MEASURING THE SUSTAINABILITY OF TOURISM
CASE STUDY: MEXICO

March, 2021

TOPICS

1. Importance of measuring the sustainability of tourism (MST)
2. Progress in Mexico on MST
1 IMPORTANCE OF MEASURING THE SUSTAINABILITY OF TOURISM (MST)

- It generates information to support the conservation of natural resources and cultural heritage.
- It makes possible to measure the positive and negative impacts of tourism.
- It generates information to support the conservation of natural resources and cultural heritage.
- It allows the measurement of SDG Goals 8.9 and 12.b.

Manila Call for Action on Measuring Sustainable Tourism
Development of a Statistical Framework for Measuring the Sustainability of Tourism (MST).
USE OF ACCOUNTING TOOLS:
TOURISM AND ENVIRONMENT SATELLITE ACCOUNT

Tourism
- Sun and beach
- Business
- Cultural
- Health
- Gastronomic

Environment
- Environmental impact
- Environmental protection expenditure
- Ecosystem services:
  - Provisioning
  - Regulation of ambient air and climate
  - Cultural and recreational

Examples:
- Management and control of visited touristic sites
- Offer of services with low environmental impact

RELATIONSHIP BETWEEN
TOURISM AND THE ENVIRONMENTAL BORDER

1 Economy of nature tourism
Wealth generated in touristic sites where the protection of the environmental border is regulated, generating no or minimal environmental impact.

2 Environmental benefits of tourism
Positive externalities generated by tourism industries in favor of the environmental border, such as the control and abatement of pollution, the production of environmental goods and services, among others.

3 Environmental impact of tourism activities
Negative externalities generated by tourism industries in the supply of goods and services for consumption by visitors, such as wastewater discharges without treatment, among others.
PROPOSED ON MEASURING OF THE ECONOMY OF NATURE TOURISM

Measuring procedure:

01. Identification of sites with regulated tourism (Natural Protected Areas: NPA).

02. Digital Map of Mexico (DMM) as a measuring platform (NPA’s shapes and touristic establishments).

03. Definition of the influence area (Buffer or polygons).

04. Information on Economic Censuses (Tourism Module) and the Tourism Satellite Account of Mexico.

05. Derivation of Results Income, Inputs, Value Added and Employed Personnel.
NATURAL PROTECTED AREAS OF MEXICO

Legend:
- Natural Protected Areas (NPA)

NATURAL PROTECTED AREAS AND ESTABLISHMENTS RELATED TO TOURISM

Legend:
- Natural Protected Areas (NPA)
- Touristic establishments
DATA GENERATED
NPA “ARRECIFES COZUMEL”

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of establishments</th>
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<tr>
<td>Travel agencies</td>
<td>12</td>
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<tr>
<td>Hotels with other integrated services</td>
<td>14</td>
</tr>
<tr>
<td>Hotels without other integrated services</td>
<td>29</td>
</tr>
<tr>
<td>Bars, canteens and similars</td>
<td>39</td>
</tr>
<tr>
<td>Restaurants with a la carte or regular food preparation service</td>
<td>96</td>
</tr>
<tr>
<td>Others</td>
<td>1,168</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,358</strong></td>
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DATA GENERATED
NPA “ARRECIFES COZUMEL”

<table>
<thead>
<tr>
<th>Description</th>
<th>Gross Value Added (Thousand of Mexican pesos)</th>
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<tr>
<td>Travel agencies</td>
<td>30,299</td>
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<td>Hotels with other integrated services</td>
<td>90,746</td>
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<tr>
<td>Hotels without other integrated services</td>
<td>11,150</td>
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<td>Bars, canteens and similars</td>
<td>18,748</td>
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<tr>
<td>Restaurants with a la carte or regular food preparation service</td>
<td>61,466</td>
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<tr>
<td>Others</td>
<td>797,931</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,010,340</strong></td>
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</table>

It is possible to establish a proxy for the gross value added of the touristic NPA of interest.

ECOVALOR MX PROJECT
NPA “ARRECIFES COZUMEL”

Relevant Information: Valuation of ES

<table>
<thead>
<tr>
<th>Ecosystem Services (valuated)</th>
<th>Methodology</th>
<th>Related economic activities</th>
<th>Valuation (contribution to wellbeing)</th>
<th>Strategic Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation</td>
<td>Choice experiment</td>
<td></td>
<td>$ 4.662 millions MNX per year (US$ 255 millions)</td>
<td>If the reef attributes are lost, it is estimated a decrease of 12% of visitors per year</td>
</tr>
<tr>
<td>ES of mangroves</td>
<td>Benefit transfer</td>
<td></td>
<td>$ 81.7 millions MNX per year (US$ 4.5 millions)</td>
<td>Mangroves provide ecosystem services fundamental to life in the island (food provision, recreation, coastal protection, CO2 sequestration, scenic beauty)</td>
</tr>
<tr>
<td>Coastal protection</td>
<td>InVest</td>
<td></td>
<td>$ 611 millions MNX per year (US$ 33.7 millions)</td>
<td>65% of population of the Island is less vulnerable to flooding and climatic events such as storms and hurricanes thanks to the presence of reefs and mangroves</td>
</tr>
</tbody>
</table>
CONCLUSIONS

- It is possible to advance the MST by linking statistical and geographical information on the same platform (DMM, National Accounts, Satellite Accounts, Economic Census, Mapping).
- Inter-agency coordination and the linkage of work teams within agencies in each country is important. INEGI, CONANP and SECTUR worked together in Mexico.
- The information generated may contribute to the monitoring of SDS goals and indicators 8.9 and 12.b.
- International coordination is important to move towards the consolidation and implementation of the MST Statistical Framework.