



Aviation Logistics in the BBIN Sub-region

Pathways for greater resilience



Joining Dots • Connecting People • Shared Prosperity

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The airline industry at the global level has grown rapidly over the last two decades as the number of passengers flying to destinations increased from 1.5 billion in 1998 to 4.1 billion in 2017. In a pre-pandemic situation, airplanes used to transport over 10 million passengers and around US\$18bn worth of goods in a day. This indicates the significant economic role played by the aviation sector in the global economy, which is also demonstrated by the fact that the sector represents 3.5 per cent of the gross domestic product (GDP) worldwide and provides 65 million jobs.¹

Air transport services provide momentum to the overall socio-economic development of a country. They help to create employment, support tourism, and enable local and international businesses to grow. Moreover, the increased connectivity brought by the expansion of air services also helps to boost foreign investment, international trade, and promotes social bonding among communities located at far-flung distances.

In this context, this Briefing Paper in an attempt to galvanise deeper aviation sector linkages in the Bangladesh, Bhutan, India, Nepal (BBIN) sub-region highlights the pathways for a resilient policy response. The pathways will not just help the BBIN countries recover from the economic hardships caused by the COVID-19 pandemic but also help foster sustainable business and people-to-people contacts in the years to come.

Background

South Asia, in comparison with other regions, is a laggard in the development of air transport. No airport in South Asia falls within the top 25 global rankings in terms of the number of passengers handled. Meanwhile, in the overall volume of freight handling and transportation, India ranks 16th position globally, while Bangladesh ranks 63rd, Sri Lanka 41st and Pakistan is placed in the 51st position.

The Asia and Pacific region handle 33.2 per cent of world air traffic in terms of aircraft kilometers, with 12.1 million departures and total passengers of 1.6

billion (37.1 per cent of the global numbers), carrying 87.8 billion tonne-kilometers of freight, which comprises 38 per cent of the global freight volume.²

Meanwhile, the BBIN countries handled 102.5 million passengers and 1.99 billion tonne-kilometer of freight in 2015, which was around 6.4 and 2.3 per cent of the Asia-Pacific figures respectively.³

Integration of the transport network is crucial, particularly to landlocked countries like Nepal and Bhutan and the north-eastern states of India. Such integration, on the one hand, helps to end their

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landlocked or semi-remote status by providing shorter and quicker transport links to the seaports.

Meanwhile, Bangladesh, as a coastal country, would also benefit from increased air and road connectivity and better transport linkages within the sub-region.

Aviation Services in BBIN

Nepal

Royal Nepal Airlines (now renamed as Nepal Airlines) was established in 1958 and begun its maiden flight with a DC3 aircraft. Initially, the airline started domestic flight operations in major cities such as Biratnagar, Pokhara, Bhairahawa, and Nepalgunj.

With the gradual development of new airports mostly in the hilly and mountainous districts, the carrier during the 70s added Twin Otter aircraft to its fleet. These Canadian aircraft were best suited for short take-off and landing at the airstrips constructed in difficult terrain.

Subsequently, Nepal Airlines also added Jet aircraft to its fleet and started international flights to cities in India, and also to Bangkok, Osaka, Frankfurt, and London.

Currently, one international airport and 30 domestic airports are in operation in Nepal. Altogether 20 airfields, mostly in the hills and mountains are non-operational due to the expansion of road linkages in those locations. Three airports namely Nijgarh, Pokhara, and Bhairahawa are being developed as international airports.⁴

Adventure tourism in the aviation sector is being promoted with a focus on mountain flights, paragliding, hot air ballooning, and heli-skiing.

Nepal's aviation sector not only serves as the backbone for tourism in the country but also facilitates trade in high-value goods. More than 26 per cent of exports and 11 per cent of import trade is moved through air transport.

The air services also hold the key in supplying essential food grains and medicines in times of emergencies to the remote areas and ferrying sick people to the hospitals in urban centres.

In 2019 altogether 1.12 million tourists visited Nepal. Of this, 83 per cent arrived via the air route while the remaining 17 per cent by surface transport. Tribhuvan International Airport (TIA) handled 4.13 million international passengers and 3.19 million domestic passengers in the same year. Altogether 30 international airlines provide services to and from the airport in Kathmandu.⁵

The cargo terminal at TIA covers around 8 hectares of land with 9,690 sq. ft. of storage area. There are separate zones dedicated to export and import cargo with pallets and raking facilities. Weighing scale, hand trolleys, scanners, and cold storage facilities are provided in the cargo terminal. The facility is now operated by a public enterprise pending leasing out of the facility to private operators.

Bhutan

The road is the major transport system in Bhutan. However, air transport is gaining popularity; foreign tourists being the major users of the services. The Paro International Airport (PIA) is the only international airport, which is around 54 km away from the capital city-Thimphu.

Table 1: Freight Transport handled at Nepal's Tribhuvan International Airport (NRs. Billion)

	2015-16	Weight (Th.mt)	2016-17	Weight (Th.mt)	2017-18	Weight (Th.mt)	2018-19	Weight (Th.mt)	2019-20	Weight (Th.mt)
Import	91.2 (12)	13.2	119.2 (12)	23.0	149.2 (12)	15.9	154.9 (11)	19.5	114.2 (9.5)	NA
Export	22.4 (32)	12.4	20.7 (28)	11.2	22.7 (28)	11.6	23.7 (24)	12.4	19.9 (20.4)	NA
Total	113.6 (13.4)	25.6	139.9 (13.2)	34.2	171.9 (13)	27.5	178.6 (11.8)	31.9	134.1 (10.4)	NA

Note: Figure in parentheses indicates percentage share in overall export and import.

Source: Government of Nepal, Department of Customs and Nepal Transit and Warehousing Company Limited.

In Bhutan, tourism is the next important sector after hydropower contributing to the Bhutanese GDP

The airport provides air transport services through two operators; the national flag carrier Druk Air and the privately-owned Bhutan Airlines.

In Bhutan, tourism is the next important sector after hydropower contributing to the Bhutanese GDP comprising more than 20 per cent of non-hydro exports.⁶

Paro international airport serves as the major gateway for receiving and sending high-end tourists. Paro is also considered as one of the most difficult airports nestled in a small valley surrounded by high mountains on all sides.

Thus, for safety reasons, the operation is restricted to visual flight rules (VFR). The airport caters to an average of 450 passengers/day and 3,800 scheduled flights annually.

Besides, there are three domestic airports at Bumthang, Yonphula, and Gelephu. Safety enhancement works are being undertaken by the Royal Government of Bhutan for ensuring safe travel to and from these airports.⁷

Bhutan has standing Air Service Agreements (ASAs) with seven countries in the region. Those countries are India, Nepal, Bangladesh, Thailand, Myanmar, the Maldives, and Singapore.

Bangladesh

Biman Bangladesh, established in January 1972, is the public sector airline and flag carrier of the country. Its main hub is Shahjalal International Airport in Dhaka and also operates flights from Shah Amanat International Airport in Chittagong and Osmani International Airport at Sylhet.

Besides these, there are six other domestic airports, located at Jessor, Cox Bazaar, Saidpur, Rajshahi, Barisal, and Ishurdi.

Bangladesh has signed ASAs with 42 countries. Biman flies to 16 different countries including the destinations of Kathmandu and cities in India in the BBIN sub-region.

The other airlines operating in Bangladesh are Regent Air, Novo Air, and US-Bangla Airlines. These private airlines mostly concentrate on domestic business and fly to limited foreign destinations like Kathmandu, Kolkata, and Bangkok.

Airfreight is a high growth market and growing at 12 per cent per annum in terms of its value. Most high-value goods including apparel are transported as air cargo. Bangladesh needs an expansion of aviation infrastructure to handle the operation of big aircraft, including the extension of parking space, automation, and adding new aircraft to its fleet.⁸

India

India has 464 airports, of which 125 are owned by the Airports Authority of India (AAI). These airports manage almost 78 per cent of domestic and 22 per cent of international passenger traffic.

The aviation sector in India currently contributes around US\$72bn to GDP. Air India, a full-service carrier, is the national carrier of India. The country has six scheduled airlines operated by the private sector, of which five are low-cost carriers and one (Vistara) as a full-service carrier. Besides, there are charter airlines, regional airlines, and cargo airlines in operation.

India's international passenger traffic stood at 341.05 million and domestic passengers at 274.5 million in FY20. Meanwhile, the share of international cargo traffic was 68.5 per cent (3.33 million tonnes) in comparison to 31.5 per cent of domestic cargo.

The aviation industry is emerging as one of the fastest-growing businesses in the country over the last three years. The growth is fueled by the economic expansion coupled with the increasing number of middle-income groups in the country.

India has become the third-largest domestic aviation market in the world and is expected to overtake the UK to become the third-largest air passenger market by 2024.⁹



Private airlines in India came into existence after the liberalisation of their economy in the 1990s. The Government of India announced the 'open skies' policy in 1992, liberalising rules and regulations to open up the commercial aviation market. This has resulted in bringing several private parties into the business.

COVID-19 and Aviation Industry

The aviation industry largely depends upon the transportation of people and goods within the country and across international boundaries. This sector is considered to be the backbone of international trade, investment, tourism, and people-to-people exchange.

The COVID-19 has impinged the social and economic life of the people with a colossal impact on travel and tourism due to restrictions imposed on the movement of people, also having a consequential impact on the movement of goods.

Industries have either stopped their operations or are running much below their capacity. By and large, aircrafts are grounded everywhere in the world incurring billions of dollar losses to the industry.

According to the World Tourism Organisation, there will be a decline in tourism receipts between US\$970 to US\$1,170bn in 2020 while the overall decline in the merchandise trade is expected to be between 13 to 32 per cent during this year.

According to International Civil Aviation Organisation (ICAO), there will be a reduction of 2,713 to 2,884 million passengers and an estimated loss of US\$366 to US\$389bn on passenger operating revenue of the airlines in 2020.

However, in contrast to the fall of passenger traffic, cargo flights surged with the increased cargo-only operations using passenger aircraft. Such an increment in the number of cargo flights this year were 5, 15, and 35 per cent during February, March, and April respectively in comparison to 2019.¹⁰

The lockdown of countries caused disproportionate job losses, particularly in the tourism, construction, and micro, small & medium enterprises (MSMEs) sector.

A simulation conducted by United Nations Economic and Social Commission for Asia and the Pacific-South Asian Network on Economic Modeling (UNESCAP-

SANEM) suggests that nearly 140 million people might lose jobs in five South Asian countries (India, Pakistan, Bangladesh, Nepal, and Sri Lanka) because of lockdowns and other restrictions on economic activity.

Among the BBIN countries, the bulk of these job losses (112.8 million) will be in India, followed by Bangladesh (12.37 million). Nepal would face job losses of 2.27 million followed by Bhutan with 50,000 job losses, particularly in the tourism sector, mainly hotel staff and tour guides.¹¹

Amid the pandemic, the BBIN countries have started limited operations of air services within the region and to the Middle East where migrant workers from South Asia form a major part of the workforce. Those flights are primarily aimed at evacuating the nationals from the workplace where they have lost jobs on account of shutting down of businesses.

All four countries have imposed a ban on air travel along with the imposition of lockdowns. Permission of the government is required for operating international flights. Domestic flights resumed in India from the second week of June while such flights were given permission by the Government of Bangladesh with effect from June 01, 2020.

Limited international flights were opened in Nepal with the prior permission of the government. Cargo planes are allowed to operate observing the standard health protocols.

Issues and the Policy Response

Due to contiguous locations, the supply chains in BBIN countries are largely based on road and rail transportation rather than air. Airfreight is commonly needed for high-value low volume goods and those requiring quick delivery. Some of such products are handicraft, jewelry, apparel, carpets, tea, coffee, cardamom, and medicinal herbs among others.

However, there is a need of integrating various modes of transport to ease the market access; moving goods from the production centre to the consumer's market through the multi-modal system to achieve efficiency and reducing the cost of transportation.

The aviation services among the BBIN countries are mostly confined between the capital cities. This is

particularly true in the case of Bangladesh, Bhutan, and Nepal. There are prospects of establishing air linkages between other cities and industrial hubs, which remains unexplored.

Such cities could be Pokhara, Biratnagar, and Bhairahawa in Nepal; Chittagong, Sylhet, Rajshahi, and Saedpur in Bangladesh and Shillong and Guwahati in north-east India. **Hence, the air services should be developed in the sub-region in the hub and spoke fashion; the airports in capital and major cities serve as a hub and other industrial and business centers as spokes.**

Thus New Delhi, Kolkata, Dhaka, and Kathmandu airports could be developed as air hubs of the sub-region. The feasibility of air linkages could be explored between other business centres like Pokhara-Paro (Bhutan), Biratnagar-Syedpur (Bangladesh), Pokhara-Lucknow (India), Bhairahawa-Patna/Bodhgaya, Bhairahawa-Kolkata, Kathmandu-Guwahati (India), and Dhaka-Guwahati and vice versa as new destinations.

The bilateral air service agreement should be revisited and made more liberal that include open skies arrangements allowing any number of airlines of the BBIN countries, having unlimited rights to fly between the cities, without significant restrictions on capacity, frequency or price. This also includes traffic rights of the fifth freedom of the air.

Besides, the provision of cooperative marketing, such as code sharing and liberal cargo operations should be made a part of such arrangements.¹²

The bilateral ASA between India and Sri Lanka reflects the progressive liberalisation of aviation

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services in the two countries over the last three decades or so. Liberalisation of air services has positive spill-overs in the form of increased cross-border trade, investment, and flow of tourist and people-to-people connectivity.

The provision of fifth freedom rights in the agreement, relaxation of visa for Indian visitors, and the bilateral free trade agreement increased economic interaction and enhanced connectivity between India and Sri Lanka.

Other countries in the sub-region may take a phased approach in fully liberalising the aviation sector with the objectives of achieving meaningful integration of their economies.

Maintaining air safety is a big issue for South Asian countries. Nepal is one of the countries in

South Asia having relatively a greater number of air crashes. There were 16 air crashes in Nepalese territory between 1992 and 2018.

India has had 20 accidents between 1958 and 2020; the last one in Kozhikode, Kerala in August 2020 killing 18 passengers. Nepalese airlines are barred from flying over European skies due to their failure to comply with the safety standards prescribed. The geography of Bhutan also poses a challenge in the expansion of air services. Improvement of air safety measures is thus a priority issue for mountainous countries like Nepal and Bhutan.

The BBIN countries should strive for enhancing collaboration in creating a viable civil aviation system with a focus on modernisation of airports, airlines, and air navigation systems and maintain air safety for strong and coordinated growth of the transport sector.

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Creating an environment of trust and confidence among countries is of paramount importance for achieving greater collaboration and harnessing mutual benefits in the aviation industry.¹³

Aviation authorities in the sub-region need to focus on cyber and data security to protect the safety of the passengers and promote the reliability of air services. Cyber threats are now becoming a growing global concern. To protect the safety of flight operations from these threats and ensure business continuity, the more integrated and automated air navigation system should provide for trusted information exchanges among the aviation communities.

The integrity of the information system should be maintained to preserve the level of air safety in harmony with the global community.

Promotion of low-cost carriers and visa facilitation are the two important elements for enhancing trade, investment, tourism, and people-to-people contact. There are limited operations of low-cost carriers between the capital cities of New Delhi, Dhaka, and Kathmandu.

However, these are becoming popular in comparison to the full-service carriers due to their reduced fare and increased frequency of operation. The positive spillovers of these carriers are many in the form of increased travel, tourism, and business interaction and thus need to be promoted.

The requirement of travel documents between Nepal-India and Bhutan-India and vice versa is

simplified as the nationals of these countries do not require a passport or visa to travel to each other country. Possession of a driving licence or valid ID card is sufficient for travel.

India and Bangladesh have signed a visa facilitation agreement in July 2018 that provides for various categories of visas such as a visa for medical services, long-term employment, investors and businesses, journalist, research scholars/fellows, and transit visas among others.

Nepal provides an on-arrival visa to Bangladeshi and Bhutanese citizens. Nepali citizens need a prior visa to travel to Bhutan or Bangladesh. However, these countries have gone for online processing of visas that have made travel much easier.

BBIN countries should consider applying a common rule for the issuance of business visas or travel cards, particularly between India and Bangladesh, and Nepal, Bangladesh, and Bhutan.

To realise the potential of increasing trade in fresh fruits, vegetables, dairy products, and other agricultural goods, the BBIN countries should explore the possibilities of using multi-modal transport, including air, inland water, road, and rail transport. Perishable agricultural goods can be transported quickly through the air routes, which will preserve its quality. For example, medicinal herbs, fresh vegetables, and fruits from Nepal and Bhutan can be transported to Bangladesh and cities in India through air services.



These may further be transported to specific destinations and consumers by using road transportation. However, the problem lies in the lack of proper logistical services such as cold warehouses, packing, and storage facilities in the airports, proper domestic transportation, and other facilitation measures including cross-country harmonisation of test and certification procedures.

It is also equally important to reduce 'dwell time' for air cargo in the terminals by using the risk management system that helps in bringing down the cost of import and export to the traders.

Last but not the least, the BBIN communities should work together in creating a conducive environment

for the promotion of intra-regional economic and social integration through joint efforts in **creating a sub-regional fund for transport infrastructure, promotion of paperless transaction in trade, transit, and transportation, and enhancing collaboration among the transport service providers.**

A sub-regional transport and trade facilitation mechanism may be constituted to promote dialogue and collaboration among the partnering countries. Such a mechanism will serve as a building block for advancing the greater regional cooperation in trade, transport, tourism, and cross-border investment.

Endnotes

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- 13 Often, questions are raised on adequacy of safety and security measures adopted by the countries at their airports. One such example is the checking of handbags and body frisking at the staircases of aircraft by the Indian security personnel while boarding the aircrafts of Indian Airlines, flying destinations to India from Kathmandu. Earlier the passenger's security clearances are done by the Nepal Police at the Terminal Building. This type of double checking arrangement was started in 2000 after hijacking of Indian Airlines flight (IC 814) in December 1999 by the Taliban hijackers who took the plane to Kandahar in Afghanistan and placed the passengers as hostages for a week, also killing one of them.

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