

SOUTH ASIA

TOWARDS A GREATER REGIONAL AIR CONNECTIVITY

AIR CONNECTIVITY

PROSPECTS & CHALLENGES



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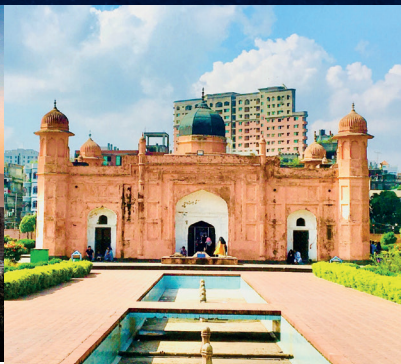


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South Asia

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Abstract

Around one fifth of the world population lives in the South Asian region and over half of the population lives in poverty. South Asia is recognized as the least integrated region in the world. Intra trade stands at 5 percent of the world trade for decades. However, the region's diversity provides numerous opportunities for trade, investment, and economic growth. To achieve regional cooperation and integration in the region, strengthening regional connectivity is the first step in the process of integrated South Asia. Air connectivity is vital for the region's economy. It would increase people-to-people connectivity, provide the city-pair connections that serve as virtual bridges supporting the flows of key economic activities between the regional emerging markets. As air transportation is the fastest global transportation network, it facilitates links between businesses, governments and people thereby improving regional trade, increasing investment flows, boosting tourism and travel activities, and strengthening cooperation between economic activities in the region. A stronger air connectivity not only strengthens the intra and inter regional trade but also generates higher income and prosperity for South Asia. However, the potential and benefits of enhanced air connectivity in the region has remained largely unrealized for several reason. There are certain factors which inhibit the air connectivity in the region, i.e., regulatory procedures, restrictive visa processes, complicated travel procedures, fewer direct flight connecting the capitals, high cost of traveling in the region, code sharing, infrastructural issues. The study examines the current state of connectivity between the South Asian countries and highlights the factors that facilitate and constrain the air connectivity in the region. The study also examines the factors of low demand of air travel in the region and outline the way forward and policies to improve the state of air connectivity in the region.

1- INTRODUCTION

It has long been recognized that South Asia is one of the least economically integrated regions in the world, with intra-regional trade hovering at around 5 percent. At the same time, air connectivity in the region is also weak, characterized by a lack of direct capital-to-capital connectivity in many cases. Although the connectivity in South Asia has remained significantly low due to the trust deficit and the lack of political will¹, countries in South Asia have prioritized trade with distant European and Southeast Asian countries² in line with the economic liberalization in the 20th century.

Around the world, trade has played a critical role in reducing poverty. The success of the most integrated regions in the world like East Asia, Europe, and North America is due to their strong intra-regional trade relations and strong connectivity both via land and air routes. Further, the difference between regions' actual and potential trade is huge, i.e., the potential intra-regional trade of South Asia would be approximately US\$67 billion whereas the actual intra-regional trade is about US\$23 billion³. The average level of trade costs is between country pairs in South Asia is 20 percent higher than between country pairs in the Association of Southeast Asian Nations.

The trade cost between some countries in South Asia is higher than the trade cost with distant European and South American region countries. A key aspect of trade costs is connectivity. Regional air connectivity in South Asia is restricted, and poor even between capitals. Instead of increasing access to connectivity, over the past 40 years, the region has been disconnected. The intraregional trade has been

limited due to several factors such as inadequate road, marine, and air transport connectivity. Further, regional air connectivity in South Asia has also decreased significantly, with no direct flights between Nepal and Pakistan as well as India and Pakistan or between smaller cities. In order to travel between neighboring countries in South Asia, it is necessary to transit in the Middle East (usually Dubai or Doha) or Southeast Asia (Singapore or Thailand), increasing both cost and time of travel. These limitations in intra-regional connectivity undermine the potential for interaction of traders and investors to engage in business transactions.

Regional connectivity infrastructure in South Asia needs a 360-degree or a complete full circle vision. Air connectivity is necessary for increased exchange of goods and services, people-to-people connections to stimulate investments and business activities, and to boost intra-tourism in the region. At the same time, air linkages will not materialize in a substantial manner unless there is a degree of existing regional integration. Therefore, these two factors are interdependent and mutually reinforcing.

In the South Asian region, improved air connectivity could bring wider economic outcomes as increased connectivity between the countries would serve as an important catalyst for economic growth and prosperity. Around 90 percent of business-to-consumer (B2C) e-commerce parcels are currently carried by air. Air transport is a driver of global trade and e-commerce, allowing globalization of production in 2018, around US\$ 6.8 trillion worth of goods were transported internationally by air, representing 35 percent of world trade,

¹ World Bank/South Asia: How Can South Asia Turn Its Proximity from a Burden to an Advantage

² Asia Pacific: Least connected South Asian region wakes up to challenge

³ World Bank Report: A Glass Half Full the Promise of Regional Trade in South Asia.

approximately 1.4 billion tourists crossing borders every year, over half of whom traveled to their destinations by air⁴. In this context, it is important to identify the factors that contribute to limiting air connectivity in the region. International air services have long been governed by a complex matrix of Bilateral Air Services Agreements (BASAs), which specify limitations on air traffic rights, a number of airlines allowed to operate, methods of setting capacity on a route, tariffs, and destinations that can be operated on flights between two countries. As a result of bilateral negotiations in recent years, these ASAs have become more flexible and liberal on the global scale, yet they remain relatively restrictive in South Asia.

Organization for Economic Co-operation and Development (OECD) countries have made substantial headway over the last two decades in liberalizing market access and ownership. For example, the pioneering US domestic deregulation of 1978, the Australia-New Zealand Single Aviation Market Arrangement of 1996, and the European Single Aviation Market completed in 1997. Moreover, in the last two decades, over 85 ‘open skies’ BASAs providing full market access without restrictions on designation, traffic rights, capacity, frequency, tariffs, or code sharing, have been completed

by many countries . Although the current level of air transport activity in South Asia is only a fraction of that in other regions like Southeast Asia, the prospects for future growth are strong.

This study is organized as follows: The first part of the paper gives a detailed overview of economic and social benefits of enhanced air connectivity in the region. The second part discusses the impacts of air connectivity on regional trade, tourism, value addition in regional supply chains and the social benefits of enhanced air connectivity in the region. Further, the study analyzes the travel and tourism index with an objective to review the demand of air travel in the region.

The third part gives a review of the state of connectivity in the region, and in this context analyze the current degree of capital to capital and state to state connectivity in the region by mapping out the existing flight route operations. The fourth part of the study highlights the issues pertaining to air connectivity in the region. The fifth part of the study highlights and briefly analyzes the challenges of air liberalization and the factors inhibiting connectivity in the region. The study also outlines a policy roadmap with recommendation to regional stakeholders and policymakers in order to enhance air connectivity in the South Asian region.

2- AIR CONNECTIVITY AND ECONOMIC GROWTH

Regional connectivity is significant in the South Asian context because of the region’s strategic geographical location between Europe and South-East Asia. South Asia is home to one of the world’s biggest concentrations of poverty. The region’s 1.7 billion people live with limited

internal connectivity that remains fragmented. Enhanced air connectivity in the region would have a catalytic impact on economic sectors as many other industries rely on effective air transport links to function. Therefore, it is important to understand the relationship between

⁴ Aviation Benefits report 2019

⁵ Air Service Agreement Liberalization and Airline Alliances © Oecd/Itf 2014

⁶ Regional Integration and Economic Development in South Asia

air connectivity and economic growth. Enhanced air connectivity improves the efficiencies in a wide spectrum of economic activities, i.e., it offers just-in-time delivery systems in the supply chains; enables regional investments; and supports innovations by encouraging effective networking and collaboration between organizations located in different parts of the region. Good air transport links are considered as essential factors that influence the investment destinations of investors. Seamless connectivity would allow countries to fully participate in the region's economy. This encourages higher productivity, investment, and innovation as connectivity helps businesses operate smoothly and efficiently in the region⁷.

Air connectivity links both places and people by creating the infrastructure necessary for the flow of goods. Therefore, priority for enhancing capital to capital connectivity in the region would be the first step toward the region's greater air connectivity plan. When country capitals in the region are connected via direct flight operations, it facilitates economic growth in the region. Strategic measures should be taken to ease the people-to-people connectivity in the region through strengthening civil aviation connectivity, international business travel, and increased mobility of academics, professionals, and tourists, through liberalization of civil aviation, which would be an important measure towards a regional greater air connectivity plan.

Traditional visa procedures also need to be replaced by e-visas and visas on arrival across the region. This would be a breakthrough in promoting tourism, people-to-people interactions, and to boost business activities in

the region. While civil aviation links in South Asia have improved over the years, many gaps remain, for instance, the outstanding issues between the two biggest economies in the region, India and Pakistan, need to be resolved through mutual cooperation⁸. In the absence of effective direct connections between the two neighboring countries, business travelers have to take more circuitous routes through the Middle East, adding cost and time. Besides affecting business links, such poor aviation links also do not allow the potential of tourism to be exploited between the two countries and the region as well.

Perhaps the most important economic benefit of air connectivity is the value that travelers derive from the ability to access destinations and markets around the world. During the last decades, air connectivity has offered consumers and producers more choice in terms of routes and faster linkages to the rest of the world, at an ever-decreasing cost in real terms. A record number of cities were connected due to the air transport industry in 2019, exceeding 23,000 unique city-pair connections for the first time⁹.

Furthermore, the cost of air travel and air freight has decreased due to the adoption of new technology and greater efficiencies are being passed on to the consumer in the form of lower prices. Air transport fundamentally changes the way companies do business with each other, as it enables an expansion of productive capacity through two main channels: increased capital base enabled by better access for foreign capital and increased productivity as a result of gains from trade, improved labor mobility, exchange of information and knowledge and other positive spillover effects¹⁰.

⁷ Air Connectivity: Measuring the connection that drives economic growth

⁸ Asian Development Bank (ADB)-Regional Integration and Economic Development in South Asia

⁹ The International Air Transport Association- air connectivity report 2020

¹⁰ OECD: The Impacts of Globalization on International Air Transport Activity

3- AIR CONNECTIVITY, THE IMPACTS ARE LARGE FOR THE SOUTH ASIAN REGION.

Air connectivity indicates how well countries and regions in different parts of the world are connected with each other. Access to greater air connectivity is one of the important determinants for any country or region to develop effective economic linkages with the rest of the world, as it provides the foundation for people-to-people interactions and flow of goods and, therefore deemed as a vital engine of economic growth worldwide.

Both connectivity and productivity are directly proportional. This shows that investments in air connectivity in developing or least integrated regions, where connectivity is relatively low as in the South Asian region, will have a much larger impact on their economic success and productivity than a similar level of investment in relatively developed regions¹¹.

Enhancing air connectivity in the region's economy significantly contributes to strengthening key economic activities such as investment, trade, tourism, and the other drivers of economic development due to efficient and affordable air services. Further, the air linkages that connect regions, countries, and cities boost the supply side of the economy and therefore, build additional productive capacity to enable economic growth.

The significant importance of air connectivity could help policymakers and relevant stakeholders to develop new policy frameworks and implement evidence-based policies aimed at improving the level of integration into both regional and global connectivity networks, as it supports both economic development and improves the welfare of their citizens.

4- BENEFITS OF AIR CONNECTIVITY

As the global economy is expanding and growing, the demand for air connectivity has increased, leading to an increased flow of travelers and goods across markets. At the same time, the aviation industry itself can be a key facilitator of economic growth through improved air connectivity.

Air connectivity generates benefits for national and regional economies, resulting in improved competitiveness and enhanced employment and economic growth opportunities. The benefits of the air transport sector to a country's economy are often measured in terms of its

direct contribution to the country's GDP. As mentioned earlier, aviation industry generates significant benefits for the economy. In 2018, it contributed over 3.6 percent to world GDP and supports 65.5 million jobs and US\$ 2.7 trillion in global economic activity¹². Direct benefits include employment and economic activity generated by the air transport industry, secondly, air connectivity also plays a key role in enabling the economic growth of countries around the world, in Dubai for instance, aviation generates about over 28% of the state's GDP¹³. Therefore, improved air connectivity would play a large role in creating such economic values.

¹¹ Aviation Economic Benefits report by The International Air Transport Association

¹² The International Air Transport Association: Aviation: Benefits Beyond Borders

¹³ Air connectivity: Why it matters and how to support growth

Improved access to the regional air transport networks and capital-to-capital connectivity in the region leads to an increase in economic flows. As the South Asian countries' connection to regional aviation network grows, it automatically stimulates business opportunities, providing better access to regional capital markets and skilled human resources. As the ecosystem and the climate of business in the region improves, the regional economy grows which in turn further stimulates the demand in the regional aviation industry and connectivity leading to more jobs in the market and setting another round of positive effects for growth in economic productivity within and across the region.

Enhanced seamless air connectivity within the region enables and facilitates a wide range of social and economic benefits for consumers, producers, and governments. The higher the improved air connectivity, the greater the catalytic effects of aviation. Better air transport linkages bring about tangible economic benefits throughout the region. In South Asia where both land and air connectivity are restrictive and limited to the rest of the world and half of the region is disconnected from the rest. Increasing air linkages, particularly cities to cities, and

country-to-country connectivity in the region would stimulate intra-trade, increase investment flows, and peoples' mobility, which would further facilitate labor and capital productivity improvements, boosts innovation, and knowledge exchange. Further, Inflows of investment in the region would allow expanding the existing capital base. Thus, air linkages facilitate the expansion of the production capacity of the region's economy, creating an important platform for long-term economic growth and prosperity. Various catalytic benefits of air connectivity have been documented by the existing body of academic, industry, and government literature¹⁴.

Increased inflow of foreign investment, facilitated and supported by strong air linkages, encourages regional capital formation. From a regional perspective, where the region has untapped natural resources and the air linkages between the countries are very limited and restricted, an increase in the movement of goods and people in the region, enabled through air transport services, could bring improved economic productivity as a result of specialization and efficient allocation of resources. Altogether, these economic forces would enable the region to expand its productive potential to ensure long-term sustainable economic growth.

Table No. 1 Air Connectivity Benefits and Impacts

Initial Impacts	Direct Impacts	Wider Impacts
People-to-people interactions	Expanding region economic potential	Agglomeration effects
Explore new destinations	Increase in airport industry Density	Economic spillovers
Business and investment opportunities	Inward and outward investments	Gains from trade
Increase in market accessibility	Increase in intra-trade (imports & exports)	Exchange of knowledge and technology

¹⁴ The International Civil Aviation Organization: Aviation benefits report 2019

Since the region is recognized as the least economically integrated due to the lack of cooperation of member states and various non-economic issues, and cross-border movement of people and goods is difficult due to the complex and cumbersome documentation process. In this context, increasing air transport and air linkages between the countries in the region would stimulate the flow of foreign direct investment as business travelers in the region explore new markets and uncover new ventures and opportunities to invest.

Both region's supply chains and economic productive capacity would be improved. First, the business investment is supported by the wider markets that air transport allows a firm to access. Second, higher productivity would be achieved due to the accessibility of increased air linkages that could provide new production

techniques and more efficient suppliers in the regional market.

International Air Transport Association (IATA) analyzed the European Union (EU) countries' air connectivity, which showed that the increased level of air connectivity network could have a significant and positive impact on the long-run economic performance in the region. Therefore, air connectivity has a causal link to both long-term investment and the long-run productivity in the economy. Among the EU countries, a 10% increase in the level of connectivity, relative to the GDP size, can increase long-run GDP by 1.1%¹⁵. Thus, in South Asia, an increase in the level of air connectivity networks could also increase long-term investments and enhance productivity in the region's overall economy, and, hence positively impacts the region's overall GDP growth as well.

5- AIR CONNECTIVITY AND INTRA REGIONAL TRADE

As trade improves productivity, enhanced air connectivity in the region would facilitate intra-trade, allowing countries in the region to access a wider regional market for production inputs, and encouraging knowledge and technology transfers through both exports and imports. Additional gains from trade, such as agglomeration economies and improved productivity due to increased competition. Agglomeration effects refer to improved productivity levels due to an increase in geographic clustering of economic activity due to an improvement in connectivity¹⁶.

Due to agglomeration effects, Firms can increase productivity levels as a result of improved proximity to employees, suppliers, and customers or collaboration with other firms in the region.

Beyond agglomeration effects, imports of goods and services can increase the level of competition in the region, stimulating greater economic efficiencies in the use of limited resources.

In addition, producers can benefit from increased access to a large range of inputs and regional supply chains, while consumers benefit from a greater choice of products and services. Thus, Increased competition may lead to a decrease in costs. Exports enable economies of scale for producers in a given country, as they can sell more products and services to existing markets and access new markets in the region and beyond as well. While air transport accounts for less than 1% of world trade by volume, it carries around 35% of global freight by value. Improvement in

¹⁵The International Air Transport Association: Air Line Network Benefits

¹⁶ In classical economic literature, the benefits from trade arise because countries specialize in the production of goods and services in which they have a comparative advantage. The specialization which arises from the division of labor and economies of scale enables countries to improve productivity and lower the price of goods and services produced.

air connectivity encourages more trade between countries in the region. In 2019, nearly 61 million tons of goods were shipped by air. Air cargo has increased its share over other transport modes – since early 2014 growing faster than world trade¹⁷. In South Asia, the land (road, rail, and transit) infrastructure is weak and cross border movement of people and goods is difficult, and procedures and documentation are complex and time costly, whereas air

connectivity i.e. airport infrastructure both in terms of connectivity with the rest of the world and in terms of resources, is fully operational and functional. Therefore, focus on improving air connectivity in the region in terms of capital-to-capital connectivity would have a multiplier effect on regional overall economic growth, trade and people mobility, and due to the agglomeration effect add more value to regional supply chains.

6- AIR CONNECTIVITY PROVIDES SIGNIFICANT SOCIAL BENEFITS

The availability and accessibility of air connectivity through air transport service in the region provides people with access to what they need: better living standards, food, healthcare, education, etc. The enhanced connectivity in the region would boost medical tourism in the region and serves as a viable means of transportation to provide health care and food supplies to many remote areas, and it is a reliable way to deliver urgent humanitarian aid during emergencies caused by natural disasters¹⁸. Furthermore, enhanced air connectivity in the region would provide educational opportunities to the students within and across the region, especially for those students from landlocked and island countries

who travel abroad for higher quality education. Aviation contributes to improving the quality of life by broadening travelers' leisure and cultural experiences. In South Asia, where the people shared history and culture, enhanced connectivity in the region provides an affordable means to visit distant friends and relatives. Therefore, enhanced air connectivity in the region holds tremendous economic potential and growth, which would support achieving sustainable development in each South Asian country. As it would be a major source of supporting and generating employment in the region and eventually have a positive impact on the region's overall GDP growth.

7- BENEFITS OF AIR CONNECTIVITY IN THE REGIONAL SUPPLY CHAINS

Enhancement in air connectivity and improvement in current infrastructure would benefit South Asian countries beyond economic gains. Besides the direct impact on trade and economic growth, establishing air networks would have several positive externalities. It would open possibilities in value chains to develop within the region, enhancing the

competitiveness of final products from the region to world markets.

Improved air connectivity in the region would make products originating from the region more competitive in export markets such as the EU and ASEAN. As the bulk of all South Asian trade focused on Europe, North America, and

¹⁷ Value of Air Cargo: The International Air Transport Association

¹⁸ The International Air Transport Association: Aviation Benefits reports 2019

East Asia, creating final products in South Asia through regional value chains would create interdependence, boost the productive capacity of the region, foster balanced regional development, and enhance competitiveness for accessing transport, energy, ICT markets across the region. The benefits of expanding air connectivity networks in the region in terms of access to wider networks for more frequent better services by connecting each country's main city/hubs with each other would strengthen the region's economy in the long run and boost productivity through its positive impacts on supply chains and on business. Further, it would reduce air travel times, giving businesses access to a wider marketplace. Better air linkages

enable investment and human capital to flow more freely across borders, improving returns on investment in the regional projects through improved supply chains. Aviation is one of the most “global” industries, which connects people, cultures, and businesses across continents¹⁹. However, the South Asian region lags far behind in the fruitful benefits of this industry. Aviation provides the fastest worldwide transportation network, which makes it essential for global business. It generates economic growth, creates jobs, and facilitates international trade and tourism. Therefore, regional stakeholders and policymakers need to work together to maximize the benefits of air connectivity, and to support the sustainable growth of this industry.

8- OVERVIEW OF SOUTH ASIA AVIATION MARKET

Most of the world's top aviation markets in the next 20 years are set to be in the Asia Pacific. In South Asia, India is forecast to climb steadily up the ranks from 5th to 3rd largest air transport market in the world by the 2030s. Thailand is expected to be the new entrant in the ranking by 2040. The domestic Chinese market experienced the strongest air travel growth in the world in 2019. Strong air travel growth is also expected in Vietnam in the next 20 years. Air connectivity links Vietnam to the global supply chain. Vietnam is one of the top 10 exporters globally of telecom and office products²⁰.

India has had a significant connectivity growth rate of 89%, replacing Indonesia in the third position in the Asia ranking in 2019. One of the main drivers of its connectivity growth was the increase in domestic traffic demand for travel in India. Maldives, Sri Lanka, and Nepal have

relatively high connectivity levels in South Asia, relative to the size of their economies.

Table 2 Air Connectivity Ranking²¹ shows air connectivity scores which measure the number of annual flights to the base city from other cities with each city pair weighted by whether the flight route was domestic (weight:1), intraregional (weight:2), or inter-regional (weight:3). A base city's Air Connectivity score is the sum of these weighted flight route scores²². The IATA air connectivity score can be used to evaluate air connectivity at the level of a city, country, or region. For example, a national government may be interested in adopting policies aimed at improving its country's air connectivity score within the region. The IATA connectivity score at the country level can be used to benchmark the country against other regional peers. India, which has the highest air connectivity score in South Asia, ranks at 4th

¹⁹ The International Civil Aviation Organization: Aviation Benefits: contributing to global economic prosperity

²⁰ The International Air Transport Association: Measuring the connection that drives economic growth

²¹ See Annexure 1

²² A competitive assessment of south Africa's leading cities — national, continental, and global perspectives.

number on a global scale. Followed by Pakistan and Sri Lanka with global ranking standing at 45 and 59 respectively.

Table 3 Air Connectivity in terms of population²³ shows the South Asian countries' connectivity relative to the population size in terms of the connectivity indicator in 2014 and 2019 for each country, as well as the indicator's growth in percentage over the five-year period from 2014 to 2019, divided by its population size.

Table 4 Air Connectivity in terms of GDP²⁴ shows the connectivity indicator of each South Asian country in 2014 and 2019, as well as the indicator's growth in percentage over the five-year period from 2014 to 2019, divided by its

level of GDP. The Maldives tops the charts and ranks 2nd on a global scale followed by Nepal in South Asia with its global ranking standing at 59th number. It is remarkable to see that each country in South Asia's performance in terms of international connectivity increased in 2019 as compared to their global ranking in 2009.

India is the only country in South Asia, that performed well in all the indicators in terms of improved connectivity. However, in almost all the scores, South Asian countries' performance with respect to connectivity indicators has improved significantly with the rest of the world, but connectivity within the region lacking far behind its actual economic potential, which is needed to realize economic cooperation in the region.

8.1 CASE STUDY OF INDIA

India's air connectivity has grown by almost 240% in the last 10 years. India is the most connected country in the South Asian region and its connections to Asia-Pacific have grown the fastest over the last five years. This significant connectivity growth was driven by several factors such as demographics, domestic market demand, and policy environment. Several important initiatives and developments were introduced by the Indian National Civil Aviation involving airline operations, safety and security, international traffic rights and maintenance, repair, and overhaul (MRO) operations²⁵.

One of the remarkable schemes was to introduce the UDAN²⁶ initiative, to make flying more affordable and convenient for the general population. Within the framework of this program, new airports and new routes have become operational, enhancing connectivity

between far-flung and hitherto underserved areas of India. Further, with the approval of the Government, the Airports Authority of India has successfully started the process leasing of six airports under a Public-Private Partnership scheme.

The South Asian countries need to learn from India's performance regarding enabling policies, air connectivity initiatives, and how it reaches to top numbers in the global ranking in terms of both domestic and international connectivity. To reach such aviation potential, the countries in the South Asian region need to expand their domestic air network and airport infrastructures under Public-Private-Partnership schemes and explore new routes to make flying more comfortable in the region.

²³ See Annexure 1

²⁴ See Annexure 1

²⁵ The International Air Transport Association: Measuring the connection that drives economic growth

²⁶ UDAN is a regional connectivity scheme spearheaded by the Government of India (GoI). The full form of UDAN is 'Ude Desh ka Aam Nagarik' aims to develop smaller regional airports to allow common citizens easier access to aviation services

9- ENHANCED AIR CONNECTIVITY BOOST TOURISM IN THE REGION

Air transport activities have a catalytic impact on multiple sectors of the economy, especially tourism. The air connectivity brought by air transport service is at the heart of tourism development and provides substantial economic outcomes for all those involved in the tourism value chain.

One of the industries that rely most heavily on aviation is tourism. By facilitating tourism, it provides substantial economic outcomes for all those involved in the tourism value chain. Approximately 1.4 billion tourists are crossing borders every year, over half of whom arrived at their destinations by air²⁷. In 2018, tourism supported a total of 319 million direct, indirect, and induced jobs globally and made-up 10.4 percent of world GDP, a total of USD 8.8 trillion; and the tourism-related GDP is forecasted to rise by 3.7 percent annually over the next decade, faster than the growth of global GDP²⁸. Through a synergetic relationship, aviation supports almost 37 million jobs within the tourism sector, contributing roughly USD 897 billion a year to global GDP²⁹. In terms of trade, international tourism (travel and passenger transport) accounts for 29 percent of the world's services exports and 7 percent of overall exports of goods and services in 2018³⁰.

In South Asia, particularly for Landlocked Developing Countries (LDCs) and Small Island Developing countries (SIDs), tourism is the main source of foreign exchange earnings. If tourism is well managed with strong support by seamless air connectivity throughout the

region, it can reduce poverty levels through employment in tourism enterprises, goods and services provided to tourists, or the running of small and community-based enterprises, etc.³¹. In South Asia, the graduation of Maldives in 2011 to LDC status was driven by the strong growth and performance of tourism³².

Business tourism, specifically meetings, incentives, conferences, and trade exhibitions, relies significantly on the availability of air travel and can generate a bigger economic impact because business travelers spend more, at least per day, than leisure visitors do. In addition to the expected benefits in the hotel, restaurant, and retail sectors, tourism also fosters growth in such industries.

South Asia possesses many valuable tourist destinations and attractions, which could be the source of reducing the widespread persistent poverty in the region. However, because the region is the least integrated and connected in the world, the potential of tourism has remained largely unrealized. Despite significant improvement in economic growth in some countries in the region, poverty is widespread in South Asia. Tourism, being a labor-intensive industry, has the potential to be a major source of employment (Williams and Hall 2000). The different branches of the tourism industry (transport, accommodation, catering, food and beverage, excursions, and recreational activities) can generate employment and income for diverse population groups. Tourism has a higher multiplier and positive spillover effect than other

²⁷ World Tourism Barometer, Vol.17, May 2019, World Tourism Organization

²⁸ Travel & Tourism Economic Impact 2019 World, 2019, WTTC

²⁹ ABBB, 2018, ATAG

³⁰ World Tourism Barometer, Vol.17, May 2019, UNWTO

³¹ Sustainable Tourism Eliminating Poverty (ST-EP), UNWTO, = <http://step.unwto.org/>

³² The Least Developed Countries Report 2018, 2018, UNCTAD [https:// unctad.org/en/Publications_Library/lcr2018_en.pdf](https://unctad.org/en/Publications_Library/lcr2018_en.pdf)

economic sectors (Archer and Owen 1971; Roe et al. 2004). According to estimates by the World Tourism Organization (WTO) and the World Travel and Tourism Council (WTTC), for each job created in the tourism industry, five to nine affiliated jobs are generated in other areas.

South Asia has tremendous potential for tourism development. The demand has been growing fast in the region due to its centuries-old civilizations, rich and unique cultural and biological diversity, the diverse and vast array of geographic features, attractive oceans, and beaches, mangrove forests, mountain ranges including the great Himalayas, the Karakorum, and the Hindu- Kush mountains, splendid archaeological monuments, historic sites of religious significance and, above all, very hospitable people, make the region a very attractive place for intra-regional as well as international tourists³³. Realizing the potential of intra-regional tourism, very few efforts collectively among the member states of the South Asian region have been made to promote tourism since the late 1980s. Despite the huge potential, little effort has been made to understand the factors constraining the promotion of intra-regional tourism. In order

to realize the potential of the regional market for tourism, it is important for regional countries to enhance cooperation with the objective to promote the region as a whole and facilitating the intra-regional movement of regional and international tourists.

Stronger air and seamless connectivity is needed in South Asia to boost tourism within the region. However, no concentrated effort was made to enhance both land and air connectivity in the region, and therefore, tourism has not flourished in the region. South Asian countries receive a very small share of both intra-regional and the international tourism market. Although nearly one-fifth of the world's population lives in South Asia, the region attracts only 1 percent of the world's tourists³⁴. Neighboring regions, such as Southeast Asia, receive respectively six to ten times more tourists than South Asia. As a result, the contribution of tourism to the economy of South Asia has remained minimal. The contribution of tourism, both in terms of its contribution to GDP and employment, in the region is much less than the world average. One of the factors that inhibits the potential of tourism in this region is complicated and complex travel procedures.

9.1 COMPLICATED TRAVEL PROCEDURES

The most critical problem in the South Asian region is cross-border travel including border formalities, visas, permits for internal movement in certain areas, airline access, currency use, and tour operator regulations. Travel procedures are very complicated and restrictive in most countries in South Asia, for both international and intraregional visitors.

This is a common picture in almost all countries in South Asia. Despite the stated intentions

of SAARC countries, there has not been much progress in simplifying visa and other travel requirements. Visa on arrival, therefore, should be promoted in all South Asian countries to promote tourism in the region. Regional visas, like the European Schengen visa, can facilitate intra-regional travel and tourism significantly. ASEAN has facilitated regional tourism in Southeast Asia by waiving visas for all travelers from ASEAN countries³⁵. South Asia could attract a lot more tourists by simplifying visa procedures. Ease in

³³ Prospects and Problems in Promoting Tourism in South Asia: A Regional Perspective

³⁴ Prospects and Problems in Promoting Tourism in South Asia: A Regional Perspective

³⁵ World Travel and Tourism council: The Impact of Visa Facilitation in ASEAN Member States

the visa process could increase the demand for air travel in the region. Due to complicated procedures, air travel within the region is costly and extremely difficult because of no or fewer flights connecting the capitals or major city hubs. Similarly, in South Asia, there are restrictive and limited facilities available while traveling through land, such as transport links, reservation facilities, and resting facilities. While air transport infrastructure is in place and apart from intra-connectivity in the region, South Asia is well connected with the rest of the world

with daily multiple flights per day. Therefore, developing air linkages among the countries could boost tourism and economic activities in the region. There is evidence that tourist flows increase dramatically where air connectivity plus administrative and documentation procedures are streamlined, and destinations are opened up to a wider population. However, air connectivity between the South Asian countries, along with poor administration, hinders the potential of intraregional connectivity and tourism in the region³⁶.

9.2 SOUTH ASIA TRAVEL AND TOURISM (T&T) COMPETITIVENESS

This section of the study analyzes the travel and tourism index of South Asian countries. The study conducted by World Economic Forum on Travel and Tourism (T&T) competitive Index covering 140 economies, measures the set of factors and policies that enable the sustainable

development of the travel and tourism sector, which contributes to the development and competitiveness of a country/region. In most South Asian countries, tourist infrastructure is inadequate, and the region's countries are not among the most competitive tourist destinations.

Table No. 5 Travel and Tourism Competitive Index South Asia

T&T Competitiveness Index	Rank	Overall result	Business Environment	Safety & Security	Prioritization of T&T	International Openness
Pakistan	121	3.1	4.2	3.7	3.6	2.2
India	34	4.4	4.9	4.5	4.3	3.8
Nepal	102	3.3	4.0	5.2	5.0	2.7
Sri Lanka	77	3.7	4.4	5.4	5.2	2.7
Bangladesh	120	3.1	4.2	4.9	3.6	2.5

Table No. 5 (continue)

T&T Competitiveness Index	Air transport Infrastructure	Tourist service Infrastructure	International Tourist Arrivals	T&T Share GDP %	T&T Share of Employment %
Pakistan	2.2	2.7	965500	2.8	2.4
India	4.2	2.8	15542900	3.6	5.1
Nepal	2.3	2.2	940200	3.6	2.9
Sri Lanka	2.8	3.3	2116400	5.7	5.7
Bangladesh	2.0	1.9	125000	2.2	1.9

Source: World Economic Forum: Travel and Tourism (T&T) Competitiveness Selected South Asian countries (data subject to availability)

³⁶ Immediately after, when China liberalized restrictions on travel to neighboring Hong Kong in July 2003, growth in Chinese tourist flows to Hong Kong grew up from 12 to 143 percent. This flow was also matched by double-digit growth from Hong Kong to China, with significant economic impact, job creation, more investment, and business opportunities. Similar gains were experienced in China-Taiwan tourist movements after formalities were reduced between China and Taiwan (Yu 1997).

Among the other developing regions of the world, South Asia's overall competitiveness has improved since 2017. However, the demand for air connectivity is very low due to the region is still far lagging in overall quality of business enabling environment and travel & tourism competitive index.

The region also scores less on the quality of airport infrastructure which clearly indicates the South Asian region is investing less in its ground, port, and tourist service infrastructures and scores less on all competitive indexes compared to the neighboring and developing regions of the world. Hotel rates are high in many South Asian countries and most of the countries in South Asia cannot compete with Southeast Asian countries in terms of price, amenities, and traveling facilities. The region also scores low on international openness, safety and security, and health and hygiene indicators. All these factors make the region less demanding for air connectivity and air travel services.

In South Asia, Bangladesh had the world's greatest percentage improvement on its overall T&T competitiveness index score, helping it move up five spots to rank 120th globally. The country enhanced its safety and security (123rd to 105th) and T&T prioritization (127th to 121st). India, which accounts for the majority of South Asia's T&T GDP, remains the region's most competitive T&T economy, moving up six places to rank 34th globally. From a regional perspective, India has better air (33rd) and ground and port infrastructure (28th), and international openness.

However, India still needs to improve its enabling environment (98th), tourist service infrastructure

(109th), and environmental sustainability (128th). Sri Lanka, the only country in the region to decrease in competitiveness (64th to 77th) in South Asia due to falls in the business environment (50th to 79th), and international openness (67th to 100th). Pakistan (121st) remains the least competitive country in South Asia when it comes to T&T indicators³⁷.

All the indicators mentioned so far do not contribute to South Asia's positive image in the outside world. Generally, South Asia is considered to be 'difficult' to travel in for several reasons including fewer direct flights along with complicated travel procedures. Furthermore, there are few efforts from regional economies to project a better image highlighting positive aspects of South Asia as a region. As a result, South Asia has not proved to become a large destination for both international and regional travelers and visitors.

South Asia possesses important tourist resources and attractions. Despite its huge potential, the tourism sector is struggling to flourish, and its potential has remained largely unrealized. Its contribution to regional economic growth, in terms of employment generation, foreign exchange earnings, and national revenue, has remained minimal. As a result, tourism has been unable to make any significant contribution to poverty reduction, which is a major concern for South Asian nations.

While the tourism sector is growing rapidly in many regions of the world, including Southeast Asia and Northeast Asia, the question arises as to why South Asia has failed to promote this sector in spite of its huge potential. Although, the South Asian countries have great potential to develop

³⁷ WEF: Travel and tourism competitiveness Index Statistics 2019

the travel and tourism sector. One of the major factors is the lack of air connection between member countries along with complicated travel procedures, poor transport facilities, inadequate facilities and services, safety, and security, which are constraining the development of the tourism sector in South Asia. Efforts made by several organizations including SAARC have made little progress in enhancing intra-connectivity in the region and facilitating the intra-regional movement of international and regional tourists.

Although the region has inherited not only a shared identity and cultural values but also a shared economic and physical infrastructure. Rail and road infrastructure built during the Mughal regime and by the British Empire is still in place. A tourist could easily catch a train from Delhi to Peshawar in Pakistan, or a bus from Dhaka in Bangladesh across India to Karachi in Pakistan, if the infrastructure had not been disrupted at the national borders³⁸. While European Union (EU) and Southeast Asian countries have been removing barriers to cross-border movement by simplifying travel procedures and enhancing cross-border transport linkages, South Asia has been erecting new barriers by tightening travel procedures and disrupting existing transport linkages.

Experiences from Asia and elsewhere show when travel restrictions are liberalized, intra-regional connectivity has increased several times³⁹. The barriers to enhancing air connectivity in South Asia are, therefore, largely political and based on distrust and disputes. The rising geo-political

issues along with the security issues within the nation and between the countries in the region are the major hindrance to increased regional cooperation, including the movement of people within the region both via land and air routes.

The experiences of the last six decades suggest that restricting the movement of people and controlling visas are not enough to ensure safety and security. Despite strict measures, the region has not remained successful in ensuring security. For a safe and secured South Asia, it is important to have a shared vision, common interests, and the commitment of neighboring countries, which is dependent on economic inter-dependencies and bonds. Regional cooperation is, therefore, not only a means of improving the economy but also an important instrument for enhancing security by binding economic ties together, which would further accelerate the movement of people and businesses to grow in the region.

In this increasingly integrated world, South Asian region needs to follow the examples of ASEAN and European region countries. It is, therefore, important to move from a 'geo-political' to a 'geo-economic' approach (Dutta 1999), and identify common economic agenda, in order to reduce poverty and vulnerability and to improve quality of life by proving security to its citizens.

³⁸ Prospects and Problems in Promoting Tourism in South Asia A Regional Perspective

³⁹ Unlocking the Potential of Regional Economic Cooperation and Integration in South Asia: Potential, Challenges and the Way forward

10- STATE OF AIR CONNECTIVITY IN SOUTH ASIA

The current state of capital to capital and overall regional air connectivity in South Asia in 2022 is shown in tables 6 and 7, which show, respectively, the number of regional flights in a month between the countries along with total

carrier's flights operates in a month between any country pair in the South Asian region and the number of air routes covered by the countries with the South Asian region.

Table No. 6 : State of Capital to Capital Air Connectivity in the region

Monthly Schedule Flights- Capital to Capital Air Connectivity in South Asia								
	Kabul	Dhaka	Paro	New Delhi	Male	Kathmandu	Islamabad	Colombo
Kabul	N/A	0	0	0	0	0	22(22*)	0
Dhaka	0	N/A	9(9*)	31(65*)	17(33*)	31(64*)	0	30(30*)
Paro	0	9(9*)	N/A	17(33*)	0	7(7)	0	0
New Delhi	0	31(66*)	19(19*)	N/A	31(81*)	31(160*)	0	31(93*)
Male	0	18(18*)	0	31(86*)	N/A	0	0	31(156*)
Kathmandu	0	31(67*)	8(8*)	31(166*)	0	N/A	0	17(17*)
Islamabad	22(22*)	0	0	0	0	0	N/A	0
Colombo	0	31(31*)	0	31(92*)	31(172*)	31(21*)	0	N/A

Source: South Asian Airline websites, Skyscanner mytrip, Druk Airlines (july-2022)

India and Sri Lanka are the only countries in the region that are well connected with all the countries in the region. India has land borders with all countries in the region except for Afghanistan and have also the maximum number of flights in the region. There were direct flights operating between India and Afghanistan, however, recently there are no direct flights operating due to political instability in Afghanistan, and flights between New Delhi and Kabul may resume as the political situation gets better. India, which has land borders with all non-island countries except Afghanistan has the maximum connectivity flights in the region. New Delhi, Mumbai, Hyderabad, Chennai, Bengaluru, and Kolkata are the major cities of India that act as regional hubs for air traffic in the region. Sri Lanka is an island country that is also connected with all the countries in the region except for Afghanistan and Bhutan. Bangladesh

also does have a good connectivity with South Asian countries, except for Afghanistan and Pakistan. Bhutan is only connected to India, Bangladesh, and Nepal, while no direct flights operate to Sri Lanka, Pakistan, Afghanistan, and the Maldives from Bhutan. Pakistan is only connected to Sri Lanka and Afghanistan. There were direct flights operated from Pakistan to India and Pakistan to Nepal and vice versa a few years ago. But due to regional political issues, security reasons, and overall regional political players' inability to cooperate and integrate, no such flights operate anymore between such routes. Afghanistan is the least connected in the region and has flights only to and from Pakistan.

In terms of Bilateral connectivity, the countries which are most connected in the region in terms of daily or multiple flights are as follows; Bangladesh and India are well connected with

* Total number of flights operating in a month between the country pair.

daily multiple flights per day, Pakistan has also good air connectivity with Afghanistan with almost daily flights per day. There are direct flights operating from Bangladesh to India, Nepal, and Sri Lanka. Bhutan is also connected to Bangladesh and Nepal in terms of 1-2 flights per week. However, 4-5 flights per week operate from Bhutan to India and vice versa. Both India and Bhutan share good air connectivity with each other.

Similarly, Maldives is also well connected with Sri Lanka and India with almost multiple flights per day while to Bangladesh, there are 3-4 flights per week operating from the Maldives and vice versa. India is well connected in the region with daily multiple flights per day with four South Asian countries, Bangladesh, Maldives, Nepal, and Sri Lanka, and 4-5 flights per week with

Bhutan. Furthermore, Nepal is well connected with Bangladesh, India, and Sri Lanka with daily multiple flights per day. While Nepal and Bhutan have only 1-2 flights per week.

India and Sri Lanka are the most well-connected in the region. Indian and Sri Lankan carriers operate around 150 flights a week between the two countries, covering a total of multiple bilateral routes. There are nine different cities in India (Bengaluru, Chennai, New Delhi, Hyderabad, Kochi, Madurai, Mumbai, Tiruchirapalli, Thiruvananthapuram,) that have direct flights to Colombo, Sri Lanka. Around 180 carrier flights operate in a month between two countries' capitals, New Delhi to Colombo and vice versa, average of 3 flights connecting each other capitals via their national flag carriers namely Sri Lankan Air Line and Air India.

10.1 KABUL, AFGHANISTAN

In terms of capital-to-capital connectivity in South Asia, the land-locked country Afghanistan is the least connected country in the region and is currently only connected to Pakistan. The direct

flight operates between Kabul and Islamabad via Kam Airline with an average of 5 to 6 flights per week (Kam Airline: Afghan Private Air Line, the largest airline in the country).

10.2 DHAKA, BANGLADESH

Bangladesh is also well connected in the region, as it shares a land border with India. There are multiple daily flights that connect Dhaka, Bangladesh to Kathmandu, Nepal via Himalaya Air Lines (Nepalese Airline), Hahn Airline (German Airline), and Biman Airline (Bangladesh International Airline).

There are around 60 carrier flights operating in a month that connects Dhaka to Kathmandu. Sri Lankan national flag carrier (Sri Lankan Air Line) is the only carrier flight that connects Bangladesh and Sri Lanka's capital. Daily scheduled flights operate which connect Dhaka

to Colombo and vice versa. Similarly, Dhaka, Bangladesh is connected to Paro (Bhutan) via DrukAir Line with an average of 1-2 flights per week.

To New Delhi, Dhaka is connected via multiple airlines including their national flag carriers Biman Bangladesh Airlines (Bangladesh International Airline), Vistara Airline (Tata SIA Airlines Limited, operating as Vistara is an Indian airline), and Indigo Airline (InterGlobe Aviation Ltd., doing business as IndiGo, is an Indian airline) with 2 to 3 multiple flights per day.

10.3 PARO, BHUTAN

DRUK AIR [Royal Bhutan Airlines] is the national carrier of the Royal Government of Bhutan, operating between three countries in the South Asian region. There are around 19 carrier flights operating in a month from and to Paro, Bhutan, and New Delhi. Both country capitals are well connected with each other with

an average of 3-4 flights per week and vice versa. Paro and Kathmandu are also connected through one flight per week. There are around 8-10 flights operating from and to Paro and Dhaka, the state of connectivity between both country capitals is also connected in terms of 1-2 flights per week.

10.4 NEW DELHI, INDIA

The state of connectivity between India's capital and with rest of the South Asian country's capital is very well integrated and connected through multiple flights per day. There are direct flights operating from New Delhi to Dhaka with an average of 2 to 3 flights per day and around 66 carrier flights operate in a month which connects both country capitals via Vistara Airline, Biman Airline, and Indigo Airline.

between India and Nepal is also well connected through multiple daily flights operating between both countries' capitals.

Similarly, there are over 81 carrier flights operating from and between New Delhi and Male' with an average of 2-3 flights per day. The airlines which connect New Delhi to Male' are Indigo Airlines and Go Air (Go First, founded as GoAir, is an Indian ultra-low-cost airline based in Mumbai, Maharashtra). The air connectivity

From New Delhi to Kathmandu around 160 carrier flights operate in a month and with an average of 4-6 multiple flights per day connecting both country's capitals via Nepal Airline (National flag carrier of Nepal), Air India (National flag carrier of India), Vistara Airline and Indigo Airline.

There are over 90 carrier flights operating from and between New Delhi and Colombo with an average of 3 flights per day via both country's national flag carriers Air India and Sri Lankan Airlines.

10.5 MALE', MALDIVES

The island country in the South Asian region, the Maldives, is directly connected to three South Asian countries' capitals, Dhaka, New Delhi, and Colombo. There are 3-4 direct flights operating per week from Male' to Dhaka via US Bangla Airlines (US-Bangla Airlines is a privately-owned Bangladeshi airline).

Airlines and Two International Airlines, Emirates and Turkish Airlines. Flights to New Delhi from Male' are operated by Indigo and Go First Airline, both carrier flights are privately owned by Indian Airlines.

There are around 156 carrier flights operating from Male' to Colombo in a month with an average of 5-6 flights per day via Sri Lankan

There are around 86 carrier flights operating in a month from Male' to New Delhi, via Indigo and Go First Airline with an average of three flights per day operating between two capitals.

10.6 KATHMANDU, NEPAL

Similarly, the state of connectivity between Kathmandu, Nepal, from the rest of the South Asian countries' capitals is also well connected by multiple flights operating per day. There are direct multiple flights operating from Kathmandu to Dhaka and New Delhi via both Private and national flag carriers. There are around 67 carrier flights operating per month from Kathmandu to Dhaka with an average of 2-3 flights per day connecting both country capitals via Himalaya Airlines, Hahn Air, and Biman airline. Both Nepal and India are well connected in terms of multiple flights connecting both countries'

capitals via multiple carrier flights operating per day. A total of around 166 carrier flights operates in a month from Kathmandu to New Delhi via Indigo Airline, Nepal Air Lines, Vistara Air Line, and Air India Airline. The flow of people-to-people connectivity is also well integrated and connected between both countries as multiple flights operate per day. From Kathmandu to Bhutan fewer flights operate between both countries' capitals, depending on the schedule, only 1-2 flights operate in a month from Kathmandu to Paro via Druk Airline.

10.7 ISLAMABAD, PAKISTAN

The state of connectivity from Pakistan to South Asian countries is very limited. There are around 22 carrier flights operating per month from Islamabad to Kabul via Kam Airlines with an average of 4-5 flights per week. In terms of capital-to-capital connectivity, there is no direct flight operating between Islamabad, to Colombo. However, Direct Flights operate between Karachi and Colombo via the Sri Lanka National flag carrier. There are around 17 carrier

flights operating per month between Karachi and Colombo with an average of 3-4 flights per week. A few years ago, direct flights operated from and between Islamabad-New Delhi and Islamabad-Kathmandu, and Karachi-Dhaka. However, no such flights operate as of today, and connectivity to the rest of the South Asian countries from Pakistan is being done through third-party countries i.e. Dubai, UAE, Qatar, and middle east countries.

10.8 COLOMBO, SRI LANKA

Just like India, the state of connectivity between Sri Lanka and the rest of the South Asian countries is also well connected and integrated as direct flights operate from Colombo to five countries in the South Asian region except for Bhutan and Afghanistan. In terms of capital-to-capital connectivity, Colombo is directly connected to New Delhi, Kathmandu, Male, and Dhaka and, Karachi via direct and multiple flights per day. Sri Lankan Airlines, the national flag carrier of Sri Lanka, is the major player in terms of Sri Lanka's air connectivity with the South Asian countries. Direct flights from Colombo to Dhaka, Kathmandu, and Karachi are connected

through Sri Lankan Airlines with 31, 21, and 17 carrier flights operating in a month respectively. There are around 92 flights operating from Colombo to New Delhi in a month and with an average of 3 flights per day via both countries' national flag carriers, Sri Lankan Airlines and Air India. The state of connectivity of both island countries in the South Asia, Sri Lanka, and the Maldives is well integrated in terms of daily 4-6 multiple flights per day. There are around 172 carrier flights operating from Colombo to Male' via Sri Lankan airline, Emirates Airline, and Turkish Air Line.

Table No. 7 State of overall Air Connectivity in the region

Air connectivity between South Asian countries								
	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
Afghanistan	N/A	0	0	0	0	0	1	0
Bangladesh	0	N/A	1	5	1	1	0	1
Bhutan	0	1	N/A	5	0	1	0	0
India	0	2	2	N/A	2	1	0	1
Maldives	0	1	0	4	N/A	0	0	1
Nepal	0	1	0	5	0	N/A	0	1
Pakistan	1	0	0	0	0	0	N/A	1
Sri Lanka	0	1	0	9	2	1	1	N/A

Source: South Asian Airline websites, Skyscanner mytrip, Druk Airlines (july-2022)

The table above shows the state of overall connectivity between South Asian countries. Afghanistan is connected to only one destination in the region while Sri Lanka is connected to total 14 destinations in the region, including nine in India. Among the airlines operating in the region, the bulk of air traffic, with the exception of traffic between India and Sri Lanka and Bhutan, Nepal, and India, and between Bangladesh and India, is carried by the national flag carriers, namely Sri Lankan Airlines, Air India, Biman Bangladesh Airlines, Druk Air Bhutan Airlines.

India is home to the largest number of budget airlines or low-cost carriers operating in the region, namely, Air India Express, Indigo, Spice Jet, and Vistara Airlines. However, their operations are limited to weekly flights covering Dhaka, Colombo, Kathmandu, and Malé. There are five different cities in India (Kolkata, New Delhi, Chennai, Mumbai, and Hyderabad) that have direct flights operating from Dhaka and Chittagong, Bangladesh. Bangladesh is connected to a total of nine different destinations in South Asia, including five in India.

Similarly, Bhutan is connected to seven different destinations in South Asia, including five cities in India (Kolkatta, New Delhi, Guwahati, Gaya, and Bagdogra). India is connected

to seven different destination cities in South Asia including two in Bangladesh (Dhaka and Chittagong), Maldives (Male and Hanimadhoo), and one in Bhutan (Paro), Nepal (Kathmandu), and Sri Lanka (Colombo). Similarly, there are five different destination cities in India (New Delhi, Mumbai, Kolkata, Mumbai, and Varanasi) that have direct flights operating from Kathmandu, Nepal. Pakistan is only connected to Kabul (Afghanistan) and Colombo (Sri Lanka) and the flight status is also limited. There are no direct flights operating from and to Pakistan with the rest of the South Asian countries except for Afghanistan and Sri Lanka.

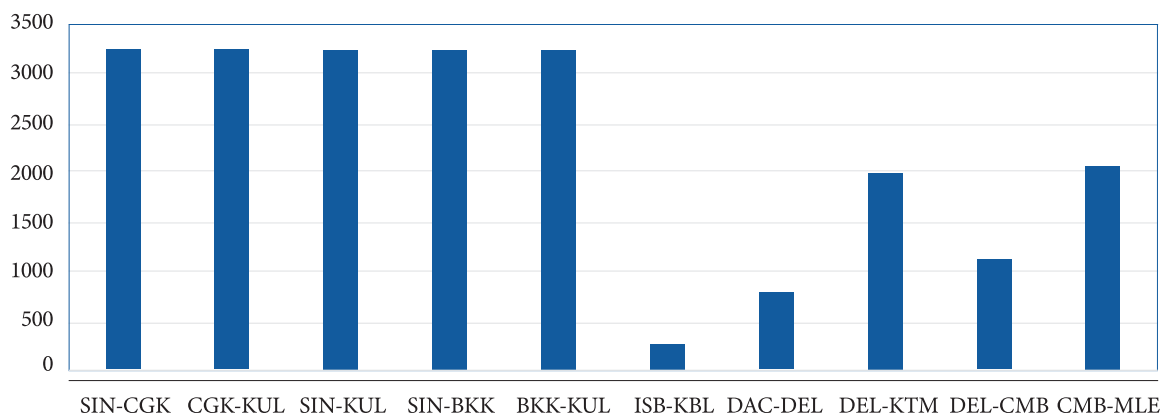
Sri Lanka is the most connected country in the South Asian region. Sri Lanka is connected to fourteen different destination cities in South Asia including nine destinations in India, two destination cities in the Maldives (Male and Gan Island), and only one destination city in Bangladesh (Dhaka), Nepal (Kathmandu), and Pakistan (Karachi).

The national flag carrier of Sri Lanka, Sri Lankan Airlines plays a pivotal role in terms of Sri Lanka's connectivity in the region. Most of the flights from and to Sri Lanka are being carried in the region via Sri Lankan Airlines as it accounts for the majority of the flights (about 80 percent of total flights per week) between South Asian countries and Sri

Lanka. India and Sri Lanka are the most well-connected in the region. Indian and Sri Lankan carriers operate around 150 flights per week between the two countries, covering a total of multiple bilateral routes. There are nine different cities in India (Bengaluru, Chennai, New Delhi, Hyderabad, Kochi, Madurai, Mumbai, Tiruchirapalli, Thiruvananthapuram,) that have direct flights to Colombo, Sri Lanka. Around 180 carrier flights operate in a month between two countries' capitals, New Delhi to Colombo and vice versa, with an average of 3 flights connecting each other capitals via their national flag carriers namely Sri Lankan Air Lines and Air India. The state of connectivity in South Asia is evolving. Traffic within and between countries has picked up significantly. Despite progress, connectivity among capitals in South Asia is still inadequate. For example, there are no direct

flights for Colombo– Islamabad, Colombo– Kabul, Colombo–Paro, and Dhaka–Kabul. There are no direct flights operating between Pakistan and India, Bangladesh, Nepal, and Maldives, and interline connections are not easily accessible or hardly available. Similarly, there are no direct connections between Maldives and Afghanistan, Bhutan, or Nepal. The regional connectivity in South Asia still has a long way to go when compared with regional connectivity in ASEAN, for example there are 9-10 flights operating per day between Malaysia and Singapore capitals, whereas in South Asia, between India and Sri Lanka capitals only 2-3 flights operate per day.

The Following graphs compare the capital-to-capital air connectivity between the most well-connected five pairs in ASEAN and five pairs in the South Asian region⁴¹.



Source: Asean and South Asian Airline websites, Skyscanner mytrip, Druk Airlines (july-2022)

There are around 3240-3400 annual flights operating from Singapore to Jakarta, Jakarta to Kuala Lumpur, Singapore to Kuala Lumpur, Singapore to Bangkok, and Bangkok to Kuala Lumpur with an average of 9-10 flights per day between these capitals. On the other hand, merely 264 annual flights operate from Islamabad

to Kabul, only around 780 flights operate from Dhaka to New Delhi, around 1992 annual flights operate from New Delhi to Kathmandu, around 1116 annual flights operate from New Delhi to Colombo, and around 2064 annual flights operate from Colombo to Male’.

⁴¹ SIN(Singapore), CGK(Jakarta), KUL (Kuala Lumpur), BKK(Bangkok), ISB(Islamabad), KBL(Kabul), DAC(Dhaka), KTM(Kathmandu), DEL (New Delhi) CMB(Colombo).

11- ISSUES PERTAINING TO AIR CONNECTIVITY IN SOUTH ASIA

One of the reasons that air services in South Asia are not commercially viable is because a large portion of the region remains relatively poor. Moreover, countries in the region rank low in travel and tourism indicators, thereby the demand for air travel in most countries remains minimal. For intra-regional travels, the demand for flights for tourism and commercial purposes within the region is low due to frequent scheduled flights between the countries being less commercially viable. It is important to note here that, commercial viability is also influenced by economic integration, which is low in the region at present. To divert airport traffic from routes, where the countries are experiencing greater traffic potential is to open up more capacity rights to metropolitan airports instead of secondary airports that would expand air service for the respective country.

Code sharing: There are certain aspects of regulation that could provide a marginal boost to intra-regional connectivity, and code sharing is one such factor. There are certain civil aviation regulatory bodies in the region, that places restrictions on code sharing in some cases. Some countries in the region do not allow code sharing between two third-party airlines and expect all agreements to take place with their respective national flag carriers. Sharing codes with third-party airlines would reduce costs and facilitate the smooth flow of airline passengers in the region. Most Bilateral Air Services Agreements (BASAs) place restrictions on code sharing, by allowing code sharing only with the national carrier of that country, and not allowing code sharing with a third-party airline. Liberalizing restrictions on code sharing in Air Services Agreements (ASAs), or at least allowing unrestricted code sharing on a priority basis on key routes could have a positive

impact, resulting in more convenient routes connecting passengers traveling within South Asia. Such liberalization would result in greater competition for the respective national carriers, especially on commercially lucrative routes.

Visa bottlenecks: Another factor that hinders the flow of intra-regional travelers is immigration laws and visa processes which undermine seamless connectivity in the region. Further, the process of obtaining a double-entry transit visa to some countries in the region is cumbersome and it makes it difficult for passengers to transit while traveling through the region. The visa regime is relatively more liberal in some countries, but not for all the countries in the region. Given the present limitations in economic integration and interaction within South Asia, business visitors alone would not be sufficient to generate sufficient air traffic within the region. Therefore, increasing intra-regional tourism will play a central role, and flexible visa regimes are an important determinant of enhancing intraregional mobility.

Operational costs: In South Asia, high operational costs are prevalent in many cases in ground handling, airport charges and several other expenses and passengers have to bear the additional cost to fly. Therefore, revising policy to reduce such costs would have a positive impact on intra-regional travelers. **Geographic & Route-specific issues:** between certain specific routes, the geographic positioning of the airport makes night flights challenging. Sometimes the entire schedule would need to be altered to accommodate the destination points because of the mountain terrain or hilly area of airport destinations. Sharing of codes along with granting 5th freedom of rights with certain routes makes such routes economically viable.

Commercial viability would require at least 100 passengers on a given flight to make the route feasible. India and Pakistan are the two largest economies in South Asia both in terms of GDP and population. Hence, undoubtedly there is the potential of commercial viability existing between India and Pakistan routes. However,

political relations between the two countries have compromised negotiations between airlines of the two countries. The negative spill-over of political tension has undermined connectivity between these two countries, which also affects regional connectivity in the region as well.

12- CHALLENGES OF AIR LIBERALIZATION IN SOUTH ASIA

Regulatory Challenges: Being the fastest-growing region in terms of growth, the region faces numerous challenges with respect to connectivity and aviation development. The region has yet to achieve a certain “seamless connectivity” that would allow countries to make optimal use of the air transport industry. The continuous growth of air traffic and enhanced air connectivity can only be sustained with a globally harmonized regulatory framework.

The operations of international air transport services have been governed by bilateral air service agreements signed between states, which in turn regulate airlines’ destinations, route capacity, frequency, fares, and rates, in addition to other operational matters. In South Asia, complex bilateral frameworks added significantly to the cost of doing business, and limited choice and competition created impediments to the growth of air connectivity in the region. To reduce the regulatory barriers and increase the demand for air connectivity in the region, states in the south Asian region cooperate and negotiate more on liberal bilateral and multilateral agreements, to allow the industries to do business in a more favorable operating environment and expand into new markets in the region. Therefore, steps need to be taken by the regional stakeholder, and policymakers to develop coherent policies with respect to boost tourism, trade, and other inter-

transport sectors. A national or regional policy framework consistent with the International Civil Aviation Organization (ICAO’s) standards and policies, and with globally accepted good regulatory practices, could unlock the full potential of air connectivity in the region⁴². New technologies and procedures should also be adopted to further improve connectivity and modernize infrastructure while minimizing any possible adverse impacts of this growth in the region.

One of the key drivers of the growth of air connectivity transport services is the decrease in the real cost of air travel. The decrease in cost means an increase in the accessibility of air travel in the region. Today, Air travel is no longer a luxury commodity. It is becoming increasingly accessible in the developed and developing regions, with various low-cost travel options available to more and more people.

For the aviation market to grow in the region, it has to undergo structural transformation and become a dynamic marketplace, other than connecting capitals, new markets should be explored by connecting more cities in South Asia. Introducing low-cost carriers would make air travel more affordable. Around 1.3 billion people were carried by low-cost carriers in 2018, indicating an 8.7 percent growth rate in

⁴² ICAO: Regulatory and Organizational Framework to Address Aviation Emissions

the aviation industry due to the introduction of low-cost carriers⁴³. Many regions have come to understand that air connectivity is an asset, which improves the global competitiveness of cities, regions, and countries⁴⁴.

Infrastructure: While current capacity is not significantly affected by shortfalls in infrastructure in terms of airport and airline capacities, improvement in infrastructure would be required in the long run with an increase in traffic in a liberalized environment.

Policy road map: It is important to address the infrastructure bottlenecks with respect to air connectivity in the region. But first, capital-to-capital direct flight connectivity needs to be promoted throughout the region. Secondly, factors, that could increase connectivity in the region would be the greater demand for air travel within the region, which would require regional integration among the South Asian countries. Relaxation in the visa regulation process could spur demand for air travel in the region. For example, India and Sri Lanka's air services liberalization and relaxation in the visa process increased the demand of air travel between both countries. Air service liberalization in South Asia possesses great economic potential.

To formulate more liberal policies regarding air connectivity in South Asia, the policymakers and the relevant stakeholders need to consider the economic benefits and challenges of air services liberalization in the region demonstrated in this study. SAARC-led collaborative, workshops, seminars, and programs could give fresh impetus to unlock the region's great economic potential i.e. enhancing air connectivity and air service liberalization in the South Asian region.

Enhancing commercial viability: To enhance the commercial viability of air services in the region, policymakers and relevant stakeholders of the region needs to outline key steps, and strategic measures for a broader liberalization of air services, such as, Policy measures could help to enhance the viability of air routes in South Asia. For example, enabling code sharing with third-party airlines would reduce operational costs in the region and introduce new airlines competition in the region; Granting 5th freedom rights would also be important to consider the "quality" of liberalization; Simplifying visa processes; Investing in air connectivity services, would enhance competitiveness, which encouraging greater foreign equity⁴⁵. To develop infrastructure with respect to air connectivity in South Asia, emphasis on the involvement of the private sector needs to be considered by the stakeholders. India in the region is promoting the development of airport infrastructure through public-private partnerships⁴⁶.

Measures towards greater liberalization: It is the need of the hour for SAARC to move toward great air connectivity, it is necessary to move forward toward air service liberalization in a phased manner as it was done by ASEAN and EU countries. ASEAN for example enabled foreign equity participation in the domestic airlines would face increased competition in times of downturn. In an increasingly competitive environment due to the enhancement of air connectivity in the region, a key challenge for policymakers is to balance the regional interest with the national interests of countries whose carriers are likely to get tough competition.

In South Asia, the current airline capacity in many countries in the region is limited and some

⁴³ ICAO: Low Cost Carriers

⁴⁴ IATA: Air Connectivity

⁴⁵ Trethewey (2010) shows that in several countries, investment in airport infrastructure (along with investment in airlines capacity) provides strong rates of return, by increasing connectivity and contributing to increases in national GDP

⁴⁶ Planning Commission, Government of India.

routes cannot be viable due to a lack of aircraft or airport infrastructures. Therefore, allowing foreign direct investment in such areas of air connectivity could enhance both the quality and the magnitude of the air services.

Easing restrictions: It is also essential to fully liberalize capacity for 3rd and 4th freedom rights for capital-to-capital flights in the region; allowing multiple designations plus liberalizing tariffs and extending 5th freedom right across the region would be the primitive steps for further liberalization of air services in South Asia.

India and Sri Lanka bilateral air services liberalization experience: After the elimination of the requirement of commercial agreements between the designated airlines between India and Sri Lanka for asymmetrical operation, Sri Lanka had the most flights to India, around 110 flights a week. This also facilitated travel to a greater extent and resulted in increased demand for Indian visitors to Sri Lanka and vice versa. Both countries became the leading source of tourism. An increase in travelers from countries resulted in an increase in educational,

medical, investment, and business and leisure activities. With an increase in direct flight access to different cities of India from Sri Lanka, travelers get the option to fly to cities of their choice. Liberalization of regulations also enabled airlines to design their strategy in a more flexible manner, keeping in mind long-term commercial viability.

The experience of India and Sri Lanka shows that for air connectivity to increase, stringent bilateral air service agreements need to be relaxed. A viable market for air services needs to exist, along with the ease of visa requirements and travel restrictions which increases both economic interaction and exchanges between the two countries.

The main factor in enhancing air connectivity in terms of the number of flights per day was the relaxation of visa regulations which boost travel and tourism between both countries and increase demand for air travel. As the demand increases many airlines started their flight operations to Colombo from numerous cities in India⁴⁷.

13- CONCLUSION & RECOMMENDATIONS

The Study presents a detailed review of how enhanced air connectivity benefits whole of the south Asian region in terms of poverty reduction, increase in intra-trade and supply chains' improvements of overall efficiency, productivity and competitiveness of the region. The study also analyzes the current state of connectivity in the region and finds that, Afghanistan is the least connected, while India is the most connected country in the region followed by Sri Lanka, Bangladesh and Nepal. Although the state of connectivity in the region is evolving, the

connectivity within the region is still inadequate. For example, fewer flights connecting South Asian region capitals plus interline connections are not easily accessible or hardly available. For South Asia's regional connectivity to prosper, the study highlights various factors affecting the growth of air connectivity. Along with restrictive air service agreements, less competition of airlines in domestic flights; low level of investment and competitiveness of airlines, and not enough airport infrastructure to cater to high traffic demand with the rise of connectivity in the

⁴⁷ Reducing Connectivity Costs: Air Travel Liberalization between India and Sri Lanka

region. These factors need to be investigated and evaluated, and the barriers should be addressed at the policy levels. The air service agreements between the countries are relatively restrictive, which limits the potential of air connectivity in the region. The other factors which have caused the region to be least connected are limited economically viable routes, code sharing limitations, visa restrictions that pose serious challenges to expanding air connectivity in the region.

There is an interdependence between regional economic integration and air transport connectivity. The study concludes that one of the significant drivers to increase the level of air connectivity in the region would be the increased demand for air travel in the region, which would require greater regional integration in terms of enhanced commerce and business activities, tourism, and people-to-people interaction across the region. In the long run, South Asia needs to devise such framework that would further liberalize trade and connectivity in the region. This would in turn create more trade, provide more business interactions, and eventually impact positively on employment and economic growth in the region.

Enhanced connectivity and better air services could increase air transport markets, reduced fares, higher traveler flows within the region, and increase air cargo, all the factors would support and complement the broader effort to improve multi-modal intra-regional connectivity in the SAARC region.

It will also create enabling business environment by reducing the cost of doing business, and boost exports and production networks in the region. Aviation is one of the most “global” industries, which connects people, cultures, and businesses across continents. However, the South Asian region lags far behind in terms of the fruitful

benefits. Therefore, it is necessary for all the policymakers and stakeholders to work together to maximize the benefits of air connectivity and to support the sustainable growth of the industry. Therefore, the study recommends the following strategic measures:

- It is necessary to un-tap the regional economic potential and encourage intra-regional tourism with an objective to reduce widespread poverty. A strong political commitment along with concrete and coordinated efforts among South Asian countries are needed to promote intra-connectivity in the region. Attention should be paid to facilitating the intra-regional movement of regional travelers. Air links need to be improved and efforts should be made to improve tourism infrastructure. Likewise, visa and administrative procedures need to be simplified. A single SAARC visa for regional travelers should be considered. Ease in visa process and administrative procedures would encourage people to travel more in the region without any hurdles.
- To increase the level of air connectivity, traditional visa procedures need to be replaced by e-visas and visas on arrival across the region. This would be a major breakthrough in promoting tourism, peoples’ mobility, and business activities in the region, and also it would increase the demand for air travel in the region. Policymakers in South Asia can draw several lessons from the India–Sri Lanka air services liberalization experience as both countries gain from improved connectivity with a larger market share. There is a need to accelerate the operationalization of connectivity initiatives in all South Asian countries and devise a framework for expanding the regional connectivity in the region.
- Enhancing the demand for air transport connectivity is a multi-sectoral activity to

boost air travel across the region. Therefore, Transport, restaurants, recreational activities, and all the travel and tourism-related indicators mentioned in this study should be improved with an emphasis on the business environment, safety and security perspectives. Therefore, it is necessary to have integrated regional plans and programs.

- Strong air connectivity within and between countries in the region is required to boost tourism, alleviate poverty and accelerate economic growth in a region. The significance of air connectivity and its benefits should be understood by policy and decision-makers who should focus on mutually beneficial opportunities to enhance air linkages in the region.

- The South Asian countries need to learn from India's performance regarding enabling policies, air connectivity initiatives, and how it reaches to top numbers in the global ranking in terms of both domestic and international air connectivity. To reach such aviation potential, the countries in the South Asian region need to expand their domestic air network and airport infrastructures under public-private-partnership schemes and explore new routes to make flying more accessible to everyone in the region. Therefore,

investment in developing private airlines in the region needs to be encouraged to lower air transport costs within the regional routes in terms of both fares and freight rates, which makes air travel more accessible to SAARC citizens.

- The SAARC aviation policies need to be revived to initiate direct flight operations to all countries' capital which could enabled free movement of people, business, investment, and trade in the region. Therefore, SAARC countries' transport ministers should meet at least once or twice a year to discuss such policy frameworks to boost aviation and other transport initiatives for integrated and connected South Asia.

- Air transport is the business of freedom, bringing tremendous benefits to the world. With the right policy framework from governments, air connectivity can grow stronger, driving even greater social and economic progress in South Asia. For that to happen, the countries in the region should ensure that borders remain open to people and trade and that the right decisions are taken to develop sufficient, cost-efficient infrastructure, thereby to meet the sustainability challenge. Through a strong shared commitment of governments, industry and all stakeholders, South Asia's aviation industry and air connectivity would grow and flourish creating numerous benefits in socioeconomic spheres in the region.

ANNEXURE 1

Table No. 2 Air Connectivity Ranking

South Asia	Air Connectivity score	Global Ranking 2009	Global Ranking 2014	Global Ranking 2019	Growth 2009-2019	Growth 2014-2019
Afghanistan	13131	115	95	98	257	21
Bangladesh	50616	67	59	60	192	51
Bhutan	1924	199	184	163	1762	240
India	1247297	9	7	4	237	89
Maldives	26354	94	80	83	282	38
Pakistan	87337	52	44	45	169	43
Sri Lanka	50616	69	56	59	200	35

Table No. 3 Air Connectivity in terms of Population

South Asia	Air Connectivity /1000 people	Global Ranking 2009	Global Ranking 2014	Global Ranking 2019	Growth 2009-2019	Growth 2014-2019
Afghanistan	0.36	150	144	147	174	-7
Bangladesh	0.3	155	155	148	162	36
Bhutan	2.32	148	121	106	1481	189
India	0.92	131	135	120	195	65
Maldives	70.84	13	4	4	223	17
Pakistan	0.43	142	145	137	121	18
Sri Lanka	2.31	103	92	91	174	23

Table 4: Air Connectivity in terms of GDP

South Asia	Air Connectivity / GDP Score	Global Ranking 2009	Global Ranking 2014	Global Ranking 2019	Growth 2009-2019	Growth 2014-2019
Afghanistan	172	113	94	100	90	0
Bangladesh	61	149	148	145	28	-2
Bhutan	231	172	121	78	744	131
India	109	118	126	121	40	21
Maldives	3062	3	2	2	76	-5
Pakistan	73	150	137	138	54	7
Sri Lanka	166	103	99	105	51	3

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