

Implementation of Measuring the Sustainability of Tourism (MST) in Malaysia: Challenges & Initiatives

Yusrina Mohd Yusoff¹; Azrulnizam Zul²; Malathi Ponnusamy³

¹ Principal Assistant Director

² Senior Assistant Director

³ Deputy Director

Abstract

<Abstract of not more than 400 words or less than a page>

Malaysia has been invited by the United Nations World Tourism Organization (UNWTO) to form a sub-group to the Working Group of Experts Measuring the Sustainable of Tourism on matters relating to Sustainable Development Goals (SDGs) and Measuring the Sustainable of Tourism (MST) implementation. The Sustainable Development Goals (SDG) is central to the United Nations 2030 Agenda for Sustainable Development. It has 17 goals and 169 related goals set by the United Nations in 2015. Tourism identified has the potential to directly or indirectly contribute to all 17 goals of SDGs. In particular, among the goals related to or directly contributing to sustainable tourism are described in 3 SDGs namely SDG 8 on decent work and economic growth, SDG 12 on responsible consumption and production and SDG 14 on life below water. The scope of MST refers to 3 aspects i.e. economic, social and environmental. Statistical Framework for Measuring the Sustainability of Tourism (SF-MST) aims to achieve sustainable tourism through a continuous process and requires consistent monitoring of impacts and corrective actions as needed. SF-MST also intends to provide a single point of reference for expanding current tourism statistics covering these three aspects or dimensions, including global, national and subnational. SF-MST plays a key role in linking discussions on sustainable tourism policy with data development and methods. Data from different sources covering economic, environmental and social aspects is combined using SF-MST standard definition, classification and measurement to compile a series of SF-MST accounts. Objective of this paper is to inform the implementation of MST in Malaysia, as well as reviewing the availability of existing data for such implementation and the constraints inherent in the compilation MST. The main reference material for this study are the Consultation draft: Statistical Framework for Measuring the Sustainability of Tourism, by UNWTO 2018, Tourism Satellite Account: Recommended Methodological Framework 2008, by UNSD and System of Environmental-Economic Accounting 2012 - Central Framework (SEEA CF), by United Nations New York, 2014.

Keywords: Measuring the Sustainability of Tourism, Sustainable Development Goals, Statistical Framework for Measuring the Sustainability of Tourism

2020 Asia–Pacific Statistics Week

A decade of action for the 2030 Agenda: Statistics that leaves no one and nowhere behind

15-19 JUNE 2020 | Bangkok, Thailand

1. Introduction

Development of a Sustainable Tourism Framework is an initiative between the United Nation World Tourism Organization (UNWTO) through the UNWTO Statistics and Tourism Satellite Account (TSA) Committee and the UN Expert Committee on Environment - Economic Accounting (UNCEEA). The Sustainable Tourism Expert Working Group was established at the Sixth UNWTO International Conference on Tourism Statistics: Sustainable Tourism Measurement in Manila in June 2017. Malaysia has been invited to join a subcommittee on the MST Expert Working Group on matters related to the Sustainable Development Goals (SDGs) and the implementation of the MST based on active participation in the 18th Tourism and Satellite Statistics Committee meeting on February 26th to 28th, 2018 in Madrid. The subgroup structure for the implementation of MST in Malaysia was formed on December 3rd, 2018 with the involvement of the Ministry of Tourism, Arts and Culture (MOTAC) and the Department of Statistics Malaysia (DOSM) as the patron for this development.

1.1 Objective of Measuring the Sustainability of Tourism

The objective of implementing MST is to measure progress on three (3) key objectives of Sustainable Development Goals (SDGs) that contribute directly to sustainable tourism, namely:

a. SDG 8: Decent Works and Economic Growth

Target 8.9 - By 2030, the policy planning and implementation to promote sustainable tourism is expected to create employment opportunities and to promote the local culture and products.

b. SDG 12: Responsible Consumption and Production

Goal 12.b - To develop and implement the methods to monitor the impact of sustainable development to create jobs and promote local culture and products.

c. SDG 14: Life Below Water

Target 14.7 - By 2030, to increase the economic benefits to SIDS Small Island Development States (SIDS) and Least Developed Countries (LDCs), as a result of sustainable use of marine resources including fisheries, aquaculture and tourism management.

Sustainable tourism in MST development refers to the optimal use of environmental resources and conserve of natural resources and biodiversity; respect and preserve the socio-cultural authenticity of the community; and ensuring the long-term economic activity plans are implemented, securing employment opportunities and contributing to reducing the incidence of poverty.

1.2 Literature review

The World Tourism Organization (WTO-OMT) in 1999 defined sustainable tourism development to meet the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems. While Tourism Division of the European Commission, 1995 informs that the sustainable tourism is a development will be understood to constitute sustainable tourism development where it considers not only aspects in visitor source countries but the form of the outward journey, on the one hand, along with the interests of visitors and residents in a region to be defined. Activities at the destination need to be based on nature's capacity to absorb, whereby consumption of resources should be as sparing as possible. WTO 2004 based on conceptual definition mentions that 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. Thus, sustainable tourism should make optimal use of environmental resources; respect the socio-cultural authenticity of host communities, and providing socio-economic benefit to all stakeholders. Malaysia is using the recommended definition as above in developing the MST with the related reference material for this study such as Consultation draft: Statistical Framework for Measuring the Sustainability of Tourism, by UNWTO 2018, Tourism Satellite Account: Recommended

Methodological Framework 2008, by UNSD and System of Environmental-Economic Accounting 2012 - Central Framework (SEEA CF), by United Nations New York, 2014.

Sustainable development is defined as a process that meets the needs of present generations without endangering the ability of future ones to meet their own needs. Since the proposal of this definition at the World Commission on Environment and Development (WCED, 1987), there have been extensive discussions on the sustainable tourism development. On how to understand sustainable tourism, Saarinen (2006) generalized three traditions of sustainability studies in tourism:

1. Resource-based tradition focuses on the carrying capacity model and aims to avoid serious negative impacts on the existing resources (Saarinen, 2006).
2. Activity-based tradition concerns with the conflicts between the growth limit/conservation and tourist activities (Wall, 1982).
3. Community-based tradition of sustainable tourism aims at setting limits of growth through negotiations and participations for the common benefits of the host communities and tourism development (Robinson and Hall, 2000; Scheyvens, 1999).

One of the important components for the achievement of sustainable tourism development is the participation of various stakeholders (WCED, 1987). Ko (2005) suggested that various stakeholders should be involved from the initial stage of the sustainability assessment. Ness et al. (2007) showed the importance of communication with stakeholders concerning the sustainability assessment. Jucan and Jucan (2010) indicated that sustainable tourism development requires the compromise between conflicting interests and objectives; the cooperation between decision-makers, processors and consumers; and the promotion of long-term public interest. Research on China's destination sustainability traditionally emphasizes government, tourism business and local people as key stakeholders (Li and Hinch, 1997; Nyaupane et al., 2006; Zeng and Ryan, 2012). Malaysia already taken this step where it formed the Committee involving DOSM and MOTAC and in the midst of extending the membership to other relevant agencies as well to incorporate the three pillars of sustainable development (environmental, economic and social) and attraction management strategies into its management process. Therefore, the purpose of this paper is to inform the initiatives and challenges faced during developing the MST in Malaysia.

2. Methodology

The main references used in developing the MST in Malaysia are the Consultation Draft: Statistical Framework for Measuring the Sustainability of Tourism (SF-MST), UNWTO 2018; Tourism Satellite Account: Recommended Methodological Framework, UNWTO 2018; and System of Environmental-Economic Accounting 2012 - Central Framework (SEEA CF), United Nations New York 2014. The SF-MST draft has been prepared for further consultation with the Working Group of Experts on Measuring the Sustainability of Tourism. This draft has considered the feedback from about 20 agencies and experts in the first consultation held in March-April 2018.

2.1 Concepts, definitions and scope

The UNWTO definition of sustainable tourism is a multi-faceted concept, depends on one's perspective, different aspects and areas of focus will be relevant. Sustainable tourism development guidelines and management practices are applicable to tourism in all types of destinations. The scope of MST refers to three (3) aspects i.e. economic, environment and social. Sustainable tourism should optimal use of environmental resources, maintaining ecological processes and helping to conserve natural resources and biodiversity. Moreover, based on sustainable tourism it is necessary to respect the socio-cultural authenticity, preserving the cultural heritage of life and traditional values; it also ensures that long-term economic operations can be implemented by providing socio-economic benefits to all stakeholders.

2020 Asia–Pacific Statistics Week

A decade of action for the 2030 Agenda: Statistics that leaves no one and nowhere behind

15-19 JUNE 2020 | Bangkok, Thailand

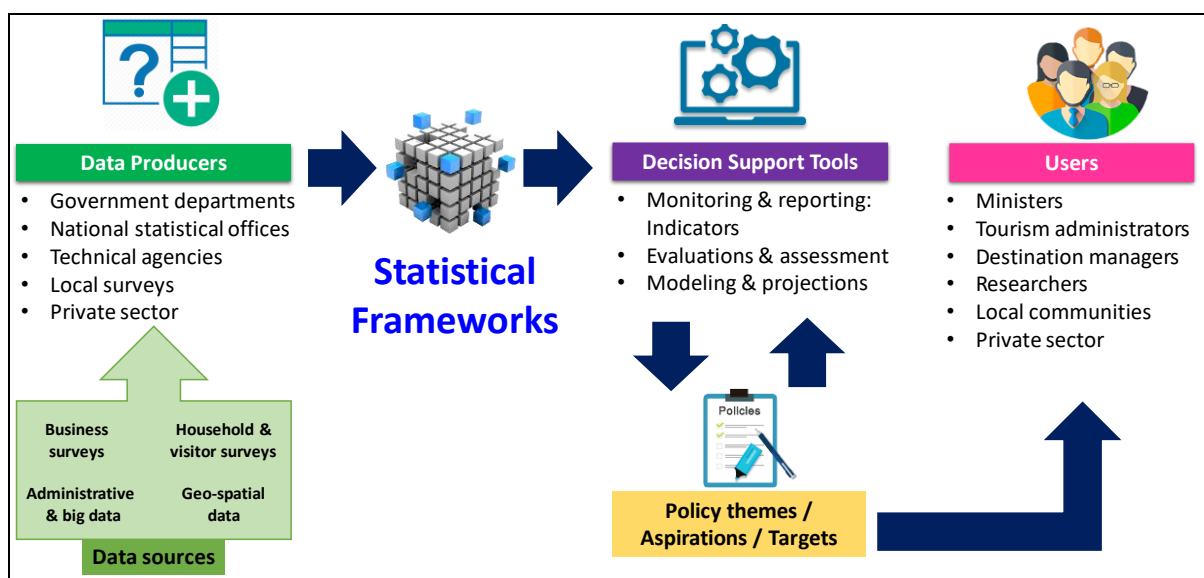
In the context of the United Nations 2030 Agenda and the SDGs, United Nations International Year of Sustainable Tourism for Development (IY2017) aimed to foster a change in policies, business practices and consumer behaviour for a more sustainable tourism sector. It explored and highlighted tourism's role in five key areas: there are inclusive and sustainable economic growth; social inclusiveness, employment and poverty reduction; resource efficiency, environmental protection and climate change; cultural values, diversity and heritage; and mutual understanding, peace and security.

The MST development scope is referring to three (3) key areas namely economic, environment and social. For the economy, recommended coverage is to measure the value added of the tourism industry; tourism growth; the number of visitors; visitor spending; and investment and infrastructure. Environment recommendations coverage is water; energy; waste; GHG emissions; land; ecosystems; biodiversity; garden/protected area and natural resources. Social recommendations coverage is community; health outcomes; education; income & wealth; decent work; governance; human rights; accessibility; culture/heritage and security.

2.2 Statistical Framework for Measuring the Sustainability of Tourism (SF-MST) Framework

A statistical framework is an organising structure for data and statistics that provides a common understanding of concepts, definitions and related terminology. A framework is independent of the sources from which data might be collected and from the methods used to compile the statistics as shown in **Figure 1**. The SF-MST is a platform for integrating data and statistics from different sources about the various dimensions of sustainable tourism. The role of statistical frameworks is depicted multiple data sources and to provide a coherent set of information, that can support (i) monitoring and reporting (and associated indicators), (ii) evaluation and assessment, and (iii) modelling and projections. Each of these activities are an important part of the policy and decision-making process.

Figure 1: Using statistical frameworks to link data and policy



Source: Consultation Draft: Statistical Framework for Measuring the Sustainability of Tourism (SF-MST), UNWTO 2018

2020 Asia–Pacific Statistics Week

A decade of action for the 2030 Agenda: Statistics that leaves no one and nowhere behind

15-19 JUNE 2020 | Bangkok, Thailand

3. Applying MST in Malaysia

Malaysia is committed to implement the development of MST in line with the effort of achieving the SDGs 2030 as envisaged by the UNWTO. In line with this, Malaysia has established the Steering Community of MST implementation on December 3rd, 2018 with the involvement of seven (7) Subject Matter Divisions of DOSM and also representatives from MOTAC. A number of consultation and workshop sessions were successfully organised intentionally to study the framework, scope, methodology and approach of implementing the MST. Meanwhile, the process of determining the data availability and the need for data as well as alternative data also been focused in the circle.

The development of the SF-MST is based on the integration of two, existing accounting frameworks – the Tourism Satellite Accounts (TSA) and the System of Environmental-Economic Accounting (SEEA). Both of these frameworks are based on the accounting framework for measuring the economy – the System of National Accounts (SNA). Linking these two accounts will be the main intention to establish the MST framework as both frameworks comprises of economic, environment and social statistics which are mainly related to tourism. Nevertheless, compiling and combining these two (2) accounts are very challenging as the data collection on the physical flows for the specific tourism industries are difficult and its involving multidisciplinary agencies. Therefore, some of the data are partially available or still under development.

Table 1 describes the summary of the data availability for MST Implementation in Malaysia. A major challenge in the development of MST is the capacity building of SEEA which currently being empowered in the statistical system in Malaysia.

Table 1: Data Availability, MST Malaysia

No.	List of Tables	Recommended Data Sources	Data Availability
1	Tourism Industries Water Flow Account (Cubic Metres)	Water SUA (including wastewater flows)	Under development
2	Tourism Industries Energy Flow Account (Joules)	Energy SUA	At main sectors
3	Tourism Industries GHG Emissions Account (Tonnes)	GHG emissions SUA	Under development
4	Tourism Industries Solid Waste Account (Tonnes)	Solid waste SUA	Under development
5	Water Resources Asset Account: Tourism catchments (Cubic Metres)	Water resources asset account	Under development
6	Tourism Land Account (Hectares)	Land use and cover asset account (including marine areas)	Under development
7	Examples of Combined Presentations for Sustainable Tourism		
7.1	Combined Presentation – Economic Dimension for Tourism Industries	TSA	Partially available
7.2	Combined Presentation – Environmental Dimension for Tourism Industries	SEEA	Under development
7.3	Combined Presentation – Demand Perspective	TSA	Partially available
7.4	Combined Presentation – Spatial Perspective	Not mentioned	Partially available

Source: Department of Statistics, Malaysia

2020 Asia–Pacific Statistics Week

A decade of action for the 2030 Agenda: Statistics that leaves no one and nowhere behind

15-19 JUNE 2020 | Bangkok, Thailand

As the MST implementation is a long-term vision in tandem with SDGs, it has the potential to be applied to complement the tourism governance ecology that susceptible to the issue of pollution and uncontrolled development. The main action to implement and move forward this agenda is to ensure appropriate engagement from experts in these various statistical and measurement areas to involve. The structure of the MST technical working group with the collaboration of multidisciplinary agencies is in the planning to be formed that will involve relevant ministries, departments and agencies. This coalition is expected to increase the effectiveness as well as the accuracy of the data in the direction to drive the development of MST in the nation.

4. Discussion

For the purpose of improvement, among the proposals is to set up the Steering Committee to strengthen the technical coordination in MST development. The Committee is expected to consider the expertise of relevant external agencies as the requirements for statistical compilation involve data sources from within and outside of DOSM. In addition, there is a need for expert consultations from UNWTO or relevant international bodies for the purpose of intensive training to the MST Implementation Subgroup. In line with the implementation of the Sustainable Development Goals (SDGs) focused on 2030 Agenda, MST Development Plan needs to be refined to achieve the goals and objectives more effectively.

5. Conclusion

Currently, Malaysia has implemented the TSA and SEEA. However, to measure the dimensions of the tourism environment, it needs to be expanded within the TSA framework to reflect the tourism industry and also to explore the relationships between SEEA accounts for individual environmental flows (e.g. water, energy, waste) and tourism activities. Lack of new data set, expert experience and knowledge in the preparation of the MST is also one of the constraints and needs to seek expert consultation from the UNWTO or relevant international bodies for intensive training purposes. Malaysia will continue to support the UNWTO and remain as a part of the sub-group to the Working Group of Experts Measuring the Sustainability of Tourism. Internally, the MST technical working group consistently discuss on the technical and current issues of MST.

References:

European Commission, Methodological work on measuring the sustainable development tourism, Part 1: Technical report, (2006)

Hamimah Hassan dan Hossein Nezakati (2014), Selected Issues in Hospitality and Tourism Sustainability, Universiti Putra Malaysia Press Serdang, ISBN 978-967-344-430-4

Jucan, C.N. and Jucan, M.S. (2010), “Social responsibility in tourism and sustainable development”, Wseas Transactions on Environment and Development, Vol. 6 No. 10, pp. 677-686.

Ko, T.G. (2005), “Development of a tourism sustainability assessment procedure: a conceptual approach”, Tourism Management, Vol. 26 No. 3, pp. 431-445

Li, Y. and Hinch, T. (1997), “Ethnic tourism attractions and their prospect for sustainable development at two sites in China and Canada”, Asia Pacific Journal of Tourism Research, Vol. 2 No. 1, pp. 5-18

2020 Asia–Pacific Statistics Week

A decade of action for the 2030 Agenda: Statistics that leaves no one and nowhere behind

15-19 JUNE 2020 | Bangkok, Thailand

- Ness, B., Urbel-Piirsalu, E., Anderberg, S. and Olsson, L. (2007), “Categorising tools for sustainability assessment”, *Ecological Economics*, Vol. 60 No. 3, pp. 498-508.
- Nyaupane, G.P., Morais, D.B. and Dowler, L. (2006), “The role of community involvement and number/type of visitors on tourism impacts: a controlled comparison of Annapurna, Nepal and Northwest Yunnan, China”, *Tourism Management*, Vol. 27 No. 6, pp. 1373-1385.
- United Nations Conference on Trade and Development, *Is The Concept of Sustainable Tourism Sustainable? Developing The Sustainable Tourism Benchmarking Tool*, (2007),
- United Nations Committee of Experts on Environmental-Economic Accounting (UNCEEA), *Measuring Sustainable Tourism: Developing a statistical framework for sustainable tourism*, (2016), Paper for submission to the United Nations Committee of Experts on Environmental-Economic Accounting (UNCEEA)
- United Nations, *System of Environmental-Economic Accounting 2012 - Central Framework (SEEA CF)*, (2014), United Nations New York
- UNWTO, *Tourism Satellite Account: Recommended Methodological Framework*, (2018)
- UNWTO, *Consultation Draft: Statistical Framework for Measuring the Sustainability of Tourism (SF-MST)*, (2018)
- Ramon Benedicto A. Alampay (2005), *Sustainable Tourism Challenges for the Philippines*, ISBN 971-564-083-4, RP 04-05-500
- Robinson, G. and Hall, D. (2000), “The community: a sustainable concept in tourism development”, in Robinson, G. and Hall, D. (Eds), *Tourism and Sustainable Community Development*, Routledge, London, pp. 1-13.
- Saarinen, J. (2006), “Traditions of sustainability in tourism studies”, *Annals of Tourism Research*, Vol. 33 No. 4, pp. 1121-1140.
- Scheyvens, R. (1999), “Ecotourism and the empowerment of local communities”, *Tourism Management*, Vol. 20 No. 2, pp. 245-249.
- Wall, G. (1997), “Sustainable tourism – unsustainable development”, in Wahab, S. and Pigram, J. (Eds), *Tourism, Development and Growth: The Challenge of Sustainability*, Routledge, London, pp. 33-49.
- World Commission on Environment and Development (WCED) (1987), *Our Common Future*, Oxford University Press, Oxford.
- Yi Chen, Zhuowei (Joy) Huang and Liping A. Cai, (2013), *Image of China tourism and sustainability issues in Western media: an investigation of National Geographic*. *International Journal of Contemporary Hospitality Management*, Vol. 26 No. 6, 2014, pp. 855-878
- Zeng, B. and Ryan, C. (2012), “Assisting the poor in China through tourism development: a review of research”, *Tourism Management*, Vol. 33 No. 2, pp. 239-248.

2020 Asia–Pacific Statistics Week

A decade of action for the 2030 Agenda: Statistics that leaves no one and nowhere behind

15-19 JUNE 2020 | Bangkok, Thailand

(NOTE: PAPER SHOULD NOT EXCEED 3,000 WORDS OR SIX PAGES inclusive of references, tables, and charts)