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Why investing in TSA?

Analyses tourism from an economic point of view

Fills the gap relating to role of tourism in economy

Calculates tourism value added and employment

Derives direct shares in GDP and Employment

Illustrates the interlinkages of tourism with other sectors

Satellite Accounts

- Measure the size of economic sectors that are not defined in National Accounts
- Maintain loose relationship with NA, with boundaries expanded and reclassified.
- Prepared for certain types of transactions which are analyzed from expenditure side
- Output of sectors is measured as total produce/supply but for certain sectors, output is the value demanded by the consumer







Tourism Satellite Account

Accounting procedure

To measure consumption of goods and services

Associated with tourism

Within the geographic boundary

according to internationally agreed standards (TSA RMF 2008), concepts, classifications and definitions







Tables 1-3: Expenditure of Inbound, Domestic tourism and Outbound tourism

Table 4: Internal Tourism Consumption by products

Table 5: Production (by tourism industries) or Supply

Table 6: Demand meets supply: Gross Value Added (GVA), Gross Domestic Product

(GDP) attributable to tourism

Table 7: Employment

Table 8: Investment

Table 9: Government consumption

Table 10: Non-monetary indicators







- Table 1: Inbound tourism expenditure by products and classes of visitors
- Table 2: Domestic tourism expenditure by products, classes of visitors and types of trips
- Table 3: Outbound tourism expenditure by products and classes of visitors
- Table 4: Internal tourism consumption by products
- Table 5: Production accounts of tourism industries and stries (at basic prices)
- Table 6: Tables 1 to 3 describe the most important component of tourism consumption: namely tourism expenditure, which includes not only what visitors pay for out of their own budget or pocket, but also what producers (businesses, governments and
- Table 7: E non-profit institutions serving households (NPISH)) or others spend for their benefit (transportation, accommodation, etc.), on which visitors are usually able to report
- Table 8: T fairly well.

 other industries
- Table 9: Tourism collective consumption by products and levels of government
- Table 10: Non-monetary indicators







Tables	Description	Data Source
Table 1: Inbound	Expenditure incurred by	Immigration, Surveys at the border,
Tourism Expenditure	visitors from other countries in	Accommodation surveys.
	the country of reference	Frequency
Table 2: Domestic	Expenditure incurred by a	Tourism-specific survey; or
Tourism Expenditure	resident visitor within the	attached to general household
	economy of reference.	expenditure survey. Frequency
Table 3: Outbound	Expenditure incurred by the	Part of surveys done for Table 1 or
Tourism Expenditure	resident visitor outside the	for Table 2
	country of reference	

TSA challenges

What if reference years of surveys are different?

Possible ways to address it:

- Extrapolate using statistics available for all the reference years, like, number of tourist arrivals/trips
- Make price adjustment using inflation







Expenditure aggregates	Description	
National Tourism Expenditure	Expenditure by resident visitors – sum of domestic; and outbound expenditure	
International Tourism Expenditure	Sum of inbound expenditure (activities of non-resident visitor within the country of reference); and outbound expenditure (activities of resident visitor outside the country of reference)	
Internal Tourism Expenditure	All expenditure incurred within the country of reference - sum of domestic; inbound; and pretrip outbound expenditure	

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- Table
- Table
- Table 4 combines internal tourism expenditure, made up of inbound tourism expenditure purch from table 1 (column 1.3) and domestic tourism expenditure from table 2 (column 2.9),
 - with the other components of tourism consumption. (para. 2.25) These other components constitute three broad categories:
- Table
 Services associated with vacation accommodation on own account,
 - Tourism social transfers in kind (except refunds).
- Other imputed consumption. Table
 - government
- Table 10: Non-monetary indicators







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- Table 3: Outbound tourism expenditure by products and classes of visitors
- Table 4: Internal tourism consumption by products
- Table 5: Production accounts of tourism industries and other industries (at basic prices)
- Table 6: Total domestic supply and internal tourism consum (at purchasers' prices)
- Table 7 Table 5 presents the production accounts of tourism industries and other industries in the
- Table 8 economy of reference. It conforms formally to the format established in the *System of National Accounts 2008*: output is broken down by product, is valued at basic prices (see SNA 2008, para. 6.51 (a)) and occupies a block of rows in the upper part of the table. Then, intermediate
- Table 9 consumption (also called intermediate inputs) is presented (para. 4.17) valued at purchasers' prices, (see SNA 2008, para. 6.64). The difference between these two values is called gross value
 - added (GVA) at basic prices.
- Table 10: non-monetary maleators







- Table 1: Inbound tourism expenditure by products and classes of visitors
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- Table 5: Production accounts of tourism industries and other industries (at basic prices)
- Table 6: Total domestic supply and internal tourism consumption (at purchasers' prices)
- Table 7: Employment in the tourism industries
- Table 8: Table 6 is the core of the Tourism Satellite Account system!

 It is where the confrontation and reconciliation between domestic supply and internal
- Table 9: tourism consumption take place. It derives from the supply and use tables of the *System* of National Accounts 1993.







Tables	Description	Data Source
Table 4: Total Internal	Most comprehensive measurement of	Sum Total of Table 1, 2 and
Tourism Consumption	tourism expenditure in the economy	3.
	of reference. Can also include imputed	
	tourism consumption.	
Table 5: Production	Conforms formally to the SNA format	National SUTs
Account of Tourism	These are prepared using the Supply	
Industries	and Use Tables (SUTs).	
Table 6: Tourism Industry	Core Table of TSA. Total supply is	Tables 4 and 5
Ratios and TDGVA	compared with internal tourism	
	consumption. Tourism Product Ratios	
	(TPR) and Tourism Industry Ratios (TIR)	
	generated	

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- **Table 7: Employment in the tourism industries**
- · Table 8: Tourism gross fixed capital formation of tourism other i Table 7 contains an additional variable on the number of
- · Table establishments for each tourism industry (information that is govern complemented in table 10 by a breakdown of this number according to the size of the establishments).
- Table







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- Table 7: Employment in the tourism industries
- Table 8: Tourism gross fixed capital formation of tourism industries and other industries
- Table 9: The rows in table 8 show a proposed list of gross fixed capital formation items governm (annex 5) related to tourism, and the columns show different blocks.
- Table 10: Non monetary indicators







Tables	Description	Data Source
Table 7: Tourism Employment	Total number of jobs and number of people employed in the tourism specific industries	Nationally conducted household surveys
Table 8: Tourism Gross Fixed Capital Formation	Tourism related assets and infrastructure. Assets like railway passenger coaches, sightseeing buses, hotels etc. Infrastructure like development of a beach.	National Accounts – GFCF (Gross Fixed Capital Formation) by assets

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- Table 5: Production accounts of tourism industries and other industries (at basic prices)
- Table The rows in table 9 show a proposed list of non-market services that are to be purch considered as tourism collective non-market services in terms of the corresponding CPC subclasses (annex 5).
- Table 8: Tourism gross fixed capital formation of tourism stries and other industries
- Table 9: Tourism collective consumption by products and levels of government
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- Table 5: Production accounts of tourism industries and other industries (at basic prices)
- Table 6: Total domestic supply and internal tourism consumption (at purchasers)
- Table 7 Table 10 presents a few quantitative indicators that are related to the previous tables and are important for the interpretation of the monetary
- Table 8: information presented. industries
- Table 9: Tourism consumption by products and levels of government
- Table 10: Non-monetary indicators







Tables	Description	Data Source
Table 9: Tourism	Govt's collective services that can be	General government
Collective Consumption	simultaneously delivered to every member or community. Govt incurs these additional expenditures from its own resources. The GFCE is divided into two components: • Individual – consumer is household – part of PFCE	
	 Collective – consumer is community 	
Table 10: Non-monetary Indicators	All Quantitative indicators	Tourism Statistics

TSA methodology estimates two types of economic impacts

Direct

- The Tourism Satellite Account: Recommended Methodological Framework 2008, an international standard adopted by the UN Statistical Commission and elaborated by UNWTO, OECD and EUROSTAT.
- Involves preparation of 10 Tables

Indirect

- While no mandate as per RMF but gives importance to estimate using appropriate economic modelling techniques.
- For example, India or Spain use the Input-Output Models for obtaining the indirect contribution.







TSA Key TSA aggregates

Measuring tourism demand – Tables 1 to 4

Main Variables: Tourism arrivals, departures, domestic Tourism trips, and their expenditures

Measuring Tourism supply – Tables 5 and 6

Main variables: on Tourism products and Tourism industries, as classified in the International Recommendations for Tourism Statistics 2008







TSA Key TSA aggregates

- Gross value added of tourism industries (GVATI)
 - •Sum of GVA of tourism industries (considers entire GVA irrespective of whether the produce is sold to tourists or others)
- Tourism direct gross value added (TDGVA)
 - •Sum of the part of gross value added of all industries that relates to providing goods and services to tourists (only that output which is sold to tourists is considered here, but the domain includes all industries in the economy)
- Tourism direct gross domestic product (TDGDP)
 - •TDGVA + net indirect taxes
- Tourism direct employment
 - •Number of jobs in Tourism characteristic industries







- ✓ Tourists make expenditures on products in the domestic economy;
- ✓ Domestic production and imports supply to meet these expenditures;
- ✓ Confrontation of the two sets of statistics is done to match supplies and expenditures;
 - ✓ This enables estimating the proportion of domestic production that is involved in supplying the products to tourists' purchases
 - ✓ And estimate the share of TDGVA and TDGDP in the total economy
- ✓ This is the direct contribution of tourism to the economy.







• Sum of the part of gross value added (at basic prices) generated by all industries in response to internal tourism consumption

plus

 the amount of net taxes on products and imports included within the value of this expenditure at purchasers' prices.







How to obtain TDGVA:

The "total GVA" column is the "total GVA" row in Table 5, and the "tourism ratios" column is the "tourism ratios" column from Table 6. These values are then multiplied together to create the TDGVA.

Source: Office of National Statistics, UK







TSA Tourism

Indirect

contribution to GDP

- TSA measures only the direct effects of tourism consumption on output and value added of tourism industries and other industries serving them
- However, several producers do not serve the tourists directly, but they provide goods and services to tourists indirectly through tourism industries.
- By using I-O table and I-O models, it is possible to estimate the indirect contribution of tourism consumption and tourism aggregates to the economy.
- The estimates of direct and indirect shares of tourism aggregates in the total economy facilitate a more realistic impact of tourism activity on the economy







Tourism component extracted from each row and column of 24X24 SUT using TPR and TIR



Additional row and column, representing Tourism separately, generated



Resultant 25X25 SUT converted to 25X25 IO Table



Output and Employment multipliers derived from Leontief Inverse Matrix







