UNWTO Statistics and Tourism Satellite Account Programme

Measuring Sustainable Tourism (MST): Developing a statistical framework for sustainable tourism

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DESIGNING PILOT STUDIES

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Background

As described in the concept note for the MST project, advancing the development of a statistical framework for measuring sustainable tourism will involve consideration of the issues in several pilot studies for destinations and countries. This note outlines the potential structure and scope for pilot studies. It will be updated as experience is gained in the conduct of pilot studies in different countries and destinations.

While the proposed pilot studies discussed here are motivated primarily by the need to progress the MST project, there are important connections and possible overlaps with other UNWTO initiatives concerning the measurement of sustainable tourism, in particular the UNWTO Network of Observatories (INSTO). The proposed MST pilot studies, as with the MST project more broadly, will take into consideration the INSTO experience in gathering information on sustainable tourism. This may be of particular relevance where there is an overlap between the location of the INSTO Observatory and the geographical scope of the pilot study.

The pilot studies, unlike the INSTO program, do not imply establishment of an ongoing measurement program. Rather a pilot study should inform a decision on this issue. Such a decision should also take into consideration findings from the ongoing INSTO program of work.

Objectives and benefits of pilot studies

The objective in undertaking pilot studies is to understand, in specific contexts, the types of measurement issues and analytical applications that surround the topic of sustainable tourism. The work is highly relevant in the development of a broader, more generic statistical framework since the pilot studies should speak to both the relevance and feasibility of developing such a framework.

There are three key benefits that emerge from undertaking a pilot study at country or destination level. First, it should provide a rationale for bringing together various stakeholders with an interest in sustainable tourism to discuss key policy and analytical questions and to understand the information requirements.

Second, a pilot study should provide a broad assessment of the availability and quality of data for measuring sustainable tourism, an understanding of the associated institutional arrangements for data production and dissemination, and proposals for advancing work in this area.

Third, a pilot study can provide some initial estimates of data concerning sustainable tourism to inform policy and analysis. The scope and quantity of information on sustainable tourism that can be compiled within a pilot study will depend on the time, resources and data available.

It is not the intention of pilot studies to complete a full articulation of tables and statistics for sustainable tourism, and it should not be expected that extended analysis will be possible in the short term. At the same time, even a limited level of estimation should give an indication of the feasibility and resource cost of improving information in this area. It should also provide an indication of the relevance of this information for tourism policy and analysis and help understand the level of interest and support to undertake more detailed and/or comprehensive measurement work.

Summary of key pilot study elements

The approach described here follows, in broad terms, the logic adopted in advancing pilot studies in the context of the System of Environmental-Economic Accounting (SEEA). There are five key elements to each pilot study which are described in more detail in the remainder of this note.

1. Description of country, region or destination
2. Description of policy and analytical questions
3. Identifying key institutional arrangements and stakeholders
4. Collection of statistics and organization of data
5. Presentation of results

It is anticipated that each pilot study would make various decisions on the scope and focus of the study taking into account local circumstances. This note is intended to give a broad structure such that different pilot studies can be compared and hence provide a broad basis for implementation of integrated measurement in the future.

Description of key elements of a pilot study to measure sustainable tourism

1. Description of country, region or destination

An initial step is to clarify the intended spatial boundaries and possible disaggregations for the pilot study. At national level this is likely quite straightforward. At regional/sub-national level and at destination level, spatial boundaries may be less clear. Given the intent to integrate economic, environmental and social factors it may not be appropriate to simply adopt local administrative boundaries. While these boundaries may be suitable for some socio-economic data, different considerations may be relevant in identifying tourism destinations and for organizing environmental information. For example, it may be appropriate to consider the relationship between a region or destination and local river basins, forest areas, national parks, rivers and lakes, coastal zones (including beaches), reefs, etc.

The general intent in delineating environmental areas is to provide a basis for integrating information on the environmental/ecosystem condition of each of the areas in a way that is both relevant and feasible. In effect each area could represent a different ecosystem type and different indicators will be relevant in assessing its condition.

The relevant environmental boundaries will vary in each pilot study and the degree of detail needed will be a function of both policy questions and data availability. The final selection can be determined through an iterative process but in the first instance it will be sufficient to describe in general terms the most relevant environmental features within scope of the study and to understand the location of these features relative to the main areas of tourism and other economic and social activity.

In describing sub-national spatial boundaries, it will be relevant to keep in mind that the availability of information at sub-national levels will be variable and across different domains different sub-national classifications may be applied.

2. Description of policy and analytical questions

When combining economic, social and environmental data there is a range of policy questions that might be addressed, especially considering the range of different organizations, government agencies and decision makers operating at different regional levels. Conceptually, the underlying statistical framework that is being

developed will integrate all of the relevant data domains for the range of policy questions, noting at the same time that the statistical framework itself will be designed with a range of policy questions in mind. However, it will not be possible in the first instance to integrate all data immediately. Further, some policy questions will be of more relevance than others, and focusing on the key questions will ensure relevant parts of the overall statistical framework are well adapted and will help direct the collection of data to the most important areas.

The second step in the pilot study is therefore to identify the key policy or analytical topics for the country, region or destination that is the focus of the pilot study. These topics should be described without specific reference to the statistical framework to ensure that the development of the framework itself is driven by the issues rather than driven by an a priori view of what is possible.

As an initial indication of possible policy topics consider the following questions (further discussion on policy issues is provided in the MST project document):

- Is tourism activity having a negative impact on ecosystem condition, if so which ecosystems and which pressures and drivers are most relevant?
- Is there sufficient water available to support current and expected tourism activity?
- Which environmental features generate the most tourism value added?
- Could alternative land use arrangements (e.g. location of hotels) deliver more sustainable tourism activity?
- What is the contribution of tourism to the generation of GHG emissions?

Note that the development of data within a statistical framework will not necessarily directly answer these types of questions but it should support discussion of these types of questions.

3. Identifying key institutional arrangements and stakeholders

The success in developing integrated statistical approaches, especially when it concerns crossing the economic, environmental and social domains, will depend primarily on the success in managing the variety of stakeholders. Two primary groups of stakeholders are relevant – producers of statistics and users of statistics. Both groups need to be engaged in the process of developing measures of sustainable tourism.

As part of the pilot study it will be relevant to bring together relevant agencies, institutions and experts perhaps undertaking an initial exploration of those institutions that have a clear and specific interest in sustainable tourism. These may include, but are not limited to

- Ministries and government policy departments
- National and regional statistical offices
- Other data custodians and data producers, especially for environmental and cultural data
- The tourism business community
- Academic experts across tourism, economic analysis, statistics, environment/ecology, social/cultural, geography
- Civil society

During a pilot study the involvement of stakeholders need not be exhaustive but it should be ongoing through the study and not only and the commencement and finalization. It would be envisaged that the number of stakeholders would rise over time. Also, it would not be expected that extensive governance or similar institutional arrangements would be put in place for a pilot study although some governance/co-ordination will be necessary and it may be appropriate to use existing cross-agency mechanisms to oversee the work. In establishing any co-ordination arrangements and in the process of engaging with different institutions, the varying relationships and dynamics between institutions should be respected.

Two particular administrative issues should be considered in the early discussions and formulation of the pilot study. First, the issue of access to information and data sharing. Since the project will involve integration of multiple datasets it will be unlikely that all datasets are held in one institution or agency – understanding how data will be accessed and integrated is important to understand upfront.

Second, the issue of releasing results. Once the work on a pilot study has been completed there may be barriers to releasing the results due to a lack of clarity on who "owns" the results and/or concern about the messages contained in the report. Clarifying the institutions involved and the processes that are required to release results is also important upfront. A related point is that ongoing dialogue and provision of interim results and findings is encouraged to support both ongoing engagement in the pilot study and the sustainability over time of this work.

4. Collection of statistics and organization of data

The collection of statistics will be guided by the key topics for analysis (step 2) and data availability. At the pilot study level it would be anticipated that only a limited number of topics and datasets would be considered such that the relevance and feasibility of the approach can be assessed. It is important to note that it is not expected that new or additional information would be collected during a pilot study. Rather the focus is on the use of existing data and understanding the extent to which additional data may be required in the future.

There are four broad areas of data that can be brought together:

- Economic activity data on tourism demand and the production of tourism characteristic industries (including employment, visitor numbers and accommodation capacity)
- Environmental data on resources used by tourism characteristic industries (e.g. water, energy) and residuals generated by tourism characteristic industries (e.g. GHG emissions, solid waste).
- Environmental data on the condition and changes in condition of ecosystems within the selected area. This might include, for example, information on the quality of beaches or coastal areas, and on the fish stocks in lakes used for recreational fishing. It may also extend to indicators of pressures on ecosystems such as the number of visitors to forest areas. This area of data may be extended to include measurement of ecosystem services noting that some flows of ecosystem services will be measured on the basis of information from areas 1 and 2.
- Cultural and social data related to tourism activity. For example, numbers and visitation rates to cultural sites (to be defined), particularly those located in the landscape such as locations of significance to indigenous people or of historical significance.

In a pilot study it would be anticipated that statistics on a selection of variables from each of the broad areas would be collected to form the basis for the development of integrated statistics and to assess the integration challenges. Further discussion on measurement and integration challenges is provided in the MST project document.

It may ne noted that the first two areas of data may be integrated by virtue of a focus on tourism characteristic industries. Information on the third and fourth areas of data will need to be integrated via specific location. For example, the link between tourism activity and the condition of beaches will require that the economic activity data can be associated to beach locations. (A discussion on the links to sustainable tourism indicators, particularly SDG indicators, will be developed in the early stages of the MST project.)

5. Presentation of results

Interim and final reports would be compiled for each pilot study detailing

- the scope of the study
- the relevant topics and policy issues
- the institutions and agencies involved
- the selected variables, tables and accounts
- next steps and action plans

The presentation of the results themselves might be best conveyed in terms of maps of information and in terms of performance indicators – such as water use by visitor night. The selection of maps and indicators would be based around those best suited to supporting discussion of the key policy and analytical topics.

It is important that the results from the pilot study are publicly available and communicated to all relevant stakeholders. There are many mechanisms that may be used for this purpose and each pilot study should consider and endorse a specific communication plan. All pilot study reports will in any case be made available on the MST website.