

From data to Action

Management of data-driven knowledge to
promote sustainable tourism

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The United Nations Statistics Division (UNSD)

- Central statistical office of the UN Secretariat
- Coordinates official statistics at global level
- Expertise and leadership in:
 - Population and Housing Censuses
 - Gender Statistics
 - National Accounts
 - Environmental-Economic Accounting
 - International Trade and Tourism Statistics
 - International Classifications
- Global coordinating office for MDG indicators

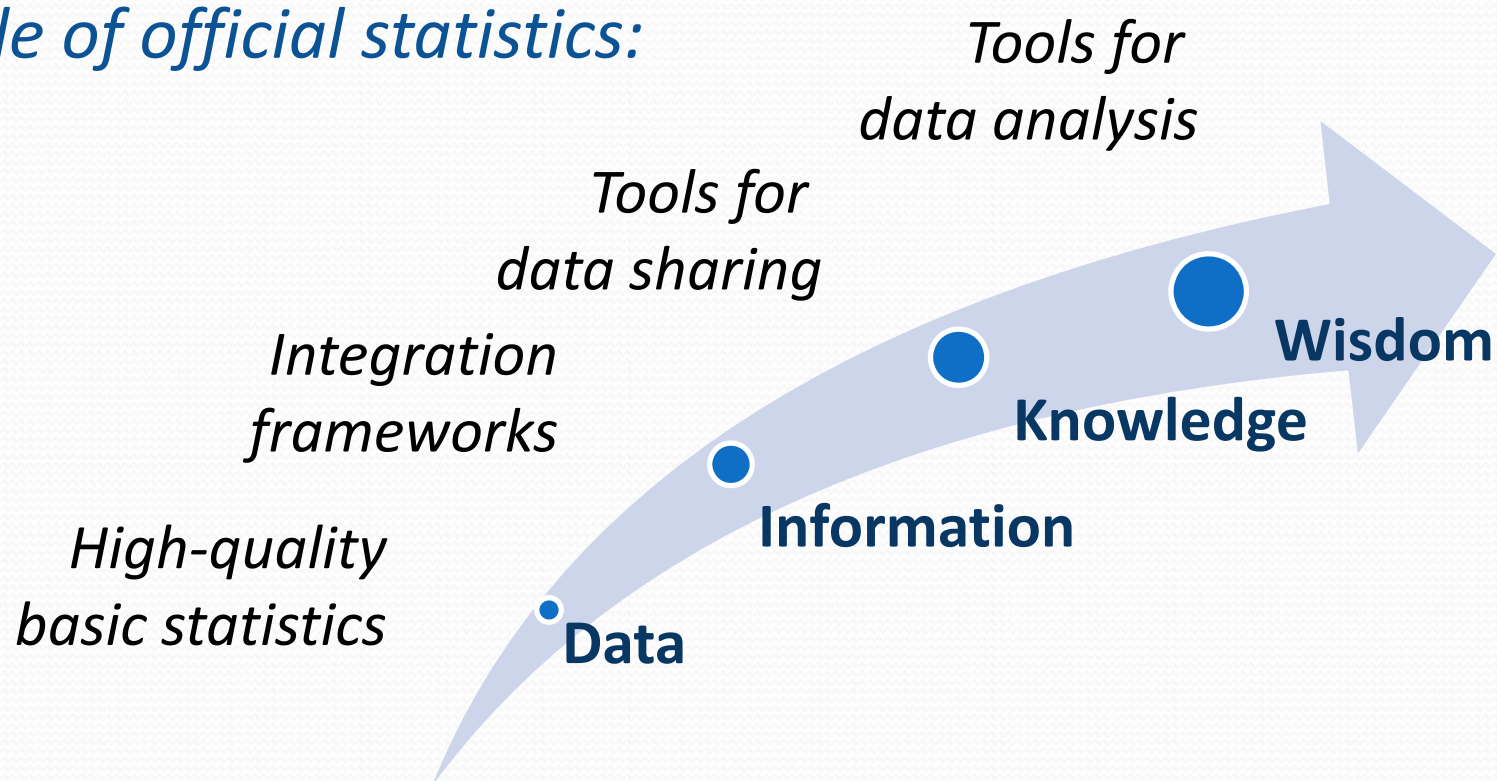


UNSD and Tourism Statistics

- Collaboration with UNWTO's Statistics and Tourism Satellite Account Programme
 - International Recommendations for Tourism Statistics (IRTS) 2008
 - Recommended methodological framework for a Tourism Satellite Account
 - Compilation Guide for IRTS 2008
 - Training workshops on Tourism Statistics
 - Measurement of Sustainable Tourism
 - Use of Big Data for Tourism Statistics

Production chain of the information and knowledge industry

Role of official statistics:





Main points of this talk

I. Policy perspective:

- Post-2015 Development Agenda and the new Sustainable Tourism target

II. Statistics perspective:

- International guidelines on Tourism Statistics and on the Tourism Satellite Account
- Integrated system of social, economic and environmental statistics (SEEA-TSA)

III. Information sharing and analysis perspective:

- Standards for data and metadata exchange (SDMX)
- Open Data - Dissemination data bases, data portals, knowledge bases
- Tools for data integration and visualization
- Insights from Big Data

Post-2015 Development Agenda and Sustainable Tourism target

Background: the Millennium Declaration



Post-2015 Development Agenda and Sustainable Tourism

Progress on Millennium Development Goals



8 Goals

21 Targets

60 Indicators



Post-2015 development agenda and Sustainable Tourism

Lessons learned from the MDG process

- Delay (or even absence) in reporting of indicators: too long for policy making
- Some countries' lack of ownership in production and dissemination of national indicators (often estimated by international agencies)
- Disconnect from national official statistics
- Missing links among the various indicators
- Excessive focus of national policies on improving specific indicators (“Power of Numbers”)



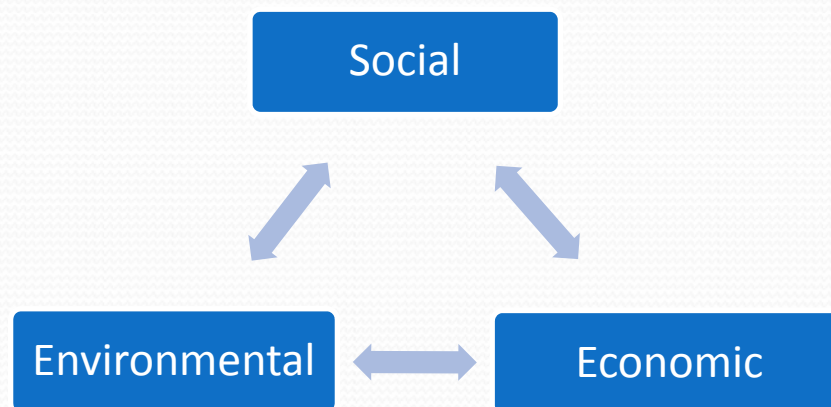
Post-2015 Development Agenda and Sustainable Tourism

Differences between MDGs and Post-2015

- 1) More goals, targets and indicators
- 2) New goals concern all countries
- 3) Sustainability and multi-dimensionality at front and center of new agenda

Sustainable Tourism

- Lanzarote Charter (1995):
 - The three dimensions of sustainable development interact in a unique way in the tourism industries



- Importance of integrating environmental, economic and social information for defining policies in the tourism field



Sustainable Tourism

- Proposed as focus area at Rio+20

“promote environmental awareness, conserve and protect the environment, respect wildlife, flora, biodiversity, ecosystems and cultural diversity, and improve the welfare and livelihoods of local communities by supporting their local economies and the human and natural environment as a whole”

- Target of the post-2015 development agenda

“By 2030 devise and implement policies to promote sustainable tourism which creates jobs, promotes local culture and products”



Measuring Sustainable Tourism

- How to know when improvements are made and when progress is lacking on all three dimensions?
- What interrelationships exist between access to sanitation, medical facilities, labor skills, job creation, natural resources, and, say, number of tourists?
- How can official statisticians provide an integrated information system of social, economic and environmental statistics?



Measuring Sustainable Tourism

Traditional Tourism Statistics

- Inbound, domestic and outbound visitor flows
- Characteristics of visitors and trips
- Tourism expenditure
- Supply of tourism industries services: hotels, restaurants, entertainment, cultural heritage, passenger transportation and travel agencies (with the special case of tour operators and package tours)
- Employment in tourism industries



Measuring Sustainable Tourism

Extended Tourism Statistics

- Tourism Satellite Account (TSA) approach
- Measuring tourism at sub-national level
- Relation tourism and sustainability

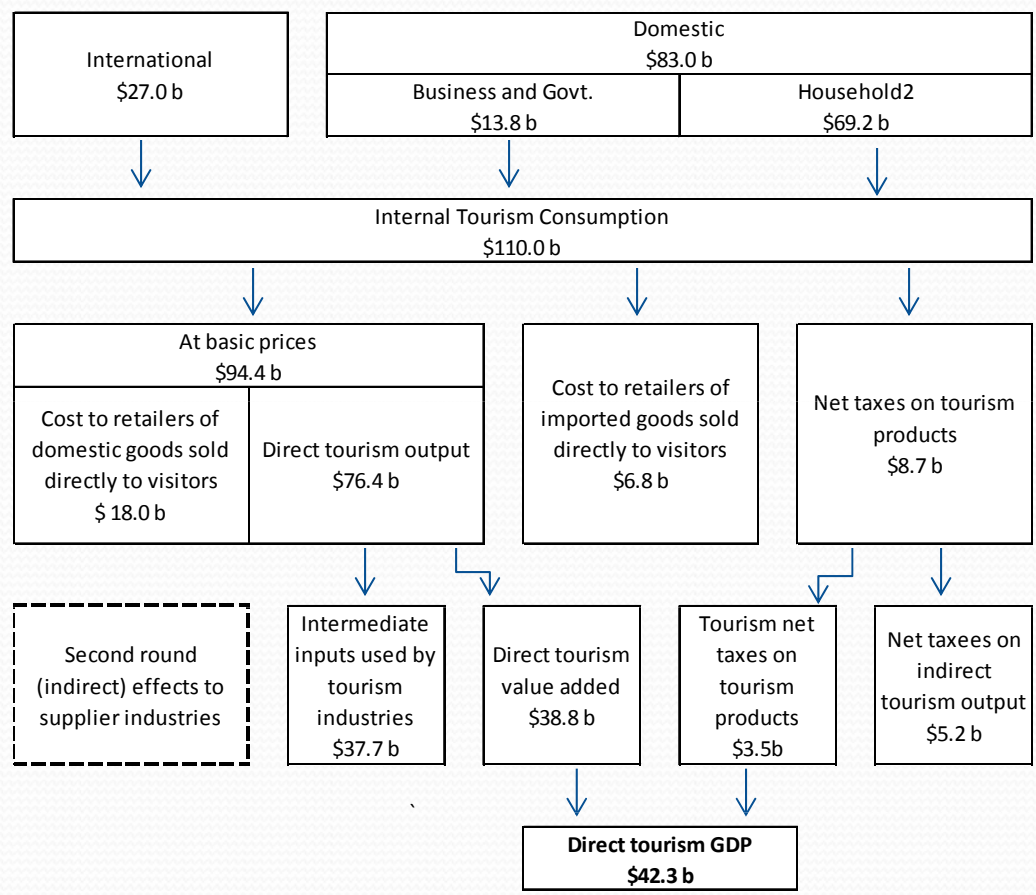


Measuring Sustainable Tourism

Tourism Satellite Account (TSA) approach

- Relationship between consumption by visitors and the supply of goods and services in the tourism industries
- What can it measure?
 - Tourism GDP
 - Employment and gross fixed capital formation in the tourism industries
 - Government administrative expenditures associated with the support and control of tourism

Flow of tourism consumption in the economy (example of Australia, 2012-2013)





Measuring Sustainable Tourism

Measuring tourism at sub-national level

- Need to emphasize importance of specific features of regions as tourism destinations;
- Characteristics and expenditure pattern of visitors can vary markedly across regions;
- Need to design policies to attract visitors and investments that are specific to regional objectives;
- Need to compare tourism across regions and between the regional and national levels , in terms of visitor numbers, characteristics and expenditure,
- Need for regional TSAs

Measuring Sustainable Tourism

Tourism and sustainability

- Estimating links between tourism and environment in national economy:
 - Hybrid flow accounts of Environmental Accounts:
Tourism as a specific set of industries and consumers
 - “Greening” the tourism GDP derived from the Tourism Satellite Account, taking into consideration
 - Cost of degradation of environment*
 - Use of natural capital*
 - Expenditures that prevent degradation (as a further adjustment)*

Hybrid environmental flow accounts specific for tourism

Tourism industries

- Accommodation for visitors
- Food and beverage serving activities
- Passenger transport
- Transport equipment rental
- Travel agencies and other reservation services
- Cultural, sports, and recreational activities
- Country-specific tourism characteristic goods and activities



Tourism Satellite Accounts (TSA)

- Production
- Intermediate Consumption
- Value added
- Tourism consumption



Environmental accounts (SEEA, NAMEA-type accounts)

- Pollution
- Intake of natural resources

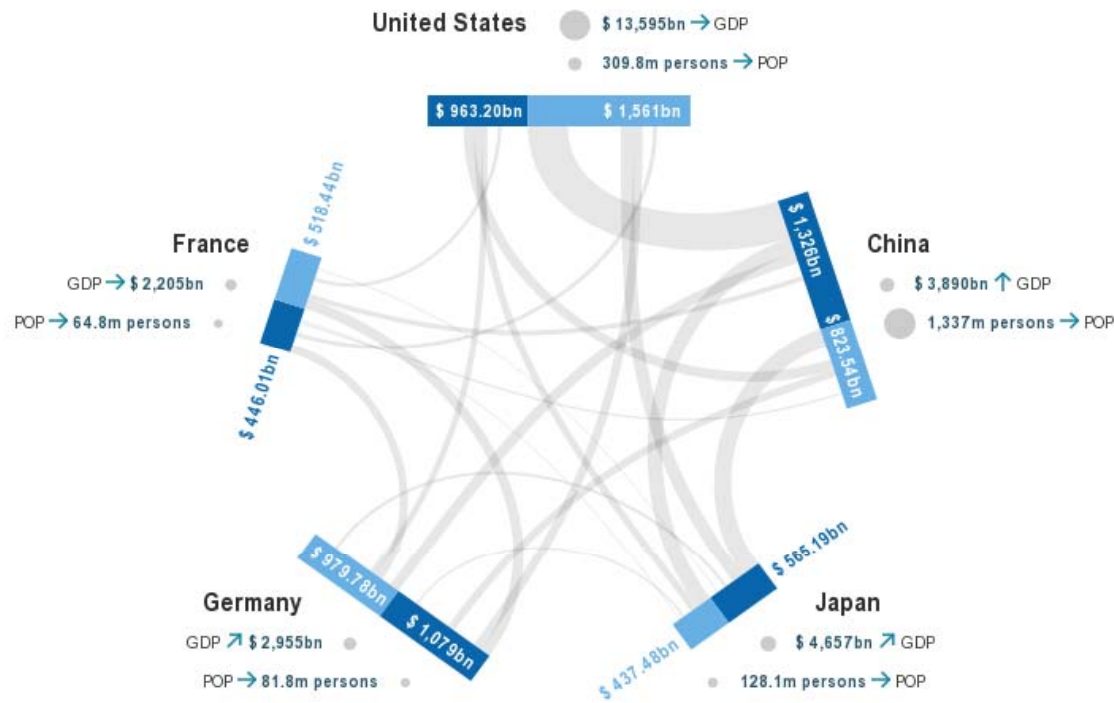




Information and Knowledge Transfer

- Sharing information (e.g. through SDMX)
- Data bases, data portals, knowledge bases
- Data visualization
- Open Data and Big Data
 - World Bank
 - UK, USA, Canada
 - India, Kenya

Data Visualization



Generated with GED VIZ (viz.ged-project.de)

SOURCES

Merchandise Trade: [UN Comtrade](#)
 GDP, POP: [OECD/European Commission](#)

LEGEND

■ 2010 Merchandise exports/imports to/from all available countries in billion US-\$ (current prices) as reported by import countries' statistics. Bar lengths relative to largest sum of imports and exports (among displayed countries for all years).

■ Merchandise exports/imports in billion US-\$ (current prices)

● Bubble size relative to largest indicator value.

GDP: Gross Domestic Product, in billion US-\$ (constant prices, base 2005)
 max. size \$ 14,231bn

POP: Population, in million persons
 max. size 1,351m

↗ Tendency arrows indicate change to previous year's value (i) for absolute values: relative change; (ii) for percentage values: difference in percent points.

Concluding Remarks

- **1st principle of the FPOS**

- Provide information serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation

- **Sustainable Tourism**

- High on the political agenda
- Potential to improve the economic and social situation of developing countries, while preserving the environment

- **Measuring Sustainable Tourism**

- More tourism statistics through integrated databases
- Integrated system of TSA and SEEA

Data-driven knowledge to promote sustainable tourism: From data to action

*Open Data,
Big Data...*

SEEA-TSA

TSA

**Sustainable
Tourism**

Wisdom

Knowledge

Information

Data

*Tourism
Statistics*

The diagram features a large, light blue arrow pointing from the bottom-left towards the top-right. Along the path of the arrow, there are four blue circular markers. Below each marker is a label: 'Data', 'Information', 'Knowledge', and 'Wisdom'. To the left of the arrow, the text 'Tourism Statistics' is written in a light blue, italicized font. Above the arrow, the text 'TSA' and 'SEEA-TSA' are written in a light blue, italicized font. Further up and to the right, the text 'Open Data, Big Data...' is written in a light blue, italicized font. On the far right, the words 'Sustainable Tourism' are written in a bold, green font.