



**High Level Discussion on Measuring the Sustainability of Tourism**  
**Side Event to the United Nations Statistical Commission 52nd session**  
12 March 2021, 9:00 – 11:00 New York time

**QUESTIONS AND ANSWERS**

A number of questions were received during the event via the Q&A box on Zoom. Some of these were addressed and answered during the event. As promised, all unanswered questions are responded in this document.

Questions are in black. Responses are in [blue](#).

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- **As we all know there are 3 dimensions of tourism sustainability: economic, social, and environmental. Do you think with Covid-19 spread, it is essential to have additional health dimension and indicators that show health aspects in tourism destinations?**

Indeed, the link between health and tourism has never been more evident than now in the aftermath of COVID-19. This is one of the areas of measurement of the MST framework under the social dimension. As crisis are inherently a sustainability issue, MST should also support the production of comparable data to help monitor and evaluate the impact and vulnerability of the tourism sector to crises, such as the COVID-19 pandemic.

- **Is it really only a matter of indicators? Many frameworks exist, KPIs are known... isn't it a question of vision, change management and actions on the ground instead?**

Absolutely, and this is precisely the *raison d'être* of MST—to provide more meaningful information for understanding where we stand and for enabling this transformation towards more sustainable tourism. MST is a statistical framework, and statistics strive to mobilize the power of data for the public good. You are right that many indicator frameworks already exist, however they often lack a central characteristic of statistics—comparability. Stronger harmonization of data on tourism's sustainability is needed to enable comparisons and benchmarking between countries, between national and subnational levels, between tourism destinations and to compare the performance of the tourism sector with other sectors/industries and across time.

MST enables the derivation of indicators that are coherent and consistent across the environmental, social and economic systems, and supports the production and organization of more harmonized data to populate these indicators. MST builds upon established measurement standards in the economic, social and environmental measurement domains, integrating them with a specific focus on tourism and its sustainability to support data coherence and comparability.

The importance of having an agreed accounting-based standard for measuring the sustainability of tourism is that, in bringing together data, it also helps to bring together the different stakeholders -both users and producers. No institution can do it on its own. The National Statistical Offices (NSOs) have a role to play in their capacity as data stewards, in bringing together different institutions, and integrating the information related to tourism from different sources (including big data) on the economic, environment and social spheres which is comparable over time and across countries. The inter-institutional characteristics of MST is what will drive transformation across sectors. Indicators are important and help to identify interlinkages but the benefits of adopting a common measurement framework go much beyond this.

Of course, these integrated data are to serve a purpose in supporting the description of a shared vision, understanding the required on-ground actions and monitoring progress towards targets. These different tasks are made more tractable through the ability to share information and experience using a common language and it is the common language for the description and discussion of sustainable tourism that MST provides.

- **How can a country implement MST when it does not have SEEA accounts?**

The MST allows for a modular approach, where parts of the framework are implemented according to priorities or specific circumstances. As MST covers more than only the Environment, and incorporates the economic and social dimensions of sustainability as well, there is no specific need for full-fledged SEEA accounts although these are very useful of course as a starting point to distil the tourism component in issues like water or energy use, solid waste or waste water flows and GHG emissions. An example is Saudi Arabia, an MST pilot country that measured the tourism energy and water consumption of for commercial accommodation services, as well as the CO2 emissions of commercial accommodation services and domestic tourism land transport, without having implemented any of the relevant SEEA accounts. For these and other examples, see: [Experiences from Pilot Studies in Measuring the Sustainability of Tourism: A Synopsis for Policy Makers](#).

Even within the environmental dimension, a country could start from a TSA and extend it to include relevant information on the environment consistent with the SEEA definitions and classification. In that sense, MST is at the intersection of the SEEA and TSA. Depending on a country's priorities it is possible to identify the impact of tourism on the environment.

In addition, implementation of MST (like implementation of any other statistical framework (e.g. TSA or SEEA) and the development of statistics more generally should be seen as a process. If measuring the sustainability of tourism is of sufficient priority in a country, it may become a priority to implement the MST tables even if TSA and SEEA are not yet produced in the country. MST could even function as an incentive to produce the TSA and SEEA tables most relevant to MST.

- **What is the recommended methodology for assessing carbon footprints at national level? Seeing as not every country has Tourism Satellite Accounts**

In principle, by using the information on the relationships between inputs and outputs of goods and services reflected in standard economic supply and use tables, it is possible to determine the links between the environmental flows (e.g. GHG emissions, water use) of

specific production processes along the whole supply chain linked to tourism demand and the outputs that are ultimately consumed by visitors. For example, it is possible to estimate the quantity of water used to grow food that is ultimately consumed by visitors. The same logic could be applied for other environmental flows such as energy and GHG emissions. Such derived estimates are often referred to as environmental footprints.

While a TSA provides a natural framework for measuring footprints as described above, it is also possible to derive them from economy wide sources of information on different production process (e.g. GHG emissions for the transport industry as a whole) but then some assumptions will be needed concerning the share of visitor consumption such that the impact of tourism can be determined.

The techniques of attributing environmental flows to categories of final demand are well established and widely applied. The SEEA Applications and Extensions introduces the relevant approaches and associated literature in Chapter III and, in Chapter IV, it provides an example of applying this approach in relation to household consumption. It is possible to use the principles outlined in SEEA Applications and Extensions to attribute environmental flows to tourism characteristic products, potentially using information on tourism expenditure to further differentiate by types of visitor.

- **It can take several years for the benefits of tourism investment to become apparent, and it can be difficult to justify public interventions on conventional ROI. Which countries are using a measure of "public value" to demonstrate that tourism can be a key driver of sustainable development?**

This question is more related to policy than statistics and certainly raises a very valid point. Statistics are about providing credible, transparent, science-based, methodologically sound, independent, impartial, accurate, accessible, comparable and relevant information. These can be used to inform an assessment of public value but the question of what is in the best interest of the public is not a statistical one. Rather it pertains to the realm of public debate and public policy. The important contribution of statistics to the public debate/policy is that it provides the commonly agreed, trusted information for these conversations to be based on facts.

The additional contribution of a framework such as the one proposed in the Statistical Framework for Measuring the Sustainability of Tourism is that information to assess the public value of tourism goes well beyond purely economic and financial considerations and further the MST works to align and integrate data across the economic, social and environmental aspects of tourism. This helps to evaluate the interlinkages and trade-offs.

- **Jamaica has been doing an outstanding job! How can we support your efforts?**

For more information on the international effort towards a statistical framework for Measuring the Sustainability of Tourism please visit:

<https://www.unwto.org/standards/measuring-sustainability-tourism>.

Parties interested in becoming involved may contact the UNWTO Statistics Department at [sttc@unwto.org](mailto:sttc@unwto.org).

- **Good day I am very pleased that the Caribbean is well represented. An excellent presentation Carol. I am wondering to what extent there is regional collaboration about these measures.**

Question addressed during the event. See [video](#).

- **By applying the same indicators, for regions with different characteristics, don't we ignore the environmental, social, economic and political problems of each destination analysed?**

**Wouldn't a system of indicators tailored to the needs of the territory be appropriate?**

*Answered during the event*

The benefit of an accounting system is that it allows to integrate information from different sources in a common framework that use consistent concepts, definitions and classifications and methods across domains: economic and environment and to some extent the social dimension. As a result the indicators derived from the accounting framework will be comparable over time, across countries and enable valid comparisons between tourism and other economic activities.

This does not mean that all countries (or subnational destinations) will focus on the same issues and topics since the context will vary. Assessment of tourism in Madrid and Paris will not consider issues about cruise ships! However, where countries or destinations are concerned about the same issue – e.g. water use or waste, they will be able to use the Framework's concepts and definitions to collect the most appropriate data and derive comparable indicators, understanding that there are important benefits to having data that is comparable (over time, between countries/destinations, between tourism and other sectors/industries). The MST Framework identifies this core information and integrates the relevant economic, social and environmental measurement standards.

Aware that different countries and destinations have their own realities, the MST Framework encourages (1) a modular implementation of the Framework according to priorities and circumstances/characteristics, while recognizing (2) that there may be specific, contextual issues outside the scope of the framework that may be very relevant in certain countries/destinations and may warrant measurement even if comparability is not a (principle) aim.

- **Hello everyone. In countries like Colombia that has great biodiversity. What would be the mechanisms or tools to articulate nature tourism or tourism for scientific or research purposes as part of sustainable tourism?**

However, it is important to distinguish nature tourism and tourism for scientific or research purposes as being types or groupings of visitors with specific purposes. The tourism for these purposes is not necessarily sustainable and will depending on the way it is undertaken. For analytical purposes it may be relevant to separately identify these type of tourism and assess their sustainability.

From an environmental measurement perspective, the MST Framework contemplates biodiversity (particularly concerning key species) as a measurement area and nature based tourism is one of the ecosystem services in the SEEA Ecosystem Accounting. To support

measurement in these areas, a tool is being developed “ARIES for SEEA” which will be launched on 22 April which will describe the use of earth observation for estimating some ecosystem services. This tool allows combining national data sets with global data sets to improve on the estimates. There is also increasing engagement between statistics and the global biodiversity measurement agenda under the Convention on Biological Diversity (CBD) that the MST can take advantage of in due course.

- **Why does the social dimension include visitor perception, but not residents' perception of tourism?**

The social dimension of the Measuring the Sustainability of Tourism contemplates both. The areas of measurement indicated in the presentation are only some examples, but the framework is wider than that. Indeed the community's perception is very important too, since a successful tourism policy needs people's acceptance and awareness for tourism.

- **Are the emissions parameters the same as those used by UNFCCC?**

In short, the parameters will be aligned but may be different depending on the specific context. One particular example concerns the treatment of emissions by international air transport which are not currently reported under the UNFCCC but are within scope of the MST following the application of the accounting principles of the SEEA.

- **What is a good definition of Sustainable Tourism?**

Sustainable tourism is tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.

**Sustainable tourism development guidelines** and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments. Sustainability principles refer to the environmental, economic, and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability.

Thus, sustainable tourism should:

1. Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity.
2. Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance.
3. Ensure viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation.

Sustainable tourism development requires the informed participation of all relevant stakeholders, as well as strong political leadership to ensure wide participation and consensus building. Achieving sustainable tourism is a continuous process and it requires

constant monitoring of impacts, introducing the necessary preventive and/or corrective measures whenever necessary.

Sustainable tourism should also maintain a high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about sustainability issues and promoting sustainable tourism practices amongst them.

- **How to find a good balance between the positives (generating revenue and jobs) and the negatives (pressure on the environment and on local communities)?**

From the policy perspective, it is important to design policy that address both, and promotes the positives while minimizing the negatives. Now, from the statistical perspective, it is important that both are measured. And that these data are used to monitor and evaluate the success of the policies, and optimize their impact.

- **I am a doctoral research based in Ireland examining indicators to measure sustainable tourism in Ireland. Also, using the data against the visualisation of geospatial data (such as described by Mr. Julio in Mexico). Do you have an expected timeline for publishing the final MST framework?**

The Statistical Framework for Measuring the Sustainability is work in progress but is suitable for testing and various components have been piloted in a number of countries. A new draft is being prepared and previous versions are available online. When the document is sufficiently consolidated both in technical terms and in terms of international consensus, it will be presented to the United Nations Statistical Commission for its endorsement. The steps towards this are outlined in the [Background Document](#) presented to the United Nations Statistical Commission.

- **To all speakers. Thank you so much for your most inspiring interventions. What are the biggest challenges you've been facing and what do you anticipate to be the most important accelerators of adoption of the upcoming framework?**

The current pandemic has made more evident than ever the need for such a framework not only because more holistic information of tourism is needed, this information also needs to be comparable at least in some areas. However, there certainly are challenges:

1. Raising awareness in statistical circles that Measuring the Sustainability of Tourism constitutes an important data demand from policy and other stakeholders involved with tourism and with sustainable development more broadly. Tourism is not a separate system, it is an integral part of our economic, social and environmental systems. When tourism is not sustainable, neither are our economies, societies and our activities in the environment.
2. At the same time, it is known that many National Statistical Offices (NSOs) are under-resourced to carry out the array of data demands in all domains while seeing their role in the data ecosystem evolve from sole data provider towards increasingly one of data steward. Collaboration and co-responsibility—including in the areas of funding—between NSOs, Ministries and other stakeholders for data initiatives such as Measuring the Sustainability of Tourism are more important than ever.

3. For this happen, the benefits of statistics and of integrated measurement frameworks such as MST need to be clearly communicated to the stakeholder community, while acknowledging the space for information that is not strictly “official statistics” but may complements it to provide a more meaningful picture of, in this case, sustainable tourism. The stakeholder community needs to see their data demands are reflected in the framework and taken seriously, which will in turn promote the relevance of statistics and NSOs.

- **Sustainability requires cooperation, and collaboration is essential for meaningful statistics. What are UNWTO and others doing to encourage consistency and transparency, especially between the public and private sectors?**

Absolutely. The [Background Document](#) presented to the United Nations Statistical Commission outlines the stakeholder engagement mechanisms on Measuring the Sustainability of Tourism (MST).

Sustainability in tourism, and its measurement, naturally cuts across a range of disciplines and entities. For this reason, UNWTO, jointly with UNSD, set up a multidisciplinary and open Working Group of Experts on MST to lead the development of a Statistical Framework for MST. This group engages experts from national statistical offices, national tourism administrations, sub-national tourism administrations and observatories, international organizations, academia and private sector. (Global) consultations on the statistical framework under development, and events such as these, are also important engagement mechanisms.

- **How would the sustainability frameworks adequate around the first and last exposures initiatives?**

The country experiences (Jamaica, Mexico, the Philippines and Austria) shown are examples of implementation of the approach proposed in the statistical framework for Measuring the Sustainability of Tourism, each applied in a modular fashion to their specific circumstances and in line with their priorities.

- **Is it possible for us to received soft copies of this presentation online**

Yes, they are available [here](#).

- **Have you seen the TRAVELSAT Resident Sentiment Index from TCI Research?**

Resident sentiment/attitude to tourism is an important consideration in the sustainability of tourism and it is included as a key measurement area in the Statistical Framework for Measuring the Sustainability of Tourism.

*(This message was received after the event via email)*

- **Benchmark energy consumption figures for hotels in the Tropics. Ideally, this must be broken up into subcategories like City Hotels, Resort hotels and also possibly as per star rating. This is because the energy consumption will vary very much as the facilities provided will be quite different.**

**The energy must consist of Electricity, Water, Fuel, and LP Gas.**

**Ideally the figures must be for Occupied Room and Available room separately.**

**On the benefits to the community, is there a way of quantifying the benefits? This may include benefits due to direct employment, benefits due to indirect employment, procurement of local produce. patronizing of local services such as transport and patronizing of local ventures giving a taste and feel of the local culture and social behaviour to the guests.**

**We have done research and work pertaining to this topic as I'm the Chairman of SLTDA Hotels Classification Committee and we would be more than happy to share our knowledge with UNWTO and hopefully work together in the future.**

Thank you for sharing your experiences and input. Environmental data disaggregated by these categories would certainly be valuable to a range of stakeholders, and we will make sure to consider it in the development of the Statistical Framework for Measuring the Sustainability of Tourism. With respect to the social dimension and the benefits to the community, indeed the framework contemplates things like employment, decent work, business demographics (e.g. enterprise births and deaths in tourism industries), resident sentiments/attitudes, etc. Some of these elements are already governed by statistical standards and the MST framework brings this together with a focus on the sustainability of tourism; other elements are not part of the realm of official statistics but are sufficiently relevant to the sustainability of tourism to be also included in the framework. Relevance and feasibility will be the two main guiding principles for assessing whether a certain measurement area (proposed in the MST framework) is warranted in a particular country/destination. We look forward to working together with you.