

Digital connectivity in the Bay of Bengal

BIMSTEC members comprises some of the fastest-growing global economies. Bipul Chatterjee and Sidharth Narayan consider the Indian perspective to the region

India suffers from low levels of connectivity and cooperation with its neighbours. South Asia is amongst the least connected regions¹. Low intra-regional trade is testament to this. A World Bank report (2014) estimated it to be five per cent of South Asia's total trade, as compared to 50 per cent in East Asia and 22 per cent in Sub-Saharan Africa².

From an Indian perspective, in 2018 the country's regional trade stood at US\$19.1 billion, which was a mere three per cent of its global trade. There is potential to increase this (India's regional trade in South Asia by another US\$43 billion³).

However, given India's relationship with Pakistan, coupled with the lack of progress of the South Asian Association for Regional Cooperation (SAARC, established in 1985), India is now looking to the Bay of Bengal region for regional cooperation through the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)⁴.

India's non-participation in China's Belt and Road Initiative has made BIMSTEC even more important for the country, for strengthening its own economic and strategic ties in South and Southeast Asia⁵. Notably, such cooperation also forms an integral part of its Act East Policy (erstwhile Look East Policy), which seeks to focus on commerce and connectivity in the region⁶.

As a trade bloc, BIMSTEC comprises some of the fastest growing economies of the world, with intra-regional trade amongst the members touching six per cent in just about a decade of its formation⁷.

Focus on information & communication technology

Formed in 1997, BIMSTEC focuses on technical and economic cooperation, including in the field of technology,

which is led by Sri Lanka. Table 1 traces the history of intended cooperation between the member countries in this realm⁸.

Such cooperation is also likely to spur a regional digital economy, which holds immense potential for growth in the Asia-Pacific region. Southeast Asia's digital economy alone poised to cross US\$200 billion by 2025⁹.

Accordingly, BIMSTEC also needs to capitalise on the current and future digital boom, and strive to enhance cooperation in the field of ICT. The importance of digital technology in trade has been mentioned below¹⁰:

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Table 1. History of cooperation

Year	Meetings/Summits	Proposals
2006	Eleventh Senior Officials Meeting, Sri Lanka.	Proposal to establish a BIMSTEC Technology Transfer Exchange in Sri Lanka.
2006	Ninth Ministerial Meeting.	Recognised need to enhance cooperation in advanced areas of fundamental scientific research; exchange of expertise in software and hardware development; joint R&D in this field; technology transfer and exchange of experience on Geographical Information System (GIS)
2008	Second BIMSTEC Summit, New Delhi, India.	Decision to establish a BIMSTEC Technology Transfer Facility in Sri Lanka.
2014	Third BIMSTEC Summit.	Enhance cooperation in expanding skill and technology base of member countries through partnerships targeted towards Micro, Small and Medium scale Enterprises (MSMEs). Decision to accelerate efforts for the finalisation of Memorandum of Association on the Establishment of BIMSTEC Technology Transfer Facility.
2016	BIMSTEC Retreat, Goa, India.	Emphasis on the establishment of BIMSTEC Technology Transfer Facility in Sri Lanka.
2017	The Fourth Meeting of the BIMSTEC Expert Group on the Establishment of BIMSTEC Technology Transfer Facility.	Finalised the draft text of the Memorandum of Association (MoA) of the BIMSTEC Technology Transfer Facility. Also, prepared the proposed budget for the facility for submission to the Nineteenth Session of the BIMSTEC Senior Officials' Meeting.

- Enable participation of businesses across borders to create and participate in Regional Value Chains (RVCs) and Global Value Chains (GVCs) in a digital economy;
- Strengthen and encourage the use of e-commerce platforms or digital marketplaces, for cross-border trade;
- Enhance efficiency, productivity and innovation of businesses in member countries;
- Overcome deficient trade due by overcoming barriers of inaccessible markets, and inefficient logistics¹¹;
- Complements physical connectivity, thereby enhancing regional integration, ie. it has potential to compliment India's land and maritime connectivity;
- BIMSTEC nations share similar socio-economic and digital connectivity conditions, as elaborated in Annexure - A;
- Technological collaboration will also bolster people-to-people connect in the region.

India's emphasis on digital connectivity

Recognising such potential of regional cooperation on digital technology, India is committed to enhance its digital connectivity with its immediate and distant neighbours, through its *Neighbourhood First* Policy. A few notable initiatives in this regard are mentioned below:

- Indian Space Research Organisation's (ISRO) GSAT-9 communications satellite, (also called South Asia Satellite), was launched in 2017 to provide benefits of resource mapping, distance education, telemedicine,

weather forecast and natural disasters warning systems, to Bhutan, Afghanistan, Bangladesh, Maldives, Nepal and Sri Lanka. Thimphu Ground Station in Bhutan has been set up for the same¹².

- Land locked by five neighbouring countries – Bhutan, Nepal, Bangladesh, Myanmar and China, North-East India was dependent on the Guwahati-Kolkata-Chennai optic fibre cable route for its internet.

However, the region got its own International Internet Gateway (IIG) in Agartala in 2016, which is connected terrestrially with Bangladesh's Cox's Bazar submarine cable station. Bangladesh Submarine Cable Company Ltd (BSCCL) has been exporting 10Gbps of internet bandwidth it.

One of the recommended solutions to overcome the technical deficiencies and for the optimal utilisation of the Agartala IIG is to set up a Gateway GPRS Support Node (GGSN)¹³ at a cost of Rs 300 crore¹⁴. However, due to technical deficiencies, only 60 percent of the available bandwidth is being utilised, despite there being additional demand¹⁵.

Notably, Bangladesh is going to be getting its third international submarine cable soon¹⁶, which provides further opportunity for collaboration between the two countries.

- In order to boost its digital connectivity, India is striving for installing a regional high-capacity fibre-optic network, with ASEAN countries. India also aims to strengthen domestic digital connectivity of Myanmar (also a BIMSTEC member) and of other countries in the region, such as Cambodia, Vietnam and Laos¹⁷.

The way forward

It is an imperative for BIMSTEC members to expand their intra-regional digital connectivity and to expand digital economy of the bloc. This can be done through in following manner:

- Ensure effective and timely implementation of the initiatives as discussed above. More such initiatives for strengthening digital connectivity may be identified and implemented. Given in the box story below is an example of the same.

Enhancing mobile connectivity in India-Nepal border

Many villages adjoining the Indo-Nepal border have been relying on expensive satellite phones for mobile connectivity, or on Nepalese telecom companies. Not only civilians, but security forces are also unable to get access to crucial mobile connectivity in the sensitive bordering areas. Signals are either weaker or completely unavailable in select areas¹⁸. Mobile towers erected in the region suffer from marred effectiveness and utility due to the mountainous terrain. India and Nepal may cooperate with each other for installing technically feasible towers and strengthening digital connectivity in the region.

- Sign a comprehensive Agreement on Digital Connectivity for enabling a framework on relevant aspects of digital economy at a regional level. These may relate to sectors such as: finance, insurance, health care, education, governance, and retail.

Such an FTA would also act as a template for other areas of cooperation. India is already implementing digital connectivity initiatives in Africa, such as the e-VidyaBharati (pertaining to tele-education) and e-ArogyaBharati (pertaining to tele-medicine). Similar such initiatives are required to be undertaken with

BIMSTEC members as well¹⁹. A possible such area of cooperation pertains to setting-up data centres in India, which has been captured in the box story below.

Enhancing India's data centre (DC) capabilities for the BIMSTEC members

India is one of the global leaders in the ICT/IT-BPM sector. Industry experts believe that India provides a strategic location in the context of setting up DCs from the point of view of catering to the needs of its smaller neighbours such as Bhutan, Bangladesh, Nepal and Sri Lanka. These other country's data may also be stored in DCs located in India, considering their increasing need for data processing, data storage and co-location services. This would not only reap trade benefits, but also strengthen digital cooperation in the BIMSTEC region, and bring in international diplomatic advantages²⁰. Notably, this is also coherent with India's proposal to roll-out a policy for building data centres in the country²¹.

- India may leverage its membership with the 'Quad'²² in the Indian and Pacific oceans, and use the technological expertise of other member countries for technology transfers/imports, building capacity on technical knowhow, enhancing innovation and R&D, and skill development for BIMSTEC countries. A noteworthy area in this regard, would be on cyber security, as given in the box story below.

Cyber security in the BIMSTEC region

In the wake of enhanced cyber security risks, countries have moved to engage with each other on forming a consensus amongst them to enhance their cyber defence to counter both internal, as well as external threats. China has been making technological investments in various Central and Southeast Asian countries, which helps it to enhance its regional power and also shape the region's cyber security policies and practices. Countering the same may be of interest to Quad members, considering today's geo-political scenario.

The ever-increasing uptake of digital technologies by Asian populations, the recent cyber-attacks witnessed by some BIMSTEC countries, and the looming threat of the Beijing Cyber-consensus²³, may prompt enhanced cooperation between Quad and BIMSTEC.

Action may be taken to train cyber security personnel in India, the requirement for which stands at a whopping 30 lacs against a current supply of mere 1 lac²⁴. Japan has already expressed its interest in cooperating with India in this regard. The exchange of Information Technology (IT) personnel between the two countries, along with cooperation in incubating start-ups in the field of cyber security needs to be soldered with financial and technical assistance flowing from Japan to India²⁵, for the larger benefit on BIMSTEC.

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Annexure - A: a snapshot of digital developments of BIMSTEC countries²⁶

	Bangladesh	Bhutan	India	Nepal	Myanmar	Thailand	Sri Lanka
GDP per capita (in US\$) in 2018	1203.22	3128.00	2100.80	817.45	1571.91	6361.62	3936.45
Mobile cellular subscriptions (per 100 people) in 2018	100.24	93.26	86.94	139.45	113.84	180.18	142.65
Fixed broadband subscriptions (per 100 people) in 2018	6.34	1.43	1.34	2.82	0.24	13.24	7.27
Fixed telephone subscriptions (per 100 people) in 2018	0.90	2.92	1.62	2.85	0.97	4.22	11.65
Internet penetration (% of population) in 2020	58.4	51.5	40.6	55.6	40.8	81.7	33.5

Endnotes

1. Countries forming a part of South Asia include eight countries, namely: India, Pakistan, Bangladesh, Afghanistan, Sri Lanka, Nepal, Bhutan, and the Maldives. These also form the SAARC countries.
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