

Tourism Satellite Account for India

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First TSA for India... A Journey of Five Years



- **Developing TSA for India – Feasibility Study (2001)**
- **Domestic Tourism Survey 2002**
- **International Passenger Survey 2003**
- **Constitution of Advisory Committee**
- **Generation of TSA Tables**
- **Presentation and discussion of results**
- **Publication of First TSA 2006**





TSA Tables-WTO Recommendation

Table 1: Inbound tourism consumption by products

Table 2: Domestic tourism consumption by products and
by purpose of travel

Table 3: Outbound tourism consumption by products

Table 4: Tourism consumption by products and forms of tourism

Table 5: Production Accounts of the tourism industries

Tourism Industry Ratios

Table 6: Tourism Value Added

Table 7: Employment in the tourism industries



Summary of Findings – Feasibility Study



Domestic Household Tourism

- No current data on expenditure patterns
- No data on same-day visitors



Business Travel

- No data source identifiable for corporate travel (both public and private)
- Central government data available only for total travel expenditure, no breakdown
- State government data may or may not be available

International: Small sample + disaggregation





Data Source for Demand Side of TSA

- **Domestic Tourism Survey - NCAER**

- Household survey - rural/urban
- Covered over 400,000 households from 221 districts and 666 towns
- Reference period : Jan - Dec 2002 (two rounds)

- **International Passenger Survey - HICS**

- Sample size
 - 18,000 Foreign Nationals
 - 10,000 NRIs
 - 2000 Transit Passengers
- Reference period: Jan - Dec 2003



Estimated Tourists and Expenditure (2002-03)

	Tourists (Million)	Expenditure per tourist (Rs.)
Inbound	4.3	80,000
Foreign	2.62	76,000
NRI's	1.66	85,000
Domestic	549.4	601
Outbound	5.0	15,000



TSA - Advisory Committee



- Reserve Bank of India
- Central Statistical Organisation
- Planning Commission
- Ministry of Labour
- Ministry of Tourism
- National Council of Applied Economic Research





Data Source for Supply Side of TSA

Tourism specific industries	Source of data	
	Value added	Value of output
Hotels and Restaurants	NAS	
Accommodation	NSSO 2001-02 ratios	CSO 2001-02 VA/Q ratio
Food and Beverages	NSSO 2001-02 ratios	NSSO 2001-02 VA/Q ratio
Passenger transport		
Railway	NAS	VA/Q ratio of I/O 1998-99
Road (Buses, mechanised, non-mechanised) *	CSO unpublished	VA/Q ratio of I/O 1998-99
Water	CSO unpublished	VA/Q ratio of I/O 1998-99
Air	CSO unpublished	VA/Q ratio of I/O 1998-99
Transport equipment rental **		VA/Q ratio of I/O 1998-99
Travel agencies and similar	NAS	VA/Q ratio of I/O 1998-99
Other Services (Recreational and Entertainment)	CSO	VA/Q ratio of I/O 1998-99

- Other mechanised road transport includes transport equipment rental also, for which data is not separately available



Data Source for Supply Side of TSA

Tourism related industries	Source of data
Clothing and Garments	Used CSO value added available at 2-digit level but the required industries are only part of those at 2-digit level, so we used their proportions for which we take data from ASI and NSSO 2000-01.
Processed food	
Tobacco products	
Alcohol	
Durable goods	
Footwear	Also taking VA/Q ratio from these sources and applying on the value added to get the value of output of these industries.
Toiletries	
Gems and Jewellery	
Medicines and health	
Printing and Publishing	



Steps Followed in Developing TSA

Step1: Domestic Tourism Survey Data is adjusted for the under/over estimation using the factors obtained using NSSO and CSO ratio for the year 1999-00

Step 2: Inbound, Domestic (Factor Adjusted) and Outbound tourism expenditure, which is at purchaser's price are converted to factor cost using I/O 1998-99 Trade and Transport Margin to Output ratios



Steps...



Step 3: Ratio of hence obtained tourism expenditure for tourism specific and related industries to their respective value of output (supply side) gives the tourism industry ratio

Step 4: These ratios applied on value added of these industries give the tourism value added





Estimating Tourism Employment

- According to WTO recommendation, total employment in Tourism specific industries forms the total Tourism employment.
- For **Tourism characteristic industries**, labour to output ratio is taken from NSSO survey on “Unorganised Services” and the ratios are applied on tourism output to get the employment.
- For **Tourism related industries**, tourism industry ratios are applied on total employment of these industries to get tourism employment.



Factors for adjustment of Tourism Expenditures Using NSSO and NAS Data

<i>Tourism specific Industries</i>	1999-00
Accommodation Services	2.30
Food and Beverage Serving Services	1.60
Passenger Transport Services	Expenditure are taken from the input-output absorption matrix
Railway	
Road	
Buses	
Other mech vehicles	
Non Mechanised Road Transport	
Water	
Air	9.50
Transport Equipment Rental	1.00
Travel Agencies and similar	8.00
Other Recreational and Entertainment activities	0.55

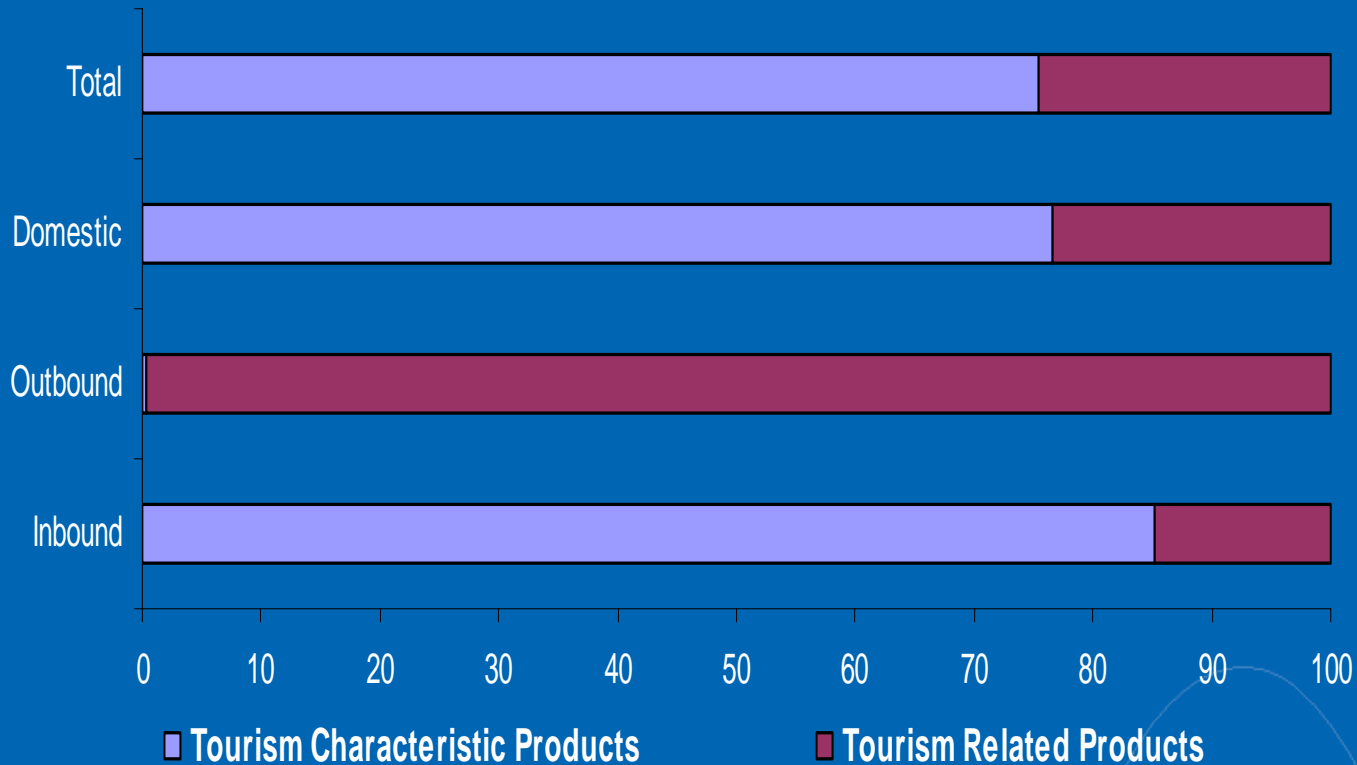


Factors for adjustment of Tourism Expenditures Using NSSO and NAS Data

Tourism related Industries	1999-00
Clothing and Garments	1.00
Processed food	1.42
Tobacco products	3.70
Alcohol	0.87
Travel Related Consumer Goods	3.54
Footwear	1.11
Toiletries	1.10
Gems and Jewellery	5.30
Medicines and Health Related items	2.30
Printing and Publishing	0.81



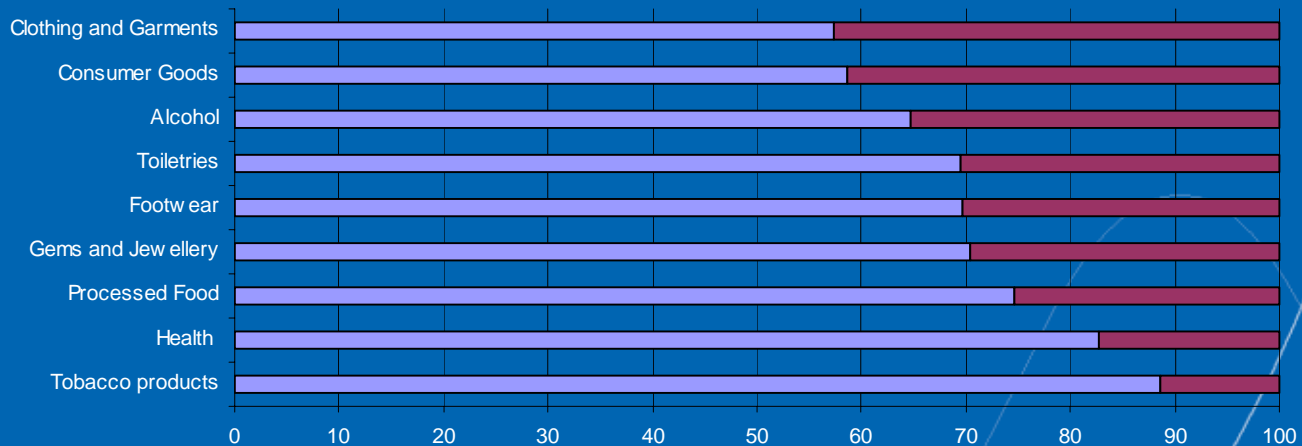
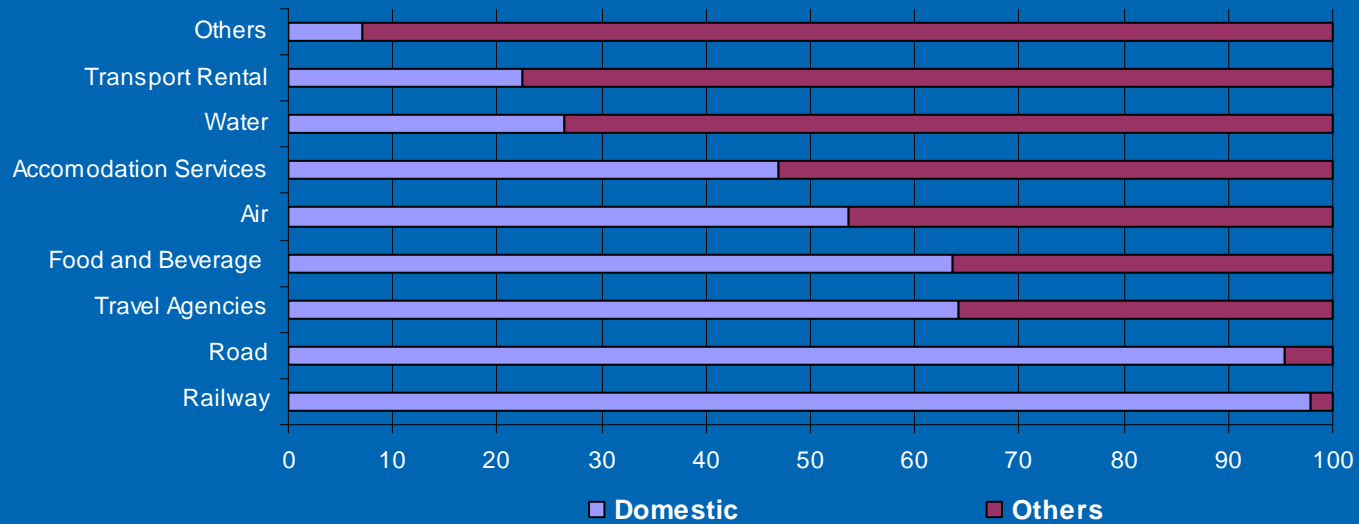
Tourism Specific Industries Vs. Tourism Related Industries (Percent of VA)





Domestic Tourism Vs. Others

(% Value Added)





Tourism Contribution to GDP in 2002

(as per WTO recommended approach)

GDP (Rs. Million)	22.494.930
Tourism Value Added (Rs. Million)	624.360
Tourism Output Multiplier	2,1
Share of Tourism to GDP (%)	
Direct	2,78
Direct and Indirect	5,84
GDP - Manufacturing and Services (Rs. Million)	14.918.950
Share of Tourism to GDP-M&S (%)	
Direct	4,19
Direct and Indirect	8,79



Contribution of Tourism to Total Employment in 2002

(as per WTO recommendation)

Total estimated jobs * (Million)	468,7
Total estimated tourism specific jobs (Million)	21,5
Tourism Employment Multiplier	1,8
Share of tourism jobs to total (%)	
Direct	4,56
Direct and Indirect	8,21
Total estimated jobs - Manufacturing and Services	207,1
Share of tourism jobs to M&S (%)	
Direct	10,4
Direct and Indirect	18,7



Top 15 sectors in terms of proportion to GDP (1998-99)

Sector No.	I-O Sector	GDP (Rs. billion)	Share in GDP*	Rank	Share in Total GDP
107	Trade	2103	22,58	1	13,16
109	Banking	849	9,12	2	5,31
104	Other transport services	734	7,88	3	4,59
114	Other services	687	7,38	4	4,30
111	Ownership of dwellings	676	7,26	5	4,23
112	Education and research	665	7,14	6	4,16
100	Electricity	374	4,01	7	2,34
106	Communication	245	2,63	8	1,53
113	Medical and health	188	2,02	9	1,18
108	Hotels and restaurants	147	1,57	10	0,92
103	Railway transport services	141	1,51	11	0,88
72	Iron, steel and ferro alloys	138	1,48	12	0,86
98	Miscellaneous manufacturing	120	1,28	13	0,75
38	Miscellaneous food products	117	1,25	14	0,73
42	Cotton textiles	110	1,18	15	0,69

* Excluding Agriculture, Mining, Construction and Public Administration & Defence

- TSA 2002 is the first systematic attempt to measure the contribution of tourism to Indian economy
- Undertaken two primary tourism focused surveys to generate the demand side data
- HBS surveys – frequency and context
- Domestic tourism issues
 - Survey methodology
 - Concepts and definition
 - tourism vs traveler vs same day tourist
 - Usual environment
 - Business/trade, Leisure/holidays, Religious/pilgrimage
 - Expenditure – Respondents selection, Recall problem, Package trip, etc.
- Supply side
 - Underestimation by surveys
 - Not updated ratios
 - Does not provide disaggregate level break up as it required for TSA framework
 - For example : Hotel and Restaurants as one in NAS but TSA reports as accommodation and Food & beverages
 - Passenger and transport

Thank You

