Prospects for Economic Integration of BIMSTEC: Trade and Investment Scenario

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Abstract

The purpose of this study is to explore the trade and investment potential under the ambit of regional cooperation comprising the seven contiguous countries of Bangladesh, India, Sri Lanka, Nepal, Bhutan, Thailand and Myanmar (BIMSTEC). The study addressed the latest update of BIMSTEC economic cooperation and then explored the economic impact of the regional integration. The potential economic impact of the BIMSTEC economic cooperation as well as BIMSTEC FTA could promote the growth for the region. One of the major findings of the paper is that a large part of BIMSTEC's trade has remained unrealized and the trade transaction cost is one of the major trading barriers prohibiting the growth of BIMSTEC intra-regional trade. The study reinforces that improvement in infrastructure and connectivity that leads to less trade transportation costs should be a necessary step in order to realize BIMSTEC's trade and investment potential. The paper concludes that liberalization of non-policy barriers will spur BIMSTEC's trade and economic cooperation.

1. Introduction

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a supranational Free Trade Agreement (FTA) that started its journey through the Bangkok Declaration in 1997. The agreement initialized as a regional cooperation grouping between Bangladesh, India, Sri Lanka and Thailand, and was known as BIST-EC, until Myanmar's inclusion later in that year, when it became BIMST-EC [1]. In 2004, Bhutan and Nepal joined the panel, which gave the FTA its current name [2].

The objective of regional integration is to accelerate growth through mutual cooperation in different areas of common interests by utilizing regional resources and geographical advantages. Unlike many other regional groupings, BIMSTEC is a sector-driven cooperative organization. Starting with six sectors—including trade, technology, energy, transport, tourism and fisheries—for sectoral cooperation in the late 1997, it expanded to embrace nine more sectors—including agriculture, public health, poverty alleviation, counter-terrorism, environment, culture, people to people contact and climate change [2].

BIMSTEC creates a bridge between 5 South Asia and South East Asia, through establishing intra-regional collaboration between ASEAN and SAARC. The region is home to 1.6 billion people, which is about 22% of the world's population, and contributes to a combined GDP of US$ 2.8 trillion. On an average, the countries have maintained

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about 6% annual growth in GDP despite global economic downturns in the recent past[3]. Potentially, BIMSTEC will be aiming towards harnessing the power of emerging markets across the region.

Covering about one-fourth of the world population, the BIMSTEC has been negotiating for free trade agreement and some other sectoral cooperation through Annual Ministerial Meetings, Senior Officials Committee, BIMSTEC Working Groups and Specialized Task Forces to coordinate and move towards signing and launching the FTA. In view of the above, the main research question in this paper is to explore the trade and investment potential under the ambit of regional cooperation of BIMSTEC. Rest part of the paper is organized as follow. Section 2 addresses the latest achievement of BIMSTEC economic cooperation. Section 3 explores the potential economic impact of the regional integration. Section 4 provides the major challenges of the BIMSTEC integration and finally conclusion and policy recommendations are briefed at the end.

2. Latest Achievement of BIMSTEC Negotiations

As per agreed upon measures, the chairmanship of BIMSTEC rotates between the member countries. As of now, Nepal is chairing the organization since 2015[1]. The BIMSTEC Trade Negotiating Committee (TNC) has held 20 sessions of negotiations. The latest TNC meeting was held in Bangkok from September 9-10, 2015. The negotiations are spread over the areas of (i) tariff concessions on trade in goods, (ii) customs cooperation, (iii) trade in services (iv) investments and (v) dispute settlement mechanism. There are four draft Agreements on Trade in Goods, Rules of Origin, Dispute settlement and Customs Matters have been agreed in different BIMSTEC TNC meetings and now waiting for sign the final agreements.

2.1. Tariff Reduction or Elimination Under BIMSTEC

The two avenues in which BIMSTEC countries shall reduce and/or eliminate its tariffs on originating goods of the other party are fast track and normal track. The tariffs on the goods covered under the fast track as well as normal track shall be eliminated in equal annual installments with reference to their respective applied MFN tariff rates as of 1st August 2007 as the base rate.

Table 1 illustrates the time schedule of tariff reduction and elimination according to framework agreement of BIMSTEC FTA as well as its amendment by the 19th BIMSTEC TNC meeting [4]. The table shows that, according to framework agreement (its amendment by 19th TNC meeting), for fast track product, the Non-LDC member countries reduced/eliminated tariff imposed on LDC member countries by 30 June 2013 and tariffs among themselves by 30 June 2015. The LDC member countries are committed to reduce/eliminate tariffs among themselves by 30 June 2015 and tariff imposed on Non-LDC member countries by 30 June 2017. For normal track product, Non-LDC member countries are required to reduce/eliminate tariff for the products of LDC member countries within 30 June 2016 and tariffs for the products among themselves within 30 June 2018. The LDC member countries are required to do the same within 30 June 2021 among themselves and within 30 June 2023 for Non-LDC member countries. However, the 20th TNC meeting in Bangkok is expected to rectify the agreement.

Table 1. Tariff Reduction/ Elimination Plan

	Countries	For India, Sri Lanka & Thailand	For Bangladesh, Bhutan, Myanmar & Nepal
FAST TRACK	**India, Sri Lanka & Thailand**	1 July 2010 to 30 June 2013	1 July 2010 to 30 June 2011
	Bangladesh, Bhutan, Myanmar & Nepal	1 July 2010 to 30 June 2015	1 July 2010 to 30 June 2013
NORMAL TRACK	**India, Sri Lanka & Thailand**	1 July 2011 to 30 June 2016	1 July 2011 to 30 June 2014
	Bangladesh, Bhutan, Myanmar & Nepal	1 July 2011 to 30 June 2021	1 July 2011 to 30 June 2019

Source: BIMSTEC

2.2. Safeguard Measures

According to the safeguard measures in place, BIMSTEC member nations are allowed to withdraw tariff concession for protectionism purposes, in case imports from free trade access from the FTA members cause significant harm to the domestic industries. The exceptions to the safeguard measures are as follows:

(i)   If the product has originated in a member nation and the import share of the product does not exceed three percent, given that rest of the members with less than three percent import shares collectively account for not more than nine percent of the importing countries import share.

(ii)   If the product has originated from an LDC and does not exceed five percent, given that LDC members with less than five percent import share collectively account for not more than fifteen percent of the import share of the importing country.

2.3. Rules of Origin

Free trade agreements emphasize largely on Rules of Origin, and BIMSTEC is no different. The rules of origin for BIMSTEC are fairly modest. By 18th TNC meeting, held in June 2009, domestic value addition, regional accumulation, and product specific rules have been agreed upon between the member nations [5]. The product specific rules have been agreed upon for 147 products at HS 6 digit level. For a product to obtain BIMSTEC FTA preferential treatment, the product has to satisfy one of the following conditions:

(i)   The product has to be wholly produced or obtained in a member country.

(ii)   The product has to satisfy the criteria of change in tariff sub-heading at HS 6 digit level, and create a local value addition of thirty-five percent of FOB value. For LDC member countries, the local value addition criteria is reduced to thirty percent of FOB value.

(iii)   Under aggregate regional accumulation, BIMSTEC content of the final goods is not less than the local value addition mentioned in (ii). In such cases, change in tariff sub-heading is only applicable for non-BIMSTEC originating materials.

2.4. Dispute Settlement Procedures

The BIMSTEC FTA arrangement has specific rules and agreements on dispute settlement procedures. As a tool for dispute settlement, bilateral consultation shall be held within 30 days upon a request for such made by any of the BIMSTEC members. Upon failure to resolve the issues through a bilateral consultation within a 60 day period, the complaining member may request for constitution of an arbitral tribunal.

The tribunal will consist of three members. The complaining member will appoint an arbitrator to the tribunal within 20 days of making the tribunal request. The member, against which the complaint has been filed, will appoint an arbitrator within 30 days of the request. A third arbitrator will chair the tribunal, and will be agreed upon by the members in the dispute. While the findings and recommendations of the tribunal is to be limited to the rights and obligations of the members according to the framework agreement, the tribunal will submit these in a report within 120 days of the start of the tribunal.

The arbitral tribunal findings and recommendations are to be complied by the members. Each member shall bear its own expenses and legal costs during the dispute resolution process. The costs incurred on the Chair of the tribunal shall be borne equally by the disputing members.

2.5. Cooperation and Mutual Assistance in Customs Matters

In the spirit of just application of customs law, for the prevention, investigation, legal proceedings and combating of customs offences and for the purpose of cooperation and mutual assistance in customs related matters, the BIMSTEC member countries will provide apt and necessary administrative assistance to each other. The scope of the customs assistance is elaborated in Article 3 of the Agreement on Cooperation and Mutual Assistance in Customs Matters for BIMSTEC FTA, which includes the following:

(i) Exchange information to be used in administering and enforcing Customs laws;

(ii) Cooperate in the prevention, suppression and investigation of Customs offences, including smuggling and fraudulent activities;

(iii) Cooperate in the exchange of intelligence for combating illicit trafficking in narcotics, psychotropic substances, fire arms, ammunition and explosives, articles of historical, artistic, cultural and archaeological value;

(iv) Cooperate in the research, development and evaluation of new Customs procedures and in the training of personnel or technical assistance;

(v) Collaborate in simplifying and harmonizing Customs procedures *etc*.

The negotiating parties agreed to conclude the Agreement on Trade in Goods within 2011 and to implement the tariff concessions from July 1, 2012 at the 19th meeting of the TNC. However, the negotiation was not successful, and the above three agreements are expected to be signed in the 20th TNC. However, negotiations are anticipated to continue on the Agreements on Services and Investment.

3. Prospects for Economic Integration

3.1. Trade and Investment Scenario among BIMSTEC

Table 2 shows major macroeconomic scenario of BIMSTEC countries. The countries have a combined population of 1.6 billion, which also goes to illustrate the abundance of labor supply in the region, whether unskilled, or semi-skilled. This also makes a good case for manufacturing hub investments in the region, as supply abundance lowers the equilibrium price leading the investors to enjoy a higher consumer surplus in the labor market.

The economies contributed to a total GDP of US$ 2.8 trillion in the year 2014[3]. Due to the variation of country size, population, population density and other resource-based factors, a mean of their gross domestic product may not be a strong indicator of their progress. However, looking at the annual growth of their GDP, it can be easily seen that even during the global economic disintegration, the BIMSTEC countries maintained a near-steady growth of approx. six percent per annum [3].

In 2014, the member countries together had a staggering total export value of US$ 606.6 billion, and an import value of US$ 685.3 billion [6]. It is interesting to note that except for Thailand, all the other six BIMSEC member nations have a higher volume of imports than the export volume.

Table 2. Macroeconomic Profiles of BIMSTEC Countries, 2014

Country	Population (Millions)	GDP (in current US$ Billions)	Exports (US$ Millions)	Imports (US$ Millions)	Tariff (Simple Mean, MFN)
Bangladesh	159	173.8	30,131.6	42,267.6	13.9
Bhutan	0.8	1.8	534.7	900.5	-
India	1,295.3	2,066.9	329,633.0	405,122.0	13.5
Myanmar	53.4	64.3	8,860.1	12,749.5	5.6
Nepal	28.2	19.6	901.5	6,614.7	12.2
Sri Lanka	20.6	74.9	11,767.1	17,475.1	9.9
Thailand	67.7	373.8	224,777.0	200,217.0	11.4

Source: World Bank, UNCTAD, and World Trade Organization Statistics Databases

imports than the export volume.

Table 2 gives a holistic overview of macroeconomic profiles of the member countries, which goes on to show that BIMSTEC is a vibrant regional block, and has a huge market and trade potential for regional cooperation[3][6][7].

According to Bloomberg, total exports of BIMSTEC countries increased from US$113.5 billion in 2001 to US$ 608 billion in 2014, whereas the imports grew robustly from US$118.4 billion in 2001 to US$ 685 billion in 2014. Its share in the world trade was about 3.7 % in 2014. However, BIMSTEC's share in total world trade is very small compared to other blocs in the region

At the same time the intraregional trade was only US$37 billion in 2014. However, the intraregional trade is significantly lower compared to many regional blocks. In 2014 intraregional trade among BIMSTEC countries was 2.86 % as against 7 % among the SAARC countries, 7.5 % among APTA and 16 % among South American Common Market (MERCOSUR) countries 29 % among ASEAN countries. Therefore, once PTAs and FTAs are negotiated and come into force, intraregional trade will grow much faster.

Table 3. Intra BIMSTEC Trade (US$ Millions), 2014

	Country	Bangladesh	India	Myanmar	Nepal	Sri Lanka	Thailand	Total
Importing Country	**Bangladesh**		6,174.40	71.59	19.44	68.30	698.91	**7,032.64**
	India	556.64		1,401.03	602.04	591.69	5,686.98	**8,838.38**
	Myanmar	16.97	955.94		-	5.76	4,614.95	**5,593.62**
	Nepal	22.55	4,845.59	-		4.18	63.16	**4,935.48**
	Sri Lanka	26.06	3,977.06	29.71	0.04		461.92	**4,494.79**
	Thailand	43.60	3,045.26	3,917.02	0.9	58.46		**7,065.27**
	Total	**665.82**	**18,998.25**	**5,419.35**	**622.45**	**728.39**	**11,525.92**	

The header "Exporting Country" spans the columns Bangladesh through Thailand.

Source: Bloomberg L.P., 2015

In al trade will grow much faster.

Table 3, it can be seen that the BIMSTEC member countries enjoy a vibrant inter-country trade relationship. In 2014 alone, the BIMSTEC countries conducted intra-BIMSTEC cross-border trade counting up to US$ 38 billion [8], demonstrating an economic window, as well as the existence of a trade bloc that can very much benefit from introduction and appreciation of preferential trade agreements.

A closer look at the table demonstrates that India and Thailand are the two members of BIMSTEC who experience a positive net trade balance, achieved through a higher export volume than their imports. Bangladesh, Myanmar, Nepal and Sri Lanka import more from these trade bloc members than they export to them. Bhutan has a smaller trade volume compared to the rest of the six members, and specializes in the trade of cross-border hydropower, mining and some agriculture, majority of it with India [9].

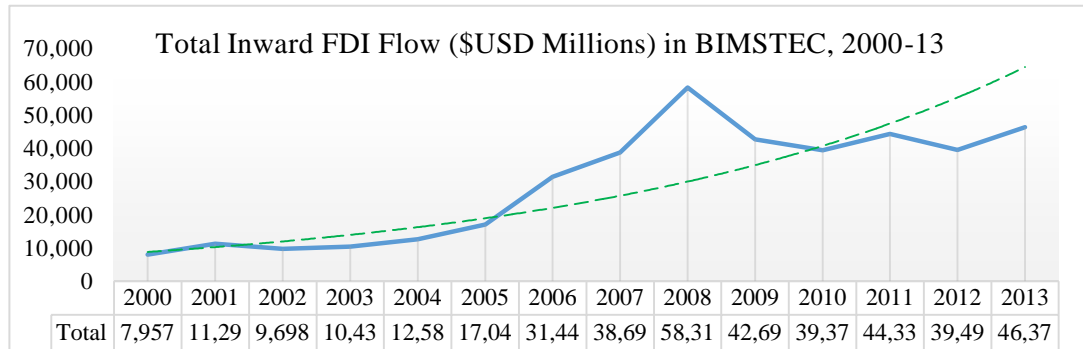### 3.2. Investment Cooperation to Strengthen Intraregional Investment

Intraregional investment can be divided into two categories: Foreign Direct Investment (FDI) and Portfolio Investment. Investment flows are often strong indicators of investment commitments and cross-border trade cooperation rends. In the year 2000, FDI inflows reached about US$8 billion in the BIMSTEC region, and kept increasing robustly till it hit its recent peak at US$ 58 billion in 2008. Despite global slowdown of economic activities since then, BIMSTEC countries maintained an upwards trend, as can be seen in the trend line drawn in **Error! Reference source not found.** below, over the annual FDI inflow values through 2000 to 2013 in the region. In 2013, FDI inflow to BIMSTEC crossed US$ 46 billion[10].

In terms of the distribution of FDI inflow during the period, the highest recipient of FDI was India with 61% of total FDIs in the region followed by Thailand (28%), Myanmar (5.6%), Bangladesh (3.4%) and Sri Lanka (2%). In view of this trend, investment cooperation is of utmost importance to strengthen intraregional investment for achieving industrial and market integration. At the same time, member countries have to strengthen their productivity and competitiveness to attract FDIs. Large inflows of FDI contribute directly to increase income through raising the capital intensity of production, and indirectly through enhancing ethnical progress.

Table 4. Inward Foreign Direct Investment Hlows, 2000 – 2013 (US$ Millions*)*

Country	2000	2002	2004	2006	2008	2010	2011	2012	2013
Bangladesh	579	328	460	792	1,086	913	1,136	1,293	1,599
Bhutan	-	2	9	72	20	31	26	22	21
India	3,588	5,630	5,778	20,328	47,139	27,431	36,190	24,196	28,199
Myanmar	208	191	251	276	863	1,285	2,200	2,243	2,621
Nepal	0	-6	0	-7	1	87	95	92	74
Sri Lanka	173	197	233	480	752	478	981	941	916
Thailand	3,410	3,355	5,859	9,501	8,455	9,147	3,710	10,705	12,946
Total	**7,957**	**9,698**	**12,589**	**31,443**	**58,316**	**39,371**	**44,339**	**39,492**	**46,376**

Source: UNCTAD Trade Statistics Database

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total	7,957	11,29	9,698	10,43	12,58	17,04	31,44	38,69	58,31	42,69	39,37	44,33	39,49	46,37

Source: UNCTAD Trade Statistics Database

Figure 1. Total Inward FDI Flow in the BIMSTEC Region, 2000-2013 ($USD Mill)

It is important to note that many BIMSTEC economies are relatively smaller to be able to undertake economic activities that could exploit substantial economies of scale. Economies of scale are better utilized in grander markets rising out of economic assimilation, and small countries have greater market penetration. Significant benefit can be derived by the BIMSTEC economies by adjoining and sharing the factors of production and the huge marketplace through preferential trading policies. Investments in the trade bloc will largely depend on governance, transparency, accountability, and predictability of policies, rules and regulations relating to investments, both in public and private sectors [11].

In order to achieve increased intraregional FDI and portfolio investment flows, member countries should further reinforce macroeconomic environments, leading towards liberalizing and harmonizing their investment regime. Moreover, robust native fiscal structures and deregulation of domestic monetary and capital markets are vital for drawing private investment as well as for intraregional investment.

3.3. The GTAP Model for Macroeconomic Analysis

The most common modeling technique for estimating economic impacts of a trade agreement with economy-wide effects involves the Computable General Equilibrium (CGE) modeling framework of the Global Trade Analysis Project (GTAP). The general equilibrium model is thoroughly documented by Hertel in 1997[12] and in the GTAP database documentation [13]. It is a comparative static multi-regional CGE model.

The basic structure of the GTAP database includes: industrial sectors, households, governments, and global sectors across countries. Countries and regions in the world economy are linked together through trade. Prices and quantities are simultaneously determined in both factor and commodity markets. The main factors of production are skilled and unskilled labor, capital, natural resources and land.

Producers operate under constant returns to scale, where the technology is described by the Leontief and constant elasticity of substitutions (CES) functions. Two broad categories of inputs are identified: intermediate inputs and primary factors of production. In the model, firms minimize costs of inputs given their level of output and fixed technology. First, producers use composite units of intermediate inputs and primary factors in fixed proportions following a Leontief production function. At the second level of the production nest, intermediate input composites are obtained combining imported bundles and domestic goods of the same input-output group. Trade policy can affect the price of traded goods relative to domestically produced goods. As a result, a key relationship for model analysis is the degree of substitution between imported and domestic goods. This key relationship is commonly identified as the Armington elasticity

[14]. It is assumed that domestically produced goods and imports are imperfectly substitute. This is modeled using the Armington structure.

Households' behavior in the model is determined from an aggregate utility function[15]. The aggregate utility is modeled using the Cobb-Douglas production function with constant expenditure shares [16]. This utility function includes private consumption, government consumption and savings. Current government expenditure goes into the regional household utility function as a proxy for the government provision of public goods and services. Private households' consumption is explained by a constant difference elasticity expenditure function.

Domestic support and trade policy (tariff barriers) are modeled as ad valorem equivalents. These policies have a direct impact on the production and consumption sectors in the model. In equilibrium, all firms have zero real profit, all households are on their budget constraint, and global investment is equal to global savings. Changing the model's parameters allows one to estimate the impact from a country's/region's original equilibrium position to a new equilibrium position.

The simulation represents what the economy would look like if the policy change or shock had occurred. The difference in the values of the endogenous variables in the baseline and the simulation represents the effect of the policy change. All the policy simulations as well as the results reported in this paper, as in other major models of this type, may be thought of as occurring in one-shot over a time-period that is needed for equilibrium to be achieved. This time-period is akin to what is widely thought of by economists as 'medium run', possibly 3-5 years in a go. So the model should be able to foretell the effect on trade and production patterns if the trade policy was changed. Furthermore, based on the change in welfare, the policy-maker would be able to judge whether the country benefited from the change in policy or not.

The GTAP framework has strength because of theoretical rigor, its ability to represent direct and indirect interactions among all sectors of an economy and precise detailed quantitative results. The strength of the multi-country CGE model is that incorporates in an elegant manner, the features of neo-classical general equilibrium and real international trade models in an empirical framework [17]. However, this study does not adequately capture the service trade reforms and thus the results may underestimate the potential effect of liberalization where the services sector is to be included. It is to be noted that the GTAP model has both static and dynamic versions. However, in this paper, the static GTAP model is used. The static model has disadvantages relative to dynamic techniques, of not describing the time path, *i.e.* attention in the analysis is concentrated on the end outcome rather than the transition [18]. The model's results may be very sensitive to the assumptions and data used. Almost all CGE exercises include a sensitivity analysis to obtain a range of results based on different assumptions or data.

3.3.1. Data and Country and Sectoral Aggregation: The study makes use of Version 8 of the GTAP database which was released in 2012. Data on regions and commodities are also aggregated to meet the objectives of this study. Version 8 of the GTAP database covers 57 commodities, 129 regions/countries and 5 factors of production. For the sake of convenience the 129 regions have been aggregated to 9 regions and the 57 commodities have been aggregated into 9 as shown in *Annex 1*. The study has simulated all tariff elimination among BIMSTEC countries.

3.3.2. Analysis of the Simulation Results: Welfare and Macroeconomic Effects: Based on the model simulations, this section reports the results that show the likely impacts on important macro-economic variables, economic welfare, industry outputs and exports. The effects of BIMSTEC FTA can be assessed at both the macro-economic and sectoral levels of analysis. Hossain(2013) has examined the possible impacts of BIMSTEC FTA on its member countries using GTAP database and observed that

BIMSTEC FTA will be welfare enhancing for all its members except Bangladesh. He also found that trading arrangement might generate employment for its members and creating employment opportunities for unskilled labor, BIMSTEC FTA can reduce poverty within the bloc[19]. However, some differences have been identified in this research compared to the aforementioned study. The welfare and other macroeconomic effects of the simulations for the countries/regions concerned are presented in .
Table *5*.

Table 5. Welfare Impact of BIMSTEC FTA, in US$ Millions

Regions	Allocative Efficiency	Endowment Effect	ToT Effect	IS Effect	Total Welfare (EV)
Thailand	43.6	0	350	-49.1	345
Bangladesh	74.2	0	-58.4	-4.53	11.2
India	606	0	467	88.8	1,162
Sri Lanka	43.9	0	-37.1	-35.5	-28.6
Nepal	49.1	0	-27.9	-25.9	-4.69
Rest of Asia	-68.9	0	-346	46.5	-368
North America	-0.051	0	-59.4	-26.6	-86
EU_25	-67.7	0	-113	-3.27	-183
Rest of World	-37.6	0	-176	9.48	-204
Total	**642**	**0**	**0**	**0**	**642**

Source: Author's simulation of GTAP version 8.

If the BIMSTEC countries completely eliminate import tariffs with each other, Thailand, India and Bangladesh are expected to experience welfare gain. The welfare gain is highest in case of India which is US$ 1,162 million followed by Thailand (US$ 345 million), and Bangladesh (US$ 11.2 million). The Sri Lanka and Nepal are expected to experience welfare loss. All other regions lose because of diverted trade and unfavorable terms of trade effects. There are three determining factors of equivalent variation *i.e.,* allocative efficiency, terms of trade (TOT) effects and investment-saving (I-S) effects. If we look at the allocative efficiency we can see that complete removal of all tariffs among BIMSTEC member countries that improve the allocative efficiency in all BIMSTEC countries [20].

Table 6. Macroeconomic Impact of BIMSTEC FTA

Countries	GDP	Export	Import	ToT
Thailand	0.33	0.2	0.56	0.2
Bangladesh	-0.18	3.53	2.8	-0.41
India	0.30	0.55	0.68	0.2
Sri Lanka	-0.68	2.27	2.23	-0.38
Nepal	-2.27	12.87	5.14	-2.23
Rest of Asia	-0.02	-0.01	-0.02	-0.01
North America	-0.01	0	-0.01	0
EU_25	-0.01	0	-0.01	0
Rest of World	-0.01	-0.01	-0.02	-0.01

Source: Author's simulation of GTAP version 8.

The BIMSTEC FTA could enhance intra-regional trade as the simulations show export and import of all BIMSTEC countries would experience high growth. In terms of real

GDP Thailand and India would experience increase by 0.3 percent. However, Bangladesh would experience a fall in real GDP of 0.18 per cent if the deal becomes realized. Sri Lanka and Nepal would experience a fall in real GDP of 0.68 per cent, 2.27 percent respectively [20].

Table 7. Impact on Industrial Output of BIMSTEC FTA

	Thailand	Bangladesh	India	Sri Lanka	Nepal	Rest of Asia	North America	EU_25	Rest Of World
Grains Crops	-0.05	-0.32	0.08	-0.37	-1.04	0	-0.01	0	-0.01
Meat and Livestock	-0.24	-0.14	0.01	-0.15	-0.46	0	0	0	0
Extraction	-0.13	-0.25	-0.16	-0.14	-1.67	0.01	0	0	0
Process Food	0.12	-0.26	0.08	-0.82	-1.34	-0.01	0	0	-0.01
Textiles	1.05	0.86	0.02	0.84	9.66	-0.06	0.01	0	0
Clothing	-0.56	3.79	-0.67	-0.19	5.06	-0.01	-0.03	-0.02	-0.01
Light Manufacturing	0.1	-1.58	-0.04	2.62	-7.26	0	0	0	0.01
Heavy Manufacturing	0.12	-1.57	0.09	-1.56	2.99	0	0	-0.01	-0.01
Service	-0.07	-0.02	-0.01	0.26	0.58	0	0	0	0

Source: Author's simulation of GTAP version 8.

Table 7 shows the sectoral analysis under BIMSTEC FTA, the production of Textiles and Clothing will increase significantly. Thailand and India could be the most benefited countries.

4. Challenges Facing the BIMSTEC Countries

4.1. Connectivity and Infrastructure

Infrastructure and connectivity are core elements of trade facilitation. Poor physical infrastructure—particularly the lack of telecommunication links, parking space, cold storage, accommodation facilities and power—is a major problem in the border station areas. BIMSTEC initiative will need to be geared to build the road, rail and air transport connectivity lack of which at present hinders deepening of trade and investment infrastructure. Improving the state of connectivity within the region, and mobilizing the required resources to build the necessary infrastructure must be seen from the perspective of long term development strategy of BIMSTEC members. Experiences of other regional and sub-regional integration attempts suggest that participating countries incurred substantial expenditures to develop their infrastructures particularly to develop internal as well as cross-border transportation infrastructure including railways, roadways, airways, bridges and ports. ASEAN could serve as a very good example for the BIMSTEC group members in this regard. An integrated transportation system must be seen as critical to generating the expected gains for BIMSTEC cooperation. Serious attention ought to be given to the development of a multi-modal transport system linking road-rail-sea transport in a seamless continuity.

4.2. Non-Tariff and Long Negative List

As most of BIMSTEC members also member of South Asian Free Trade Agreement (SAFTA) and Asia Pacific Trade Agreement (APTA), the average tariff have been reduced. However, there are numerous non-tariff barriers that have to be removed. There

are long negative list among BIMSTEC countries that need to be reduced within a specified timeframe in order to realize the trade potential. Harmonizations of standards, tariff elimination as well as dismantling of all para-tariff and non-tariff barriers are key for regional integration.

4.3. Trade Facilitation

World Bank's *Doing Business* report provides an aggregate ranking on the ease of doing business based on indicator sets that measure and benchmark regulations applying to domestic small to medium-size businesses through their life cycle [21]. One of the indicators in trade facilitation is the number of documents required to complete the process per business cycle. However, difficulties arise when different trading partners ask for different documents in the process of exporting or importing the same product. The table 8 shows the status of trade facilitation in BIMSTEC countries.

Table 8. The Status of Trade Facilitation in BIMSTEC Countries (2014)

Economy	Bangladesh	Bhutan	India	Myanmar	Nepal	Sri Lanka	Thailand
Ease of Doing Business Rank	173	125	142	177	108	99	26
Trading Across Borders Rank	140	165	126	103	171	69	36
Documents to Export (number)	6	9	7	8	11	7	5
Time to Export	28.3	38	17.1	20	40	16	14
Cost to Export(US $ Per Container)	1,281	2,230	1,332	620	2,545	560	595
Documents to Import (number)	9	11	10	8	11	7	5
Time to Import	33.6	37	21.1	22	39	13	13
Cost to Import(US $ Per 20 Container)	1,515	2,330	1,462	610	2,650	690	760

Source: World Bank, 2015

This shows that establishment of a seamless system of cross-border movement of both cargo and people are major challenge for the BIMSTEC. For easing up cross-border movement and establishing greater connectivity the existing trans-border formalities, vehicular movement and customs procedures need to be simplified. Use of modern technology could play an important role in speeding up the procedures. A BIMSTEC visa could also be introduced to facilitate movement of people particularly for the investors and the businessmen.

4.1. Political Economy and Overlapped with SAARC

Political commitment is essential to move forward for closer cooperation among BIMSTEC countries. The major focus of BIMSTEC initiative should be to develop the growth zone that is a relatively underdeveloped area. Five of the members of BIMSTEC had been members of SAARC as well. In this backdrop, the enthusiasm for BIMSTEC was slightly misplaced and unrealistic given the inability of SAARC to bring to light the program agreed upon. Attracting investments, both from within and also from outside, to exploit the complementarities of the sub-region, through horizontal and vertical cooperation, should be at the centre of the design of BIMSTEC cooperation.

5. Concluding Remarks

The BIMSTEC regional integration is a bridge between South and South East Asia and represents a reinforcement of relations among these countries. BIMSTEC is key to establishing a platform for intra-regional cooperation between SAARC and ASEAN members. The BIMSTEC region is home to around 1.6 billion people with a combined GDP of 2.7 trillion economies and total trade US$1295 Billion[3]. However, intra-regional share accounts for only 2.8 percent, which easily puts BIMSTEC as the least integrated area in any regional block.

However, The BIMSTEC members' countries have been negotiating for regional economic cooperation. The negotiations are spread over the areas of (i) tariff concessions on trade in goods, (ii) customs cooperation, (iii) trade in services (iv) investments and (v) dispute settlement mechanism. There are four draft agreements on trade in goods, rules of origin, dispute settlement and customs matters have been agreed in different BIMSTEC TNC meetings and now waiting for sign the final agreements in the 20th TNC meeting that will be held in Bangkok from September 9-10, 2015.

This studies shows that if the BIMSTEC countries completely eliminate import tariffs with each other, Thailand, India and Bangladesh are expected to experience welfare gain. The welfare gain is highest in case of India which is US$ 1162 million followed by Thailand (US$345 million), Bangladesh (US$ 11.2 million). The Sri Lanka and Nepal are expected to experience welfare loss. There are three determining factors of equivalent variation *i.e.*, allocative efficiency, terms of trade (TOT) effects and investment-saving (I-S) effects. If we look at the allocative efficiency we can see that complete removal of all tariffs among BIMSTEC member countries that improve the allocative efficiency in all BIMSTEC countries. The BIMSTEC FTA could enhance intra-regional trade as the simulations shown that export and import of all BIMSTEC countries would experience high growth. In terms of real GDP Thailand and India would experience increase by 0.3 percent. However, Bangladesh would experience a fall in real GDP of 0.18 per cent if the deal becomes realized. Sri Lanka and Nepal would experience a fall in real GDP of 0.68 per cent, 2.27 percent respectively.

Establishment of a seamless system of cross-border movement of both cargo and people is major challenge for the BIMSTEC. In the context of the current state of play, BIMSTEC remains one of the least connected regions in the world. BIMSTEC initiative will need to be geared to build the road, rail, port and air transport connectivity which at present hinders deepening of trade and investment infrastructure. The BIMSTEC countries should work on Single Window facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements. Non-tariff barrier have to remove within a mutually agreed timeframe. The member states should reduce the negative list to unlock trade potential in the BIMSTEC region. Transit facilities should be introduced to promote effective intra BIMSTEC trade, especially for Land-Locked member countries. A BIMSTEC visa could also be introduced to facilitate movement of people particularly for the investors and the businessmen. Improving the state of connectivity within the region, and mobilizing the required resources to build the necessary infrastructure must be seen from the perspective of long term development strategy of BIMSTEC members.

Appendix

Annex 1. Regional and Commodity Aggregation of GTAP Database

SL	Aggregated Region	GTAP Region	SL	Aggregated Commodities	GTAP Commodities
1	Thailand	Thailand	1	Grains Crops (9 products)	pdr wht gro v_f osd c_b pfb ocr pcr
2	Bangladesh	Bangladesh	2	Meat and Lstk (6 products)	ctl oap rmk wol cmt omt
3	India	India	3	Extraction (6 products)	frs fsh coa oil gas omn
4	Sri Lanka	Sri Lanka	4	Process Food (5 products)	vol mil pcr sgr ofd
5	Nepal	Nepal	5	Textiles (1)	tex
6	Rest of Asia	Rest of all Asian Countries (including East and Southeast Asia)	6	Apparel (1)	wap
7	North America	All North America (USA, Canada, Mexico *etc*)	7	Light Mnfc (7)	lea lum ppp fmp mvh otn omf
8	EU_25	EU_25	8	Heavy Mnfc (7)	p_c crp nmm i_s nfm ele ome
9	Rest of the world	Rest of countries in the World of GTAP Database	9	Services (15)	ely gdt wtr cns trd otp wtp atp cmn ofi isr obs ros osg dwe

Source: GTAP version 8

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