TOURISM SATELLITE ACCOUNT IN PERU
AND THE STATISTICAL FRAMEWORK FOR
MEASURING THE SUSTAINABILITY OF TOURISM

Ministry of Foreign Trade and Tourism - Peru
Vice Ministry of Tourism

November 29th, 2018
Statistical instrument through which the main economic facts of a country are recorded systematically, such as: production, consumption, savings, gross capital formation, relations with the outside world and the correlation that exists between the different economic agents; companies, households, the government and the rest of the world.
The Tourism Satellite Account is designed to evaluate in detail the economic contribution of the transactions related to tourism, according to regulations, classifications and definitions, recommended by the World Tourism Organization (WTO) to establish valid comparisons with other activities and between countries.

This instrument measures the economic impact of the tourism sector on the economy through tourism GDP, consumption and employment.

This measurement is made within the framework of the National Accounts:

System of National Accounts

It offers a global and integrated framework for the preparation of production, consumption, capital investment, among other economic variables of the Tourism Satellite Account.
WHAT DOES TOURISM SATELLITE ACCOUNT MEASURE?

1. The contribution of tourism to the Gross Domestic Product (GDP).
2. Touristic consumption and how it is satisfied by domestic supply and imports.
3. Direct employment generated by tourism in the country’s economy.
4. The position of tourism compared to other economic sectors.
5. The collection of taxes generated by the touristic industries.
6. The investment made in the touristic industry.

TOURISTIC ACTIVITIES

A1. Characteristic activities of tourism

1. Accommodation for visitors
2. Food and beverage supply industries
3. Passenger transport by rail
4. Passenger transport by road
5. Passenger transport by water
6. Passenger air transportation
7. Rental of transport equipment
8. Travel agency industry and other reserve services
9. Cultural industry
10. Sports and recreational industry
11. Retail trade of tourism-specific goods characteristic of each country
12. Other tourism industries specific to each country

A2. Other industries

1. Industries related to tourism
2. Industries not related to tourism

Source: World Tourism Organization (WTO)
Passenger transportation, food provision, accommodation and travel agencies represented together 66.8% of touristic GDP.

Provision of food, transportation of passengers, accommodation and travel agencies together account for 73.5% of touristic employment.

**TOURISTIC GDP BY ECONOMIC ACTIVITY, 2015**

(Percentage)

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger transport 1 /</td>
<td>27.0</td>
</tr>
<tr>
<td>Provision of food and beverages</td>
<td>22.6</td>
</tr>
<tr>
<td>Accommodation for visitors</td>
<td>14.0</td>
</tr>
<tr>
<td>Cultural, recreational and sports industry</td>
<td>6.9</td>
</tr>
<tr>
<td>Taxes and import duties</td>
<td>6.7</td>
</tr>
<tr>
<td>Production and trade of crafts</td>
<td>4.0</td>
</tr>
<tr>
<td>Travel agency</td>
<td>3.2</td>
</tr>
<tr>
<td>Other activities 2 /</td>
<td>15.6</td>
</tr>
</tbody>
</table>

**TOURISTIC EMPLOYMENT BY ECONOMIC ACTIVITY, 2015**

(Percentage)

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision of food and beverages</td>
<td>35.6</td>
</tr>
<tr>
<td>Passenger transport 1 /</td>
<td>21.0</td>
</tr>
<tr>
<td>Accommodation for visitors</td>
<td>10.9</td>
</tr>
<tr>
<td>Production and trade of crafts</td>
<td>9.6</td>
</tr>
<tr>
<td>Cultural, recreational and sports industry</td>
<td>9.0</td>
</tr>
<tr>
<td>Travel agency</td>
<td>6.0</td>
</tr>
<tr>
<td>Other activities 2 /</td>
<td>7.9</td>
</tr>
</tbody>
</table>

1 / Road transport, air transport, water transport, rail transport, car rental.
2 / Financial services and insurance, services related to transport, urban transport, imputed housing, public administration services and tourism promotion, education related to tourism, other related and non-specific activities.

Source: Ministry of Foreign Trade and Tourism, National Institute of Statistics and Informatics - Peru

Elaboration: Ministry of Foreign Trade and Tourism - Peru
INTERNAL TOURISTIC CONSUMPTION

Internal touristic consumption is the expenditure incurred by inbound visitors and domestic visitors in the country of reference.

- Domestic touristic expenditure: 62.2%
- Internal Touristic Consumption: S/. 42.1 (Thousand of millions)
- Inbound touristic expenditure: 31.4%
- Other Expenditures 1/: 6.4%

1/ Include services that its provided to the inbound visitors and domestic visitors.

Note: Refers to 2015 data in current values
Source: BCRP, Ministry of Foreign Trade and Tourism - Peru, PROMPERÚ
Elaboration: Ministry of Foreign Trade and Tourism - Peru
CONTRIBUTION OF THE TOURISTIC GDP TO THE TOTAL GDP

**Mexico: Touristic GDP (%)**

- 2011: 8.4%
- 2012: 8.2%
- 2013: 8.5%
- 2014: 8.5%
- 2015: 8.7%
- 2016: 8.7%

Source: INEGI
Elaboration: Ministry of Foreign Trade and Tourism - Peru

**Peru: Touristic GDP (%)**

- 2011: 3.6%
- 2012: 3.6%
- 2013: 3.7%
- 2014: 3.8%
- 2015: 3.9%
- 2016: 3.9%
- 2017: 3.9%

Source: Ministry of Foreign Trade and Tourism - Peru
Elaboration: Ministry of Foreign Trade and Tourism - Peru

**Colombia: Touristic GAV (%)**

- 2012: 1.3%
- 2013: 1.4%
- 2014: 1.4%
- 2015: 1.8%
- 2016: 1.8%

Source: DANE
Elaboration: Ministry of Foreign Trade and Tourism - Peru

**Chile: Touristic GDP (%)**

- 2008: 3.3%
- 2009: 3.3%
- 2010: 3.2%
- 2011: 3.2%
- 2012: 3.4%

Source: SERNATUR
Elaboration: Ministry of Foreign Trade and Tourism - Peru
CONTRIBUTION OF TOURISTIC CONSUMPTION TO THE TOTAL GDP

Mexico (%)

Source: INEGI
Elaboration: Ministry of Foreign Trade and Tourism - Peru

Peru (%)

Source: Ministry of Foreign Trade and Tourism - Peru
Elaboration: Ministry of Foreign Trade and Tourism - Peru

Colombia (%)

Source: DANE
Elaboration: Ministry of Foreign Trade and Tourism - Peru
ARRIVAL OF INTERNATIONAL TOURISTS

Mexico (Millions)

Peru (Millions)

Colombia (Millions)

Chile (Millions)

Source: INEGI, UNWTO World Tourism Barometer
Elaboration: Ministry of Foreign Trade and Tourism - Peru

Source: National Superintendence of Migrations - Peru
Elaboration: Ministry of Foreign Trade and Tourism - Peru

Source: SERNATUR, UNWTO World Tourism Barometer
Elaboration: Ministry of Foreign Trade and Tourism - Peru
FOREIGN CURRENCY INCOME FOR INBOUND TOURISM

Mexico (Millions of US$)

<table>
<thead>
<tr>
<th>Year</th>
<th>Value (Millions of US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>12,739</td>
</tr>
<tr>
<td>2013</td>
<td>13,949</td>
</tr>
<tr>
<td>2014</td>
<td>16,208</td>
</tr>
<tr>
<td>2015</td>
<td>17,734</td>
</tr>
<tr>
<td>2016</td>
<td>19,650</td>
</tr>
<tr>
<td>2017</td>
<td>21,336</td>
</tr>
</tbody>
</table>

Note: It only refers to the travel item
Source: INEGI, UNWTO World Tourism Barometer
Elaboration: Ministry of Foreign Trade and Tourism - Peru

Peru (Millions of US$)

<table>
<thead>
<tr>
<th>Year</th>
<th>Value (Millions of US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2,814</td>
</tr>
<tr>
<td>2012</td>
<td>3,073</td>
</tr>
<tr>
<td>2013</td>
<td>3,916</td>
</tr>
<tr>
<td>2014</td>
<td>3,908</td>
</tr>
<tr>
<td>2015</td>
<td>4,140</td>
</tr>
<tr>
<td>2016</td>
<td>4,303</td>
</tr>
<tr>
<td>2017</td>
<td>4,573</td>
</tr>
</tbody>
</table>

Note: Includes travel and passenger transport items
Source: BCRP
Elaboration: Ministry of Foreign Trade and Tourism - Peru

Colombia (Millions of US$)

<table>
<thead>
<tr>
<th>Year</th>
<th>Value (Millions of US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>3,460</td>
</tr>
<tr>
<td>2013</td>
<td>3,611</td>
</tr>
<tr>
<td>2014</td>
<td>3,825</td>
</tr>
<tr>
<td>2015</td>
<td>4,245</td>
</tr>
<tr>
<td>2016</td>
<td>4,522</td>
</tr>
<tr>
<td>2017</td>
<td>4,821</td>
</tr>
</tbody>
</table>

Note: It only refers to the travel item
Source: DANE, UNWTO World Tourism Barometer
Elaboration: Ministry of Foreign Trade and Tourism - Peru

Chile (Millions of US$)

<table>
<thead>
<tr>
<th>Year</th>
<th>Value (Millions of US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>2,150</td>
</tr>
<tr>
<td>2013</td>
<td>2,181</td>
</tr>
<tr>
<td>2014</td>
<td>2,259</td>
</tr>
<tr>
<td>2015</td>
<td>2,481</td>
</tr>
<tr>
<td>2016</td>
<td>2,665</td>
</tr>
<tr>
<td>2017</td>
<td>3,634</td>
</tr>
</tbody>
</table>

Note: It only refers to the travel item
Source: SERNATUR, UNWTO World Tourism Barometer
Elaboration: Ministry of Foreign Trade and Tourism - Peru
AVERAGE EXPENDITURE AND PERMANENCE OF THE FOREIGN TOURIST

**Mexico**

- **US$**
  - 2013: 491
  - 2014: 488
  - 2015: 493
  - 2016: 505
  - 2017: 488

**Peru**

- **US$ and Number of nights**
  - 2011: 948
  - 2012: 922
  - 2013: 985
  - 2014: 992
  - 2015: 994
  - 2016: 964
  - 2017: 946

**Colombia**

- **US$ and Number of nights**
  - 2012: 2,493
  - 2013: 2,380
  - 2014: 2,114
  - 2015: 2,204
  - 2016: 3,051

**Chile**

- **US$**
  - 2012: 594
  - 2013: 597
  - 2014: 602
  - 2015: 543
  - 2016: 464
  - 2017: 567

**Source:**
- Mexico: INEGI
- Peru: PROMPERÚ
- Colombia: DANE
- Chile: SERNATUR

**Elaboration:** Ministry of Foreign Trade and Tourism - Peru
The implementation of a statistical framework will allow a homogeneous language and an organizational structure to take advantage of the available data in the country and build indicators that measure the performance of integrated tourism activity within the dimensions of sustainability.

This measurement instrument will allow an efficient planning of the sustainability of tourism at national and regional levels, with a vision towards the Sustainable Development Goals (SDG).
Ministry of the Environment: Developed a pilot called "The Experimental Account of Ecosystems in the San Martín Region" (2016), carried out with the organization named "Conservation International".

National Integrated System of Environmental Indicators: Collect and publish 58 indicators related to environmental activity.


National Service of Protected Areas by the Government: It has the role of the coordination between national government, regional governments and local governments that participate in the management of the Protected Natural Areas.

National Water Authority: They start the process of preparation and systematization of the Environmental and Economic Accounts of Water in Peru, which enables the analysis of the interaction between water and the economic system (2016).

National Institute of Statistics and Informatics: Created the Interinstitutional Technical Committee on Statistics and Environmental Accounts (2016), which meets 30 public institutions that generate statistical information with whom it has been coordinating and establishing lines of action for the strengthening of environmental statistics, and start implementation of the mentioned accounts.

Ministry of Foreign Trade and Tourism: Created the Directorate of Environmental Tourism Affairs (2015), which has among its functions to formulate and implement legal instruments and devices related to environmental management for the protection of the environment.
General framework, according to the dimensions

The first general framework takes the model of sustainable development, which integrates 4 dimensions: Economic, Environmental, Social and Institutional. This criterion allows the development of a joint and planned the sustainability of tourism.

General framework, according to Pressure, Status, Impact, Response (PSIR)

The second general framework used is the PSIR Matrix, which defines and classifies the indicators into 4 types: Pressure, Status, Impact and Response. With this criterion, a logical link is established between its components to guide the evaluation within each dimension.

- **Pressure**: Forces that affect a certain dimension
- **Status**: Situation in which the assessed dimension is located
- **Impact**: Effect produced by the pressure in the state of the dimension analyzed
- **Response**: Actions that mitigate or prevent negative impacts on the state of the observed dimension
We propose 61 indicators, of which 14 are economic, 22 social, 16 environmental and 9 institutional.

A horizontal analysis we have 11 indicators of pressure, 19 of status, 16 of impact and 15 of response.

<table>
<thead>
<tr>
<th>General framework</th>
<th>Dimension</th>
<th>Economic</th>
<th>Social</th>
<th>Environmental</th>
<th>Institutional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td></td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Status</td>
<td></td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>Impact</td>
<td></td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Response</td>
<td></td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>14</td>
<td>22</td>
<td>16</td>
<td>9</td>
<td>61</td>
</tr>
</tbody>
</table>

Elaboration: Ministry of Foreign Trade and Tourism, Peru
## PERU: INDICATORS FOR MEASURING THE SUSTAINABILITY OF TOURISM

<table>
<thead>
<tr>
<th>General framework</th>
<th>Dimension</th>
<th>Economic</th>
<th>Social</th>
<th>Environmental</th>
<th>Institutional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td></td>
<td>Percentage of arrival of international tourists with respect to the population resident in the country.</td>
<td>Percentage of households that are supplied with water through a public network.</td>
<td>Number of wastewater treatment plants.</td>
<td>Number of operating licenses granted by the municipalities for the development of tourism activities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of arrival of international tourists by air and land with respect to the total arrival of international tourists to the country.</td>
<td>Percentage of households that have a public sewerage network.</td>
<td>Ecological environmental footprint per capita.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of new bed places offered by lodging establishments.</td>
<td>Percentage of households that have electric lighting by public network.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of institutions providing health services (IPHSH) of level III per 100 thousand habitants.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Use of Information and Communication Technologies (ICT) in business to business transactions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td></td>
<td>Percentage of tourist employment with respect to the employed active population.</td>
<td>Participation of the female workforce with respect to the male workforce.</td>
<td>Percentage of Protected Natural Areas (PNA) for tourist use compared to the total PNA.</td>
<td>Number of iPeru offices that provide tourist advice and guidance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average expenditure of foreign tourists.</td>
<td>Percentage of tourist companies that provide training to their workers with respect to the total number of tourist companies.</td>
<td></td>
<td>Number of visitors to the Protected Natural Areas.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net occupancy rate of bed places in lodging establishments.</td>
<td>Reporting rate for theft crime per 100 thousand habitants.</td>
<td>Percentage of the area of the territory to be reforested.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reporting rate for the crime of homicide per 100 thousand habitants.</td>
<td></td>
<td>Number of fauna and flora species existing in Peru.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Number of visitors to the Protected Natural Areas.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Number of hospital beds per 10 thousand habitants.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Registration rate in primary level education.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mobile network coverage, measured as a percentage of villages that have a mobile telephone signal.</td>
</tr>
</tbody>
</table>
## PERU: INDICATORS FOR MEASURING THE SUSTAINABILITY OF TOURISM

<table>
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<tr>
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<th>Environmental</th>
<th>Institutional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td></td>
<td>Percentage of foreign tourists who visit the country, more than once.</td>
<td>Overall satisfaction of the tourist services received in the country.</td>
<td>Emissions of carbon dioxide equivalent per capita.</td>
<td>Number of municipalities that have territorial improvement plans.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Domestic tourism consumption with respect to household consumption nationwide</td>
<td>Number of complaints for theft to tourists.</td>
<td>Projection of greenhouse gas emissions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of ATMs per 100 thousand habitants.</td>
<td>Number of traffic accidents in the country</td>
<td>Number of active socio-environmental conflicts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of reports of HIV cases per 10 thousand habitants.</td>
<td>Loss of forest area.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of malaria cases per 100 thousand habitants.</td>
<td>Number of endemic fauna and flora species.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average monthly remuneration in the activities characteristic of tourism.</td>
<td>Number of threatened wildlife species.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response</td>
<td></td>
<td>Number of public investment projects in the tourism sector.</td>
<td>Rate of registration in tourism higher education per 100 thousand habitants.</td>
<td>Area reforested annually.</td>
<td>Number of regions that have a Regional Strategic Plan for Tourism (RSPT) approved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amount of public investment made in tourism projects with respect to total public investment.</td>
<td>Number of doctors per 1000 habitants.</td>
<td>Percentage of the environmental public budget with respect to the total public budget.</td>
<td>Number of master plans.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of the public budget in tourism with respect to the total public budget.</td>
<td>Number of police officers per 100 thousand habitants.</td>
<td>Percentage of public environmental spending compared to national public expenditure.</td>
<td>Number of tourist use plans.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of public spending on tourism executed with respect to public spending executed nationally.</td>
<td></td>
<td></td>
<td>Number of natural and cultural sites with recognition of world heritage of humanity.</td>
</tr>
</tbody>
</table>

Elaboration: Ministry of Foreign Trade and Tourism, Peru
The percentage of international tourists with respect to the resident population has been higher than the share of employment generated by tourism in the national employment.

The percentage of public environmental expenditure has been higher than public expenditure on tourism.

Elaboration: Ministry of Foreign Trade and Tourism, Peru
The rate of annual forest loss has been higher than the annual rate of reforestation.
CONCLUSIONS

The Tourism Satellite Account has allowed us to know the importance of tourism in the Peruvian economy through touristic GDP, touristic consumption, touristic added value and touristic employment, among other touristic aggregates.

Measuring the Sustainability of Tourism in Peru has evidenced limitations of sources of information since the data that are available refers to environmental issues.

The indicators developed to measure the sustainability of tourism in this first stage have allowed a better panorama of tourism activity within its economic, social, environmental and institutional dimensions. These indicators are still at the national level, the main objective being to prepare indicators at the departmental level.

RECOMMENDATIONS

To count on the support of the authorities to continue with the improvement of the quality of the information and the methodologies to elaborate the next Tourism Satellite Account.

To establish interinstitutional coordination through the National Statistical System, which will allow the integration of statistics at the national and departmental levels.

To develop a methodology that articulates and synthesizes the indicators obtained at the level of each dimension: economic, social, environmental and institutional. These actions will consolidate the Tourism Satellite Account (CST) with the System of Environmental and Economic Accounting (SEEA).

To create a Multisector Commission in charge of the Tourism Satellite Account and Measuring the Sustainability of Tourism that is attached to the Ministry of Foreign Trade and Tourism in order to establish guidelines, define procedures, provide advice and approve methodologies.