and trade facilitation measures. Trade policy of SAARC countries, therefore, needs to ensure that SAFTA ensures trade creation rather than trade diversion from the region as many researchers apprehend.





Based on the results and key findings of this study, the following recommendations are proposed:

- Among the SAARC countries, Pakistan and India represent as major source for Afghanistan as export and Import destination, but import dependence is much more inclined and the export promotion base is missing in Afghan Context. Afghan economy needs to revitalize the export base by giving priorities to those Markets and sectors where it enjoys comparative advantage.
- 2) Trade Intensity Index depicted the pattern of Trade dependence between the nations. India, Pakistan exemplifies as a leading source for trade. Moreover, on comparing with Bangladesh and Srilanka the trend is not same. Thus, it is necessary to increase the trade relations with Bangladesh and Srilanka.
- 3) There is an urgent need of trade diversification in the trade flows among the economies. As Afghanistan has definite trade potential with SAARC but the structure of trade relation represents a changing environ as with each economy the basket of tradable commodities vary. Assessing the potential items, the relative sectors should be given due importance in order to earn export revenue. Apart from the existing level of trade, Afghanistan also needs to focus on trade from emerging countries that are liberalizing their markets for economic growth.
- 4) For sustainable export growth, better market access has to be ensured in addition to diversification. There is need to enhance the share of the value-added goods along with technology up-gradation.
- 5) Strategic partnerships should also be created to increase value added throughout the production and marketing chain, and mutually beneficial technological partnerships should be developed (to apply advances in biotechnology to agro-industry, mining, forestry and fishery, for example). With respect to India and Pakistan, value-chain creations in services should be given a high priority.
- 6) Reducing the impediments to trade by building on the foundations of the dialogue process, there has to be free movement of goods, capital, and people—businessmen, investors, students, media persons, and skilled workers.
- 7) Strengthening Private Sector Cooperation is essential to ensure an increase in investments and international trade. The largest potential obstacle on the way towards stronger ties is the lack of political will of governments and it should be solved for the successful laurel of the economic bloc.
- 8) For the promotion of Trade, export expansion increases efficiency in the economy, which further stimulates economic growth. This increase in efficiency takes place in three ways: firstly, through



the exploitation of increasing returns to scale by producing for a larger market. Secondly, through more efficient allocation of resources by specialization in accord with comparative advantage, and thirdly, through fierce competition, which encourages innovation, product and process improvements, and cost reductions.

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