



Tourism Satellite Account of Bangladesh: Challenges and Solutions

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Abstract: *This paper aims at providing a brief profile of tourism scenarios existing in Bangladesh. It is also attempted to identify the loopholes and shortcomings prevailing in various dimensions and directions of tourism industry in Bangladesh. With the admittance that tourism data are fragmented and scattered all over, some specific problems exist in Bangladesh. Several constructive recommendations are put forth for better Operations Management in the tourism sectors of Bangladesh so that challenges faced can be tackled well. The paper is based on findings obtained from survey on selected tourism activities in Bangladesh conducted for constructing Pilot Tourism Satellite Account (TSA) for Bangladesh Economy. Although every form of tourism keeps contribution to the enlargement of economic activities, Inbound and Outbound tourism appear to be more contributing sectors compared to Domestic Tourism in Bangladesh. Total demand of both Characteristic and Connected Products are quite high in Bangladesh. While total tourism sector contributes 1.79% to GDP directly, direct and indirect combined contribution as obtained from Input-Output technique is 1.89%. Direct and indirect contribution of Tourism to job creation is still more and it is 4.09% of total jobs. Simple statistical tools have been used to reflect the tourism scenarios in Bangladesh. Strategic directions and organizational reforms for amassing scattered data on tourism are of paramount importance for Bangladesh. Concert actions through forming integrated Networking system for collecting tourism data on a regular basis will facilitate pathways to provide more insightful estimates of tourism contribution to the national economy.*

Key Words: Challenges, Characteristic product, Connected Product, Advisory Committee, I-O Technique

1. Introduction

Travel and tourism is a very important economic sector, like life and blood, in most countries of the world. This sector keeps formidable contribution to invigorate economic activities having high backward and forward linkage coefficients. In addition to “direct” economic impacts, this sector keeps “indirect” and “induced” impact on the economy. World tourism industry is flourishing very swiftly and posthumously. It is reckoned that in 21st century World Tourism will generate about 500 million job opportunities in Tourism Characteristic and Connected industries. It is also presumed that the contribution to GDP by World Tourism will be approximately 15%. However, in order to meet the requirements, constant changes in

the travel and tourism policies need to be reframed and restructured. Tourism is a vital source of income for many countries and it generates income through the consumption of goods and services by tourists, the taxes levied on business in the tourism industry, and the opportunity for employment in the service industries associated with tourism, Some of the services offered by these industries include transportation services such as cruise ships and taxis, accommodation services such as hotels, restaurants, bars and entertainment venues and other hospitalities. Tourism is a social, cultural and economic phenomenon related to the movement of people to places outside their usual place of residence pleasure being the usual motivation. The activities carried out by a visitor may or may not

involve a market transaction, and may be different from or similar to those normally carried out in his/her regular routine of life. If they are similar, their frequency or intensity is different when traveling. These activities represent the actions and behaviours of people in preparation for and during a trip in their capacity as consumers.

2. Literature Review

Tourism's contribution to economic development has been well documented in the literature. For many developing countries, which were traditionally dependent upon primary products in export earnings, tourism has become a major source of foreign exchange earnings. This has been vital for such countries given their prevailing economic conditions. Many developing countries have experienced severe deficits, particularly in the current account of the balance of payments during past few decades. In the resolution of these economies issues tourism has played an important role in such economies. There have been several recent empirical studies which explored the relationship between tourism and economic growth. Hazari and Sgro (1995) developed a growth model in which they model tourism as an added component to the domestic aggregate demand. Furthermore, they model the foreign supply of capital and the growth in export as dependent on tourism growth.

Rigorous research works have been done and are being carried out to assess economic & social impacts of tourism. Among recent studies, one is by Eugene Tian et al (2011), UNWTO (2006), Barry, J. (1994) According to WTTC ranking, (WTTC country report 2009) The south Asian travel & tourism economy is ranked number , 10 in absolute size worldwide, 10 in relative contribution to national economies , 1 in long-term (10-year)

growth. On marketing scenario of tourism, a direction based focus is available in the research work done by Buhalis and Michopoulou (2010). About on line tourism domain, a good representation can be found in the work of xiang and fesenmarier (2007). Similarly ideas about promoting tourism can be found in Millar (1997). Gnoth) 1997) discusses tourism motivation and Nininen & March (2007) discusses customer centric tourism marketing.

3. Conceptual Framework

Travel and Tourism

Travel is an activity done by a person moving from one geographic location to another. The person doing such an activity is a Traveller. A Trip is a to-and-fro activity. It is the travel by a person from the time of departure till he comes back to the origin. It is thus a Round Trip. Travel to a country by non-resident is called Inbound Travel. Travel done by a person outside his country of residence is called Outbound Travel. Thus, a person doing above types of traveling is called a Domestic, Inbound and Outbound Traveller. Thus, an Inbound Trip refers to travel between arriving in a country and leaving it. But, Domestic and Outbound trip refer to leaving place of residence and returning. Domestic travel has ultimate destination within own country of residence but outbound has destination outside country of reference.

With respect to the country of reference an international traveller qualifies as an international visitor if he is on tourism trip (less than one year, purpose are business, personal, leisure etc and not employment) and if he is a non-resident traveling in the country of reference or a resident traveling outside of it.

So, a domestic, inbound and outbound traveller on a tourism trip is called domestic, inbound and outbound visitors.

What is TSA?

The tourism satellite accounts (TSA) is an accounting framework adopted by the structure and role of tourism in an economy. The need for a satellite account arises because is not an industry in the way industry is defined in the system of national accounts. Instead, tourism a demand based concept defined not by its output but by its use. Tourism differs from many economic activities in that it made use of a diverse range of facilities across a large number of industrial sectors. As a result it is not possible to identify tourism as a single industry in the national accounts, so that its value to the economy is not revealed. Industries defined in national accounts, such air transport, hotels and restaurants, etc produce the same output irrespective of whether it is consumed by tourists or non-tourists. While the total output of these industries is usually captured by the national accounts, it is only the consumption by tourists that defines the tourism economy, e.g. the part of total value added attributed to tourism activities.

4. Methodology

Estimation Techniques

Foundation Ideas

Tourism, as the activities undertaken by visitors, generates direct and indirect increase in economic activity arising from demand for goods and services that need to be produced and provided. The direct effects are to immediate effects of the additional demand (tourism internal consumption or total tourism internal demand) on production processes and supply of goods and services. It results in

additional goods and services, and additional value added and its components. Indirect effects of tourism arise from the linkages of industries and then with the linkages of these industries with others that supply them, and so on. Additional value added, employment, compensation of employees, taxes, income, etc are generated.

Direct and indirect impacts of tourism can be estimated using following tools.

(a) Models based on Input-output analysis

An input-output table is a widely used matrix framework on the flow of goods and services and on the structure of production costs. I-0 Table is used to express the technical relationship between output by product (at basic price) and intermediate consumption (at purchasers' price) by product as a technical coefficient. It is a matrix of technical coefficients in which each cell represents the required value of input i for the production of 1 unit value of output j .

(b) Computable general equilibrium models (CGEM)

Computable general equilibrium models do not need the constraints inherent in input output models particularly price variation constraints. The supply and use table compiled for a given year represents an equilibrium between the different variables of the system. Since Tourism generates changes in some of the variables, and CGEM computes a new equilibrium depending on the conditions imposed by the vector of tourism demand and the relationships that exist among different variables of the supply and use table. These relationships are modelled in CGEM.

Multiplier Analysis: Input Output Technique

It is the basis of a multiplier analysis. It is based on inputs consumed and outputs produced by sectors.

$$Y_i = Y_{i1} + Y_{i2} + Y_{i3} + \dots + Y_{ik} + F_i = \sum Y_{ij} + F_i$$

$$Y_{ij} = a_{ij} Y_j \quad Y = AY + F$$

$Y = (I - A)^{-1} F$, F is the vector of final demand.

Total of each column of the matrix gives direct and indirect effects of unit increase of final demand of that sector and is the coefficient of multiplier of outputs. Direct and Indirect impact of tourism can be obtained by multiplying Leontief's inverse by

tourism demand vector. The tourism expenditure vector is obtained as proportion of tourism expenditure of each industry out of total of that industry. Column sum gives multiplier effect due to tourism expenditures of each industry. This can be done separately for Inbound, Domestic and Outbound tourism. Sum over column sums gives multiplier effect due to tourism expenditure.

5. Results and Analysis

In this section we provide some brief results obtained using above technique for Bangladesh Economy.

**Table 1: Total Tourism Expenditures by Forms of Tourism
(Incorporating Pre-Trip Expenditure of Outbound Tourist) (Mil BDT)**

Indicator	Inbound tourism consumption	Domestic tourism consumption	Outbound tourism consumption	Total tourism consumption
Tourism characteristics Products :				
Accommodation services	18362	2530	1439	22331
Food and Beverages	6800	2539	1297	10636
Airways		1657	239	1896
Waterway		146	290	436
Railway		510	872	1382
Bus/Taxi etc		837	744	1581
Total Transport Cost	3150	3377	2145	8672
Entertainment Cost	5692	3927	1007	10626
International Ticket	-	-	59435	59435
Travel Agent and similar	-	-	12181	12181
Sub Total	34004	12373	77504	123881
Tourism connected products:				
Tour related purchase expenses in Bangladesh	5514	-	2501	8015
Purchase not related to tourism	5427	1659	871	7957
Minor Maintenance expenses locally	595	-	544	1139
Expense for Financial Service	286	-	533	819
Total monetary	272	-	359	631

expenses made by others				
ICT Expense	470	-	484	954
Health Related Cost	1077	35963	468	37508
Insurance Cost	0	0	5143	5143
Shopping Cost	53231	-	15885	69116
Others Cost	5489	389	2089	7967
Sub Total	96119	38011	28877	163007
Grand Total		130123		50384

Table 2: Tourism contribution in GDP

VA from Trade Margin (mil BDT)	39866
VA from Transport margin (mil BDT)	29458
Total Tourism Value Added (mil BDT)	164514
Gross Domestic Product (mil BDT)	918144
Direct contribution of tourism in GDP (mil BDT)	1.79%
Tourism output multiplier	1.056
Direct and Indirect contribution of tourism in GDP (mil BDT)	1.89%

Table 3: Tourism contribution in Employment

Direct Share of Tourism (%) in total job	3.79%
Tourism Employment Multiplier	1.065
Direct and Indirect Share of tourism	4.03%
Direct and Indirect share of Tourism in Total number of jobs	506660

Analysis of Results

It is a well-recognized fact that information on tourism is hidden (buried) in the National Accounts of an economy. TSA plays the role of supplementing national accounts with additional data on specific aspects of tourism. Demand and Supply side data are compiled to estimate direct share of tourism value added in GDP and employment.

Based on the survey findings, direct contribution tourism value added to GDP is 1.79%. When multiplier effect is considered, the direct and indirect share of tourism comes out to be 1.89% of GDP. Although such a share cannot be considered

to be very high, it definitely provides indication that tourism sector has potentialities of keeping massive contribution to the economy. So, it appears that a more will bring lot more economic base in terms of employment, contribution of tourism sector is still better. As the direct share, tourism accounts for 3.79% of total number of job and when indirect effect is included the share of tourism gets upto 4.03%. This implies that over 0.51 million jobs have been generated due to various tourism related activities in the economy.

The result contained in the tables point out that improvement in tourism sector can make it very dynamic for keeping substantial contribution to boostup economic activities of Bangladesh it is also clear that an wider survey on a regular basis can provide a better insights about the massive contributions of tourism sector.

In arriving at aforesaid results several challenges gave rise and these are discussed below.

6. Key challenges and Recommendations

The main challenges for developing the Bangladesh Tourism Satellite Accounts (BTSA) are non-availability and insufficiency of necessary data. Some issues have practically no data or hidden somewhere. Lack of data on the composition of Inbound and Outbound tourism consumption by products is a problem. There is also lack of data on the composition of tourism packages. Data on some

surveys like Hotel & Restaurant Survey, Transport Surveys, and Labor Force Survey etc are very much aggregated and it becomes too problematic to fit into disaggregated forms of TSA.

We may provide some identified challenges accompanied by recommendations as deemed rational and reasonable. These are presented below in a tabular form.

Areas of challenges	Challenges Present	Recommendations to overcome the challenges
1. Organizational context	<p>1. No formal Advisory Committee of Tourism Satellite Account</p> <p>1. Severe dearth of Data and Inventory system. Too much aggregation of available data hinder to fill up TSA because it needs disaggregated information by its construction</p> <p>2. Due to absence of integration among different stakeholders, appropriate data are not stored.</p>	<p>1. Form a Central Advisory Committee for TSA. Such a committee should be comprised of different Ministries, Bangladesh Bank, Academics and other Experts related to Tourism say, ATAB, TOAB etc.</p> <p>Domestic Tourism.</p> <p>4. Strong co-ordination is needed among different organs like central Body, Immigration Authorities, All bodies related to tourism, BBS & other Ministries.</p> <p>5. Develop system of strong information on relevant tourism issues like Second homes, Resorts, Khamar Bari, Bagan Bari etc.</p> <p>6. Government and other organizational tourism information should be poured in a particular location (cell) in a mandatory way.</p> <p>7. Principal sources which are in direct contact with tourist like hotels, Travel Agents, Tour Operators, Tourist Spots, and Resorts etc. can be provided with specific forms to be filled up on a regular basis. Such filledup forms may be collected and recorded as a routine work by central cell on Tourism.</p> <p>8. Immigration Authority should play a dynamic role in the compilation of Tourism information. For such purpose modern means of electronic communications should be massively used.</p> <p>1. Encourage private Initiatives</p> <p>2. Create interactive Strategies Encompassing Supply chain Members, travel Agencies, tour Operators and guides etc.</p>

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Inter- Organizational Commitment and External Networking

A committed and strong culture of co-ordination and collaboration among concerned agencies is a prerequisite at the onset of developing satellite account. An efficient networking system among

key agencies is very much needed and imperative for developing a TSA. It is also of utmost importance to maintain network with other economies for facilitating exchange of information and experiences.

Capacity Building

Imparting training to compiler and data producers must be a continuous process. Compilers must be equipped with appreciation that data compiled are of great use to the decision making process for enhancing Tourism activities.

Allocation of Financial Resources

Continuation of development of TSA needs establishing linkages among agencies, building capability of personnel involved and sufficiency in manpower. Pursuit of statistical initiatives for conducting new surveys, improving administrative records and processing new data need allocation of resources as a crucial factor.

Statistical Initiatives

Based on the initial experience in the compilation of the TSA, the following activities are suggested to be undertaken.

- Development and sustained enhancement of standard classification systems for tourism.
- Improved coverage taking into account the developed classification systems on tourism products and industries.
- Improved data sources and availability of new data sources, both survey-and administrative-based.
- Refined estimates in consideration of improved data availability.
- More frequent compilation of TSA aggregates. Organized TSA metadata considering the WTO-proposed standard formats
- Continuous strengthening of inter-agency coordination.

Good Governance for Tourism

With the admittance of considering Tourism sector to be very vital for boosting up the Economy of Bangladesh, several measures are suggested here as immediate needs.

Every nation and every country has its own heritage. People of one nation have natural instinct to know about heritages of others. Thus, proper organizing of national herital objects which are of interest to tourist needs to be well looked after.

Nature and Environment

Gifts of nature vary from one nation to another. Bangladesh has lot of natural gifts like Sundarban, Kuakata, Hiltracts, Cox's Bazar, Sunamgonj, Garo areas, etc. Proper channelization of these gifts may become immense resources to increase attraction of tourists.

Use of Mass Media

In order to enhance informed choices of tourists both local and outsiders, promotion campaign has no alternative. In the age of modern means of communication (technology) like webpages, it is very much convenient to convey the messages of tourism facilities. In the modern era of science and technology, mass media got a new momentum. Besides the area coverage of mass media (political, social, economic, ecology, sciences), means of communication have enhanced tremendously. Same message can be passed on through several means of communication like Facebook, Flicker, YouTube, Twitter, Mobileblongs, RSS feders in addition to previous means like printed and electronic means.

What is disparately needed at the start is, to develop various domains of tourism in Bangladesh. This may include two major directions namely existing ones and newly explored ones.

Water Tourism in Bangladesh

World tourism at large is majorly dependent on water resources. Like Europe, America, water tourism is favorite in many countries. For maintaining and sustaining water resources, tourism can play important role. Political and economic support to Tourism can contribute to the maintenance of water resources.

Bangladesh is a riverine land having tremendous water resources like Cox's Bazar, Kuakata, Sundarban, St Martin, Jaflong, Haors, Waterfalls in different places etc. Environment friendly management of water resources can lead Tourism Sector to achieve great success for building up a resourceful economy and better future of our people.

World Tourism Day- 2013 had the main slogan "Tourism can come forward to save water resources and its sustenance." Political and economic co-operations of Tourism Industries can play vital role in this respect. In case of Bangladesh, Cox's bazaar, Kuakata, Sundarban, St martin, Jaflong, Haor-baur, other water bodies are parts of water resources. Environment –Friendly restructuring of water resources and transportations over water need to be emphasized so that tourists become motivated to visit such water resources as parts of their trip.

Exploratory Adventure

It is of paramount importance to explore possible resources which can be exploited to enrich tourism attractions. There may be potential reserves which when properly channelized can be transformed into ornamentals for drawing attention of tourists.

Limitations of the Data Used in the Compilation of the Pilot TSA AGGREGATES	VARIABLES	LIMITATIONS OF THE AVAILABLE DATA	PROPOSED ACTIVITIES TO ADDRESS CONCERNS
1. Inbound tourism consumption expenditures	a. Expenditure of inbound tourist on the service charge for packaged tours b. Expenditure of inbound tourists on passenger transport	a. Data are not disaggregated into the service charge of the packaged tour operators and the other components of tourism consumption expenditure (e.g., air fare, hotels, tour visits, etc.). Data on Non-Resident local citizens is very scarce.	Survey the travel agencies and/or tour operators with optimal coverage at regular intervals. Surveys at border check-posts at regular intervals need to be conducted.
2. Domestic tourism consumption expenditures	a. Expenditure of domestic tourists by items b. Expenditure of domestic tourists on passenger transport, accommodation	Respondents of the survey are limited and very limited access to data sources.	To provide the disaggregation on the data on a wider scale of conducted surveys.
3. Outbound Tourism Consumption Expenditures	Pre-trip expenditures and expenditures abroad	Clear Identification is a problem	Separate surveys for Pre-trip outbound and for expenditure abroad after arrival is needed.
4. Tourism consumption expenditures in kind (transfers)	a. Amount by types of transfers	a. There is no breakdown of fees reported into outbound, inbound and domestic	a. Request the agencies to provide the data properly in disaggregated forms.

tourism

DATA GAPS IN THE COMPILATION OF THE TSA DATA GAPS TO BE ADDRESSED	VARIABLES	REMARKS
- Under coverage on the estimation of internal tourism consumption expenditures	1. Inbound tourism consumption of tourists on equipment, rental services, ICT services	SUT &I-0 framework should include information
2. Tourism expenditures of same-day visitors (domestic and if any, inbound visitors)		May be integrated into the existing surveys
3. Pre-travel consumption expenditures of residents going abroad		An outbound tourism survey over long period is a possibility
4. Tourism expenditures of households on behalf of tourists		May be requested to form part of HIES
5. Tourism business expenses		Should be mandatory to compile
6. Other tourism consumption expenditures on social transfers in kind		Other than the individual non-market services.
7. Outbound tourism consumption expenditures		May be sourced from the database of special Branch of Police, Travel Agents.
-No estimate of TVA yet	1. Variables from the national accounts and input-output account	Need to be studied and made available in disaggregated form

7. Conclusion

It is universally admitted that tourism statistics are too much scattered. Thus, it hinders the smooth collection of data which delays the entire process. This is truer in the case of Bangladesh. Whatever results so far obtained show very clearly that tourism sector has high demand for goods and services. It keeps enormous contributions in GDP, Value added and Employment. Present findings clearly demonstrate that there are tremendous potentials and possibilities for the tourism sector to contribute massively for achieving MDGs of economic sector of Bangladesh.

The results point to the fact that tourism is an important sector in the Bangladesh economy. Thus, it is imperative to prepare TSA regularly. In the household surveys, there is always a possibility of underestimation due to the recall problem. It can be further improved if the survey targets tourists while

on trip. Data on the supply side of TSA has been taken from the National Accounts Statistics. For most of these industries, data are not readily available as it is required for TSA framework. For TSA, passenger and transport services are disaggregated into road, air and water transport services. Within road transport, there are buses, other mechanized vehicles and non-mechanized vehicles. Disaggregated data on these transport are needed for TSA.

The Domestic Tourism Survey and International Passenger Survey were the first such attempt at the national level. These efforts have highlighted the areas where intensive work needs to be undertaken to compile systematic data on tourism.

It has been estimated that Tourism has kept 1.79% direct contribution to GDP during 2011-12 and 1.89% is the direct & indirect contribution. In job creation also Tourism has kept substantial

contribution. While 3.79% is the direct contribution of Tourism in job creation, 4.03% is the combined direct and indirect contribution.

It is very fervently expected that improvement in tourism sector in its various dimensions will enable to cherish dormant social and economic benefits. Keeping in view that Tourism sector is a very vital economic sector, constant changes in Tourism policies need to be reformed and restructured to make the sector more dynamic and flourishing. For accelerating pace of progress in various dimensions of Bangladesh Economy, tourism sector can work as a stimulant because of its links with various sectors of the Economy. It is imperative to ensure promotion of accessibility for all population groups of the country to tourism. It is of paramount importance to foster a tourism culture in the society. For this, tourism needs to be nurtured and made as an easily obtainable good to the people. Special care and attention are needed to attract Inbound Tourists which can enable to earn substantial foreign exchanges.

It is expected that the findings of the present survey will knock at the mind of all concerned to warm up positive attitudes for flourishing the tourism sector which is a very immensely contributing sector of the Bangladesh economy.

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