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Measuring the Sustainability of Tourism - Purpose and underlying concept - Peter Laimer - Deputy Director, Directorate Spatial Statistics, Statistics Austria

Pomiar zrównoważonego rozwoju turystyki – cel i koncepcja

Abstract

Attracting tourists mainly depends on – apart from the necessary tourism infrastructure facilities – an intact and unsoiled nature and picturesque landscapes. Therefore, a **high quality** of the **natural and social environment** is one of the most important production factors of tourism industry, as tourists want to move to attractive and unpolluted places which are one of the main travel purposes.

In many regions and countries **sustainable tourism policies** are more or less well developed; however, there is still a **lack of guidance and information** on how to monitor this progress. Given its economic, social and environmental implications and its potential for growth, tourism plays, and will continue to play, a major role in our societies.

Considering this fact, the **development of tools** measuring the economic, social and ecological sustainability applicable to the tourism industry was initiated by various (national and international) organizations and proposed for implementation.

Based on the “UN 2030 Agenda” (see UN 2015), the UN World Tourism Organisation (UNWTO, now “UN Tourism”; see UNWTO 2017a) - one of the leading international organisations dealing with tourism and tourism statistics - has set itself the goal of measuring sustainable tourism as part of a specially defined project “**Measuring the Sustainability of Tourism**” (MST; see UNWTO 2017b) and a multidisciplinary Expert Group on MST¹² has been set up jointly with the UN Statistics Division (UNSD). The need for statistical analysis of the topic stems from the increasing realization that tourism - beyond its links with the economy - has an impact on the environment and society in general. A pre-condition for MST is the development of a **common accepted statistical framework** which aims to provide an internationally agreed statistical tool to measure the impacts and dependencies of tourism on the economy, society and the environment.

Therefore, a “**Statistical Framework for Measuring the Sustainability of Tourism**” (SF-MST; see UNWTO 2023a) has been developed by UNWTO in partnership with leading countries, and with the support of the UNSD, the International Labour Organization (ILO) and others. Work is being led by the Expert Group on MST under the auspices of the UNWTO Committee on Statistics¹³. After the “Global Consultation Process” in October/November 2023 the Framework is going to be sent to the UN Statistical Commission¹⁴ (UNSC) for its endorsement through the Commission.

The document is **structured as follows**: after the introduction and the rationale of the document, the second section provides an overview of the steps developing the SF-MST; the third section shows the underlying concepts of SF-MST. The fourth section gives insights related to the purpose of developing a SF-MST; before concluding the fifth part provides some thoughts related to potential indicators measuring the sustainability of tourism.

The **document is mainly based** – among others - on the Draft SF-MST (see UNWTO 2023a), the presentation held on 26 October 2023 at Vistula University Group (see Laimer 2023) and the keynote paper presented at the Manila Conference in 2017 (see Laimer 2017).

Abstrakt

Przyjazdy turystów są warunkowane nie tylko niezbędną infrastrukturą turystyczną, ale również zależą od nieskazitelnej przyrody oraz malowniczych krajobrazów. Dlatego też wysoka jakość środowiska przyrodniczego i społecznego jest jednym z najważniejszych czynników na rzecz rozwoju branży turystycznej. Turyści chcą przyjeżdżać do atrakcyjnych i niezanieczyszczonych miejsc.

W wielu regionach i krajach polityki w zakresie zrównoważonej turystyki są w różnicowanym stopniu rozwinięte. W dalszym ciągu brakuje wytycznych i informacji dotyczących sposobu monitorowania rozwoju turystyki zrównoważonej. Biorąc pod uwagę skutki gospodarcze, społeczne i środowiskowe oraz potencjał wzrostu, turystyka odgrywa i nadal będzie odgrywać główną rolę w naszych społeczeństwach.

Mając to na uwadze, różne organizacje (krajowe i międzynarodowe) zainicjowały i zaproponowały do wdrożenia rozwój narzędzi pomiaru zrównoważenia gospodarczego, społecznego i ekologicznego dla branży turystycznej.

W oparciu o „Agendę ONZ 2030” (por. ONZ 2015) Światowa Organizacja Turystyki ONZ (UNWTO; por. UNWTO 2017a) – jedna z wiodących organizacji międzynarodowych zajmujących się turystyką i statystyką w dziedzinie turystyki – postawiła sobie za cel pomiar turystyki zrównoważonej jako część projektu „Pomiar zrównoważonego rozwoju

¹² <https://www.unwto.org/tourism-statistics/expert-group-on-mst>

¹³ <https://www.unwto.org/tourism-statistics/unwto-committee-on-statistics>

¹⁴ <https://unstats.un.org/UNSDWebsite/statcom/>

turystyki” (MST; zob. UNWTO 2017b) oraz stworzono multidyscyplinarną grupę ekspertów ds. MST wspólnie z Wydziałem Statystyki ONZ (UNSD). Potrzeba analizy statystycznej tematu wynika z rosnącej świadomości, że turystyka – poza powiązaniem z gospodarką – ma wpływ na środowisko i społeczeństwo.

Warunkiem wstępnym MST jest opracowanie wspólnie przyjętych ram statystycznych, których celem jest zapewnienie uzgodnionego na szczeblu międzynarodowym narzędzia statystycznego do pomiaru wpływu i zależności turystyki na gospodarkę, społeczeństwo i środowisko.

Dlatego też UNWTO we współpracy z wiodącymi krajami i przy wsparciu UNSD, Międzynarodowej Organizacji Pracy (MOP) i innych organizacji opracowało „Statystyczne ramy pomiaru zrównoważonego rozwoju turystyki” (SF-MST; zob. UNWTO 2023a). Prace prowadzi Grupa Ekspertów ds. MST pod auspicjami Komitetu ds. Statystyki UNWTO. Po „globalnym procesie konsultacji” w październiku/listopadzie 2023 r. Ramy zostaną przesłane do Komisji Statystycznej ONZ (RB ONZ) w celu zatwierdzenia za pośrednictwem Komisji.

Struktura dokumentu jest następująca: po wstępie i uzasadnieniu dokumentu druga część zawiera przegląd etapów opracowywania SF-MST; trzecia sekcja przedstawia podstawowe koncepcje SF-MST. Czwarta sekcja zawiera spostrzeżenia związane z celem opracowania SF-MST; przed zakończeniem część piąta zawiera przemyślenia dotyczące potencjalnych wskaźników mierzących zrównoważony rozwój turystyki.

Dokument opiera się głównie m.in. na Draft SF-MST (por. UNWTO 2023a), prezentacji, która odbyła się 26 października 2023 r. w Grupie Uczelni Vistula w Warszawie (por. Laimer 2023) oraz referacie programowym zaprezentowanym na Konferencji w Manili w 2017 r. (por. Laimer 2017).

Keywords: sustainability, tourism, statistical framework, indicators

JEL: Z31- Tourism economics – Industry Studies

Rationale of the document

So far, the success of tourism has mainly been measured by **physical and quantitative parameters** such as overnight stays and arrivals, which reflect, however, only a small aspect of the tourism industry. Tourism can have a range of **effects** on the economy, the environment and the society; there is a need for a comprehensive approach to monitor tourism development, therefore.

Thus, for a **targeted tourism policy**, instruments are needed which permit a comprehensive picture and a

holistic view related to tourism. By means of a set of innovative measures and indicators all dimensions related to a sustainable development of tourism have to be examined and monitored. (see BMAW 2018)

The document uses the development of the UNWTO’s SF-MST to show possibilities for comprehensive measurement of tourism. Having such a multipurpose conceptual framework it is possible to record data about tourism’s economic, environmental and social connections and effects in a holistic way and considering differences across geographic scales from local to national and international levels.

Developing a SF-MST - the steps over time

The development of SF-MST **builds on and is coherent with, well-established statistical frameworks** including the ‘International Recommendations on Tourism Statistics 2008’ (IRTS 2008; see UNWTO 2010a), the ‘Tourism Satellite Account: Recommended Methodological Framework 2008’ (TSA: RMF 2008; see UNWTO 2010b), the ‘System of Environmental-Economic Accounting 2012’ (SEEA 2012; see UN 2014), the ‘System of National Accounts 2008’ (SNA 2008; see UN 2009) and International Labour Organisation (ILO) statistical manuals.

Following the work programme presented to the **UN Statistical Commission** (UNSC) 2017¹⁵, engagement with various stakeholders has taken place notably through the Expert Group on MST. It is composed of representatives from National Statistical Offices (NSOs) and Ministries (National Tourism Administrations; NTAs) in charge of tourism from around 40 countries covering all world regions, as well as representatives from over 30 international and regional organizations, subnational authorities, academia and the private sector.

Several countries and sub-national destinations from all world regions have piloted the implementation of SF-MST. These **pilots** served to test the framework for policy relevance and technical feasibility. The pilots showcased that it is possible to measure in a comparable way the breadth of elements that comprise tourism sustainability - from environmental to social and economic aspects, at national and sub-national levels - within a single integrated framework. (see UNWTO 2020 and UNWTO 2022).

¹⁵ <https://unstats.un.org/UNSDWebsite/statcom/>

<https://unstats.un.org/UNSDWebsite/statcom/48>

An **open, transparent and inclusive approach** to gathering comments and feedback on SF-MST has been adopted. A global consultation on the final draft of SF-MST was conducted in October and November 2023, directed at both the statistical community and the tourism community. Furthermore, a series of **capacity development initiatives** on MST, in the form of workshops and seminars, have taken place.

The **MST programme** is a process that includes various lines of work beyond the development of SF-MST, continuing to work in partnership with countries, international organizations and others on supporting the further implementation of SF-MST, including through the drafting of compilation guidance and capacity development, the development of a set of SF-MST based indicators for international comparability purposes, and the subsequent setting up of an international dataset with country reporting on these indicators.

The SF-MST can function as a **catalyst for the development of systems** of tourism statistics which include data based on the IRTS 2008 and TSA:RMF 2008. To support countries in the implementation of SF-MST, UNWTO will develop in 2024, under the supervision of the UNWTO Committee on Statistics and with the support of the Expert Group on MST, an implementation programme; this will include:

- the preparation of an **SF-MST compilation guide** to assist implementing efforts by providing additional guidance on data sources and methods,
- organization of the seventh **International Conference on Tourism Statistics** that will focus on SF-MST implementation,
- **capacity development activities** at both regional and national levels, in the form of workshops, seminars, and training programmes, as well as training the trainers,
- an **additional publication(s) on the lessons learned from MST pilots**, following the existing two publications mentioned above.

These activities will cover technical knowledge on SF-MST, exchange of good practices and institutional arrangements. The **implementation programme** will be accompanied by resource mobilization efforts to support the financing of the planned activities. (see UNWTO 2023b)

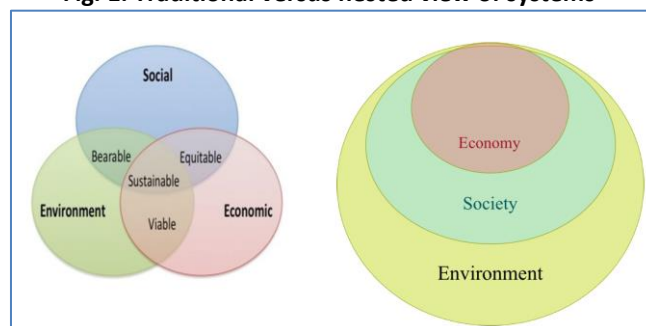
Finally, the **UN Statistical Commission** (UNSC) is being invited to endorse the SF-MST at its 55th meeting in New York, held 27 February – 1 March 2024 ¹⁶.

SF-MST: the concept behind

The design of SF-MST recognizes the importance of **reflecting the interactions between the economic, environmental and social dimensions** at different spatial scales, from national and global scales to sub-national and destination scales. (UNWTO 2023a, para 2.2)

More generally, SF-MST recognizes that individual contexts, such as for a single tourism destination, are usefully characterized in terms of “**nested systems**” where the economic system is embedded within a social context which in turn sits within an environmental system (see [Figure 1](#), right side). In contrast the more traditional conception of the relationship between the three dimensions shows the economy, the environment and society as distinct systems, even if slightly overlapping (see [Figure 1](#), left side). Using a nested-systems framing to consider the sustainability of tourism supports inclusion of all three primary dimensions of sustainability and provides the opportunity to explicitly consider the connections between different spatial scales. (UNWTO 2023a, para 2.5)

Fig. 1. Traditional versus nested view of systems



Source: UNWTO 2023a, Figures 2.1a+b

Purpose of SF-MST

Different purposes have brought the development of a framework for measuring the sustainability of tourism on the international agenda:

- Tourism can have a **range of effects on the economy, the natural and built environment**, the local

¹⁶ <https://unstats.un.org/UNSDWebsite/statcom/55/>; see also Report of the 55th session, page 20 (55/115)

https://unstats.un.org/UNSDWebsite/statcom/session_55/documents/2024-36-FinalReport-EE.pdf

population at the places visited and the visitors themselves. Given the range of direct and indirect effects and the wide spectrum of stakeholders involved, there is a need for an integrated approach to tourism development, management and monitoring. (UNWTO 2023a, para 1.1)

- The SF-MST is a **multipurpose conceptual framework** designed to support the recording and presentation of data about the sustainability of tourism. It aims to record data about tourism’s economic, environmental and social connections and effects in a holistic way and considering differences across geographic scales from local to national and international levels. (UNWTO 2023a, para 1.2)
- **Statistical frameworks provide a structure for organizing data and statistics** using common concepts, definitions, classifications and reporting rules. Collectively, this establishes a common language for measurement and the presentation of data. Statistical frameworks are applied in all areas of official statistics and play the role of transforming source data into well-accepted and authoritative statistics that can be used to support many aspects of decision making. (UNWTO 2023a, para 1.3).

Figure 2 highlights that the **SF-MST encompasses measurement of the economic, environmental and social dimensions of tourism** and is intended to support application at all spatial scales from the local destination level to the global scale. Further, SF-MST is concerned with what should be the focus of measurement. The topic of how data might be collected and transformed following the concepts and definitions of the SF-MST is described in supporting statistical compilation guidance and the topic of who might use the data and why it might be used should be the subject of ongoing discussions between compilers of statistics and various decision makers and stakeholders. However, SF-MST is intended to provide a common language to support those discussions. (UNWTO 2023a, para 1.5)

SF-MST will be relevant to **three groups of stakeholders** each involved in different ways in relation to information for decision making about sustainable tourism. These groups are

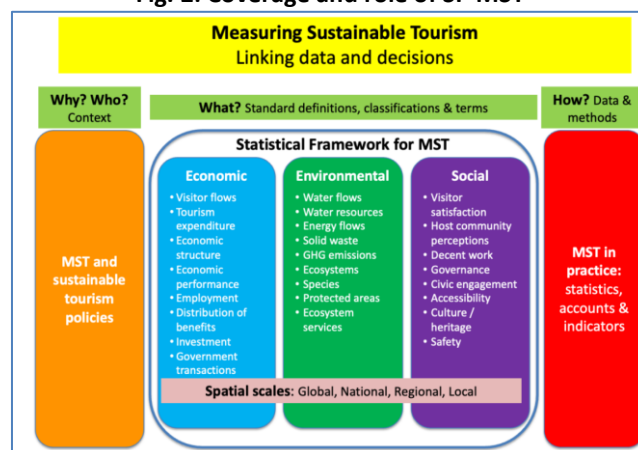
- **data producers**, including but not limited to national statistical offices (NSO), for whom SF-MST

supports the compilation of comparable and robust statistics;

- **data analysts** who integrate data from various sources and provide information to decision makers, for whom SF-MST provides a common focal point for data and standard classifications that facilitate integration; and
- **decision makers** across public and private sectors, for whom SF-MST describes a common language for discussion of progress towards sustainable tourism.

However, **SF-MST is primarily intended for use by NSOs and related technical agencies** whose role it is to collect data and compile statistics for all areas within a country for a range of statistical themes. In many countries, the collection and compilation of tourism statistics involves also the NTA who is able to both support data collection and to ensure a close link between tourism statistics on the one hand and tourism policy on the other. The broad coverage of statistical topics within the scope of SF-MST provide a wide range of opportunities to connect tourism statistics to tourism policy including concerning economic development, climate change, circular economy, disaster preparedness, employment and social and cultural heritage. (UNWTO 2023a, para 1.7)

Fig. 2: Coverage and role of SF-MST



Source: UNWTO 2023a, Figure 1.2

Potential indicators – measuring the sustainability of tourism

UNWTO and its “Committee for Statistics” considered that **tourism may be relevant in many more goals and targets**

within the “Sustainable Development Goals” (SDGs)¹⁷ beyond those that explicitly mention tourism; therefore, an additional set of indicators around a “tourism theme” could be developed to complement the above indicators in order to support global and national monitoring for the SDGs. This would include indicators to monitor elements not covered in the existing indicators for targets 8.9, 12.b and 14.7. For most additionally proposed indicators there is a strong connection to other types of indicators recommended in other sustainable tourism processes (see Laimer 2023).

The SF-MST output data can also be used to **derive indicators** that summarize performance. The **SF-MST itself does not incorporate a definitive indicator set** for assessing the sustainability of tourism. Table 1 below lists the set of themes covered by SF-MST and notes some indicators that are commonly considered in the measurement of those themes (see also UNWTO 2023a, para 2.89).

That initial proposal for a set of core indicators derived from SF-MST might be relevant for **international comparability purposes** as well as a possible way forward that includes rounds of consultations and testing in countries. In due time, the core set of indicators is expected to be incorporated into the UNWTO tourism statistics database

¹⁷ <https://sdgs.un.org/goals>

Table 1: Potential indicators

Dimension	Measurement theme	Potential Indicators
General indicators	Visitor length of stay	Average length of stay of inbound and domestic visitors
	Tourism concentration	Number of visitors per 100 residents; Number of visitors per hectare of habitable land
	Tourism visitor dependency	Number of inbound visitors (total/tourist/same day) relative to total internal visitors (total/tourist/same day)
	Tourism seasonality	Variations in visitor arrivals (total/inbound/tourist/same day) on a regular time horizon and in regular frequencies.
Economic	Visitor expenditure	Average internal tourism expenditure per visitor ((total/inbound/domestic/tourist/same day)
	Tourism economic structure	Share of large and SME tourism establishments, Share of resident owned tourism establishments relative to all tourism establishments
	Tourism economic performance	Tourism direct GDP; Tourism share of total output for each tourism industry
	Distribution of economic benefits	Share of compensation of employees relative to tourism direct value added in the tourism industries
	Employment in tourism	Total employment in tourism industries (# jobs, # person employed & # employees); Share of employed persons in tourism industries relative to total economy; Number of jobs held by women in the tourism industries; Labour productivity of tourism industries
	Tourism investment	Total gross fixed capital formation (GFCF) in tourism specific fixed assets relative to total GFCF of tourism industries; Total GFCF in tourism industries relative to total economy GFCF
	Government tourism-related transactions	Total tourism related government final consumption expenditure
Environmental	GHG emissions	Internal GHG emissions per visitor; Internal GHG emissions per unit of tourism direct GDP
	Solid waste flows	Solid waste generated per visitor; solid waste generated per unit of tourism direct GDP; Share of solid waste generated by tourism industries relative to total solid waste
	Water flows	Tourism water use per visitor and per visitor overnight; Tourism water use per unit of tourism value added
	Wastewater	Tourism wastewater per visitor overnight
	Water resources	Annual tourism water use as a proportion of the net change in stock of water resources.
	Energy flows	Total end-use of energy products by tourism industries
	Ecosystem extent for tourism related areas	Share of tourism-related ecosystem assets to the total area of the tourism region; Percentage of protected areas (marine and terrestrial) to total area
	Ecosystem services flows for tourism related areas	Total recreation related services in a region
Social	Visitor satisfaction	Share of visitors satisfied with overall experience at destination; Number of repeat visitors, Extent to which visitors would recommend a destination
	Host community perception	Overall perception of host communities of visitors
	Decent work	Share of compensation of employed persons relative to tourism direct value added in the tourism industries; Share of persons employed in tourism industries who are informally employed;
	Governance	Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability (see SDG indicator 12b.1)

Source: UNWTO 2023a, Table 2.1.

Using the **SF-MST as a base for conceptual content**, which presents a proposal for a set of indicators to support measurement of the sustainability of tourism and to provide a starting point for establishing an agreed core set of data for international reporting on tourism’s sustainability. One motivation for SF-MST is not the lack of past work on measuring the sustainability of tourism but the lack of harmonisation and comparability that in turn limited the potential for the key messages to be readily conveyed to decision makers. (see UNWTO 2023a)

However, related to indicators the **following challenges** might be observed (see Laimer 2023):

- tourism is very **complex and interacts with many sectors** of the economy, with the environment and with the local population;
- **tourism policy objectives vary**, and regional and local conditions must be taken into account;
- results should be well chosen in the context of sustainability, taking into account the **applicability and usability of data** for tourism policy decisions;
- **well-coordinated cooperation** between tourism and environmental policy in the broad sense and (tourism, environmental and social) statistics;
- the **overall comprehensibility and feasibility** (i.e., in terms of comparability and data availability) of figures and data for measuring tourism sustainability must be ensured as good as possible;
- many countries are well developed in most environmental areas, i.e., waste separation, water use, renewable energy, etc., which also affect the tourism industry, but which are **difficult for the tourism industry to quantify** and measure or present separately;
- the **objectives of countries’ tourism policies are different**, regional and local conditions have to be taken into account; therefore, general statements on tourism sustainability -applicable to all regions and destinations -are not possible (i.e. comparability of indicators has to be considered); a comprehensive analysis is mainly possible only at destination level.

Conclusions

It is obvious that **tourism is of great significance for the economy** of many countries. Receiving a more detailed or concrete answer for policy makers related to its

sustainability, additional measures have to be introduced getting **more information on the ecological and social agreeableness of the tourism development**.

Relevant measures and the SF-MST will help to understand the size of tourism, its structure and in particular its **interrelation with the ecological, social and economic environment**. SF-MST supports to manage tourism components and their relationship to the environment; it permits decision makers (on local, regional, federal as well as national level) a broader view of the whole tourism system moving away from the traditional, one-sided economic approach.

There is no doubt this is an **ambitious project**; nevertheless, it can be counted on the international tourism statistics network of official statistics, guided by international organisations which have a long track record in facilitating the measurement of coherent pictures of economic, environmental and social change around the world.

Information society demands more and more data in shorter intervals than ever. In particular related to tourism for which nature and social stability is doubtless the prerequisite of tourism, MST in general and its statistical framework are **important initiatives to gain reliable information on tourism in its wider context**.

Literature:

- BMAW (Federal Ministry Republic of Austria Labour and Economy) (2018) “Plan T – Masterplan for Tourism” Available at <https://www.bmaw.gv.at/dam/jcr:0ea14456-ac84-4d66-ac69-d507317cd3f2/PLAN%20T%20-%20MASTER%20PLAN%20FOR%20TOURISM.pdf> (Accessed: 3 December 2023).
- Laimer (2017) “Tourism Indicators for Monitoring the SDGs”. Central Paper presented at the 6th UNWTO International Conference on Tourism Statistics, 21-24 June 2017, Manila/Philippines.
- Laimer (2023) “Tourism Indicators for Monitoring the SDGs. Underlying methods, concepts and challenges”. Presentation held at Vistula University Group, Warszawa/Poland on 26th October 2023 at the Conference: Impact of tourism on sustainable development of countries and regions.
- UN (2009) System of National Accounts 2008. Elaborated by United Nations, the European Commission, the Organisation for Economic Co-operation and Development, the International Monetary Fund and the World Bank Group. Available at <https://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf> (Accessed: 27 December 2023).
- UN (2014) *System of Environmental-Economic Accounting 2012. Central Framework*. Elaborated by United Nations, European Union, Food and Agriculture Organization of the United Nations, International Monetary Fund, Organisation for Economic Co-operation and Development, The World Bank. Available at https://unstats.un.org/unsd/envaccounting/seearev/seea_cf_final_en.pdf (Accessed: 27 December 2023).
- UN (2015), Transforming our world: the 2030 Agenda for Sustainable Development, Resolution adopted by the General Assembly on 25 September 2015. Available at <https://documents-dds->

ny.un.org/doc/UNDOC/GEN/N15/291/89/PDF/N1529189.pdf?OpenElement (Accessed: 21 December 2023).

- UNWTO (2010a) “International Recommendations for Tourism Statistics”. Studies in Methods, Series M No.83/Rev.1. Available at https://unstats.un.org/unsd/publication/Seriesm/SeriesM_83rev1e.pdf (Accessed: 27 December 2023).
- UNWTO (2010b) “Tourism Satellite Account: Recommended Methodological Framework 2008”. Elaborated by UN, UNWTO, Eurostat and OECD. Studies in Methods, Series F No.80/Rev.1. Available at https://unstats.un.org/unsd/publication/Seriesf/SeriesF_80rev1e.pdf (Accessed: 27 December 2023).
- UNWTO (2017a) “2017 International Year of Sustainable Tourism for Development”. Available at <https://www.unwto.org/tourism4development2017> (Accessed: 6 December 2023).
- UNWTO (2017b) “Measuring the Sustainability of Tourism”. Available at <https://www.unwto.org/tourism-statistics/measuring-sustainability-tourism> (Accessed: 21 December 2023).
- UNWTO (2020) “Experiences from Pilot Studies in Measuring the Sustainability of Tourism – A Synopsis for Policy Makers”. ISBN: 978-92-844-2403-0. Available at <https://www.e-unwto.org/doi/epdf/10.18111/9789284424047> (Accessed: 27 December 2023).
- UNWTO (2022) “Measuring the Sustainability of Tourism – Learning from Pilots”. ISBN: 978-92-844-2405-4. Available at <https://www.e-unwto.org/doi/epdf/10.18111/9789284424061> (Accessed: 27 December 2023).
- UNWTO (2023a) “Statistical Framework for Measuring the Sustainability of Tourism (SF-MST)”. Draft prepared for Global Consultation October 2023. Available at https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2023-10/SF-MST_complete_version_OCT2023_cover03.pdf (Accessed: 6 December 2023).
- UNWTO (2023b) *Report of the World Tourism Organization on tourism statistics. Note by the Secretary-General at the 55th UN Statistical Commission, 27 February – 1 March 2024*. Available at https://unstats.un.org/UNSDWebsite/statcom/session_55/documents/2024-17-TourismStats-EE.pdf (Accessed: 20 December 2023).
- UNWTO (2023c) “Measuring the Sustainability of Tourism (MST): Proposals for a set of indicators. Draft prepared for discussion at the 4th Meeting of the Expert Group on Measuring the Sustainability of Tourism, September 2023”. Available at https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2023-09/MST_Indicators_EG_version_Sep2023_13092023_REV1.pdf (Accessed: 18 December 2023).