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Final Report

Tourism Satellite Account for India

Commissioned by

Ministry of Tourism

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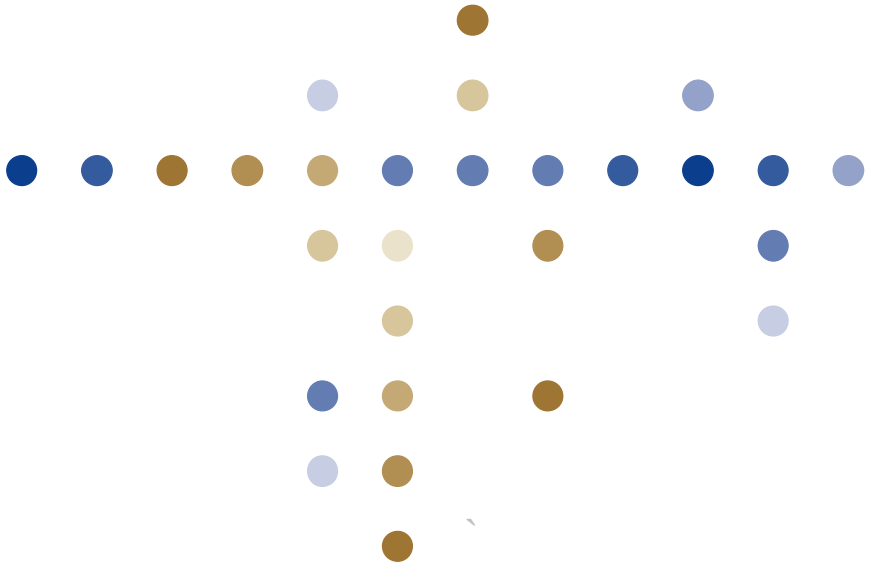

NCAER National Council of Applied Economic Research

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Foreword

This study marks the culmination of a long process, first initiated in 2000 when the Ministry of Tourism Commissioned National Council of Applied Economic Research (NCAER) to undertake a feasibility study to develop India's first Tourism Satellite Account (TSA). Subsequently, in 2002-03, again on behalf of the Ministry, NCAER undertook for the first time in the country, a comprehensive all-India Domestic Tourism Survey. Data from the survey as well as from an International Passenger Survey and official sources have been brought together now to develop a pilot TSA for India. In addition to providing internationally comparable and credible estimates of tourism in the Indian economy, the development of the pilot TSA should also contribute to further strengthening the national statistical system for better capturing tourism.

With its adoption recently by the United Nations Statistical Commission, the TSA framework is the central platform available for estimating the size and role of tourism in the economy using concepts and definitions consistent with the UN System of National Accounts (SNA). A key concern addressed by the TSA is credibility of tourism estimates. Since tourism is a demand-defined concept, and not an "industry" as defined in the SNA, it has for long been plagued by a multitude of ad hoc estimates based on methodologies not uniformly accepted. This has hampered a clear recognition of the role of tourism in the economy despite a general awareness in policy-making circles of its importance for growth and employment.

Consistent with the spirit of providing credibility to estimates of tourism, the development of India's TSA was guided by an Advisory Committee of Tourism Satellite Account, comprising representatives from different institutions, including the Central Statistical Organization, Ministry of Tourism, Ministry of Labour, Planning Commission and the Reserve Bank of India. This inter-institutional platform represents important governmental stakeholders in the tourism sector.

The TSA developed for India for the year 2002-03 confirms tourism as one of the largest sectors in the economy. Tourism value added accounts for 2.78 percent of the GDP in terms the direct contribution; when indirect effects are also accounted for, the share of tourism in the GDP is 5.83 percent. Tourism also accounts for a large share of total employment, directly accounting for 4.59 percent of the total number of jobs. If both direct and indirect contributions of tourism are taken into account, number of jobs due to the tourism sector is at least 38.6 million, or 8.27 percent of total jobs. These estimates in our view provide the lower bound for the share of tourism in the economy for two reasons. First, they exclude a large and growing segment of tourism, namely same-day tourism. Second, these estimates relate to the year for which the TSA is compiled, namely 2002-03, and rising incomes in the country are accompanied by rising tourism activity by households. With further reforms in the economy, including in the aviation

sector and improved infrastructure, the tourism sector is likely to rapidly grow in importance in the immediate future.

I would like to place on record our gratitude to the Ministry of Tourism for repeatedly trusting us to undertake implementation of various stages of the important exercise. I would also like to thank members of the Advisory Committee for actively participating in the finalization of the accounts. Finally, I would also like to express appreciation for the core team and its leaders Dr. Pradeep Srivastava and Dr. Rajesh Shukla, that has worked for five years on all the different stages leading up to the TSA.

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Inputs from the members of Sub-group appointed by the Advisory Committee were extremely valuable during the entire study. The study team wishes to place on record its appreciation of the cooperation by the Central Statistical Organisation (CSO), Ministry of Statistics and Programme Implementation. In this connection, the team expresses its thanks to Dr. Vaskar Saha, former Additional Director General, CSO and Mr. Vishnu Kumar, the present Additional Director General, CSO for their participation in the meetings of the Committee. The team is especially indebted to Shri Ramesh Kolli, Deputy Director General, CSO, for his immensely valuable suggestions and comments. His prompt support in assembling and providing the required data was critical inputs to the study. With gratitude, the team acknowledges Mr. Kolli's participation in all the sub-group meetings and also in the informal meetings and discussions that the team members had with him several times. His insights and thorough understanding of the technicalities involved in the national accounts system made the present report its present form. The NCAER team expresses its thanks to Mr. Alok Kar, Director, CSO and Mr. T. Bhaskaran, Joint Director, CSO for their important suggestions during the sub-group meetings and for their support in providing the data.

The NCAER team expresses its thanks to Mr. P.K. Ray, Deputy Director General, Directorate General of Employment and Training (DGET) and Dr. V.K. Malhotra, Director, DGET for their comments on employment data and for making themselves available for the discussions whenever required. The team expresses special thanks to Mr. Michael D. Patra, Advisor, Reserve Bank of India and Mr. A.K. Nag, Advisor, DESACS for their valuable inputs and observations. The team also expresses thanks to

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The team places on record its sincere gratefulness to all the officials of Ministry of Tourism for rendering their support in completing the project. The team wishes to place on record its thanks to Mr. Amitabh Kant, Joint Secretary, Ministry of Tourism for trusting the team and for making NCAER a partner in the process of developing India's first TSA. Mr. J.Dash, former Joint Director General of the Ministry extended his full support during the Domestic Tourism Survey study. The team is particularly grateful to the interest shown by Mr. V.K. Bajaj, Joint Director General (Market Research) whose tireless efforts were a great source of encouragement. The team also acknowledges the contributions of Mr. Kaushal Joshi, Deputy Director (Market Research), Mr. D.D. Mathur, Deputy Director (Market Research) and Mr. S.K. Mohanta, DAP "B" (Market Research).

The NCAER team is thankful to Mr. Antonio Massieu, Chief, Statistics and Economic Measurement of Tourism, World Tourism Organisation for his important inputs and encouraging remarks that helped the team deliver the best output.

List of Abbreviations

CSO	Central Statistical Organistaion
DGET	Directorate General of Employment and Training
GDP	Gross Domestic Product
GFCE	Government Final Consumption Expenditure
GVA	Gross Value Added
I-O	Input-Output
ISIC	International Standard Industrial Classification
NAS	National Accounts Statistics
NPISH	Non-Profit Institutions Serving Households
NSSO	National Sample Survey Organisation
PFCE	Private Final Consumption Expenditure
RBI	Reserve Bank of India
SNA	System of National Accounts
TSA	Tourism Satellite Account
VA	Value Added
WTO	World Tourism Organisation

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I. Introduction

With the growing recognition of tourism as a source of employment-generating growth in the country, improved understanding of what tourism is, its role in the economy and its relationship to other parts of the economy is important. The Tourism Satellite Account (TSA) is a new framework recently adopted by the United Nations Statistical Commission that provides an important platform towards forging improved understanding of the structure and role of tourism in the economy. Estimates using the TSA framework have the advantage of being credible, with the methodology now widely accepted, and internationally comparable.

This study presents India's pilot TSA, in the form of various tables suggested by the World Tourism Ogranization (WTO). The tables present a disaggregated picture of various components of tourism in the country, as well as explaning the method of arriving at estimates of tourism sector's role in the economy.

Using the TSA methodology, tourism value added is 2.78 percent of GDP in terms of direct impact, and 5.83 percent of GDP when indirect effects are also included.. Similarly, tourism's share in total number of jobs is 4.59 percent, rising to 8.27 percent when indirect effects are also included. These estimates do not include the role of another growing segment of tourism in the country, namely (same) day tourism.

The presentation in this report is divided into two parts. Since the TSA framework is new and not very widely familiar in India, the first part provides a brief introduction to the concepts and issues. In Part II, the methodology and the basic findings of the TSA for India are presented.

PART A

II. Objectives of TSA

The Tourism Satellite Account (TSA) is an accounting framework adopted by the United Nations and designed to measure goods and services associated with tourism according to international standards, concepts, classifications and definitions.

To the extent tourism is an economic phenomenon, many aspects of it are already embedded in the national accounts. However, since tourism is not identified as a separate activity in these accounts, information relating to tourism is buried in some other elements of the core accounts and not readily apparent. The objective of a Tourism Satellite Account is to bring together the information by essentially reorganising the national accounts and supplementing them with additional concepts and data, and thus develop relatively credible quantification of different aspects of tourism.

Amongst the various purposes that can be served by TSA, one can identify the following important ones:

- Provide a coherent and credible set of tourism accounts that can also be compared internationally across countries
- Develop quantitative estimates of tourism value-added and, thus, analyse the importance of tourism in the economy
- Identify employment generation in tourism industries and the role tourism plays in job creation for different types of workers
- Offer a framework for developing impact models of tourism on economic activity and employment by identifying relationships between tourism industries and the rest of the economy

- Identify capital base of tourism industries
- Measure productivity within tourism and compare it with other industries.

III. Relationship of TSA with National Accounts

III.A. The System of National Accounts

The starting point of Satellite Accounts is the System of National Accounts (SNA), which is a set of guidelines for organising information about the economy in a useful way. The SNA provides concepts, definitions, classifications and accounting rules to provide a comprehensive framework for analysing production, investment, income and stocks and flows of financial and non-financial assets in the economy.[1]

For the purposes of the SNA, the economy is divided into institutional units which are economic units capable of owning assets, incurring liabilities on their own behalf and are centres of decision making for all aspects of economic life. There are five different types of institutional units: households, financial corporations, non-financial corporations, government and non-profit institutions serving households (NPISH).

Institutional units may produce various types of goods and services as a result of different types of processes of production that may differ in terms of materials used, supplies consumed, kind of equipment and labour employed, etc. To study production processes in detail, it is necessary to refer to as homogeneous units as possible given that many units are multi-activity units. Consequently, the unit of analysis for production in the SNA is an *establishment* which is characterised by a single location (or nearby sites) and a well-defined primary or principal activity. Establishments that have the same principal

[1] See WTTC/WEFA (1998).

activity are grouped into industries using standard systems of classification such as ISIC (International Standard Industrial Classification).[2]

The SNA can be viewed as consisting of three sub-accounts: current accounts, accumulation accounts and balance sheets, of which the first is of interest here. The current accounts, in turn, can be seen as consisting of accounts dealing with production, distribution of income and use of income.

The production account emphasises value added as one of the main balancing items in the system. Consequently, it does not cover all transactions linked with production but only the result of production (i.e., output) and the using up of goods and services in the production of the output (intermediate consumption). Intermediate consumption does not cover the progressive wear and tear of fixed capital, which is recorded as a separate transaction.

The distribution of income account looks at primary distribution of value added to factors of production (labour and capital) and to government through taxes less subsidies. It also looks at secondary distribution and redistribution in kind.

The use of income account shows, for those sectors that have some final consumption, how disposable income is allocated between final consumption and saving. Only government, households and NPISH have final consumption.

GDP is reflected in all three above, being the total of all value added, as well as the sum of the final uses of goods and services, and also the sum of primary incomes generated in the economy.

[2] The Indian classification system NIC-1998 (National Industrial Classification) which is used in the study is identical with the ISIC Rev 3 up to the four-digit level of classification.

III.B. Tourism Satellite Accounts

Satellite accounts take off from the SNA by focusing on the *purpose* or *function* of transactions. Thus, transactions in the economy are first analysed in the SNA according to their characteristics. Then, certain types of transactions (such as tourism, or health care, or environment, etc.) are analysed from the expenditure side. In satellite accounts, therefore, the unit of analysis to which classification is applied is not an establishment (as in national accounts) but, instead, is *transactions*, or groups of transactions.

The need for a satellite account for tourism arises because tourism is not an industry in the way industry is defined in the System of National Accounts. Instead, tourism is a demand-based concept defined not by its output but by its use. Industries defined in national accounts, such as 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 attributable to tourism activities. Thus, to the extent tourism is an economic phenomenon, it is already embodied in the national accounts but not in a manner readily apparent because commodities and services that are produced and consumed in meeting tourism demand are buried in some other element of the core accounts. The TSA provides a mechanism by which these economic aspects of tourism can be drawn out and analysed separately but in a way that the results can still be related to the rest of the national accounts.

The WTO suggests developing the TSA in the form of ten tables. The first three tables identify tourism consumption by products and forms of tourism (inbound, domestic and outbound). The fourth table consolidates total tourism consumption, including coverage of tourism consumption in the form of non-monetary transactions, to develop estimates of internal tourism consumption

and tourism internal consumption.[3] The fifth table presents the production accounts of the tourism industries in a form suitable for comparison with tourism consumption. The next table is essentially the core of the TSA, bringing together the demand and supply sides of the tourism and wherein aggregates like tourism value added and tourism GDP can be evaluated. The seventh table gives the estimate of employment in the tourism industries, and the indicator to express its size is recommended to be the simplest one, that of number of jobs. The next table, Table 8 presents at the same time the detailed fixed capital formation of the compiling economy of produced fixed assets specific to tourism acquired by the tourism industries and by producers outside the tourism industries as well as the gross fixed capital formation of the tourism industries in non-tourism specific produced assets. Table 9 suggests a compilation of tourism collective non-market services by type of services and level of government. The last table, Table 10, presents a few quantitative indicators, without monetary expression which have been used in most of the previous tables: number of arrivals by forms of tourism and duration of the stay, physical indicators regarding forms of accommodation, means of transportation used by inbound visitors to enter the compiling economy, and finally number and size of the establishments belonging to tourism characteristic and related activities.

The WTO recommends countries to focus initially on getting at least first six tables implemented (and also not to emphasise non-monetary flows of tourism consumption in the initial stages of developing a TSA) to estimate the tourism value added and the seventh table to estimate employment. This is the approach adopted in developing India's first TSA.

[3] Internal tourism consumption is defined by the WTO as the sum of domestic tourism consumption and inbound tourism consumption. Tourism internal consumption is the sum of internal tourism consumption and domestic part of outbound tourism consumption.

III.C. TSA: A Review of Underlying Principles and Definitions

This section briefly reviews some underlying principles and definitions important to the TSA framework. This is necessary not only to highlight the fact that there are some grey areas in this framework, as with many elements of economic statistics, on which judgements were to be made, but also to illustrate some of the daunting empirical problems that will challenge the implementation of the TSA for the economy.

III.D. Defining Tourists and Tourism Demand

Tourism being a demand-based concept, it is important to clearly define who are visitors or tourists, and the expenditure by these tourists, or tourism demand. What is classified as tourism demand is central to identifying what is tourism economic behaviour and, hence, to what should be measured.

Tourists

The WTO defines visitors as "any person travelling to a place other than that of his/her usual environment for less than 12 months and whose main purpose of the trip is other than the exercise of an activity remunerated from within the place visited."[4] Visitors are further sub-divided into two categories: tourists, who must stay one or more night in the place visited, and same-day visitors, comprising visitors who visit a place for less than one night.

While the term "tourist" usually connotes travel for leisure, recreation and holidays, the definition of tourists above is much broader (it can subsume, for example, many types of business travel). The WTO recommends following categories as characterising the main purpose of visit for tourists:

(a) leisure, recreation and holidays
(b) visiting friends and relatives
(c) business and professional (including for study)
(d) health treatment
(e) religion, pilgrimage, and,
(f) other (e.g., airline or ship crews, transit travellers, etc).

In general, the definitions followed by the government of India conform to these definitions.[5] The major exception is the treatment of those visiting friends and relatives whose trips and activities are not considered part of tourism below but are so in the definition above.

III.E. Definitions followed in India

International Visitor

Any person visiting the country on a foreign passport with main purpose of visit other than the exercise of an activity remunerated from within the country or for establishment of residence in the country.

International visitors may be tourists or excursionist.

[4] UN/WTO *Recommendations on Tourism Statistics ¶20.*
[5] India Tourist Statistics 1998

Foreign Tourist

A foreign tourist is a person visiting India on a foreign passport, staying at least 24 hours in the country, and the purpose of whose visit can be classified as one of the following:

(i) Leisure (recreation, holiday, health, study, religion and sport)
(ii) Business, family, mission, meeting

The following are not regarded as foreign tourists:

(i) Persons arriving with or without a contract to take up an occupation or to engage in activities remunerated within the country
(ii) Persons coming to establish residence in the country
(iii) "Same-day visitors" (including travellers on cruise ships)

Excursionist

A foreign visitor who stays less than 24 hours.

Cruise Passengers

Persons arriving on cruise ships who do stay a night in an accommodation establishment in the country.

Domestic Tourist

A person who travels within the country to a place other than his usual place of residence and stays at hotels or other accommodation establishments run on commercial basis or in dharamshalas/sarais/musafirkhanas/agra-shalas/choultries etc for a duration of not less than 24 hours or one night and for not more than 12 months at a time for any of the following purposes:

(i) Business & Trading
(ii) Leisure & Holiday
(iii) Religious & Pilgrimage
(iv) Social purposes

The following are not treated as domestic tourists:

(i) Persons travelling with or without a contract to take up an occupation or engage in activities remunerated from within the State/Centre
(ii) Foreigners resident in India

The TSA has been prepared along the lines of the international definition

III.F. Tourism Demand

According to the WTO, tourism demand represents "expenditure made by, or on behalf of, the visitor before, during and after the trip and which expenditure is related to that trip and which trip is undertaken outside the usual environment".[6]

Tourism demand, thus, includes expenditures made not just by the visitor but also those that might be made on his or her behalf. It also includes expenditures incurred not just during the trip but also those incurred before and after (as long as they are related to the trip). This conceptualisation and the basic principles of SNA are helpful in approaching some conceptually ambiguous areas such as treatment of consumer durables, purchase of capital goods during the trip, second homes and gross fixed capital formation in tourism industries.

Another significant aspect of the definition relates to the fact that a visitor is defined by being outside his or her "usual environment". Usual environment poses some concerns about its precise meaning but is central to capturing what is or is not tourism. This would be particularly relevant in case of "same-day" visitors. The notion of "tourism" is aimed at covering elements of human activity that are different from the routine in life. It is thus important that information collected from demand side attempt to clarify to the extent possible what "usual environment" means so that respondents can understand what is the purpose of the questions being asked.

III.G. Consumer Durables

The treatment of consumer durables in TSA has been subject of debate but the preponderance of analysis suggests their exclusion, with some exceptions. If consumer goods were to be included in the TSA, they would enter

[6] OECD (1998)

either as capital expenditures or as consumption goods. If they are treated as capital expenditure, it would go against the objective of making TSAs conceptually consistent with national accounts where the production boundary is set to include only those transactions that are market based (or have a very close proxy to market production). Therefore, in the national accounts, goods that are used by households for their own benefit and which are of a "capital nature" – i.e., have lives of more than one year, such as cars, boats, etc. – are not treated as capital but as consumption.[7] Having a production boundary different in the TSA as opposed from the national accounts would mitigate the meaning of comparisons such as "tourism expenditures are x% of the GDP" because their bases would not strictly be comparable.

As consumption items, only those consumer durables should be included as part of tourism consumption that are purchased during the trip. Even here, however, those durables with a significant unit value (such as cars, caravans, boats, etc.) should not be included even though they may be used in the future for tourism purposes.

Aside from the purchase of small consumer durables during a trip for personal use, souvenirs and gifts for family and friend, another class of consumer durables that should be included in tourism consumption consists of single-purpose durable goods with very high tourism usage, such as suitcases. This class of durables should be included irrespective of when they were purchased.

III.H. Second homes

In the context of the TSA, second homes should be regarded as residential structures that households own in a different environment (outside of "usual environment") from that of their primary residence which are used as a retreat

[7] Dwellings are an exception. The discussion here draws upon OECD (1998).

of some sorts from the primary residence. The acquisition of second homes should be treated as part of tourism gross fixed capital formation. Any imputed rent, or actual rent when paid by a third party for their use, should be regarded as part of tourism demand. Also included in tourism demand would be minor purchases made by the household for provisioning or repairing the second home. However, more substantial repairs, major renovations and extensions should not be treated as tourism demand.

In order to estimate this tourism consumption, it is necessary for the compiling economy to determine which of its existing housing units are second homes used for tourism purposes by households owning them. At the present moment, given the data available and the high likelihood of the minor magnitude of this component of tourism demand in Indian economy, it has been deemed advisable to exclude second homes from the purview of the TSA.

III.I. Package Tours

Package tours may be sold to visitors either through an agent or by an organiser. In the latter case, the organiser bears all the risks while in case of the agent, his/her value added is only the margin. In either case, the person purchasing the package has no information on the costs of the specific components of the package.

It is recommended that the activities of travel agencies and tour operators be valued on a "net" basis rather than a "gross" basis. In the case of gross valuation, the difference between the total cost of the package (to the organiser) and the price at which it is sold to the visitor would be viewed as the value added in the transaction. Implicitly, the value added in the industries providing the products in that package (e.g., airline, hotel) would be set to zero. In the net valuation, however, the margin of the operator would still be considered as value added, but additional account would be taken of the value

added by the constituent industries (i.e., industries providing the constituent products of the package). Thus, value added by the net approach, wherein the package is decomposed into each constituent product, will be higher generally than that calculated by the gross valuation method. Due to data limitations, "gross" valuation of package trips has been used.

III.J. Gross fixed capital formation

In general, there is little direct relationship between acquisition of capital by tourism industries and the visitor. The railways, for example, may purchase passenger coaches but the visitors only buy transportation on those coaches, not the coaches themselves. The same would apply to airlines that purchase aircraft from manufacturers. Although they would not be able to provide transportation without the aircraft, there is no direct contact between visitors and manufacturers of the transportation equipment. Therefore, gross fixed capital formation by tourism industries has only an indirect impact on the measure of tourism and its significance in the economy's value added.

Measurement of gross fixed capital for purposes of TSA faces several important problems. For example, most characteristic tourism industries – railways, airlines, hotels, etc. – have multiple output in that they cater to both visitors and non-visitors. Applying "tourism ratio" of their (total) output to their gross fixed capital formation entails many special assumptions that may not be valid. The marginal cost of capital for meeting tourism demand may be close to zero in an industry using its capital for a variety of purposes, and the tourism element may be small.

Another issue in measurement of gross fixed capital formation for tourism concerns the provision of services such as infrastructure to those industries that supply services (and goods) to visitors. For example, the construction of airports and railway stations usually are part of public-sector investments but without

them the companies would not be able to provide the services to tourists. The general principle recommended is to include within tourism gross fixed capital formation capital investments undertaken by entities that have direct contact with visitors (adjusting for usage by non-visitors), such as hotels, airlines, etc. For investments undertaken by entities not directly interacting with visitors, any investment should be considered as part of tourism investment only if there is a very high proportion of use of that investment by characteristic tourism industries.

III.K. Relationship between Input-Output Characterisation and Tourism Characteristic Industries

A fundamental aspect of the TSA is the reconciliation of tourism demand and the supply of tourism characteristic goods and industries usually through the input-output tables. In the I-O tables, the relation between commodities and industries is based up on the similarity of technologies expressed in classification notions of products and the corresponding industry. In case of tourism, however, it is the actual use of a commodity that determines its tourism characteristicity. In general, on aggregation, the uses are likely to not correspond with a sufficiently homogeneous industry aggregate (as defined for I-O purposes). Conversely, an industry notion a la the I-O tables may not correspond with a specific use category.

Thus, even some of the characteristic tourism industries with a relatively direct correspondence with the I-O notion of industry may produce considerable amounts of non-tourism characteristic commodities. For example, a hotel may rent its premises for local functions, or commuters may be predominant travellers on railways, etc. In a similar vein, there may be numerous industries that are not tourism characteristic but whose secondary output may be consumed by tourists.

Therefore, a straightforward 'commodity x industry' classification as in the I-O framework may not usually be available in case of tourism characterisation. Further, the broader the categories in the I-O tabulation, the more severe will be the constraints imposed by this problem. These considerations have an important bearing on the development and implementation of the TSA for the economy.

PART B

IV. Development of TSA for India

As recommended in the Feasibility Study, prepared by NCAER, the proposed pilot TSA has focussed on the construction of seven tables. The first three tables identify tourism consumption by products and forms of tourism (inbound, domestic and outbound). The fourth table consolidates total tourism consumption, to develop estimates of internal tourism consumption and tourism internal consumption[8]. The fifth table presents the production account of the tourism industries in a form suitable for comparison with tourism consumption. The next table is essentially the core of the TSA, bringing together the demand and supply side of tourism and wherein aggregates like Tourism Value Added/GDP can be evaluated. The seventh table analyses employment in the tourism industries. Taken together, these seven tables constitute the first TSA for India.

The year 2002-03 has been selected for the development of TSA, as the expenditure data for Domestic Tourists is available for the year 2002, the International Tourists for 2003 and the supply side data for the year 2002-03 is available from CSO at the aggregate level.

[8] Internal tourism consumption is defined by WTO as the sum of domestic tourism consumption and inbound tourism consumption. Tourism internal consumption is the sum of internal consumption and domestic part of outbound tourism consumption.

All goods and services in the economy are first divided into Tourism Specific and Non-specific goods and services, then tourism specific goods and services are further broken into Tourism Characteristic and Tourism Related goods and services. Tourism specific goods and services are either tourism characteristic or tourism-related goods and services.

IV.A. Tourism Characteristic Product:

A tourism characteristic product is a product that would cease to exist in meaningful quantity or for which the level of consumption would be significantly reduced, in the absence of tourist.

IV.B. Tourism Related/Connected Product

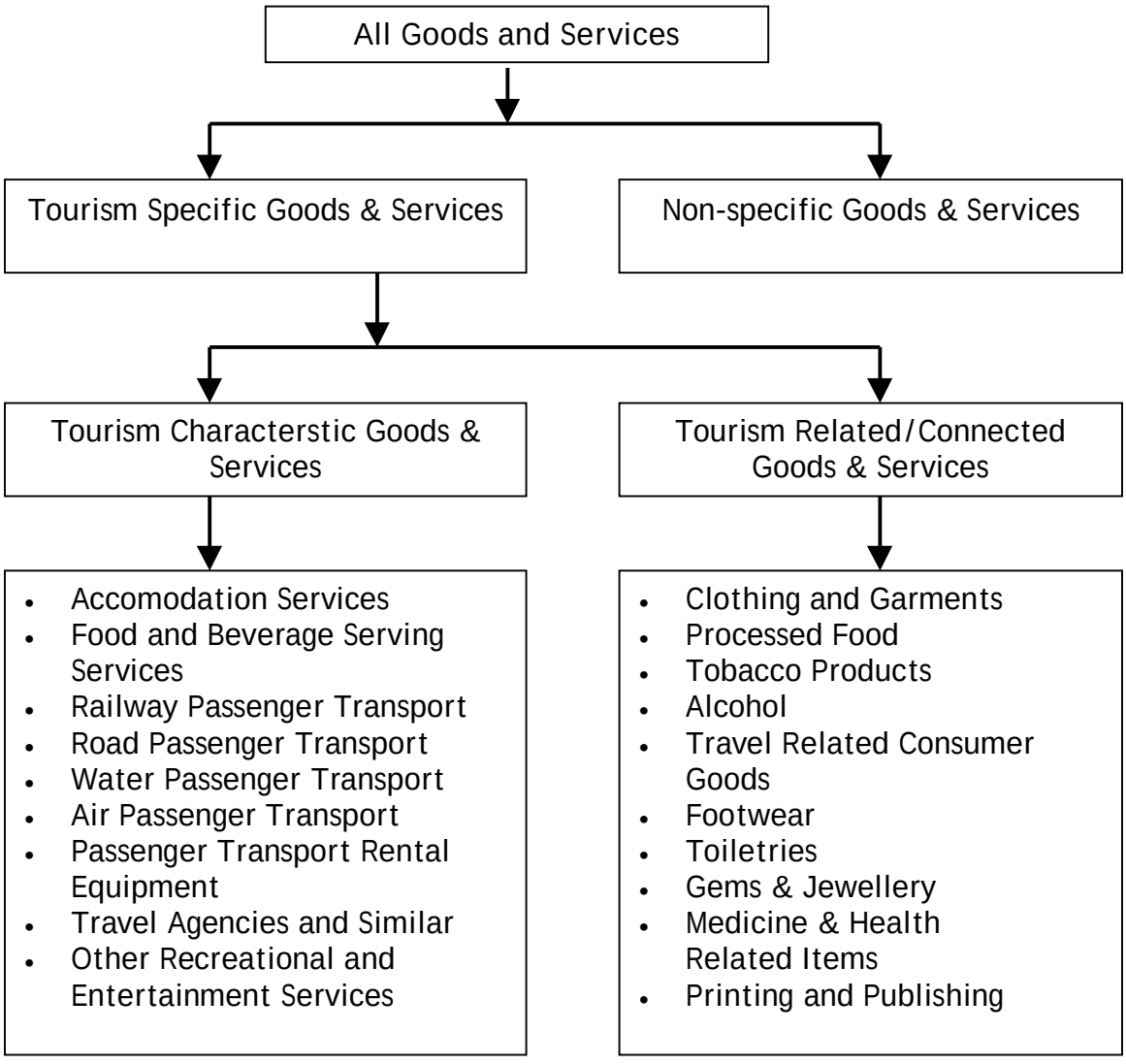
A tourism related product is a product that is consumed by visitors in volumes that are significant for the visitor and/or the provider but are not Included in the list of tourism characteristic products.

IV.C. Non-specific Goods & Services

A non-specific goods and services is a product that is not a tourism specific product. It is assumed that tourists purchase none of these products. The flow chart describing these is given Figure 1.

After the identification of industries, data on tourist expenditure, value added, value of output and employment is required for the development of TSA. The required data is available from different government sources at a very aggregate level. Following section of the report shows the methodology adopted to estimate the required data and their sources of availability.

Figure 1: Distribution of Goods and Services in the Economy



IV.D. Compilation of Data from Demand side and Supply side

The data obtained by 'Domestic Tourism Survey' and 'International Passenger Survey' gives the domestic tourism consumption expenditure on various tourism characteristic and tourism related goods and services across the purpose of visit. Domestic Tourism Consumption Expenditure, by definition is expenditure incurred by the domestic/resident visitors within their country of

reference. All the expenditures incurred by domestic tourists with the tourism industries are mapped as follows[9]:

Table A: Mapping of Expenditure Items with Tourism Industries

Tourism characteristic industries	
Industries	Items of Expenditure
1. Accomodation Services	Hotels
	Private guest house
	Tourist guest house
	Govt. guest house
	Dharamshala
	Rented houses
	Relatives
	Others
2. Food and Beverage Serving Services	Food and Refreshment joints at Railway station, bus stand, train
	Hotels
	Private guest houses
	Tourist guest houses
	Govt. guest houses
	Dharamshala
	Restaurants
	Cafeteria
	Snack bars
	Lunch counters
	Refreshments stands
	Canteens
	Milk bars
	Bars & other drinking places
	Mela, Fair, Picnic
	Others
3. Passenger Transport Services	
• Railway	Railway
• Road (Buses and other mechanised road transport	Passenger transport by bus services
	Passenger transport by other motor vehicles
	Own Transport - Two wheeler
	Own Transport - Auto rickshaw/car/jeep/bus/tractor
	Others

[9] This list of items covers all those expenditures that were asked in Domestic Tourism Survey, with the exception of "alms" and "other expenditure not covered elsewhere". Since, these cannot fall in any of the above categories of industries, these expenditures were distributed pro-rata amongst all other industries.

Tourism characteristic industries (Cont.)	
Industries	Items of Expenditure
• Non Mechanised Road Transport	Passenger or freight transport via hackney carriage, bollock carts, ekkas, etc.
	Transport by animals
	Transport by man including rickshaw and cart pullers, pushcart operators, palki bearers, doli carriages, etc.
	Own Transport - Animal driven transport
	Own Transport – Rickshaw
• Water	Ship/boat
• Air	Air
• Passenger Transport Supporting Services[10]	Other support services
4. Transport Equipment Rental	Hired taxi/car/jeep/tractor
5. Travel Agencies and similar	Travel Agents
	Tour Operators
	Tourist Guides
6. Other Recreational and Entertainment Services	Cinema, Night clubs, Theatres
	Conferences and Conventions
	Other Amusements

Tourism Related Industries	
Industries	Items of Expenditure
1. Clothing and Garments	Clothes (dhoti, sari, shirt, pyjamas, ladies suit, etc.)
	Chaddar, Dupatta, Shawl, Lungi, Towel etc.
	Readymade garments
	Knitted garments, sweater, pullover, cardigan, etc.
	Bedsheet, bed cover, blanket, pillow, quits etc..
	Knitting wool
	Others
2. Processed Food	Tea and coffee
	Cold beverages and fuit juice
	Other beverages
	Biscuits, salted refreshments ,preoared sweets, cake, pastry
	Pickle, Sauce, Jam, Jelly etc.
	Other processed food
3. Tobacco products	Pan, Supari, Lime, Katha
	Bidi, Cigratte, Tobacco
4. Alcohol	Beer, Toddy, Liquor
	Other intoxicants

Tourism Related Industries (Cont.)

[10] Since from the supply side, passenger transport supporting services are included in transport services, its expenditure is distributed proportionately among road (bus and mechanized road transport), water and air transport services.

Industries	Items of Expenditure
5. Travel Related Consumer Goods	Suitcase,trunk,hand bag, other travel goods
	Spectacles, pen, lock, umbrella
	Radio, walkman,torch,batteries etc.
	Camera,cassettes,films etc.
	Others
	Photography, Video Cassette
	Sports items and Toys
6. Footwear	Leather footwear
	Rubber footwear
	Others
7. Toiletries	Toilet soap, washing soap, washing powder,hair oil etc.
	Tooth brush, tooth paste, tooth powder
	Body talcum, powder, face cream
	Shaving blades, shaving stick, razor, shaving cream
	Other toiletries
8. Gems and Jewellery	Gems & Jewellery
9. Medicines and Health Related items	Medicines and Health Related items
10. Printing and Publishing	Book,magazines, Newspapers, Library and other stationery

The household surveys conducted by National Sample Survey Organisation (NSSO) collect information on Household Consumption Expenditure, which is also reported in National Accounts Statistics (as Private Final Consumption Expenditure) for a number of consumption items. But the two results show variation with respect to all the items. Whereas the survey collects information directly from the households, NAS obtains estimates of Private Final Consumption Expenditure (PFCE) using the commodity flow approach. The expenditure incurred by industries as intermediate consumption and all final consumption (including imports and exports) other than those by households and non-profit institutions are deducted from the total availability to arrive at the estimates of PFCE[11]. There has been a trend of under-reporting of consumption expenditure obtained from the survey. Since there is no consensus on factors underlying this divergence, CSO and NSSO prepared a report "Cross validation Study of Estimates of Private Consumption Expenditure Available from Household Survey and National Accounts" to see how different the estimates obtained from

[11] see Chapter 19, NAS - Sources and Methods, 1989

NSSO survey on "Consumption Expenditure" for the year 1993-94 were from the NAS estimates for the same year. Using the same approach, such divergence in estimates is worked out for the year 1999-00, during which the NSSO conducted large sample survey (usually conducted once in five years) on consumption expenditure. Comparing these factors with those given in cross validation report for 1993-94, it can be deduced that the divergence of survey estimates form the NAS estimates is widening over the years. Hence, the adjustment factors to be applied on household survey expenditure estimates are obtained. These adjustment factors are used to adjust the tourism expenditure estimates obtained from the Domestic Tourism Survey, which is also a household survey. These factors applied are given in Table B.

Even after adjusting the survey results using the adjustment factors as given above, it was realised that the expenditures incurred on transport services are still quite underestimated. This under-estimation is possible owing to the fact that the tourists whose trips are sponsored by the government (in case of government employees) or by the companies they are employed in, may not correctly report the actual expenditure on transport. In fact, in most of the cases, they may not even know the amount spent on their travel. The supposition of underestimation of expenditure could be legitimised when compared with the Input-Output table published by CSO. The 115-sector absorption matrix at purchaser's price prepared by CSO gives the expenditure incurred by all industries (Intermediate Use), private households (Private Final Consumption Expenditure, PFCE) and the government (Government Final Consumption Expenditure, GFCE) on travel by railways and other transport. The summation of these three gives the total expenditure incurred on travel. Hence, it was decided, with the suggestions of Advisory Committee, that the expenditures incurred on transport services obtained from the domestic survey be replaced with what is reported in the absorption matrix. Railways expenditure is substituted as it is and distributed across purpose of visits in the same proportion as observed in the survey. And Other Transport is disaggregated

into Road (Buses, Other mechanised vehicles, other non-mechanised vehicles), Air, Water, Transport Equipment Rental and Travel Agencies, applying the structure observed in survey. But, on doing this, the tourism industry ratios of air, transport equipment rental and travel agencies get disturbed and exceed 1, which is not acceptable. So retaining tourism industry ratios and hence the tourism demand for these industries, the remaining transport expenditure is distributed amongst the road and water transport industries.

Table B: Adjustment Factors for Tourism demand obtained from Domestic Tourism Survey

Industries	Adjustment Factors using 1999-00 NAS PFCE and NSSO consumption expenditure estimates
Tourism characteristic industries	
Accomodation Services	2.3000
Food and Beverage Serving Services	1.6000
Passenger Transport Services	
• Railway	For these industries, as described above, the expenditures are taken from the Input-Output Absorption Matrix
• Road	
Buses	
Other mech vehicles	
Non Mechanised Road Transport	
• Water	
• Air	9.5000
• Transport Equipment Rental	1.0000
• Travel Agencies and similar	8.0000
Other Recreational and Entertainment activities	0.5462
Tourism Related industries	
Clothing and Garments	1.0000
Processed food	1.4165
Tobacco products	3.7000
Alcohol	0.8735
Travel Related Consumer Goods	3.5400
Footwear	1.1113
Toiletries	1.1000
Gems and Jewellery	5.3000
Medicines and Health Related items	2.3025
Printing and Publishing	0.8097

Note: Worked out using NSSO survey on "Consumer Expenditure -1999-00" and NAS item-wise Private Final Consumption Expenditure for the same year.

Hence obtained demand side data are at purchaser's price, which are converted into factor cost as the data from supply side is at factor cost. For this conversion, CSO data (115 sectors) on Trade and Transport margin for the year 1998-99 was used. Also available is each sector's indirect taxes and value of output at factor cost. However, these trade and transport margins also contribute to tourism sector indirectly, hence, value added generated from trade and transport margins is also added to the calculated tourism value added.

Now, from supply side, value of output and value added for each of these tourism industries are obtained from the following sources.

1. Accommodation Services and Food & Beverages Serving Services

   Separate value added and output data on these services are not available in the National Accounts Statistics (NAS). Value added data is provided under the head "Hotel & Restaurants". To disaggregate this value added into the required sectors, ratio of accommodation and food & beverages serving services in total Hotel & Restaurants obtained from the NSSO's 57th Round data on Unorganized Service Sector (2001-02)[12] have been used. Value Added to Value of Output ratios for these sectors are available separately from the same source. Applying these ratios on value added the value of output of these sectors is estimated.

2. Railway Transport

   Both value added and value of output data are available in the NAS. Value added is available for the year 2002-03 but the value of output is available only for the year 2001-02. Value added to output ratio for 2001-02 is used to estimate the value of output for 2002-03.

[12] By definition followed by NSSO, unorganized service sector includes all enterprises except those run by Government (Central Govt, State Govt, Local Bodies) / Public Sector Enterprises.

3. Transport by other means
   a) Road (Buses, Mechanised Vehicles, Non-Mechanized Road Transport)
   b) Water Transport
   c) Air Transport

   Value added data on Transport by other means is available only till the year 2001-02 in the NAS. However, its disaggregation into Buses, Mechanized Vehicles, Non-Mechanized Road Transport is not available. Disaggregated value added of these sectors is provided in the National Accounts published by CSO.

   For the estimation of value of output of these services, value added to value of output ratio for 1998-99, provided by CSO, has been used.

4. Transport Equipment Rental

   Value added data on Transport Equipment Rental is not available separately for the above mentioned transport services. It is included in all kinds of transport services. To segregate the value added portions of Transport Equipment Rental, again the *NSSO's 57th Round* data on *Unorganized Service Sector* (2001-02) is used. For the estimation of output, again ratio for 1998-99, provided by CSO, has been used.

5. Travel Agencies and Similar

   Value added data on Travel Agencies and Similar is available in the NAS under the head "Services Incidental to Transport" only till 2001-02. Using last year's growth, the value added figure for the year 2002-03 is estimated. For the estimation of output, value added to value of output ratio for 1998-99, provided by CSO, has been used.

6. Recreation and Entertainment Services

   Value added data is available in the NAS. For the estimation of value of output, value added to output ratio of 'Other Services' (Sector no. 114 in Input-Output table) for the year 1998-99 is used.

For tourism related industries, value added is available in NAS but value of output is available only for registered sector. To get value of output for these industries, value added to output ratio for the year 2000-01 is applied. Here value added to output ratios of 1993-94 from the Input-Output table could also be used but in order to have most recent ratios, organised and unorganised data on manufacturing industries are combined for the latest year available. Latest data on unorganized manufacturing is taken from NSSO's 56th Round for the year 2000-01. Annual Survey of Industries (ASI) 2000-01 is used to get data on organized/registered sector. Both the sources give value added and output numbers at National Industrial Classification, NIC-1998 4-digit level. Mapping them with tourism related industries, are obtained their value added to output ratios, which applied on value added can give outputs too.

However, value added reported in NAS is available for manufacturing industries at NIC-1987 2-digit level. And our industries do not map completely with 2-digit classification. Most of the tourism related industries are only part of the industries at 2-digit level classification. The mapping is given in Table C.

It is to be noted that industries in column 1 are part of those in column 3 for which value added is available in NAS. Now applying the proportion of column 1 industry in column 3 industry on 2002-03 NAS value added, value added is obtained for required industries. These proportions for 2000-01 are again taken from ASI and NSSO. Both columns 1 and 3 are mapped with industries at 4-digit level to get the required proportions for value added. Once these are obtained, value added to output ratio is taken and applied on value added to get value of output as discussed above.

Table C: Mapping of Tourism Related Industries with NIC industries

Tourism related industries	NIC Code at 2-digit level as given in NAS	NIC industry Description
Column 1	Column 2	Column 3
Clothing and garments	26	Textile products
Processed food	20-21	Food products
Tobacco products	22	Beverages, tobacco, etc.
Alcohol	22	Beverages, tobacco, etc.
Durable Goods 1. Leather and leather products 2. Plastic products 3. Watches and clocks	 29 31 38	 1. Leather and fur products 2. Rubber, petroleum etc. 3. Other manufacturing
Footwear	29	Leather and fur products
Toiletries	30	Chemicals, etc.
Gems and jewellery	38	Other manufacturing
Medicines and health related items	30	Chemicals, etc.

Value of output and value added for all tourism characteristic and related industries form the supply side data. From the demand side, expenditure data suggests the output of these industries on account of tourism. The proportion of this tourism specific output of total output, when applied on their respective value added gives tourism specific value added for each industry.

Summation of these gives total tourism specific value added of the economy. Ratio of this to total GDP of economy gives the share of tourism in total GDP. This share in GDP has been worked out at 2.78 percent. Table D lists top 15 sectors of the total 115 sectors in terms of their share in GDP which gives an idea on how significant is the share of tourism sector in the economy.

Table D: Top 15 sectors in terms of share in GDP

Rank	I/O sector number	Sector Name	Share in GDP (Per cent
1	107	Trade	13.16
2	17	Other crops	8.58
3	115	Public administration	6.23
4	99	Construction	5.83
5	109	Banking	5.31
6	104	Other transport services	4.59
7	114	Other services	4.30
8	111	Ownership of dwellings	4.23
9	112	Education and research	4.16
10	18	Milk and milk products	4.11
11	1	Paddy	3.69
12	100	Electricity	2.34
13	2	Wheat	2.28
14	20	Other livestock products	1.67
15	106	Communication	1.53

Source: Input-output Transactions Table, 1998-99

However, what is obtained till now is only the direct contribution of tourism value added. To this, the indirect contribution, which has been worked out using multiplier analysis, is added. This indirect contribution owes to the indirect tourism demand that is generated in the sectors of the economy other than the direct recipient sectors, due to inter-industry relationship. This direct and indirect demand can be measured by using the input-output techniques. The input-output table, which is a statistical description of the inputs consumed and the output produced forms the basis of multiplier analysis. The virtue of this analysis is that it brings out the indirect internal transactions of the economic system. In the Input-Output table, economy is divided into 115 sectors each of which is represented by a row and a column. The row gives the total supply of the sector and column gives the input requirement of the sector.

Algebrically, the distribution of the output of different sectors can be presented as:

$$X_i = \sum_j X_{ij} + F_i \qquad \text{(i=1,2,3....n; j=1,2,3.....n)}$$

where,

X_i is the output of the i^{th} sector

X_{ij} is the output of the i^{th} sector consumed by the j^{th} sector and

F_i is the final demand for the output of the ith sector which consists of private consumption, public consumption, gross fixed capital formation, change in stocks and net exports.

Assuming that the inputs consumed by a sector varies in direct proportion to sectoral output,

$$X_{ij} = a_{ij} X_j$$

Where, aij is the requirement of the output of the ith sector for a unit level production of jth sector. Using the matrix notation,

$$X = AX + F = (I - A)^{-1} F$$

This Inverse matrix is called *Leontief Inverse* or *multiplier matrix*. It gives direct and indirect demand for the output of each sector by all the other sectors of the economy. The total of each column in this matrix gives the direct and indirect effect of a unit increase in the final demand of the sector and is called output multiplier.

The direct and indirect impact of tourist expenditure in various sectors of the economy can be obtained by multiplying the Leontief Inverse Matrix with the corresponding tourism expenditure vector. This tourism expenditure vector is obtained as the proportion of tourism expenditure on each industry in total expenditure. The sum total of the resultant column gives the multiplier effect due to tourist expenditure. This multiplier effect can be worked out separately

for inbound, domestic and outbound tourism. The total Tourism output multiplier comes out to be 2.1, which implies that the direct and indirect impacts taken together is 2.1 times the actual spending of the tourists. Hence, if the actual contribution comes out to be 2.78 percent of GDP, direct and indirect impact brings this contribution up to 5.83 percent.

V. Tourism employment

According to WTO, "the basic recommendation of the TSA recognizes the difficulty that most of the compilers meet in the measurement of employment. Seasonality, high variability in the work conditions, flexibility and lack of formality of many work contracts in many small producing units are the major obstacles for deriving meaningful figures. This explains why, although there is no doubt that employment is a crucial variable for the description of the economic importance of tourism, statistical limitations do not allow to be very ambitious for the time being. Measurement of employment should thus be limited to the employment in the tourism industries, and the indicator to express its size be the simplest one, that is, the number of jobs.

However, since this method recommended by WTO may not apply well to large industries with low tourism ratios (eg, railways) the employment to output ratio is used to estimate the total number of jobs generated by the tourism activity. To get tourism employment, the total workers employed in tourism industries are estimated. When number of workers employed in tourism industry is estimated, the principal as well as subsidiary work status is taken into account, as done by CSO while estimating the total employment. This way, the estimated number of jobs instead of number of workers employed is worked out. This estimate is important in the sense that there may be people whose principal activity is not tourism but the subsidiary activity is related to tourism, eg. working part-time in a restaurant or running a transport service. These people

also to some extent survive on tourism industry, besides those working completely in tourism industry.

For Tourism characteristic industries, 57th Round of NSSO survey on Unorganised Service Sector, conducted in 2001-02, is used. This survey, done by NSSO, provides information on only unorganised services sector in India. Also required is data on manufacturing sectors that form tourism related industries. For these tourism related industries, CSO employment estimates given in their "Labour Input Estimation at 3-digit level of NIC-1998", prepared on the basis of Employment Unemployment survey conducted by NSSO in 1999-00, is used. From Unorganised Service Sector survey data, both employment and value of output of tourism characteristic industries are estimated. Applying hence obtained labour to output ratio of each tourism characteristic industry on total value of output of these industries, total employment is computed for each of them. Again applying same ratios on tourism output, i.e. total tourism demand for each industry, tourism characteristic employment is computed. For tourism related industries, employment estimates prepared by CSO for the year 1999-00, are used. As mentioned above, CSO estimates take into account both principal and subsidiary activities, so it gives total number of jobs and not total number of workers. To get estimates for 2002-03, the structure followed by industries in total employment in 1999-00 is imposed on total estimated employment of 2002-03. For 2002-03, employment estimate is obtained by applying the annual growth rate observed in 1999-00 over 1993-94, both being the NSSO survey years on Employment Unemployment. Imposing the structure followed by tourism related industries in 1999-00, on total employment for 2002-03, total workers employed in tourism related industries in 2002-03 are estimated. Applying tourism industry ratio on the total employment of each industry, tourism employment in tourism related industries is estimated. Hence, is obtained total employment due to tourism for tourism characteristic and tourism related industries. Adding the two gives tourism employment, or to be precise, it gives tourism number of jobs, proportion of which in total estimated number of jobs of 2002-03, gives share of

tourism employment in total. This share comes out to be 4.59 percent of total number of jobs in India. In absolute terms, tourism related jobs come out to be 21.5 million.

As done for value added, multiplier analysis is done for employment also to get the direct and indirect impact of tourism in employment. Employment coefficient which is the labour to output ratio is computed for each of the 115 sectors of the Indian economy. To estimate employment of these sectors, NSSO survey on "Employment Unemployment" for the year 1999-00 is used and the value of output is taken from the Input-Output Table, 1998-99. Value of output at fairly disaggregated level is available for both 1998-99 and 1999-00 in NAS. Their growth rate is applied on 1999-00 employment so as to deflate it to get 1998-99 employment. Hence, value of output and employment are obtained, both for the same year, i.e. 1998-99. The labour to output ratios of each sector are called their employment coefficients. However, as done in estimating direct share, employment coefficients for tourism specific services sectors are taken from the more recent and services sector-specific NSSO survey during the year 2001-02 on 'Unorganised Services Sector'. Multiplying the row matrix of Tourism Output Multiplier with column matrix of employment coefficients, tourism employment multiplier is obtained. This employment multiplier comes out to be 1.8. This means that direct and indirect impact of tourism is 1.8 times the actual tourism employment. Hence, multiplying this with the direct share of employment of 4.59 percent, total contribution of tourism (direct and indirect) comes out to be 8.27 percent of total employment. This means total direct and indirect contribution of number of jobs generated by tourism is estimated to be 38.6 million.

The share of tourism calculated for India can be compared with other countries based on their TSA based calculations.

Figure 2: International Comparison of Tourism Industry

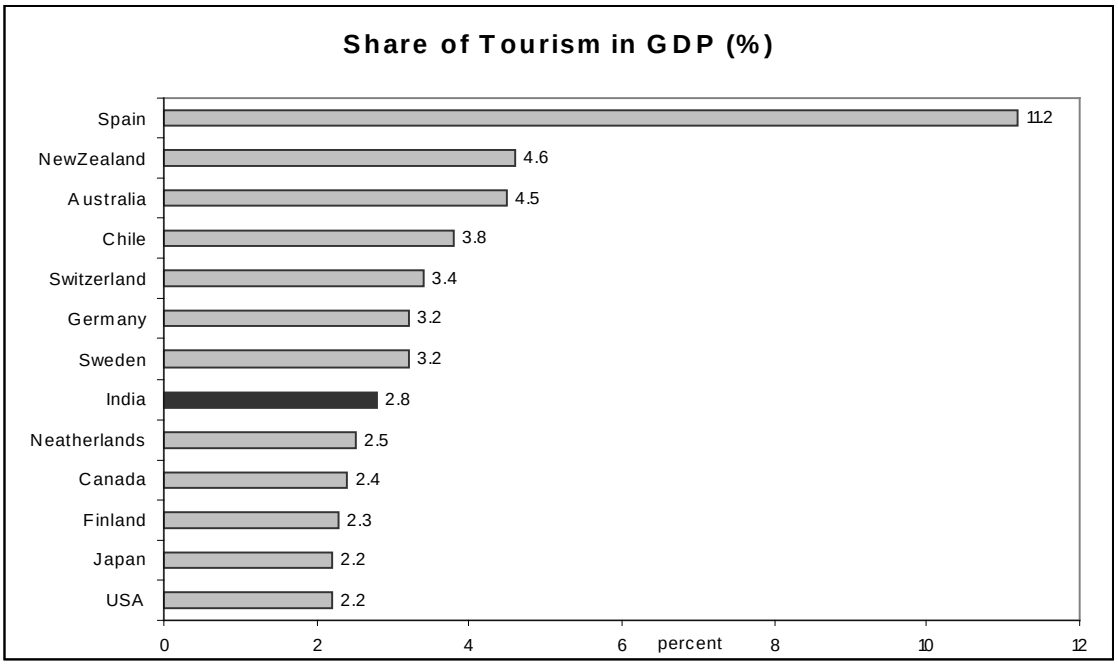
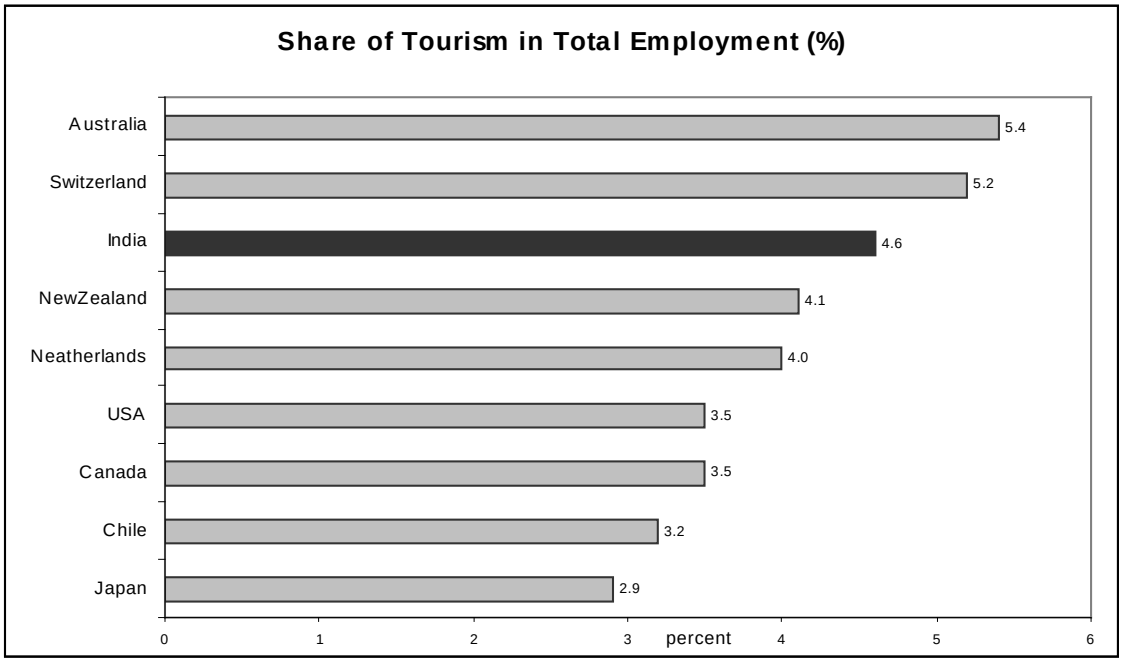


Figure 3: International Comparison of Tourism Industry



Source: Reports on Tourism Satellite Account for respective countries

VI. Description of TSA Tables

The Tourism Satellite Account is prepared by bringing together the demand side and the supply information for the industries producing "tourism" commodities. The demand side data obtained, in case of India, from the two large surveys canvassing domestic as well as inbound tourists provide the initial information. From these surveys the commodities that tourists purchase are determined. The expenditure pattern can be used to determine tourism characteristic and tourism related industries as per their definitions. Hence, the estimates of personal expenditure disaggregated by industry for the forms of tourism identified by WTO: domestic and inbound tourism, are arrived at. For the third form of tourism, i.e., outbound tourism, the information could not be obtained from the surveys, and hence, certain assumptions are made that will be described later. Once the commodity detail is determined, the supply side is to be addressed. This gives us the industry value added and value of output using National Accounts Statistics and the Input-Output Transactions Table.

The information from the demand side and supply side, together with the computation of tourism ratios comprise the relevant tables as recommended by WTO to estimate the share of tourism value added in nation's GDP. Explanation about these is given below:

- Table 1 gives the inbound tourism consumption across tourism characteristic and tourism related industries. Within inbound tourism, expenditure pattern of two of its components is reported separately. These are expenditures incurred by foreign nationals and non-resident Indian nationals. These expenditures are at purchaser's price, which are converted to those at factor cost using CSO's data on Trade and Transport Margin for 115 sectors of economy. The Input-Output Table gives value of output of each industry at factor cost. Adding trade and transport margins and indirect taxes to it will give output at purchaser's price. The ratio of output at factor cost to that at

purchaser's price for tourism industries, when applied on tourism expenditure gives expenditure at factor cost. Tourism industries can be identified from the 115 sectors and wherever required, aggregation of sectors is done.

Ø Table 2 gives the domestic tourism consumption for tourism industries. The domestic tourists are further classified with respect to the purpose of visits and expenditure pattern is collected for all of them. The five purposes of visits are Business/Trading, Leisure/Holiday, Religious/Pilgrimage, Social and Others. These expenditures are inflated using the factors while for railways, road and water transport services, these are replaced with expenditures reported by CSO in the absorption matrix of their Input-Output Table, 1998-99, as described in earlier sections. The expenditures are further converted to expenditure at factor cost as done for inbound tourism consumption.

Ø Table 3 provides outbound tourism consumption. Although this information could not be collected through the surveys, per tourist pre-trip expenditure is approximated to be Rs. 15000 (this is based on discussions with the Adisory Committee members and is expected to include pre-trip shopping expenditure, medical insurance, visa fee etc.), multiplying which with total number of Indian tourists going abroad, as obtained by Ministry of Tourism, total outbound tourists' pre-trip expenditure is calculated. For the outbound tourists, its logical to take into account only the pre-trip expenditure as other expenditure on accomodation and travel etc. is done in the country of their visit, and hence will not be accounted in India's tourism industry. Since the pre-trip expenditure is mainly done on shopping, it goes only to tourism-related industries. In order to distribute this expenditure among tourism related industries, it is assumed that outbound tourists follow same shopping pattern as domestic tourists. Further again, expenditure is converted to factor cost.

- Table 4 compiles the tables 1, 2 and 3 and obtains total tourism expenditure with respect to its three components.

- Table 5 provides the production account of tourism characteristic and tourism-related industries obtained from National Accounts. This table gives industries' value of output, intermediate consumption and gross value added.

- Table 6 amalgamates demand side information with that of supply side to generate tourism industry ratios. Since tourism is a demand side activity, its output is defined in terms of the consumption of its consumer, i.e., a tourist. Hence, total expenditure incurred by tourists given in Table 4 is actually tourism industry's value of output. Tourism industry ratio is the ratio of total supply of each industry to the value consumed by tourists. When these ratios are respectively applied on industry's gross value added, the value added of each industry on account of tourism is obtained, summation of which across industries will give total tourism gross value added. Its proportion in India's Gross Domestic Product will give share of tourism in economy.

- Table 7 gives the estimated number of jobs generated by tourism industry and hence its share in total number of jobs. To get this, tourism characteristic and tourism related industries are separately worked on. For tourism characteristic industries, labour to output ratios of service industries are used to get labour-force and for tourism related industries, tourism industry ratio is applied on estimated total employment of each industry to get tourism employment. Their sum gives the total tourism employment or number of jobs and its proportion in total gives the share of tourism.

VII. Concluding Remarks

This report presents India's first TSA for the year 2002-03 in the form of relevant tables suggested by the World Tourism Ogranization (WTO). To the extent tourism is an economic phenomenon, many aspects of it are already embedded in the national accounts. However, since tourism is not identified as a separate activity in these accounts, information relating to tourism is buried in some other elements of the core accounts and not readily apparent. The objective of a tourism satellite account is to bring together the information by essentially reorganising the national accounts and supplementing them with additional concepts and data, and thus develop relatively credible quantification of different aspects of tourism

TSA is prepared by bringing together the demand side and the supply side information for the industries producing "tourism" commodities. The Domestic Tourism Survey and International Passenger Survey, together provide the demand side information, while for the supply side, the source of data has been identified clearly for each industry. The demand and supply side data are compiled to prepare the relevant tables to estimate the direct share of tourism value added in GDP and employment. Tourism output multipliers are generated to get the indirect contribution of tourism sector.

Based on the analysis presented in this report, tourism value added accounts for 2.78 percent of the GDP in terms of its direct contribution. When indirect effects are also taken into account, the share of tourism is 5.83 percent. In terms of employment, tourism sector's contribution is quite substantial. As the direct share, tourism accounts for 4.59 percent of the total number of jobs, and together with indirect effects, the share goes up to as much as 8.27 percent, which means that at least 38.6 million jobs are estimated to have been generated due to the tourism activities in India.

The results point to the fact that tourism is an important sector in the Indian economy. Hence, it is a desirable proposition to prepare TSA regularly, once in five year, by collecting the reliable data in the forms of *thick* and *thin*

rounds (as in the case of NSS) attributed to various issues of tourism sector, as is done by many other developing and developed economies. For instance, the tourism industry ratios obtained in thick rounds could be used to estimate tourism value added and employment for the in between years. During these years, thin sample surveys (surveys based on small samples) might be conducted for other relevant tourism issues, like same day tourism, survey of service providers such as tour operators, tourist guide, etc.

In the household surveys, there is always a possibility of underestimation of expenditure incurred for a trip taken during the year due to the recall problem. It can be further improved if the survey targets tourists while on trip, both at selected tourist locations or at the places of their stay, viz., hotels or other tourist lounges.

Data on the supply side of TSA has been taken from the National Accounts Statistics. This comprises production accounts of tourism characteristic and tourism related industries. For most of these industries, data are not readily available in NAS as it is required for TSA framework. The related sectors of NAS are at an aggregated level which only when further disaggregated, provide the information for required sectors of tourism. For this disaggregation, proportions are taken from the surveys conducted by NSSO and CSO in various rounds in the past. Thus various approximations which necessarily influence accuracy of estimates. For instance, in the case of hotels and restaurants, whereas this is the sector for which NAS provides value added estimates at an aggregate level. But for TSA, hotels and restaurants are taken as two different sectors, i.e., accommodation services and food and beverage serving services. To obtain disaggregated estimates of value added, the survey conducted by NSSO on Unorganised Services Sector is used to provide the proportion of each industry in total value added. If value added of these two sectors is also made available in NAS the estimates could be more accurate.

For TSA, passenger and transport services are disaggregated into road, air and water transport services. Within road transport, there are buses, other mechanised vehicles and non-mechanised vehicles. The value added by these

transport services are obtained from CSO, although this data is not published anywhere. The value added of each of these industries is inclusive of the component called 'transport equipment rental' which is a separate sector in TSA. To extract this component from each of the transport services, again NSSO survey on "Unorganised Services Sector – 2001-02" is used to get the proportion of rental value added in total value added of each transport services. For the reasons already mentioned above, it is advisable that the disaggregation of transport services and their rental part should be based on more comprehensive survey.

Public policies cannot be formulated in the absence of authentic data. Therefore, the need for collecting, collating, and analyzing reliable data to arrive at policies cannot be overemphasized. The Domestic Tourism Survey and International Passenger Survey were the first such attempt in this direction. These efforts have highlighted the areas where intensive work needs to be undertaken to compile systematic data on tourism.

The report needs to be seen as a part of continuing efforts towards strengthening the Tourism statistical network within the country. The results presented in this report, will be an important input for the tourism industry, researchers and policy makers for transforming Indian tourism sector.

VIII. TSA Tables

Table 1a: Inbound Tourism Consumption by Products (Expenditure at market price)

(Rs. crores)

Industries	Foreign Tourist	Non-Resident Indians	Total International Demand
(A) Tourism Characteristic Products			
Accommodation services	4,026	1,576	5,602
Food and beverage serving services	2,335	1,519	3,854
Passenger transport services			
- Railway	300	113	413
- Road			
Buses	370	249	619
Other mechanised vehicles	111	75	186
Non-mechanised road transport	12	8	20
- Water	176	31	207
- Air	4,055	919	4,974
Transport equipment rental	967	1,318	2,285
Travel agencies and similar	3,233	2,528	5,761
Other recreational and entertainment activities	930	2,130	3,060
Sub Total (A)	**16,515**	**10,466**	**26,981**
(B) Tourism Related Products			
Clothing and garments	1,018	814	1,832
Processed food	*	*	*
Tobacco products	*	*	*
Alcohol	*	*	*
Travel related consumer goods	1,392	1,678	3,070
Footwear	*	*	*
Toiletries	*	*	*
Gems and jewellery	938	1,009	1,947
Medicines and health related items	*	*	*
Printing and publishing	74	157	231
Sub Total (B)	**3,422**	**3,658**	**7,080**
TOTAL (A+B)	**19,937**	**14,124**	**34,061**
Number of tourists (Lakh)	26.16	16.65	42.81
Expenditure per tourist (in Rs.)	76,202	84,835	79,559

** For these items, expenditure is not available from International Passenger Survey as these items were not listed in the items for which expenditure information was collected.*

Table 1b: Inbound Tourism Consumption by products (Expenditure at factor cost)

(Rs. crores)

Industries	Foreign Tourist	Non-Resident Indians	Total International Demand
(A) Tourism Characteristic Products			
Accommodation services	4,025	1,575	5,600
Food and beverage serving services	2,335	1,519	3,854
Passenger transport services			
- Railway	306	115	421
- Road			
Buses	367	247	614
Other mechanised vehicles	110	74	184
Non-mechanised road transport	12	8	20
- Water	174	30	204
- Air	4,021	911	4,932
Transport equipment rental	959	1,307	2,266
Travel agencies and similar	3,205	2,507	5,712
Other recreational and entertainment activities	888	2,033	2,921
Sub Total (A)	**16,402**	**10,326**	**26,728**
Tourism Related Products			
Clothing and garments	735	588	1,323
Processed food	*	*	*
Tobacco products	*	*	*
Alcohol	*	*	*
Travel related consumer goods	941	1,135	2,076
Footwear	*	*	*
Toiletries	*	*	*
Gems and jewellery	542	582	1,124
Medicines and health related items	*	*	*
Printing and publishing	50	107	157
Sub Total (B)	**2,268**	**2,412**	**4,680**
TOTAL (A+B)	**18,670**	**12,738**	**31,408**

n.a. These items are not applicable in inbound tourism consumption as the expenditure incurred on these items is not available in international passenger survey.

Table 2a: Domestic Tourism Consumption by products and by purpose of travel
(Expenditure at market price)

(in Rs. crores)

Industries	Business & Trading	Leisure & Holiday	Religious & Pilgrimage	Social	Others	Total
(A) Tourism Characteristic Products						
Accommodation services	449	417	462	184	644	2,156
Food and beverage serving services	518	630	972	1,209	864	4,193
Passenger transport services						
- Railway	364	394	623	1,519	430	3,330
- Road						
Buses	278	295	716	2,311	425	4,025
Other mechanised vehicles	58	56	116	218	70	518
Non-mechanised road transport	22	28	42	116	33	241
- Water	-	5	4	3	-	12
- Air	95	176	154	118	61	604
Transport equipment rental	64	101	147	249	98	659
Travel agencies and similar	105	323	591	204	68	1,291
Other recreational and entertainment activities	78	79	34	190	52	433
Sub Total (A)	**2,031**	**2,504**	**3,861**	**6,321**	**2,745**	**17,462**
(B) Tourism Related Products						
Clothing and garments	1,096	599	814	3,989	520	7,018
Processed food	114	138	214	568	205	1,239
Tobacco products	48	24	38	168	34	312
Alcohol	32	14	13	90	19	168
Travel related consumer goods	273	272	246	558	170	1,519
Footwear	122	68	108	468	90	856
Toiletries	102	80	127	310	112	731
Gems and jewellery	44	46	79	876	66	1,111
Medicines and health related items	18	29	30	68	2,192	2,337
Printing and publishing	44	14	21	84	100	263
Sub Total (B)	**1,893**	**1,284**	**1,690**	**7,179**	**3,508**	**15,554**
TOTAL (A+B)	**3,924**	**3,788**	**5,551**	**13,500**	**6,253**	**33,016**
Number of tourists (Lakh)	423	330	758	3,236	753	5,499
Expenditure per tourist (in Rs.)	928	1,149	732	417	831	601

Table 2b: Domestic Tourism Consumption by products and by purpose of travel
(Expenditure at market price after adjusting for deviation of survey data from actual[13])

(Rs. Crores)

Industries	Business & Trading	Leisure & Holiday	Religious & Pilgrimage	Social	Others	Total
(A) Tourism Characteristic Products						
Accommodation services	1,033	959	1,063	424	1,481	4,960
Food and beverage serving services	828	1,008	1,555	1,935	1,383	6,709
Passenger transport services						
- Railway	1,299	1,406	2,222	5,422	1,536	11,885
- Road						
Buses	4,863	5,161	12,529	40,441	7,430	70,424
Other mechanised vehicles	318	308	633	1,191	384	2,834
Non-mechanised road transport	754	985	1,443	4,005	1,140	8,327
- Water	13	137	118	88	8	364
- Air	898	1,673	1,464	1,118	581	5,734
Transport equipment rental	64	101	147	249	98	659
Travel agencies and similar	842	2,581	4,728	1,630	543	10,324
Other recreational and entertainment activities	43	43	19	104	28	237
Sub Total (A)	**10,955**	**14,362**	**25,921**	**56,607**	**14,612**	**122,457**
(B) Tourism Related Products						
Clothing and garments	1,096	599	814	3,989	520	7,018
Processed food	162	196	303	805	290	1,756
Tobacco products	178	89	141	622	125	1,155
Alcohol	28	13	12	79	16	148
Travel related consumer goods	968	961	871	1,975	600	5,375
Footwear	135	75	120	520	100	950
Toiletries	112	88	140	341	123	804
Gems and jewellery	235	244	421	4,642	349	5,891
Medicines and health related items	42	67	69	158	5,046	5,382
Printing and publishing	36	12	17	68	81	214
Sub Total (B)	**2,992**	**2,344**	**2,908**	**13,199**	**7,250**	**28,693**
TOTAL (A+B)	**13,947**	**16,706**	**28,829**	**69,806**	**21,862**	**151,150**

[13] For Railways, Road and Water transport services, the expenditures are taken from CSO's Absorption Matrix, and for the rest of the industries, the adjustment factors are applied to adjust the survey results.

Table 2c: Domestic Tourism Consumption by products and by purpose of travel
(Expenditure at factor cost)

(in Rs. crores)

Industries	Business & Trading	Leisure & Holiday	Religious & Pilgrimage	Social	Others	Total
(A) Tourism Characteristic Products						
Accommodation services	1,033	959	1,062	423	1,480	4,957
Food and beverage serving services	828	1,008	1,555	1,935	1,383	6,709
Passenger transport services						
- Railway	1,324	1,434	2,266	5,528	1,566	12,118
- Road						
Buses	4,822	5,118	12,424	40,101	7,367	69,832
Other mechanised vehicles	316	306	627	1,181	381	2,811
Non-mechanised road transport	748	977	1,431	3,971	1,130	8,257
- Water	13	136	117	88	8	362
- Air	890	1,659	1,452	1,109	576	5,686
Transport equipment rental	64	100	146	247	97	654
Travel agencies and similar	835	2,559	4,688	1,616	539	10,237
Other recreational and entertainment activities	41	41	18	99	27	226
Sub Total (A)	**10,914**	**14,297**	**25,786**	**56,298**	**14,554**	**121,849**
(B) Tourism Related Products						
Clothing and garments	791	432	587	2,879	375	5,064
Processed food	125	151	233	619	223	1,351
Tobacco products	122	61	96	426	85	790
Alcohol	13	6	5	36	7	67
Travel related consumer goods	654	650	589	1,335	406	3,634
Footwear	87	48	77	333	64	609
Toiletries	69	55	87	211	76	498
Gems and jewellery	136	141	243	2,680	202	3,402
Medicines and health related items	31	50	52	118	3,786	4,037
Printing and publishing	24	8	12	46	55	145
Sub Total (B)	**2,052**	**1,602**	**1,981**	**8,683**	**5,279**	**19,597**
TOTAL (A+B)	**12,966**	**15,899**	**27,767**	**64,981**	**19,833**	**141,446**

Table 3a: Outbound Tourism Consumption by products
(Expenditure at market price)

(Rs. crores)

Industries	Total pre-trip expenditure by Indians going abroad
(A) Tourism Characteristic Products	
Accommodation services	-
Food and beverage serving services	-
Passenger transport services	
- Railway	-
- Road	
Buses	-
Other mechanised vehicles	-
Non-mechanised road transport	-
- Water	-
- Air	-
Transport equipment rental	-
Travel agencies and similar	15
Other recreational and entertainment activities	-
Sub Total (A)	**15**
(B) Tourism Related Products	
Clothing and garments	3,377
Processed food	596
Tobacco products	150
Alcohol	81
Travel related consumer goods	731
Footwear	411
Toiletries	352
Gems and jewellery	535
Medicines and health related items	1,125
Printing and publishing	127
Sub Total (B)	**7,485**
TOTAL (A+B)	**7,500**
Number of tourists (Lakh)	50.0
Expenditure per tourist (in Rs.)	15,000

Note: The expenditure incurred by outbound tourists on tourism characteristic industries are not taken into account as this expenditure is done in the country of destination and not in India. However, expenditure on travel agencies can be taken. Rest of the expenditures is pre-trip expenditure and is therefore incurred only on tourism related industries.

Table 3b: Outbound Tourism Consumption by products
(Expenditure at factor cost)

(Rs. crores)

Industries	Total pre-trip expenditure by Indians going abroad
(A) Tourism Characteristic Products	
Accommodation services	-
Food and beverage serving services	-
Passenger transport services	
- Railway	-
- Road	
Buses	-
Other mechanised vehicles	-
Non-mechanised road transport	-
- Water	-
- Air	-
Transport equipment rental	-
Travel agencies and similar	15
Other recreational and entertainment activities	-
Sub Total (A)	**15**
(B) Tourism Related Products	
Clothing and garments	2,437
Processed food	459
Tobacco products	103
Alcohol	37
Travel related consumer goods	494
Footwear	263
Toiletries	218
Gems and jewellery	309
Medicines and health related items	844
Printing and publishing	87
Sub Total (B)	**5,251**
TOTAL (A+B)	**5,266**

Table 4: Total Tourism Demand by products and by forms of tourism
(at factor cost)

(Rs. crores)

Industries	Inbound Tourism Consumption	Domestic Tourism Consumption	Outbound Tourism Consumption	Total Tourism Consumption
(A) Tourism Characteristic Products				
Accommodation services	5,600	4,957	-	10,557
Food and beverage serving services	3,854	6,709	-	10,563
Passenger transport services				
- Railway	421	12,118	-	12,539
- Road				
Buses	614	69,832	-	70,446
Other mechanised vehicles	184	2,811	-	2,995
Non-mechanised road transport	20	8,257	-	8,277
- Water	204	362	-	566
- Air	4,932	5,686	-	10,618
Transport equipment rental	2,266	654	-	2,920
Travel agencies and similar	5,712	10,237	15	15,964
Other recreational and entertainment activities	2,921	226	-	3,147
Sub Total (A)	**26,728**	**121,849**	**15**	**148,592**
(B) Tourism Related Products				
Clothing and garments	1,323	5,064	2,437	8,824
Processed food	n.a.	1,351	459	1,810
Tobacco products	n.a.	790	103	893
Alcohol	n.a.	67	37	104
Travel related consumer goods	2,076	3,634	494	6,204
Footwear	n.a.	609	263	872
Toiletries	n.a.	498	218	716
Gems and jewellery	1,124	3,402	309	4,835
Medicines and health related items	n.a.	4,037	844	4,881
Printing and publishing	157	145	87	389
Sub Total (B)	**4,680**	**19,597**	**5,251**	**29,528**
TOTAL (A+B)	**31,408**	**141,446**	**5,266**	**178,120**

Table 5: Production Account of the Tourism Industries
(at factor cost)

(Rs. crores)

Industries	Value of Output	Intermediate Consumption	Value Added
(A) Tourism Characteristic Products			
Accommodation services	11,510	6,464	5,046
Food and beverage serving services	57,380	39,490	17,890
Passenger transport services			
- Railway	42,601	21,050	21,551
- Road			
Buses	112,523	90,140	22,383
Other mechanised vehicles	114,003	91,325	22,678
Non-mechanised road transport	9,217	2,640	6,577
- Water	25,857	10,612	15,245
- Air	11,317	6,399	4,918
Transport equipment rental	3,890	2,740	1,150
Travel agencies and similar	16,694	8,441	8,253
Other recreational and entertainment activities	6,425	5,225	1,200
Sub Total (A)	**411,417**	**284,526**	**126,891**
(B) Tourism Related Products			
Clothing and garments	39,764	25,740	14,024
Processed food	63,372	51,589	11,783
Tobacco products	42,931	24,794	18,137
Alcohol	31,122	23,280	7,842
Travel related consumer goods	40,092	31,899	8,193
Footwear	11,340	8,758	2,582
Toiletries	18,716	14,338	4,378
Gems and jewellery	31,978	20,798	11,180
Medicines and health related items	48,884	35,976	12,908
Printing and publishing	13,992	9,554	4,438
Sub Total (B)	**342,191**	**246,726**	**95,465**
TOTAL (A+B)	**753,608**	**531,252**	**222,356**

Table 6a: Tourism Industry Ratios

Industries	Inbound Tourism Consumption	Domestic Tourism Consumption	Outbound Tourism Consumption	Total Tourism Consumption
(A) Tourism Characteristic Products				
Accommodation services	0.4866	0.4307	-	0.9173
Food and beverage serving services	0.0672	0.1169	-	0.1841
Passenger transport services				
- Railway	0.0099	0.2844	-	0.2943
- Road				
Buses	0.0055	0.6206	-	0.6261
Other mechanised vehicles	0.0016	0.0247	-	0.0263
Non-mechanised road transport	0.0022	0.8958	-	0.8980
- Water	0.0079	0.0140	-	0.0219
- Air	0.4358	0.5024	-	0.9382
Transport equipment rental	0.5825	0.1681	-	0.7506
Travel agencies and similar	0.3422	0.6133	0.0009	0.9563
Other recreational and entertainment activities	0.4547	0.0352	-	0.4898
(B) Tourism Related Products				
Clothing and garments	0.0333	0.1273	0.0613	0.2219
Processed food	n.a.	0.0213	0.0072	0.0286
Tobacco products	n.a.	0.0184	0.0024	0.0208
Alcohol	n.a.	0.0022	0.0012	0.0034
Travel related consumer goods	0.0518	0.0906	0.0123	0.1547
Footwear	n.a.	0.0536	0.0232	0.0769
Toiletries	n.a.	0.0266	0.0116	0.0382
Gems and jewellery	0.0352	0.1063	0.0097	0.1511
Medicines and health related items	n.a.	0.0826	0.0173	0.0998
Printing and publishing	0.0113	0.0104	0.0062	0.0279

Table 6b: Tourism Value Added

(Rs. crores)

Industries	Inbound Tourism	Domestic Tourism	Outbound Tourism	Total Tourism Value Added	Total Non-Torism Value Added	Total Value Added
(A) Tourism Characteristic Products						
Accommodation services	2,455	2,173	-	4,629	417	5,046
Food and beverage serving services	1,202	2,091	-	3,294	14,596	17,890
Passenger transport services						
- Railway	213	6,129	-	6,342	15,209	21,551
- Road						
Buses	123	13,891	-	14,014	8,369	22,383
Other mechanised vehicles	36	560	-	596	22,082	22,678
Non-mechanised road transport	14	5,892	-	5,906	671	6,577
- Water	120	213	-	334	14,911	15,245
- Air	2,143	2,471	-	4,614	304	4,918
Transport equipment rental	670	193	-	863	287	1,150
Travel agencies and similar	2,824	5,062	7	7,893	360	8,253
Other recreational and entertainment activities	546	42	-	588	612	1,200
Sub Total (A)	**10,348**	**38,718**	**7**	**49,073**	**77,818**	**126,891**
(B) Tourism Related Products						
Clothing and garments	467	1,785	860	3,112	10,912	14,024
Processed food	-	251	85	336	11,447	11,783
Tobacco products	-	334	44	377	17,760	18,137
Alcohol	-	17	9	27	7,815	7,842
Travel related consumer goods	424	742	101	1,267	6,926	8,193
Footwear	-	138	60	198	2,384	2,582
Toiletries	-	116	51	167	4,211	4,378
Gems and jewellery	394	1,188	108	1,690	9,490	11,180
Medicines and health related items	-	1,066	223	1,290	11,618	12,908
Printing and publishing	50	46	28	124	4,314	4,438
Sub Total (B)	**1,335**	**5,685**	**1,568**	**8,588**	**86,877**	**95,465**
TOTAL (A+B)	**11,683**	**44,403**	**1,576**	**57,662**	**164,694**	**222,356**

Table 6c: Tourism contribution in GDP

(Rs. crores)

Tourism value added (as obtained in Table 6b)	57,662
VA from railway margin	72
VA from Transport margin	820
VA from trade	3,882
Total Tourism Value Added	**62,436**
Gross Domestic Product	**2,249,493**
Direct contribution of tourism in GDP (%)	**2.78**
Tourism output multiplier	2.1
Direct and Indirect contribution of tourism in GDP (%)	**5.83**

Table 7a: Tourism Employment

(Number of jobs in Lakh)

Tourism specific jobs	Total number of jobs	Tourism specific jobs
(A) Tourism Characteristic Products		
Accommodation services	6.22	5.71
Food and beverage serving services	74.14	13.65
Passenger transport services		
- Railway	10.24	3.01
- Road		
Buses	55.87	34.98
Other mechanised vehicles	118.31	3.11
Non-mechanised road transport	38.03	34.15
- Water	92.90	2.04
- Air	15.78	14.80
Transport equipment rental	2.72	2.04
Travel agencies and similar	77.39	74.01
Other recreational and entertainment activities	12.38	6.06
Sub Total (A)	**503.99**	**193.57**
(B) Tourism Related Products		
Clothing and garments	49.87	11.07
Processed food	21.40	0.61
Tobacco products	45.03	0.94
Alcohol	4.35	0.01
Travel related consumer goods	8.35	1.29
Footwear	6.74	0.52
Toiletries	4.50	0.17
Gems and jewellery	15.27	2.31
Medicines and health related items	3.59	0.36
Printing and publishing	7.85	0.22
Sub Total (B)	**166.95**	**17.49**
TOTAL (A+B)	**670.94**	**211.07**

Table 7b: Tourism contribution in Employment

(Number of jobs in Lakh)

Number of tourism specific jobs	211.1
Jobs due to trade	0.1
Jobs due to railway transport	1.5
Jobs due to other transport	2.7
Total Tourism Jobs	**215.4**
Total estimated number of jobs*	**4,687.4**
Direct Share of Tourism (%)	**4.59**
Tourism Employment Multiplier	1.8
Direct and Indirect share of Tourism in Total number of jobs (%)	**8.27**

Note: Total number of jobs for the year 2002-03 is projected using CSO estimates for the year 1993-94 and 1999-00.

IX. Same Day Tourism

The Domestic Tourism Survey conducted by NCAER gives some estimates for same day tourism. The survey was conducted during the month of December, 2002. It estimates a total of 243 million same-day trips for tourism for this month out of which 176 million were from the rural households. Average expenditure for all purposes taken together comes out to be Rs. 86. This implies a total expenditure of almost Rs. 21.7 billion (or Rs. 2100 crores) on tourist same-day trips for the month of December.

An effort is made to estimate the annual expenditure due to same-day tourism on the basis of estimation for the month of December. For this, Ministry of Tourism provided monthly data on domestic tourist visits. The actual data and the monthly percentage distribution of visits over the year 2002 is given below:

Table A1: Monthly distribution of Domestic Tourists Visits

Month	Domestic tourist visits	Percentage Distribution
January	17199292	7.95
February	17455289	8.07
March	15010858	6.94
April	17226012	7.96
May	15293920	7.07
June	13501409	6.24
July	16361464	7.56
Aug	39927263	18.45
Sep	14981667	6.92
Oct	14381903	6.65
Nov	17261454	7.98
Dec	17816174	8.23
Total	216416705	100.0

Assuming that the same-day tourism follows the same pattern throughout the year as the domestic tourism, the total same-day tourist visits for the year 2002 are estimated using the estimated same-day tourists visits for December. Hence, total trips come out to be 29.5 billion. Once total same-day tourist trips are estimated, applying the above percentage distribution on this total, monthly

distribution of same-day trips is obtained. The average expenditure for same-day trip is Rs. 86, multiplying which with no. of trips gives the total estimated expenditure for each month. The summation of this gives an estimate of total expenditure on account of same-day tourist trips.

Table A2: Estimated number of same-day visitors and their expenditure

Month	Percentage distribution of domestic tourist visits	Same Day Visitors	
		(Number in million)	Estimated expenditure (Rs. million)
January	7.95	235	20273
February	8.07	238	20575
March	6.94	205	17693
April	7.96	235	20304
May	7.07	209	18027
June	6.24	184	15914
July	7.56	223	19285
Aug	18.45	545	47062
Sep	6.92	204	17659
Oct	6.65	196	16952
Nov	7.98	235	20346
Dec	8.23	243	21000
	100	2952	255091

Hence the estimated total expenditure comes out to be Rs.25,509 crore. Converting this to factor cost using the ratio of total tourism demand at market price to total tourism demand at factor cost, the expenditure comes out to be Rs. 22,861 crore. This expenditure forms 1 percent of India's GDP. Hence the share of tourism in GDP, which is estimated at 2.78 percent comes further up to 3.78 percent. Similarly, the direct and indirect share of tourism at 5.83 percent can be expected to go up to 6.83 percent. To estimate employment on account of same-day tourism, the value added-employment relationship as observed in tourism sector (excluding same-day) is imposed on same-day tourism value added. *Same-day tourism is then expected to contribute another 8.1 million workers in tourism employment, bringing the direct and indirect share of 8.27 percent in total employment to 9.27 percent*. But it should be noted that this estimation is based on very liberal assumptions and a fairly small sample canvassed in only one month of the year.