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DEEPENING COOPERATION IN THE BIMST-EC: A CASE FOR TRANSPORT INTEGRATION

Abstract

The growth of regional trading blocs has been one of the major developments in international relations in recent years. The major contributing factor to rising regional integration has been improved integrated infrastructure systems which have facilitated nesting of regional and/or sub-regional markets. This paper argues that the scale of intra-regional infrastructure disparity in BIMST-EC is quite significant resulting in wider scope for stronger economic interdependence in the region. The paper concludes that a stronger and desirable intra-regional trade is contingent upon improved transport network among BIMST-EC countries.

1. Introduction

The growth of regional trading blocs has been one of the major developments in international relations in recent years; all countries are now members of at least one bloc and many belong to more than one (Schiff and Winters, 2003). In the last decade, the world has

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witnessed boom in number of regional trading blocs as well as rapid changes in regional integration arrangements. [1] In general, most of all these regional integration arrangements (RIAs) have shared a similar objective to reduce trade barriers – quantitative and otherwise. Some RIAs have also moved towards geo-political regionalism. The major qualitative changes which the world has witnessed in RIAs during the last decade are as follows.

- **Dynamism:** Most of the RIAs have moved from closed model to more open model encouraging greater international commerce rather than controlling it by way of less and less tariffs and quotas (ASEAN).
- **Transparency:** In recognition of importance of faster trade, trade and transport bottlenecks have been narrowing in RIAs leading to "deep integration" of the economies concerned (EU).
- **Equality:** In some RIAs, developed countries and developing countries are equal partners (NAFTA).

Urgency of greater and closer trade and economic cooperation in Southeast Asia has been felt since the 1997 East Asian crisis (Sobhan, 1999; Bird and Rajan, 2002; Kumar, 2002, RIS, 2004a). Although potentials are high in this part of the world, SAARC is failing to integrate in full swing due to various limitations (Ray and De, 2003; De, 2003). Naturally, more and more regional and/or sub-regional initiatives have been opened up such as BIMST-EC (Bangladesh, India, Myanmar, Sri Lanka and Thailand – Economic Cooperation), IOR (comprising countries in the Indian Ocean Rim), BCIM (Bangladesh, China, India and Myanmar), SASEC (Bangladesh, Bhutan, India and Nepal), Mekong – Ganga Cooperation Group (comprising India, Cambodia, Laos, Myanmar, Vietnam and Thailand), etc. in the last few years. In spite of accession to WTO, countries are moving with RIAs for closer

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1 RIAs have been around for long period of time since 1664 when a custom union of the provinces of France was proposed. There are as many as 194 regional integration agreements (RIAs) that had been notified by the beginning of 1999, 87 dated from 1990 or after (Schiff and Winters, 2003).

economic and trade cooperation (Rajan et al., 2001). Interestingly, whatever evolution has happened in RIAs has been effected through improved integrated transport systems which had facilitated nesting of regional and/or sub-regional markets (Amjadi and Winters, 1999).

Many factors lay the foundations for countries to form RIAs with one or many. In general, it is found that trade liberalisation is a necessary but not a sufficient condition for countries to have single and/or multiple RIAs. It is the secure access to major markets which forces countries to bind themselves into an RIA, though many RIAs are political in origin (World Bank, 2000). But nature of political compulsions in forming RIAs differs across regions. In some cases, political compulsions have emerged as the critical factor behind regionalism; the pressures of globalisation are forcing countries to seek efficiency through larger markets, increased competition, and access to foreign technologies and investment through RIAs. Being within RIAs, there is desire to help neighbouring countries stabilize and prosper, both for altruistic reasons and to avoid spill-over of unrest and population migration (inward or outward). It is with the above objective that BIMST-EC was mooted in 1997 to promote regional economic cooperation in the Bay of Bengal region (RIS, 2004b; De and Ghosh, 2003).

This paper discusses the three aspects of BIMST-EC relating to potential cooperation in the area of infrastructure. Section 2 presents current level of economic and social dynamics of BIMST-EC. Section 3 deals with present social and economic infrastructure status of the region. Sections 4 and 5 review the trade and transport linkages in BIMST-EC. Finally, Section 6 suggests some areas where policy cooperation among the BIMST-EC members is possible in order to promote regional integration in the Bay of Bengal basin.

2. Economic and Social Dynamics of BIMST-EC

The idea of setting up a sub-regional co-operation bloc in the Bay of Bengal basin was first mooted in Bangkok, known as "Bangkok Declaration", by Bangladesh, India, Sri Lanka and

Thailand. On June 6, 1997, Bangladesh–India–Sri Lanka - Thailand Economic Cooperation (BIST-EC) came in force. These countries were chosen because of their proximity and direct access to the Bay of Bengal. The purpose of this regional grouping was to provide trade and technological cooperation among its members in the areas of trade and investment, tourism, transport and communication, technology, energy and fisheries. Later, at the special Ministerial meeting convened in Bangkok on December 22, 1997, by entering Myanmar as a member of the grouping BIST-EC was renamed as BIMST-EC (Bangladesh – India – Myanmar - Sri Lanka – Thailand – Economic Cooperation). At the Ministerial meeting in December 1998, Nepal was added as an observer. By signing the Framework Agreement at the Ministerial meeting held in Phuket (Thailand) in February 2004, BIMST-EC received further momentum in launching of the process of deeper integration in the region.

Differences in factor endowments and economies of scale among the members of BIMST-EC are very prominent; four of the present members (namely, Bangladesh, India, Myanmar and Sri Lanka) and two envisaged members (Bhutan and Nepal) are categorised as low income countries, whereas Thailand is the only member which is ranked as middle income country in the world.[2] Except India, all the other existing and envisaged members are relatively small in size. All the present members do share a common water (Bay of Bengal) through which a large portion of intra-BIMST-EC trade take place. Most of ASEAN countries have sailed through the severity of the crisis and started to ponder again about the process of their own integration within the regional and global context (Dutta, 2002; Chirathivat, 2002). South Asian countries had severe geo-political differences for a long time, but they have now realised the importance of regional integration process, and finally, have signed the long-standing Free Trade Agreement at the 2004 SAARC Summit held in Islamabad. In view of above, BIMST-EC

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2 See, *World Development* Indicators, 2003 (World Bank, 2003).

being a bridge between SAARC and ASEAN, is presumed to usher into a new era (RIS, 2004b).

BIMST-EC's success is likely to come from its vast US$ 741.28 billion economy and 1.32 billion population resource (Table 1). Although Thailand and Sri Lanka were the earlier starters in BIMST-EC in reforming their economy in 1980s, rest of BIMST-EC economies have implemented first generation reforms and/or "core reforms" in early 1990s as a part of their structural adjustment programmes. Good endeavour towards economic reform in the last decade coupled with India's accelerated growth have brought in respectable level of economic growth in this region. The BIMST-EC economy is growing at higher pace than that of some predominant RIAs. In 2001, BIMST-EC has witnessed 4.65% growth rate in GDP and 2.89% in GDP per capita which were miserably poor a decade back. Looking at Average Annual Growth Rate (AAGR) in GDP and per capita GDP that BIMST-EC members have achieved separately and together as a whole during 1991-2001, India can be marked as an economy which has generated considerable impetus towards closer regional economic interdependence in the BIMST-EC region (Table 2). Those countries which have opened early and were able to restructure their economies in tandem with global requirements have gained more than late-starters from the globalised world through exports. Thailand's commendable export earnings have made a mark towards higher openness of the region.

Thailand's rising export growth has helped this region to open up. In terms of exports of goods and services, BIMST-EC can be placed next to the world's fastest growing region – the East Asia and Pacific; today BIMST-EC's exports share stand at 31% of GDP which a decade back was just 18%. Falling current account balance between 1991 and 2001, which means the region's export earnings are favourable compared to import bills, indicates the region's stability in export earnings. The more an economy is open, the larger is its potentiality for gain from world investments. Due to considerable thrusts given by India and Thailand, BIMST-EC has been successful in attracting more than US$ 7 billion FDI in 2001

which was double that of South Asia as a whole. Nonetheless, low savings rate which, in other way, means low investments rate, indicates opportunities for more investments in coming days in the region at a time when the BIMST-EC is witnessing rising GDP growth.[3]

Still differences persist among the BIMST-EC members in the structure of the economy. Table 4 represents prime particulars of the structure of BIMST-EC economy. It is the service sector which contributes highest in the BIMST-EC GDP and also is growing since 1991. Industrial sector contributes 25% of BIMST-EC GDP, while agriculture share 23.42% of GDP in 2001. Naturally, BIMST-EC is a service-driven economy, and its contribution to the region's GDP is quite higher than that of East Asia and Pacific as a whole. Though only 1/3rd of the region's GDP comes from the industrial sector, the region is considerably rich in resource endowments which, if exploited properly, can help this region to catch up with industry-based growing East Asian economies like China. However, when the world is dividing clearly into two areas – knowledge-based and industry-based, and while India has been rated as the proponent of the former and China as the later, underlining any policy prescription in BIMST-EC in this respect needs further analysis.

From the above discussions it may be concluded that though the BIMST-EC economy is growing at a considerable pace, members of this RIA are moving with different levels of economic development. This may be due to the fact that members are embodied with different levels of resource endowments. Finding out appropriate economic and social complementarities among the BIMST-EC members will help the policy maker in craving an appropriate cooperation framework in BIMST-EC.

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3 There are also arguments whether or not low savings rate in the region is associated with higher household consumption expenditure. It may be noted from the below furnished table 3 that the BIMST-EC may be considered as consumer driven economy as its private household expenditure is more than 70% of its GDP, which is also quite higher than East Asia & Pacific economy. At the same time, government in this region does consume less.

3. Economic and Social Infrastructures in BIMST-EC

3.1 Economic Infrastructure Endowments in BIMST-EC

A look at Table 5 makes it obvious that India is much ahead of other BIMST-EC members in terms of aggregate economic infrastructure endowments, although she lags behind of others in most of per capita economic infrastructure endowments. In some sense, members are at different levels of economic infrastructure development as they enjoy varied natural and derived resource endowments. In terms of generation of electricity, India ranks first whereas Thailand occupies top position in terms of per capita consumption of electricity. In case of air freight and passengers carried in air transport, Thailand ranks first whereas India handled highest number of aircrafts in 2001. India's vast international trade has been reflected in its huge seaborne sea freight. Thailand, Sri Lanka and Bhutan have better penetration of paved roads in their economies than India, whereas in terms of road and railway densities, Sri Lanka ranks first in BIMST-EC.

If we look into modern communication facility like telephone lines and mobile phones, Thailand's performance is noteworthy; today 123 and 99 people out of 1000 people have mobile phone and landline connections respectively in Thailand. Rest are far behind of Thailand in terms of communication networks. Though there are wide differences in aggregate terms of telecommunication utilities among BIMST-EC members, interestingly, the largest cities in this region except that in Myanmar and Bangladesh do not have such wide differences in landline penetration. Thimpu being the largest city of a small country like Bhutan has successfully provided higher landline connections to its people than that of India, Bangladesh and Myanmar. People in Thailand also have higher access to personal computers and television sets, and Sri Lanka comes next to Thailand in these two fields.

From the foregoing discussion, it is clear to us that the BIMST-EC members are at different levels of economic infrastructure endowments, and complementarities among the

members are substantial. Here comes the necessity for closer regional cooperation. Thailand's immense experience in telecommunication facilities will certainly help rest of the BIMST-EC members in strengthening their own systems. Similarly, India's vast capabilities in modern railway system and advanced computer knowledge will help other members to build up their own railway networks and computer education. Thus, complementarities are substantial and so are potentials for intra-BIMST-EC infrastructure networking.

3.2 Social Infrastructure Endowments in BIMST-EC

The combined population of BIMST-EC is 1.32 billion of which 20% of live in urban area. In general, population pressure in urban cities is relatively high in BIMST-EC resulting in the possibility of wider cooperation of urbanisation among BIMST-EC members when social infrastructural facilities are comparatively better placed in urban areas compared to rural areas. Improvement in some of the social indicators of this region is noteworthy, for example, in literacy. Due to splendid performance of Thailand and Sri Lanka, BIMST-EC has witnessed higher literacy rates than that of South Asia and, perhaps, many other RIAs.

People in BIMST-EC have better access to improved sanitation facilities compared to South Asia and East Asia & Pacific regions. Here performance of Thailand, Sri Lanka and Bhutan is commendable. People in BIMST-EC also have better access to improved water source. In this particular category, most of BIMST-EC members have attained some sort of convergence in providing improved water source to their population. Here, Bangladesh has achieved splendid performance; 97% of her total population now have access to improved water source. Although Thailand has improved her health system quite notably, however the story of the rest BIMST-EC is different. Only 9 people out of 100 have access to hospital beds and 50 per 1000 children die within a year of birth in BIMST-EC. (Table 6)

Naturally, BIMST-EC as a whole is yet to come out from its poor social infrastructure facilities. In some area, particularly in education this region has shown some improvement, but, still lots need to be done for the health system. In this regard, experiences of Thailand can be useful for rest of BIMST-EC countries (Appendix 1).

Finally, as shown in the foregoing section, the scale of intraregional infrastructural disparity in BIMST-EC is quite significant, resulting in wider scope for having stronger economic interdependence in the region. It may further be concluded that BIMST-EC's success is likely to bring enormous benefits in infrastructure sector to some of its small members like Bhutan and Nepal.

4. Trade Interdependence in BIMST-EC

One important message that emerges from the analysis in previous sections is that members in BIMST-EC are moving with different level of development resulting in scopes for substantial regional cooperation. The two of the foremost criteria for generating meaningful cooperation among the members are the trade intensity and the transportation linkages of the region. More trade among the members generates the need for more cooperation when members are faced with different levels of factor endowments (Georgakopoulos *et. al.*, 1994; Robson, 1998). According to some studies (Anderson and Norheim, 1993; Balassa, 1989), RIAs can only be successful when it reallocates factors of production within the bloc and improves the trade structure and productivity level. There are also counter arguments. It is not always found that more free trade within an RIA has rendered higher productivity in trade across all the members of that RIA (Brada and Mendez, 1988; Baldwin, 1993). In most cases, countries with higher income and infrastructural facilities gain more out the free trade compared to the poor members (Ben-David, 1996). But some recent studies present ample empirical evidence towards the fact that RIAs with open

economies grow faster than those with closed economies (World Bank, 2000).

BIMST-EC is an RIA of five economies which are either partially opened or are in a transitional phase. Table 7 shows the ratios of openness of BIMST-EC members over two crucial time points, 1995 and 2001. It is interesting to note that although variation of openness is quite high, most of the BIMST-EC members are gradually becoming more open to the world and also to the BIMST-EC. While in international trade Thailand is more open to world economy than rest of BIMST-EC members, Nepal is becoming more dependent on BIMST-EC. On the whole, above openness profile indicates that BIMST-EC members have increased their openness to world as well as among the each other within last six years only.

Rising openness for a country explicitly means higher proportion of trade in total income generation. During 1995-2001, there was no substantial change in the trade share of BIMST-EC members in the world. Table 8 highlights shares of BIMST-EC members in world trade. Today, BIMST-EC shares about 2% of world trade where Thailand alone shares 1%. With a share of 0.77%, India comes next to Thailand. India has witnessed a marginal gain in world trade in the same period. In general, BIMST-EC, with 22% of world population and 2% of world GDP, generates 2% of world trade. BIMST-EC's trade is driven by two countries, namely, Thailand and India. More specifically, with 1% of world population Thailand contributes 1% of world trade, and with 17% of world population India shares only 0.77% of world trade. Nonetheless, BIMST-EC's exports/imports to/from world appear to have been marginally rising in recent period.

On the other hand, there is wide difference in intra-BIMST-EC trade. India and Thailand had 34.65% and 24.34% shares in intra-BIMST-EC trade in 2001 respectively (Table 9). While India's share in total intra-BIMST-EC trade had gone down in 2001 compared to 1995, there was no change in Thailand's share in the same. Interestingly, shares of Myanmar and Nepal in intra-BIMST-EC

trade had gone up substantially, whereas shares of Sri Lanka and Bangladesh gone down in 2001.

Does it suggest that, except Myanmar and Nepal, rest of BIMST-EC members had attained higher trade with rest of the world (other than BIMST-EC) during 1995-2001? From Table 10, it is clear that except Bangladesh, rest of BIMST-EC members had higher trade within BIMST-EC than what they had with outside of BIMST-EC in 2001. Thus, these countries had witnessed increasing proportion in intra-BIMST-EC trade, and, at the same time, all of them (except Bangladesh) had attained decreasing trade share with rest of the world (extra-BIMST-EC region).

Which are the countries that had higher contribution in extra-BIMST-EC trade? It is Thailand which had 51% share in extra-BIMST-EC trade in 2001. With 38% share, India comes next to Thailand (Table 10).

As shown in Tables 7 to 11, though the volume of intra-BIMST-EC trade is not very significant, it has been increasing since 1995 resulting in wider interdependence among its members.[4] In view of the aforesaid discussion, the following observations are worth noting:

- First, most of the BIMST-EC members are more open to each other and doing more trading within the group now than what they used to do in 1995.
- Second, the intra-regional total trade of BIMST-EC countries had increased to US$ 11.50 billion 2001, which was 80% higher compared to 1995.
- Third, imports of Bangladesh, Nepal, and Myanmar are increasingly becoming dependent on other BIMST-EC members,

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[4] There are some important studies which have suggested closer economic and trade cooperation in BIMST-EC (Mehta, 2002, RIS, 2004c).

namely, India and Thailand, while India and Thailand have also registered rising imports from other BIMST-EC members.

- Fourth, the export basket of Myanmar was dependent on other BIMST-EC countries to the extent of around 37% in 2001, while that for Nepal was 35%. Similarly, India's export basket is dependent on other BIMST-EC countries to the extent of only around 6%. Other members', i.e. Sri Lanka, Bangladesh and Thailand, export share to BIMST-EC was also small.
- Fifth, India is a major exporter in the region. Out of total amount of US$ 5.45 billion intra-BIMST-EC export, India exported US$ 2.76 billion in 2001. Next to it was Thailand.
- Finally, except Bhutan, India has closer trade with rest of BIMST-EC members, and except Nepal and Bhutan, Thailand has the same with other BIMST-EC members.[5]

5. Transport Interdependence in BIMST-EC

From the foregoing analysis it seems that at present there is limited interdependence among BIMST-EC members in intra-regional trade. However, a stronger intra-regional trade can be attained provided BIMST-EC countries set in place an improved transport network in the region. Interestingly, BIMST-EC is ahead of some other predominant RIAs in terms of geographical contiguity which has been found to be a necessary factor for expansion of intra-RIA trade. Existing members are connected by a common sea (Bay of Bengal) and overland (except Sri Lanka). Before we discuss the present status of transport network within BIMST-EC, a brief

5 According to ranks of intra-regional trade flow in 2001, following countries can be marked as closer trade partners of India and Thailand within BIMST-EC.

India		Thailand	
Export	Import	Export	Import
Bangladesh	Thailand	India	Myanmar
Thailand	Myanmar	Myanmar	India
Sri Lanka	Nepal	Bangladesh	Sri Lanka

discussion on intra-BIMST-EC trade freight will help us understand the transport interdependence in the region.

5.1 Bangladesh's Trade with BIMST-EC Members

The major trading partner of Bangladesh in the BIMST-EC region is India followed by Thailand. Principal items of Bangladesh's export to other BIMST-EC countries are jute and jute goods, pharmaceuticals, chemicals, leather, shrimps, handicrafts, textiles and textile products. Items of Bangladesh's import are spices, animal and vegetable oils and fats, rubber, textile fibres, ferrous ores and metal scraps, essential oil and perfume materials, textile yarn and fabric, machinery and transport equipment, fruits and vegetables, iron and steel, plastic and articles thereof, paper and board, wood and cork, non-metallic minerals, base metals etc.

Currently, Bangladesh's exports to the BIMST-EC region is 1.46% of its total exports and imports around 15.67% of total imports. Bangladesh's trade deficit with the other BIMST-EC countries grew from US$712 million in 1994-95 to US$1300 million in 1999-2000. The rate of growth is around 80%. During the period, Bangladesh's exports to the region grew from US$70 million to US$114 million, the rate of growth being little over 60%. Most of Bangladesh's trade with India pass through overland mainly by road, and by sea with rest of BIMST-EC members (Table 12).

5.2 India's Trade with BIMST-EC Members

India's major trading partners with respect to exports in the BIMST-EC region are Bangladesh followed by Thailand, Sri Lanka and Nepal. India imports mainly from Thailand followed by Myanmar in the BIMST-EC region. Major items of exports to BIMST-EC countries include cotton yarn, fabrics, gems & jewellery, transport equipments, machinery & instruments, drugs, pharmaceuticals & fine chemicals, manufactures of metals etc. India's imports from BIMST-EC countries include commodities such as textile articles, jute raw, electronic goods, machinery except

electric and electronic, spices, logs, etc. Currently, India's exports to the BIMST-EC region is 6% of its total exports and imports around 2% of total imports. India relies on the road sector for her trade with Bangladesh, Nepal and Bhutan, while her trade with Myanmar, Sri Lanka and Thailand occurs through sea routes.

5.3 Myanmar's Trade with BIMST-EC Members

Myanmar trades mostly with Thailand and India. As per the volume of trade, Thailand and India are Myanmar's first and second largest trading partners respectively. Over the past few years, Myanmar had a trade surplus with India, while it had a trade deficit with Thailand.

Myanmar's major exports to India are agricultural products like beans, pulses and maize, forest products such as teak and hardwoods. It imports back from India chemical products, pharmaceuticals, electrical appliances and transport equipment. To Thailand, Myanmar exports mainly fish, prawn and timber. Its major imports from Thailand are textile fabrics, plastic articles, base metals and electrical appliances. Due to geographical contiguity, Myanmar's trade with Thailand mostly passes through overland while sea routes are used for trading with rest of members.

5.4 Sri Lanka's Trade with BIMST-EC Members

Sri Lanka's major trading partner in the BIMST-EC region is India followed by Thailand. Major items of exports to the BIMST-EC countries include waste & scrap paper, copper waste and scrap parts, accessories of machines, synthetic filament yarn of nylon, nutmeg, cloves, essential oil, mechanical machinery and parts, precious stones and diamond, shrimps & prawn lobsters, plastic articles, conch shells, electrical board panels, organic colouring matters and man made staple fibres, etc. Major items of import from other member countries are vehicles, cotton, iron and steel, cement, machinery and mechanical items, medicaments, beet sugar, cane sugar and related products, paper and paper board, onion, dried chillies, rice, vegetable oils, electrical machinery and parts, dried

fish, salt, sulphur, stone, lime, yarn, plastics & articles, fabrics of jute or of other textile, lead acid, textile fabrics coated with plastic & gum, jute bags and sacks, dried vegetables and raw tobacco. Sri Lanka has trade deficit with both India and Thailand. Due to geographical positioning, Sri Lanka relies on sea routes for trading with BIMST-EC.[6]

5.5 Thailand's Trade with BIMST-EC Members

Except Nepal and Bhutan, Thailand's export has increased to rest of BIMST-EC members in recent years. In terms of volume of trade, India and Myanmar are the major trading partners of Thailand in BIMST-EC followed by Bangladesh and Sri Lanka. About 2% of Thailand's total exports in 2001 went to BIMST-EC while 2.50% of Thailand's total imports came from the region in 2001. India alone imports 35% of Thailand's total export to BIMST-EC. The principal items that have been exported to BIMST-EC countries are computers and parts, plastic, chemical products, vehicles and parts thereof, iron and steel, fabric, sugar, cement and textile. The principal imports from BIMST-EC countries are gems, silver bars and gold, chemical products, wood, oil cake, computer and parts, frozen shrimp and lubricant, etc. Thailand had trade deficits with India and Myanmar in 2001. Except Myanmar, it is sea route which carries Thailand's trade with rest of BIMST-EC members.

From the foregoing analysis it appears that a considerable portion of intra-BIMST-EC trade at present pass through sea routes, generating some sort of transport interdependence among BIMST-EC members, which itself suggests for closer cooperation for enhancement of trade and transport. An effort has been made below in identifying the total freight generated to and from India in

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[6] Although at present Sri Lanka never has overland connection with India, there are plans for developing land bridge between India and Sri Lanka. See Dissanayake et al. (2003) for the India – Sri Lanka land bridge plans. If this land bridge realises then all the BIMST-EC economies will enjoy single overland connection.

BIMST-EC which will help us to understand why BIMST-EC members need a stronger transportation network among themselves.

Due to lack of information on commodity-wise freight tonnage, it is difficult to estimate total freight that BIMST-EC generates every year. However, an effort has been made to estimate approximate freight tonnage that was generated out of India's trade with BIMST-EC members. Table 13 shows estimated freight which was generated for India's trade with other BIMST-EC members. Estimated total freight generated from India's trade with BIMST-EC members in 2002-03 was about 6 million tons where about 3 million tons took place overland by road with Bangladesh, Bhutan and Nepal, and rest 3 million tons with Myanmar, Sri Lanka and Thailand through sea. Since there is huge informal trade among Bangladesh, Bhutan, India and Nepal, estimated yearly road transport volume could be perhaps more than 3 million tons, if there were records. Due to poor road network, India's trade with these three countries are suffering and costs of tradable are going up considerably. Even if there is lack of well established intra-regional road networks, India's freight had gone up to 5.77 million tons in 2002-03 which was just 1.22 million tons a decade back and 3.71 million tons at the time of initiation of BIMST-EC sub-regional cooperation. Had there been uninterrupted all weather road network within BIMST-EC connecting Bangkok to Yangon to Dhaka to New Delhi to Colombo, intra-regional trade could have been substantially higher.

Similarly, due to poor performance of seaports in Bangladesh, India, and Myanmar, intra-BIMST-EC trade is not taking shape as per expectation. In this respect, ports of Sri Lanka (Colombo) and Thailand (Laem Chabang) are performing much better than rest of BIMST-EC ports. Coordinated effort has to be initiated to strengthen intra-regional road and sea networks in BIMST-EC because these are the transportation modes which are used most, at present, for the merchandise trade.

6. Policy Recommendations and Conclusions

Why do we need better cooperation in the transport sector in BIMST-EC? First, the transport sector in several erstwhile RIAs has been undergoing transformation from a subsistence infrastructure resource into a more capital intensive, commercially oriented facility during last two decades. On the other hand, India and Thailand have lately thought about taking some steps leading to deregulation of their transport sector. Still transport sector in BIMST-EC is currently characterized by the existence of obsolete technology, hierarchical and bureaucratic management structures, and in general, an institutional framework that is considerably at variance with government's overall economic objectives. Second, considering the region's eagerness to promote intra-regional trade, strengthening transport sector will help BIMST-EC to assess potential benefits of moving to a deregularised transport sector under a liberal trading regime when a substantial portion of intra-BIMST-EC trade occurs through sea routes.

An extensive travelling in BIMST-EC region by the present authours makes it clear that three critical components are missing in the region– harmonisation of railway network, all weather paved roads, and modern port – which are seriously hindering trade and integration. Another serious problem is the standard of the road condition particularly in Myanmar and, to a lesser extent, in Bangladesh. Except Thailand, all four countries have problems in maintaining in roadway to a level that would permit efficient transport using larger trucks.

Average road condition inside Myanmar is poor and they need to be rebuilt. India and Bangladesh have had problems in building and maintaining the roadway to a classification standard that will provide an acceptable level of service for larger trucks. India has been renovating her road network system through National Highway Development Project (NHDP). Myanmar has expanded its road network in the last decade, but the road quality has been poor and maintenance lacking. Thailand in this region has best road conditions, but the hilly sections of BIMST-EC and roads leading

from Myanmar to the Indian and Thailand borders require widening and better maintenance to allow efficient movement of larger trucks.[7] Development of regional economic corridors in BIMST-EC in the line of GMS East-West Corridors will facilitate investments as well as spur economic growth in this region. In this connection, greater economic and/or commercial cooperation may be sought from the developed countries of Asia who have better technological expertise on transport and communications: for example, Japan and Singapore are the obvious choices.

Rail system in BIMST-EC was begun as early as 1850; much of the existing network is well developed except that in Myanmar and Bangladesh. Railway network in these two countries are very poor which need drastic improvement to generate greater economic integration in the region. Rail network in Bangladesh, Thailand and

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7 Towards this vein, India–Myanmar–Thailand Trilateral Highway from Moreh (in India) to Mae Sot (in Thailand) through Bagan (in Myanmar) is commendable. This project is divided into three phases; the first phase would include 78 km of new roads, upgradation of about 400 km of roads, construction of all-weather approach lanes, rehabilitation/reconstruction of weak or distressed bridges and a detailed examination of a project on the Ayeyarwaddy River as well as a causeway. Phase-I would be taken up in early 2004. India will assume responsibility of 78 km of missing links and 58 km of upgradation as part of Phase-I. India may also take up additional 132 km of upgradation. Thailand would take up upgradation of 136 km and 62 km sectors of Phase-I and another 100 km as part of Phase-II. Myanmar indicated willingness to take up intermediary approach roads, reconstruction/ rehabilitation of weak bridges. India has agreed to offer of a Line of Credit at concessional terms to Myanmar for financing new constructions from Chaungma-Yinmabin (30 km.) and Lingadaw-Letsegan-Pakokku (48 km.). India has also agreed to consider similar financing of the upgradation to two-lane standard of the Yinmabin-Pale-Lingadaw (50 km.) inside Myanmar. Further, India has agreed to consider, subject to internal approvals, financing of the upgradation of the Bagan-Meiktila (132 km.) segments in Myanmar. Indian has agreed to undertake the preparation of a Detailed Project Report (DPR) for a bridge over the Ayeyarwaddy River and for the causeways near Kyadet. Thailand has also agreed to extend concessional loans for financing the upgradation to two-lane standard of the Thaton-Hpa-an-Kawkareik section (136 km.) and Kawkareik-Myawaddy section (62 km.). The Thai side also agreed to assist Myanmar in financing of the route Thaton-Mawlamyine-Mudon-Kawkareik as a second phase of the same package. Myanmar has agreed to consider financing of construction of all weather intermediate lane approach roads at both ends from Pakokku to Bagan up to the existing ferry crossing and the rehabilitation/reconstruction of only distressed and weak bridges. Myanmar has decided to explore the possibility of important commercial segments of the highway being constructed, operated and maintained by operators on a commercial basis.

Myanmar is mainly meter gauge whereas the same in India and Sri Lanka is broad gauge. Naturally, harmonisation of railway track in the region is very much essential.

Railways can play a positive role in integrating BIMST-EC which will promote bulk trans-national movement amongst the neighbouring countries. Needs are two folds – (a) to link India's Manipur with India's main railway corridor, and (b) to re-establish and renovate railway networks of Bangladesh and Myanmar. Indian Railways is engaged in harmonization of railway tracks in the northeastern India and also construction of new lines. Considering the projects already sanctioned and under construction, Diphu–Karong–Imphal–Moreh rail link (in Indian side) is identified for development which will link India with ASEAN. Although at present construction work is being carried out in Diphu–Karong section, linking Karong with Morea via Imphal would link India with Thailand provided railway system in other side (Myanmar) is also developed simultaneously. Notwithstanding above, India, Bangladesh and Myanmar should take joint initiatives to link each other's border cities by road and railway systems following the best feasible routes.

Without having a compatible and strong railway system inside Myanmar and Bangladesh, closer communication within BIMST-EC will be unfulfilled. Indian government has come forward and extended $56 million credit line to the Myanmar government for upgradation of 640 km railway system between Mandalay and Yangon section. Similar initiative should be taken up for up-gradation of railway network system in southern (Yangon to Dawei) and northern (Mandalay to Kalay) Myanmar. A possible connection between Myanmar and Thailand could be via Thanbyuzayat and Three Pagoda Pass, and between India and Myanmar could be by constructing new railway line between Tamu and Kalay. On completion of these projects, there could be possibilities for India–Myanmar–Thailand–Malaysia–Singapore rail link. An equal effort has to be given for strengthening railway network systems inside Bangladesh and to great extent in Nepal. To attain this objective,

countries in BIMST-EC may set-up a railway development fund for useful development of railway network in the region.

Lack of adequate transport links among the BIMST-EC members poses serious problems for the expansion of intraregional trade. Also in the road sector, a trade consignment takes minimum 4 to 6 days for clearance from Indian border to Bangladesh side and vice versa. The present legal arrangement between India and Bangladesh prohibits Indian vehicle (or Bangladeshi vehicle) to cross each other's border for delivering the consignment to the ultimate user(s). Generally a consignment needs minimum 22 documentations, more than 55 signatures, and minimum 116 copies for the final approval taking into account both sides (Subramanian, 1999; De and Ghosh, 2001, RIS, 2004a). Cross-border trades between Thailand and Myanmar and between Nepal and Bhutan also face the similar situation. Due to this complex, lethargic and primitive procedure, pilferage is rising high day-by-day which often changes the composition and direction of trade. Procedural complexities very often work as deterrent to India – Bangladesh trade.

To serve the region better, ports have to be equipped with efficient multi-modal transport system besides being able to accommodate larger, next-generation ocean-going vessels. Countries in BIMST-EC should also encourage short-sea shipping within the region. In this respect many of the ports in BIMST-EC like Kolkata and Haldia (in India), Chittagong (in Bangladesh), Yangon and Dawei (in Myanmar), and Bangkok (in Thailand) have many limitations due to navigational problems, lack of multimodal connectivity and absence of modern port handling equipments. There are also immense opportunities for inland water transportation in the region provided this system is well strengthened in tandem with the development of other modes of surface transport.

To meet these challenges, BIMST-EC countries need to develop regional transportation and transit network that offers efficient transportation options and low 'transaction costs' that are competitive with those found elsewhere. Naturally therefore,

BIMST-EC economies should develop an effective transportation and transit facilitation system that will greatly reduce current physical and non-physical barriers to transportation and transit – by means of both physical infrastructure (such as multi-modal corridors and terminals) and non-physical infrastructure (reformed policies and procedures, regulations, and incentives for efficient transportation and transit).

Liberalization of intra-BIMST-EC trade in services requires strengthening transport links, interconnecting telecommunications, increasing the use of information and communications technology, and liberalizing investment in these sectors. Simplification of procedures and requirements for the transit transport of dangerous goods in BIMST-EC, using internationally accepted standards and guidelines, will pave the way towards faster integration of the region. BIMST-EC countries might think of signing a Protocol to facilitate movement of goods in transit – air freight, road freight and sea freight in short term. BIMST-EC may learn from the experiences from ASEAN on how ASEAN countries allowed the designated airlines of each ASEAN member country to operate cargo services up to 100 tonnes weekly with no limitations on frequency and aircraft type.[8]

BIMSTEC could also adopt a BIMST-EC Land Transport Infrastructure Integration Roadmap and Transport Facilitation of Goods Roadmap. These could facilitate BIMST-EC Highway and BIMST-EC Railway projects (RIS, 2004c). There should be regular dialogues among BIMST-EC transport officials for setting up

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8 In the implementation of the Hanoi Plan of Action/Successor Plan of Action in Transport, ASEAN countries did receive several technical assistances and funding support. These include technical assistance for the open-sky study from Australia; HRD activities in river transport and road traffic management from China; maritime sector and cruise studies, road safety, Intelligent Transport System (ITS), and urban transport from Japan; highway preparation studies from the Republic of Korea; dangerous goods planning in ports from Germany; and HRD in inland waterways/ferries transport from Belgium. Meanwhile, the Asian Development Bank and the International Maritime Organization (IMO) have extended technical assistance in road safety studies and a study on ASEAN accession to IMO conventions, respectively.

BIMST-EC Airlines Group, BIMST-EC Federation of Forwarders Associations, BIMST-EC Ports Association, Federation of BIMST-EC Shipowners' Associations, and the Federation of BIMST-EC Shippers' Councils. Regular exchange of each other's experiences in achieving following targets will strengthen BIMST-EC transport networking process:

- Harmonization of technical standards such as truck size and weight regulations, transport rules and regulations, etc.;
- Less and less border inspection except strategic areas;
- Simplification of documentation and clearance procedures;
- 'One track one system', in railways and roadways, in BIMST-EC; and
- Strengthen road and railway networks within BIMST-EC following ESCAP's overall Asian Highway and Trans Asian Railway guidelines.

To attain this set of objectives, it is suggested that BIMST-EC countries should take immediate initiatives to formulate a comprehensive transport policy on the basis of sub-regional transportation network. They should also initiate the possibility of signing an agreement to facilitate movement of goods in transit – air freight, road freight and sea freight in short term.

Finally, as shown in the foregoing sections, the scale of intraregional infrastructural disparity in BIMST-EC is quite significant, resulting in wider future scope for stronger economic interdependence among these countries. BIMST-EC's success is likely to bring enormous benefits in infrastructure sector to some of its small members like Bhutan and Nepal.

Table 1. Key Economic Indicators of BIMST-EC*

Particulars	Unit	1991	1995	2001
Total Population of BIMST-EC	Billion	1.11	1.19	1.32
Total Area of BIMST-EC	'000 Sq. Km.	4881	4881	4881
Population Density of BIMST-EC	Per Sq. Km.	246	263	291
Total Gross Domestic Product (GDP) of BIMST-EC	US $ billion	444.19	578.74	741.28
GDP Growth				
BIMST-EC	%	3.88	6.35	4.65
World	%	1.40	2.77	1.10
East Asia & Pacific	%	8.15	9.49	5.50
South Asia	%	1.81	7.00	4.89
GDP Per Capita				
BIMST-EC	US $	660.11	828.87	899.08
World	US $	4999.80	5165.50	5626.40
East Asia & Pacific	US $	543.54	760.60	989.03
South Asia	US $	332.41	387.37	471.29
GDP Per Capita PPP				
BIMST-EC	US $	1914.00	2620.00	3068.00
World	US $	5273.50	6174.40	7441.80
East Asia & Pacific	US $	1666.00	2658.80	3854.40
South Asia	US $	1537.40	1981.70	2579.60
GDP Per Capita Growth				
BIMST-EC	%	1.91	4.49	2.89
World	%	-0.22	1.31	-0.16
East Asia & Pacific	%	6.52	8.13	4.52
South Asia	%	-0.23	4.97	3.09
Gross Capital Formation				
BIMST-EC	% of GDP	25.45	28.81	21.82
East Asia & Pacific	% of GDP	34.09	38.18	30.97
South Asia	% of GDP	21.23	24.92	21.64
World	% of GDP	23.31	22.74	22.40
Exports of Goods and Services				
BIMST-EC	% of GDP	18.04	23.16	30.94
East Asia & Pacific	% of GDP	26.74	31.70	40.76
South Asia	% of GDP	10.35	12.82	15.18
World	% of GDP	19.55	21.55	29.88
Imports of Goods and Services				
BIMST-EC	% of GDP	24.11	29.21	34.73
East Asia & Pacific	% of GDP	25.96	32.23	36.08

South Asia	% of GDP	11.77	16.45	17.45
World	% of GDP	19.50	21.23	28.29
Current Account Balance of BIMST-EC	% of GDP	-5.41	-5.14	-2.49
Foreign Direct Investment				
BIMST-EC	US $ billion	2.27	3.71	7.31
South Asia	US $ billion	0.42	2.66	3.94
Gross Domestic Savings				
BIMST-EC	% of GDP	19.38	22.75	19.39
East Asia & Pacific	% of GDP	34.91	37.66	35.83
South Asia	% of GDP	19.81	21.29	19.37
World	% of GDP	23.37	23.08	23.99

Note: * Including Nepal and Bhutan
Source: World Development Indicators CD-ROM, 2003, World Bank.

Table 2. GDP and Per Capita GDP AAGR in BIMST-EC: 1991-2001

Countries	GDP Per Capita	GDP
	%	%
Bangladesh	3.34	5.71
Bhutan	3.82	8.21
India	4.44	7.03
Myanmar	4.48	3.20
Nepal	2.43	5.53
Sri Lanka	3.41	5.15
Thailand	3.06	4.08
BIMST-EC 6	3.29	6.08
East Asia & Pacific	7.45	9.51
South Asia	3.80	6.44
World	1.14	2.66

Data Source: Same as Table 1

Table 3. Pattaenn of Government of Household expenditure

Particulars	Unit	1991	1995	2001
General Government FCE*				
BIMST-EC	% of GDP	10.37	11.69	9.86
East Asia & Pacific	% of GDP	11.72	10.74	12.18
South Asia	% of GDP	11.24	10.57	12.05
World	% of GDP	16.99	16.65	17.62
Household FCE*				
BIMST-EC	% of GDP	69.35	64.01	70.75
East Asia & Pacific	% of GDP	53.16	51.35	51.99
South Asia	% of GDP	68.95	68.14	68.59
World	% of GDP	59.63	60.26	58.38

Note: * Final Consumption Expenditure. Source: Same as Table 1.

Table 4. Structure of the BIMST-EC Economy

Particulars	Unit	1991	1995	2001
Agriculture Value Added				
BIMST-EC	% of GDP	35.86	32.85	23.42
East Asia & Pacific	% of GDP	21.09	19.07	14.61
South Asia	% of GDP	30.64	27.75	24.95
World	% of GDP	5.05	4.54	3.87
Industry Value Added				
BIMST-EC	% of GDP	23.49	26.30	25.07
East Asia & Pacific	% of GDP	38.34	44.30	48.53
South Asia	% of GDP	25.79	27.12	25.86
World	% of GDP	33.31	31.51	29.82
Manufacturing Value Added				
BIMST-EC	% of GDP	13.63	14.95	13.94
East Asia & Pacific	% of GDP	27.81	30.38	32.19
South Asia	% of GDP	15.88	17.43	15.48
World	% of GDP	22.58	21.36	20.14
Services Value Added				
BIMST-EC	% of GDP	40.65	40.85	48.20
East Asia & Pacific	% of GDP	40.57	36.64	36.22
South Asia	% of GDP	43.56	45.12	49.20
World	% of GDP	61.64	63.94	66.31

Source: Same as Table 1.

Table 5. Selected Economic Infrastructure Indicators of BIMST-EC

Countries	EP[1]	PCE[2]	AFT[3]	AD[4]	PCAT[5]	Port Traffic[6]	PR[7]
	BKwh	Kwh	MTKm		Million	Million Tons	%
	2001	2001	2001	2001	2001	2001	1999
Bangladesh	15.83	95.86	169.60	6500	1.45	18.00	9.53
India	542.35	354.71	517.70	214300	17.27	288.00	45.70
Myanmar	5.13	68.55	0.90	9700	0.40	30.00	12.80
Sri Lanka	6.85	293.28	217.70	11300	1.72	25.00	95.00
Thailand	95.98	1447.96	1669.20	102400	17.66	42.00	97.50
Nepal	1.65	55.98	16.20	12300	0.64		30.80
Bhutan				1300	0.04		60.70
BIMST-EC7	667.77	386.06	431.88	357800	39.18	403.00	50.29

Countries	Road Density	Rail Density	MP[8]	TM[9]	TS[10]	PC[11]	TMLC[12]
	Km per Sq. Km of Area		(Per 1000 People)				
	1999	1999	2001	2001	2001	2001	2001
Bangladesh	1.44	0.019	4	4	17	2	30
India	1.01	0.019	6	38	83	6	136
Myanmar	0.04	0.003	1	6	8	1	32
Sri Lanka	1.47	0.022	36	44	118	9	299
Thailand	0.13	0.008	124	99	300	28	452
Nepal	0.09		1	13	9	4	315
Bhutan	0.08			26	26	6	168
BIMST-EC7	0.61	0.014	28	33	80	8	205

Data Source: Same as Table 1

Notes: 1. Electricity production, calculated in billion kwh. 2. Per capita consumption of electricity, taken in kwh per capita. 3. Air freight transport, calculated in million tons per km. 4. Aircraft departures, taken in number. 5. Passengers carried in air transport, taken in million number. 6. Considered only major seaport traffic, taken in million tons. 7. Paved roads, taken as % of total roads. 8. Mobile phones, taken per 1,000 people. 9. Telephone mainlines, taken per 1,000 people. 10. Television sets, taken per 1,000 people. 11. Personal computers, taken per 1,000 people. 12. Telephone mainlines in largest city, taken per 1,000 people.

Table 6. Selected Social Infrastructure Indicators of BIMST-EC

Countries	PD[1]	UP[2]	LR[3]	ISF[4]	IWS[5]
	Per Sq. Km.	%	%	%	%
	2001	2001	2001	2000	2000
Bangladesh	1024	25.56	40.55	48.00	97.00
Bhutan	18	7.38		70.00	62.00
India	347	27.87	58.01	28.00	84.00
Myanmar	73	28.17	84.98	64.00	72.00
Nepal	165	12.18	42.86	28.00	88.00
Sri Lanka	290	23.12	91.86	94.00	77.00
Thailand	120	20.02	95.65	96.00	84.00
BIMST-EC 7	291	20.62	68.99	61.14	80.57
East Asia & Pacific	115	37.30	86.77	45.70	75.91
South Asia	288	27.76	55.34	34.02	84.44
World	47	47.15		55.43	80.75

Countries	PH[6]	Physicians	HB[7]	LEB[8]	IMR[9]
	%	Per 100 people		Years	Per 1,000 live births
	2000	2000	2000	2001	2001
Bangladesh	33.70	2	5	61.64	51.00
Bhutan				62.72	74.00
India	28.60		11	62.99	67.00
Myanmar		3	5	56.93	77.00
Nepal	41.30		5	59.36	66.00
Sri Lanka	24.60		6	73.39	17.00
Thailand		3	20	69.01	24.00
BIMST-EC 7	32.05		9	63.72	53.71
East Asia & Pacific		19	24	69.20	33.72
South Asia	27.00		7	62.59	70.61
World				66.59	56.11

Notes: 1. Population density. 2. Urban population, as % pf total population. 3. Literacy rate. 4. Improved sanitation facilities, as % of population with access. 5. Improved water source, % of population with access. 6. Poverty Headcount, as % of population. 7. Hospital beds. 8. Life expectancy at birth. 9. Infant mortality rate, taken as per 1000 live births.

Data source: Same as Table 1.

Table 7. Openness of BIMST-EC Members

Countries	Openness to World		Openness to BIMST-EC	
	(%)	(%)	(%)	(%)
	1995	2001	1995	2001
Bangladesh	27.92	37.74	3.05	3.20
India	25.59	29.08	0.68	0.83
Myanmar	3.15	3.78	1.07	3.78
Nepal	58.83	54.42	6.83	14.80
Sri Lanka	81.42	80.62	5.02	5.47
Thailand	90.43	126.45	0.92	2.43
BIMSTEC(6)	47.89	55.35	2.93	5.09

Notes: 1. Openness to World = Trade in World as percentage of GDP. 2. Openness to BIMST-EC = Trade in BIMST-EC as percentage of GDP. 3. GDP is taken in current USD million.

Data Sources: World Development Indicators CD-ROM, 2003, World Bank. 2. Direction of Trade Statistics Yearbook, 2002, IMF.

Table 8. Share in World Trade of BIMST-EC Members

Countries	Share in World Export		Share in World Import		Share in Total Trade	
	1995	2001	1995	2001	1995	2001
	(%)		(%)		(%)	
Bangladesh	0.062	0.093	0.126	0.142	0.094	0.118
India	0.601	0.723	0.671	0.815	0.636	0.770
Myanmar	0.024	0.045	0.046	0.042	0.035	0.044
Nepal	0.006	0.009	0.015	0.021	0.011	0.015
Sri Lanka	0.075	0.077	0.087	0.090	0.081	0.084
Thailand	1.126	1.060	1.434	0.975	1.281	1.017
BIMST-EC(6)	1.894	2.008	2.379	2.085	2.138	2.047

Source: Same as Table 6.

Table 9. Country-wise Shares in Intra-BIMST-EC Trade

Countries	Export		Import		Total Trade	
	1995	2001	1995	2001	1995	2001
	(%)		(%)		(%)	
Bangladesh	2.05	1.54	34.62	23.48	18.45	13.05
India	62.39	50.71	14.78	20.11	38.42	34.65
Myanmar	6.03	19.14	0.79	7.77	3.39	13.17
Nepal	0.96	3.67	8.58	10.36	4.80	7.18
Sri Lanka	2.022	2.20	18.70	12.49	10.42	7.60
Thailand	26.54	22.74	22.53	25.79	24.52	24.34
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Same as Table 6.

Table 10. Country-wise Intra – and Extra – BIMST-EC Trade Shares

Countries	Export Share (in %)				Import Share (in %)			
	Intra-bloc		Extra-bloc		Intra-bloc		Extra-bloc	
	1995	2001	1995	2001	1995	2001	1995	2001
Bangladesh	2.05	1.46	97.95	98.54	16.84	15.67	83.16	84.33
India	6.37	6.22	93.63	93.78	1.35	2.33	98.65	97.67
Myanmar	15.69	37.49	84.31	62.51	1.07	17.40	98.93	82.60
Nepal	9.26	35.03	90.74	64.97	35.33	46.49	64.67	53.51
Sri Lanka	1.66	2.54	98.34	97.46	13.19	13.10	86.81	86.90
Thailand	1.45	1.90	98.55	98.10	0.97	2.50	99.03	97.50

Countries	Trade Share (in %)			
	Intra-bloc		Extra-bloc	
	1995	2001	1995	2001
Bangladesh	12.03	10.14	87.97	89.86
India	3.71	4.12	96.29	95.88
Myanmar	6.02	27.63	93.98	72.37
Nepal	27.59	43.07	72.41	56.93
Sri Lanka	7.90	8.33	92.10	91.67
Thailand	1.18	2.19	98.82	97.81

Source: Same as Table 6.

Table 11. Country-wise Shares in Extra-BIMST-EC Trade

Countries	Export		Import		Total Trade	
	1995	2001	1995	2001	1995	2001
	(%)		(%)		(%)	
Bangladesh	3.29	4.79	4.54	6.00	3.99	5.42
India	30.72	35.34	28.56	40.00	29.51	37.75
Myanmar	1.09	1.47	1.95	1.75	1.57	1.62
Nepal	0.32	0.31	0.42	0.57	0.37	0.44
Sri Lanka	4.02	3.90	3.27	3.93	3.60	3.92
Thailand	60.57	54.17	61.28	47.76	60.97	50.85
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Same as Table 6.

Table 12. Transport Interdependence Matrix in BIMST-EC

	Bangladesh	India	Myanmar	Sri Lanka	Thailand
Bangladesh		Road, Rail*, Sea, IWT*	Sea, Road	Sea	Sea
India	Road, Rail*, Sea, IWT*		Sea	Sea	Sea
Myanmar	Sea, Road	Sea		Sea	Road, Sea
Sri Lanka	Sea	Sea	Sea		Sea
Thailand	Sea	Sea	Road, Sea	Sea	

Note: * Periodic

Table 13. Estimated Indian Freight in BIMST-EC

Trade	Unit	1991-92	1995-96	2001-02	2002-03[3]
Export[1]	Million Tons	0.97	3.04	3.97	4.44
	TEUs[4]	80493	253569	331198	369846
Import[2]	Million Tons	0.25	0.67	1.54	1.33
	TEUs[4]	20889	55679	128474	111068
Total Trade	Million Tons	1.22	3.71	5.52	5.77
	TEUs[4]	101382	309248	459672	480914

Notes: 1. Exports to Bangladesh, Bhutan, Myanmar, Nepal, Sri Lanka and Thailand. 2. Imports from Bangladesh, Bhutan, Myanmar, Nepal, Sri Lanka and Thailand. 3.

April 2002 to February 2003. 4. TEUs stand for twenty equivalent units. 5. For country-wise breakdown, see Appendix 2.

Data source: Author's own calculation

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Appendix 1. Thailand's New Universal Coverage Health Care Scheme

Along with strong economic growth in Thailand, its health services have expanded dramatically in coverage and quality over the last few decades. The Government provides health services to all its employees and those of State enterprises. Health insurance has become a standard job benefit offered by private companies to their employees. For poor and disadvantaged groups, including disabled persons, the aged and Buddhist monks, a health welfare programme providing free health care was started in 1975. These people were issued cards to enable them to benefit from medical facilities at government hospitals and health clinics. In 2000, the actual number of cardholders was approximately 20 million (33% of the population); the annual budget for the programme had increased substantially from 300 million baht in 1979 to 8.83 billion baht in 2000. In April 2001, the Government launched a new health-care scheme to cover every Thai citizen who was not currently under any other public insurance scheme. Under this priority programme, the insured receives medical treatment from participating government and private hospitals for only 30 baht (approximately $0.75) a visit. The bulk of the cost of the service is covered by a central government subsidy. Under the system, health care providers are compensated according to the number of registered patients they

have. In addition to an annual allowance of 1,252 baht (approximately $ 30) per patient, resource-strapped hospitals can draw on a 3 billion baht contingency fund and claim fees for referral patients. The new universal health scheme has resulted in an overhaul of the health-care system in Thailand, putting medical services within the reach of all citizens, rich and poor, young and old. For millions of rural poor people, the 30 baht health care scheme is a blessing, ensuring their access to basic health services.
Source: United Nations, 2003, pp. 256.

Appendix 2. India's Trade with BIMST-EC Members

Trade	Unit	1991-92	1995-96	2001-02	2002-03
EX to Bangladesh	Million Tons	0.50	1.92	2.19	2.71
	TEUs	41843	159845	182415	225737
IM from Bangladesh	Million Tons	0.02	0.19	0.10	0.13
	TEUs	1271	15463	8616	10943
Total	Million Tons	0.52	2.10	2.29	2.84
	TEUs	43114	175308	191030	236680
EX to Bhutan	Million Tons	0.0006	0.0099	0.0127	0.0329
	TEUs	48	822	1060	2739
IM from Bhutan	Million Tons	0.00003	0.01166	0.01503	0.01766
	TEUs	3	971	1252	1471
Total	Million Tons	0.0006	0.0215	0.0277	0.0505
	TEUs	51	1794	2312	4211
EX to Myanmar	Million Tons	0.004	0.050	0.093	0.119
	TEUs	365	4184	7717	9893
IM from Myanmar	Million Tons	0.08	0.25	0.77	0.72
	TEUs	6521	20601	63877	60032
Total	Million Tons	0.08	0.30	0.86	0.84
	TEUs	6886	24785	71594	69925
EX to Nepal	Million Tons	0.08	0.13	0.11	0.22
	TEUs	6615	10736	9146	18429

IM from Nepal	Million Tons	0.07	0.10	0.43	0.29
	TEUs	5811	8318	35880	24070
Total	Million Tons	0.15	0.23	0.54	0.51
	TEUs	12426	19054	45026	42498
EX to Sri Lanka	Million Tons	0.20	0.43	0.82	1.01
	TEUs	16356	35438	68524	83829
IM from Sri Lanka	Million Tons	0.03	0.07	0.09	0.07
	TEUs	2680	5559	7293	5897
Total	Million Tons	0.23	0.49	0.91	1.08
	TEUs	19035	40996	75817	89726
EX to Thailand	Million Tons	0.18	0.51	0.75	0.35
	TEUs	15266	42543	62336	29219
IM from Thailand	Million Tons	0.06	0.06	0.14	0.10
	TEUs	4603	4767	11557	8655
Total	Million Tons	0.24	0.57	0.89	0.45
	TEUs	19869	47311	73893	37874

Note: EX and IM stand for exports and imports.
Source: Authours' own calculation based on DGCIS Data, Kolkata.