Measuring Sustainable Tourism

Project concept note

20 January, 2016

1. Introduction

Motivation for measuring sustainable tourism

This concept note is intended to describe key aspects of the World Tourism Organization (UNWTO) project - Measuring Sustainable Tourism (MST). The rationale for the MST project is the increasing recognition that tourism has connections beyond its contribution to economic activity, including impacts on the environment, dependencies on the environment and connections to society more generally. Broadening the understanding of these various connections of tourism activity should enable more holistic approaches to the development of tourism and also facilitate tourism becoming a positive force in economic, environmental and social development.

Given the multi-faceted nature of tourism, the MST project considers that the appropriate organization and presentation of information and statistics surrounding tourism activity is an important component of developing appropriate policy responses. Specifically, the analysis of a range of policy topics would be facilitated through the development of a statistical framework for sustainable tourism. These include:

- The environmental impacts of tourism activity (e.g. energy use, greenhouse gas (GHG) emissions and climate change, solid waste, wastewater, disruption of ecosystems and biodiversity)
- The dependency of tourism activity on the environment (e.g. land, water and energy requirements, healthy and good quality ecosystems – beaches, reefs, forests, etc.)
- Responses of tourism businesses and visitors in relation to the environment (e.g. environmental protection expenditure, environmental taxes)
- The social impacts of tourism activity (e.g. on local tradition and customs, on employment)
- The dependency of tourism activity on “social” infrastructure including a suitably qualified workforce, transport infrastructure and public facilities.

In parallel, the aspiration of sustainable development now lies at the forefront of international policy discussion. The measurement of tourism within the broader context of national and international Sustainable Development Goals (SDG) is thus a general driver of work in this area. In addition, the UN recently declared 2017 as International Year for Sustainable Tourism.

It is anticipated that through the course of the project a range of tourism related information might be better integrated. Thus the ambition is not to ignore or discount any ongoing measurement programs but rather find means by which tourism related information can be placed in a broader context and hence support integrated decision making.

1 Tourism is a social, cultural and economic phenomenon related to the movement of people to places outside their usual place of residence” (IRTS 2008 para 1.1). “Tourism has an impact on the economy, the natural and built environment, the local population at the places visited and the visitors themselves” (IRTS 2008 para 1.3).
Background and context for the project

It is important to recognize that the MST project does not commence from a blank sheet of paper. Indeed, in many ways the MST project represent the continuation of a statistical journey surrounding both tourism and environment statistics and accounts. The developments in these areas over the past 20 years are portrayed in Figure 1. The figure serves to highlight the considerable statistical foundation that exists for the integration of tourism related data. Over the past 20 years developments in tourism statistics, tourism satellite accounts, environment statistics, environmental-economic accounting and sustainability indicators have each served to advance the understanding of the measurement challenges and opportunities. The MST project must take advantage of the findings from the development of standards and their implementation.

The description of the MST project here builds on a 2015 UNWTO proposal entitled “a statistical project to support Mainstreaming Tourism in Sustainable Development”. This proposal was the subject of consultation through the second half of 2015 and this concept note takes into consideration the feedback received.

The initial proposal identified three primary objectives which continue to be reflected in this MST concept note.

1. Developing indicators for global monitoring of sustainable tourism and promoting tourism within the SDG indicator framework
2. Linking the System of Environmental-Economic Accounting (SEEA) and Tourism Satellite Accounts (TSA) frameworks to underpin a statistical framework for sustainable tourism
3. Advancing towards an understanding of tourism in relation to sustainability at multiple scales by integrating information at the global, national and sub-national levels.

From a conceptual point of view, there are strong connections and inter linkages between these objectives. For example, ideally the development of a statistical framework for sustainable tourism would integrate directly the multiple scales considered in objective 3. Also, ideally, the development of indicators would emerge following the development of a statistical framework.

However, it is the reality that this project must be responsive to the existing stock of knowledge and various drivers for the development of improved information. Consequently, after taking into account the timeframes likely to be required to advance towards the different objectives it is relevant to proceed towards all objectives largely in parallel but taking into account the findings from each line of work as they emerge.

While all three objectives are covered in this concept note, the primary focus of the note is on the development of a statistical framework for sustainable tourism. In this regard, there are a number of proposals concerning the potential to combine the accounting frameworks of Tourism Satellite Accounts (TSA) and the System of Environmental-Economic Accounting (SEEA). At the same time, the broader intent is to contribute to the organization of information regarding tourism and sustainable development, and to advance measurement of the more general concept of sustainable tourism.

It is intended that the MST project be conducted collaboratively between UNWTO and the UN Statistics Division (UNSD), under the auspices of both the UN Committee of Experts on Environmental-Economic Accounting (UNCEEA) and the WTO Committee on Statistics and Tourism Satellite Accounts.

This concept note has been developed for discussion to ensure that work to investigate the relevant issues is appropriately targeted and comprehensive. All comments and suggestions would be welcome.
Figure 1: Context Map for the project Measuring Sustainable Tourism
Relevant groups

The development of frameworks related to sustainable development naturally cuts across a range of disciplines and agencies. As noted above, in the context of tourism, the leading agencies at international level are the UNWTO and UNSD. At national level there will be important roles for national tourism administrations in particular, but also, potentially for central and territorial planning agencies, development agencies and banks, and environment departments. Staff in all of these types of agencies is considered the primary users of data on sustainable tourism and hence must be involved in the development of the statistical framework.

In terms of different areas of expertise, advancing the statistical framework for sustainable tourism will involve experts from national statistical offices, academia and other organizations in areas including:

- national accounts, employment, trade and other economic statistics
- environmental-economic accounting
- tourism satellite accounts
- tourism statistics
- environment statistics
- geo-spatial and sub-national data
- classifications of activities, products and environmental stocks and flows

An important task in taking this work forward is to ensure appropriate engagement from experts in these various statistical and measurement areas. A Working Group for the MST project has been established to support this engagement work. (See Annex 1 for a list of participants and draft terms of reference).

Role of accounting frameworks in statistics

In the development of a statistical framework for sustainable tourism it is considered that accounting frameworks have considerable potential. This potential emerges from consideration of the role that the standard national accounts framework has played since its initial development in the 1930s. The relative success of the national accounts as an area of statistics is based on three key features that are inherent in accounting based approaches. All of these features are equally inherent in the TSA and SEEA accounting frameworks which are specific applications of the core System National Accounts (SNA).

The first key feature is that the national accounts gives definition in measurement terms to macro-economic concepts such as production, consumption, income, investment, international trade, saving and net wealth. Consequently, the national accounts dataset has provided the evidence base for the development and monitoring of macro-economic policy over the past 70 years.

Second, the SNA provides a coherent measurement framework in which data about the various economic variables and accounts can be confronted and balanced to provide a single, integrated picture of the macro-economic situation of a country. This is not only true in terms of specific time periods but also in terms of providing a consistent time series and, via the international standards, the capacity to compare across countries.

Third, the breadth of the national accounts including its compilation in both nominal and real terms, provides a framework for the compilation of economic statistics generally. This feature of the accounts has gradually been incorporated into many national statistical systems such that there is increasing alignment, in an end-to-end sense, between the collection of economic statistics (including the formation of statistical infrastructure such as business registers) and the release of quarterly measures of economic activity.
Together, these three factors mean that there is an important and long-standing rationale for the support of national accounts systems and the use of accounting frameworks.

Accounting frameworks can also be seen in the context of other statistics and indicators. The information pyramid (see below) has been developed to demonstrate the different roles and connections within the statistical system. It can also be seen that different types of analysis will be informed by different types of information. Thus broad monitoring might be best facilitated by indicators, comparative analysis is facilitated by accounting type information and detailed issue specific analysis supported by detail statistics on specific themes. Detailed statistics will include data at a sub-national level. The role of an accounting framework in this context is to support the maintenance of a coherent set of information across different types of analysis whether using indicators, accounts or basic statistics.

**Figure 2: Information pyramid**

While it is likely that a large range of information relevant to the analysis of sustainable tourism can be brought within an accounting based framework, it will be important to recognize situations in which non-accounting based information is also required.

### 2. Proposed steps to develop a statistical framework for sustainable tourism

To develop a statistical framework for sustainable tourism the following seven steps are considered relevant.

(i) Engaging with users and clarifying requirements

At both national and international levels, the development of statistics must respond to the needs of users. In the case of tourism this will include both government and private sectors. The various types of analysis and specific areas of focus within the broad coverage of sustainable tourism should be discussed and understood with relevant stakeholders. A short questionnaire may be helpful for this process. This will enable the statistical framework to be relevant and also ensure effort is placed in priority areas.

(ii) Describing sustainable tourism

At present, there is no agreed definition of sustainable tourism that might be directly amenable to measurement. At this time, it may be premature to spend significant resources to determine a singular definition, however, it is likely to be necessary to be
able to describe the elements and perspectives relevant to sustainable tourism such that the work on developing the statistical framework is scoped appropriately.

The description of sustainable tourism will reflect a combination of the user requirements and a general understanding of sustainable development as encompassing economic, environmental and social dimensions.

(iii) Assess relevant statistical guidance and frameworks

Based on the understanding of user requirements and the description of sustainable tourism, the third step is to assess how existing statistical guidance and frameworks might be utilized and integrated in the formation of a statistical framework for sustainable tourism. Likely existing sources to be considered are

- TSA (TSA:RMF 2008)
- SEEA 2012 Central Framework
- SEEA 2012 Experimental Ecosystem Accounting
- International Recommendations for Tourism Statistics (IRTS 2008)
- INRouTe work concerning spatially enabling tourism statistics (2015)

As an initial, short-term output to promote discussion in this area, it is proposed that a technical note be drafted proposing some possible integrated tourism-environmental accounts.

In addition, it will be relevant to ensure linkages can be made to the work currently underway to define indicators for the UN SDGs being led by the SDG inter-agency expert group (IAEG-SDG). Support for the discussion of these linkages may emerge from the technical note just proposed.

(iv) Assess country experiences

To inform both the relevance and feasibility of the statistical framework it will be important to take advantage of experience to date at country level in measurement related to sustainable tourism. These experiences may cover work on the development of indicator sets, work on specific aspects of sustainable tourism (e.g. on GHG emissions) and work on environmentally extended tourism satellite accounts. An initial task will be the collection of information, or stock-take, of countries experiences in TSA and SEEA implementation, possibly using a questionnaire.

(v) Describe key measurement challenges

As part of developing the statistical framework it will be important to understand and document the key measurement challenges – both conceptual and practical. Statistical frameworks should be relatively idealistic in nature to provide a clear sense of direction and ambition for measurement and analysis. At the same time, there must be a clear understanding of challenges such that implementation of the framework can be appropriately communicated and understood, i.e. that a path towards implementation can be determined.

There are three particular challenges that are noted at this stage
The integration of the demand side/consumption – “visitor” - perspective inherent in tourism with the supply side/production perspective inherent in much environmental statistics. Connecting these perspectives for the full range of relevant variables will not be straightforward.

Providing coherence between national and sub-national perspectives. Generally statistical frameworks are developed and implemented to provide national level information. However, for understanding environmental impacts and dependencies and for understanding tourism behavior it is increasingly clear that sub-national/location level information is required. Of course, the data requirements are much larger as finer scale information is incorporated and some variables may not be amenable to measurement at finer scales. Describing the appropriate scales of measurement for the various parts of the statistical framework will be important.

Generally, frameworks for economic statistics are based on a focus on production, consumption and investment behaviour of individual economic units, i.e. businesses, households and governments. However, when integrating environmental and social perspectives it is important to be able to allow for public/societal costs and benefits, many of which are not-priced explicitly in markets. The extent which measurement of these public costs and benefits can be taken into account will be an important aspect of the framework.

(vi) Develop country case studies

Beyond utilizing the experience of countries that have already undertaken work on the measurement of sustainable tourism (step iv), it will be appropriate to look to examine the relevance and feasibility of the statistical framework through country case studies. These may be undertaken in both statistical advanced and less advanced countries. In addition to being useful for assessing the potential of the statistical framework at country level, the findings from country case studies should be able to inform on the potential to support global monitoring on sustainable tourism.

(vii) Propose a statistical framework for sustainable tourism

Based on the information obtained from the previous six steps it will be possible to propose a statistical framework for sustainable tourism. The framework can then be the subject of relevant consultation and approval processes.

3. Towards the development of SDG tourism indicators

The UN General Assembly adopted on 25 September 2015 the Resolution Transforming our world: the 2030 Agenda for Sustainable Development (A/70/L.1). This 2030 Agenda identifies 17 Sustainable Development Goals (SDGs) and 169 corresponding targets. Tourism is explicitly mentioned in three targets: 8.9, 12.b and 14.7. In addition, there are many more targets that don’t explicitly mention “tourism” but where tourism is/can be very relevant in their achievement.

The Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs), created by the UN Statistical Commission, is developing an indicator framework for the SDGs. It will present its proposed indicators to the UNSC in March 2016. In addition to this “core set” of indicators, it is expected the framework allow for the development “thematic sets” as menus of indicators that countries can choose from to focus on specific policy areas relevant to them. Development of “thematic sets” will begin once the UN Statistics Commission has approved the “core set”.
In this context, it is proposed that SDG tourism indicators comprise:

- Core indicators: those for targets 8.9, 12.b and 14.7.
- A “tourism theme” set with additional indicators to (1) expand consideration of tourism to the other targets where tourism is not explicitly mentioned but relevant, and (2) consider more detailed aspects of the targets and disaggregation of the indicators as deemed relevant.

Some of the tasks involved include:

- Description of metadata (including definition and description of the methodological framework, method of computation, interpretation, sources and data collection). Making explicit the linkages with integrated tourism-environmental accounts could be especially valuable in promoting these indicators within the SDG indicator framework.
- Testing the indicators to ensure feasibility and relevance.

This line of work will ensure a continued engagement in international discussions and formal process towards the development and implementation of an SDG indicator framework. At the same time, it will help ensure that the tourism indicators in the SDG framework is aligned with the coverage and detail of the statistical framework for sustainable tourism that is under development. This alignment will support the provision of data on a consistent and comparable basis for the derivation of indicators.

[More information on SDG tourism indicators is available in the PPT for the UNWTO Committee on Statistics and TSA, available here]

4. Towards integration of the sub-national perspective

The International Network on Regional Economics, Mobility and Tourism (INRouTe) promoted by UNWTO is finalizing the drafting of the Handbook of Regional Tourism. UNWTO will assume the editing and worldwide consultation of this document that will gain the status of UNWTO document. It is expected that in 2017 the final version of the Handbook be presented to the UN Statistical Commission as a room document for information, and to the UNWTO General Assembly.

This Handbook, and the work towards it, should provide valuable insights for advancing the MST project. It will be the starting point for:

- Extending the statistical framework to the sub-national level to ensure coherence between tourism statistics and multiple scales.
- Exploring the potential for spatial disaggregation of the SDG tourism indicators (as part of the “tourism theme”), in line with UN General Assembly calls to “leave no one behind” and the consequential IAEG-SDG work stream on disaggregation.

This line of work may involve the development of case studies in selected countries/regions and an evaluation of the possibility to compile sub-national indicators from selected countries.

[More information on the sub-national perspective and INRouTe’s work is available in the proceedings of the MOVE 2015 International Conference on the Sub-national Measurement and Economic of Tourism: Towards UNWTO Guidelines]
5. Process and next steps for the project

The three sections above highlight a range of tasks and outputs that would be developed as part of the MST project. Annex 2 shows an approximate time for the main actions and outputs of the project.

The Working Group established for the MST project will play a key role in the development and leadership of the project. Its main roles are sharing experiences and ideas on how to move the project forward, reviewing documents, engaging in the development of case studies, and raising awareness and leadership of this project within national governance structures.

Beyond the MST project there is the important question of implementation of the concepts, frameworks and indicators that have been proposed. To support implementation it is envisaged that a number of elements would need to be considered. These include:

- Recognition of the use of a tiered approach to implementation whereby the integration of information across different domains is completed in a step-wise, modular fashion guided by the information requirements at national and sub-national level and the resource available.

- The development of guidance materials concerning the compilation of tourism-environmental accounts, the derivation of indicators of sustainable tourism and the organization of sub-national level data.

- Advice on establishing appropriate institutional arrangements at national and sub-national level to guide the collection and integration of statistics that are likely to be sourced from multiple domains and different agencies.

- Co-ordination of implementation with plans already underway considering the advancement of tourism statistics, tourism satellite accounts, environment statistics and environmental-economic accounts. This may involve co-ordination on training, guidance materials, funding and resources, timing of activities and the like. As appropriate various UN and international agencies should be engaged including the UN regional commissions, the development banks and similar bodies.

Discussion points

At this time, feedback on the following points would be beneficial:

- Is the proposed approach appropriate?
- Which groups and stakeholders should be included in scope of the development process?
- What perspectives on sustainable tourism should be incorporated in the statistical framework?
- Is the approximate timeline adequate?

Annexes (available [here](#))

1. Participants in the Working Group on MST
2. Draft Terms of Reference for the Working Group on MST
3. Approximate timeline (focusing on the 1st year)