Official statistics for measuring the sustainability of tourism: the UNWTO initiative

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1. Introduction

The worldwide ongoing digital transformation is facilitating the availability of an ever increasing amount of data. The demand for data-driven decision-making is stimulated more and more by the increase itself of information. On the other side, even more attention is to be payed to make sure that the available data is accurate and, given the importance now attached to sustainability, the accuracy at issue concerns distinctly economic, social and environmental statistics and their integration.

Since tourism has been one of the fastest growing sectors in the recent past before the appearance of the COVID-19 pandemic, in the last few decades this sector has been increasingly drawing the attention of agencies and stakeholders, focused on how tourism might deter or even support efforts towards sustainable development, especially in the face of challenges like climate change or poverty alleviation.

In order to make the tourism sector more responsible and its development more sustainable, the availability of data that are relevant, integrated and timely and the establishment of a statistical system devoted to sustainable tourism that is worldwide trusted are more important than ever. Data from official statistics, characterized by the highest quality possible inasmuch as they are produced in compliance with the United Nations Fundamental Principles of Official Statistics and the European Statistics Code of Practice, are best suited to meet this need.

The United Nations World Tourism Organization (UNWTO) is the agency with the UN mandate to promote tourism as a driver of economic growth, inclusive development and environmental sustainability. Along these lines, UNWTO is involved in a range of projects to support the sustainability of tourism. An initiative known as Measuring the Sustainability of Tourism (MST), launched by UNWTO in late 2015 in partnership with the United Nations Statistics Division (UNSD), is particularly relevant from a statistical standpoint.

As a long-term purpose which is particularly close to decision makers’ needs, the MST initiative intends to propose an international statistical standard that not only can provide methodological guidance for statistics on the sustainability of tourism but can support measurement of progress towards the UN Sustainable Development Goals (SDGs), part of the 2030 Development Agenda, on the basis of indicators that are relevant as far as those targets directly related to tourism are concerned.

On a methodological ground, the main effort of MST is to establish a Statistical Framework for measuring the role of tourism in sustainable development (SF-MST). Official statistics are at the core of said framework, since this is supposed to provide crucial guidance for countries to produce statistical data that is credible, comparable, integrated and enriched by harmonised metadata.

In the present paper, after an overview of the concept of sustainable tourism and the UNWTO

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1 Relevant targets within SDGs are the following: target 8.9 (“devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products”); target 12.b (“develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products”); target 14.7 (“increase the economic benefits to small island developing States and least developed countries”) (UN General Assembly, 2015).
MST initiative, a specific focus is on SF-MST. Concluding remarks and annotations on future developments complete the paper.

2. The sustainability of tourism and the UNWTO initiative

Tourism is a multidimensional phenomenon relying on and having impacts on economy, environment and society. Its role in supporting or deterring efforts towards sustainable development (e.g. by creating jobs, on the one hand, or by contributing to pollution, on the other hand) is now universally recognized. This awareness has been consolidating in the framework of the debate on sustainability started since the early nineties following the appearance in 1987 of “Our Common Future”, the Brundtland Commission report on sustainable development (World Commission on Environment and Development, 1987), and the subsequent Rio Earth Summit of 1992.2

According to UNWTO, “sustainable tourism” is a “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” (UNEP, UNWTO, 2005). More specifically, according to the community of experts working on UNWTO projects, sustainable tourism is one that, in addition to making optimal use of environmental resources, should 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; furthermore, in addition to ensuring viable, long-term economic operations, sustainable tourism should provide 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.

UNWTO found that for the collection of statistical information suitable to describe sustainability aspects of tourism no standardized basis was available for the time being. This gap was deemed worth to be filled in order to make possible a proper support to decision makers involved in advancing sustainable tourism.

With a view to achieve this, the UNWTO Committee on Statistics has set up a multidisciplinary Working Group of Experts on Measuring the Sustainability of Tourism (WGE-MST), by engaging experts from national statistical offices, tourism administrations and observatories, international and regional organizations, academia and the private sector. The major task of this group of experts not only is to lead the needed technical development but also to support engagement among stakeholders. Given the relevance of the environmental-economic dimension of sustainability, this leading role is played by WGE-MST in coordination with the United Nations Committee of Experts on Environmental-Economic Accounting (UNCEEA).

A very important objective already realized is the almost finalized drafting of the above mentioned statistical framework, in a sense the core element of MST since SF-MST is envisaged to be adopted as the much needed standardized statistical basis.

A number of pilot studies, including examples of policy applications, have been carried out according to the conceptual structure of SF-MST. Italy, with Istat, is among the first countries that have realized pilot studies for the purposes of MST (Istat, 2019; Tudini, Ardi, Recchini, 2018).

The current draft of SF-MST is the result of several rounds of consultations among the members of UNWTO Committee on Statistics and of WGE-MST (UNWTO, 2018a). In addition to that, global consultations have been carried out, obtaining comments from about 20 countries, including Italy with Istat and Ministry of the Environment, as well as from international agencies and academic institutions.

It’s worth noting that on the occasion of the International Year of Sustainable Tourism for Development 2017, the first draft of SF-MST was a core component of the conference programme of the “Sixth UNWTO International Conference on Tourism Statistics: Measuring

sustainable tourism” held in Manila in the same year³.

As highlighted within the tourism statistician community, this Conference is considered a historical milestone for tourism statistics. It was the first time ever that a UNWTO event united ministers, statistical chiefs, policy experts, statisticians, private sector and academics dedicated to the measurement of sustainable development and tourism. Not only all parties fully supported the SF-MST, but the Conference concluded with the adoption of the Manila Call for Action on Measuring Sustainable Tourism, which represents a global commitment to create a consistent statistical approach to measuring the full impact of tourism. It emphasizes that effective sustainable tourism policies require integrated, coherent, comparable and robust data.

Along with the development of overall methodological work, a number of specific though somewhat cross-cutting conceptual research areas have been addressed by WGE-MST, namely the following: social sustainability of tourism, employment in tourism industries, defining spatial areas, implementation strategy, communication strategy, tourism SDG indicators. For the different research areas, ad-hoc sub-groups have been established, each led by an expert from a different country/agency. An expert from Istat – the Institute representing Italy in the WGE-MST – leads the sub-group on social sustainability of tourism (Recchini, 2018; Recchini, Costantino, 2019).

3. Measuring the full impact of tourism based on official statistics data: the statistical framework

As anticipated, the ambition of the MST initiative is to provide a standardized statistical structure allowing to measure and monitor the full impact of tourism and supporting decision-making towards any preventive and/or corrective action/policy/measure.

SF-MST plays a fundamental role in providing a common and harmonized set of relevant concepts, definitions, classifications and measurement scopes, thus developing a standardized and comparable language in the field of quantitative measurement.

Particularly important in achieving this goal is the crucial role of official statistics in SF-MST. As a matter of fact, it is within official statistics that common understanding on concepts, definitions and related terminology for measurement purposes is ensured and proper support to the measurement of changes over time and of differences between locations can be provided. Official statistics, by their nature, provide reliable, impartial, transparent, accessible and relevant information produced according to the highest possible quality criteria and strict conditions concerning processes and conceptual methods. In official statistics metadata is no less important than the data itself.

In principle, SF-MST builds upon existing internationally agreed statistical standards and guidance developed for the three dimensions of sustainable tourism, economic, environmental, social. By integrating these different domains, SF-MST intends to overcome the fragmentation due to no underlying alignment between the corresponding statistics.


SF-MST is to a great extent inspired by accounting concepts. In this perspective, the System of National Accounts 2008 (SNA 2008), with its comprehensive, consistent and flexible set of macroeconomic accounts provides the globally accepted accounting framework supporting decision-making, analysis and research work in the economic field (UN et al., 2009), thus being the basic statistical standard for addressing the economic dimension of sustainability. Of course,

in addition to SNA 2008, the Tourism Satellite Accounts: Recommended Methodological Framework 2008 (TSA: RMF 2008) (UN, UNWTO, Eurostat, OECD, 2010) is the international statistical standard specific for describing the economic aspects linked to tourism. Furthermore, for the environmental aspects concerning tourism, in addition to the above mentioned IRTS 2008, the System of Environmental-Economic Accounting 2012 – Central Framework (SEEA-CF 2012) (UN et al., 2014) is a very key international statistical standard which SF-MST builds upon.

The scope of existing international statistical standards that are actually used for measuring tourism is largely economic for the time being. Systems of tourism statistics in line with the international statistical standards specifically focused on tourism mentioned above have been developed by many countries, but the growing need of decision makers and stakeholders for an overall system covering the three dimensions of sustainability has led SF-MST to acknowledge the multifaceted nature of sustainable tourism, without trying to provide a univocal operational definition of this concept. In practice, SF-MST is meant to provide a single reference point for extending the current range of tourism statistics to include the three dimensions of sustainable tourism at relevant spatial scales. The integration of economic, environmental and social statistics on tourism at appropriate spatial scales represents the key aspect of SF-MST.

The linking of TSA: RMF 2008 and SEEA-CF 2012, both aligned with SNA principles and structure, is a central feature of SF-MST: the former provides guidance for measuring the direct economic impact of tourism, the latter for the measurement of the relationships between tourism as an economic activity and the natural environment.

A specific output of MST has been the development of a Technical Note linking SEEA and TSA, which has been prepared under the joint auspices of the UNWTO Committee on Statistics and the UNCEEA. This SEEA-TSA Technical Note describes a core part of the overall SF-MST by providing a framework to link the economic and environmental dimensions of sustainable tourism. It is structured to provide a starting point for compilers of tourism and environmental-economic accounts to consider ways in which their accounts can be adapted and extended to organize information for assessing sustainable tourism (UNWTO, 2018b).

Based on an accounting approach, SF-MST points to sustainability assessment by measuring a broad set of capitals (produced, natural, human and social capital) and the flows of related incomes and benefits.

As regards the social dimension of the sustainability of tourism, further effort is needed, however, because social statistics are particularly complex and in general they are relatively less mature, compared e.g. to the economic data (Recchini, Costantino, 2019).

The social dimension, in fact, is the weakest pillar of the measurement of sustainable development, due to different theoretical and analytical bases still under debate. Nevertheless, the concept of social capital, despite the current unavailability of a standard accounting system due to its intangible and multi-dimensional nature not allowing its direct measurement, is deemed to be appropriate for integrating the social dimension of the sustainability of tourism into the multiple capitals-based approach (Recchini, 2018).

Turning to implementation aspects concerning SF-MST, it is expected that application work would be flexible and modular, allowing countries to take into consideration only those aspects and those spatial levels considered most relevant, also on the basis of available resources.

4. Concluding remarks and future developments

An increasingly globalized and interconnected world, which is also better aware about sustainable development, enhances the need for accurate information to better target decision-making. Official statistics, based on the UN Fundamental Principles of Official Statistics and the European Statistics Code of Practice, are best suited to meet this need.

Regarding tourism – given its impacts on economy, environment and society – we are moving towards the production of data reflecting a sustainability perspective. SF-MST, the main effort of UNWTO in terms of methodological development for the purposes of MST, addresses decision
makers’ demand for integrated statistics on tourism reflecting the three dimensions of sustainability and is proposed as a standardized basis for the collection of relevant information. This is supposed to integrate statistics on different domains in order to measure the role of tourism in sustainable development at appropriate spatial scales.

The finalization of SF-MST – after an active process of research, discussion and worldwide consultation across multiple experts, sectors and stakeholders – is currently at a quite advanced stage. The United Nations Statistical Commission (UNSC), noting the strong interest from countries in this work, has encouraged the finalization of SF-MST (UNSC, 2022). The final version of the document is expected to be submitted to the UNSC at its next session, for approval as an international statistical standard.

SF-MST, involving a wide range of agencies and stakeholders, plays a key role in providing an integrated information basis for development of data and metadata and derivation of indicators supporting more effective decision-making towards sustainable outcomes.

References


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