SUSTAINABLE TOURISM DEVELOPMENT AND ITS ECONOMIC IMPACT: BALANCING GROWTH AND ENVIRONMENTAL RESPONSIBILITY THROUGH INTEGRATED ACCOUNTING, STANDARDS, AND DESTINATION GOVERNANCE

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Abstract

Tourism growth can generate employment, export earnings, and local economic development, yet it can also create environmental pressures and social frictions when benefits and burdens are unevenly distributed across places, seasons, and communities. Global policy frameworks explicitly place "sustainable tourism" within the 2030 Agenda, including targets to promote sustainable tourism that creates jobs and supports culture, and to develop tools to monitor tourism sustainability impacts. However, destinations frequently face a practical bottleneck: sustainability is difficult to manage when it is not measured using consistent, decision-relevant indicators that integrate economic and environmental dimensions. Official measurement standards address this gap by linking the Tourism Satellite Account (TSA) with the System of Environmental-Economic Accounting (SEEA), and more recently through the Statistical Framework for Measuring the Sustainability of Tourism (SF-MST), endorsed in 2024 as a holistic structure for organizing tourism's economic, social, and environmental data.

This article develops a strategic framework for balancing tourism growth with environmental responsibility by integrating (1) international sustainability measurement standards (TSA/SEEA/SF-MST), (2) destination-level sustainability norms (GSTC Destination Criteria), and (3) enterprise sustainability management requirements for accommodations (ISO 21401). Using a conceptual and policy-analytic methodology grounded in primary sources and peer-reviewed scholarship, the paper identifies actionable governance mechanisms indicator toolkits, reporting cycles, and investment criteria that enable destinations to shift from "volume-first growth" toward "value-and-responsibility growth." The paper concludes with implementation guidance, an empirical follow-up agenda, and a practical roadmap

for destinations seeking internationally comparable sustainability reporting aligned to global standards.

Keywords

Sustainable tourism; tourism satellite account; SEEA; SF-MST; destination governance; GSTC; ISO 21401; economic impact; environmental responsibility; policy measurement

Introduction

Sustainable tourism is formally embedded in the 2030 Agenda for Sustainable Developmentand is explicitly referenced through targets that call for policies promoting sustainable tourism that creates jobs and supports local culture and products, and for tools to monitor sustainable development impacts in tourism. Yet many destinations remain caught in a persistent policy dilemma: tourism is promoted for its economic benefits, but unmanaged growth can intensify environmental stress (emissions, water, waste, land use) and erode social license when residents perceive crowding, affordability pressures, or cultural degradation.

A core reason this dilemma persists is that tourism success metrics are often narrower than the outcomes destinations must manage. Stakeholders may alternate between "growth narratives" (arrivals, occupancy, spend) and "responsibility narratives" (emissions, waste, biodiversity impacts), without integrating them into a single decision framework that can guide investment, regulation, and operations. Official UN guidance on sustainable tourism emphasizes balancing environmental resource use, socio-cultural authenticity, and long-term economic viability implicitly requiring integrated measurement and governance rather than ad hoc indicator selection.

To address this, official statistical standards define tools that allow tourism's economic contribution and sustainability impacts to be monitored more systematically. The TSA is described by the UN statistical system as a framework to analyze demand for goods and services associated with visitors and to connect that demand to supply within the economy. In parallel, SDG indicator 12.b.1 explicitly assesses the degree to which countries implement the TSA and SEEA tables relevant to monitoring sustainability in tourism. Most recently, the SF-MST provides an internationally agreed structure for organizing tourism sustainability data across economic, environmental, and social domains and across geographic scales.

This paper asks: How can destinations balance tourism growth with environmental responsibility using internationally recognized measurement and sustainability standards? It contributes (1) an integrated conceptual framework

linking TSA/SEEA/SF-MST with destination and enterprise sustainability standards, and (2) an implementation roadmap that clarifies what destinations can measure now with public statistics versus what requires partner data and governance capacity building.

Literature review

Defining sustainable tourism as a governance objective

UN Tourism defines sustainable tourism as making optimal use of environmental resources, respecting socio-cultural authenticity, and ensuring viable long-term economic operations that provide socio-economic benefits to stakeholders. This definition frames sustainability as an aspiration and process applicable to all forms of tourism, rather than a market niche, implying that sustainability must be implemented through mainstream destination and enterprise governance systems.

Policy sources further emphasize that tourism's impacts can be economically, socially, and environmentally unbalanced and benefits do not automatically accrue to local communities; thus, active governance and tailored measurement are needed. This aligns with the conceptual stance of the SF-MST: tourism has varied effects on economy, environment, local population, and visitors, creating the need for an integrated approach to monitoring and management.

Measuring tourism's economic contribution using TSAs

A recurring challenge is that tourism is not a single "industry" in standard national accounts; rather it spans multiple industries and consumption categories. The TSA provides a recognized statistical approach for connecting visitor consumption demand to production/supply within an economy. In the United States, the Travel and Tourism Satellite Accounts are described by the Bureau of Economic Analysis as consistent with national economic measurement methods (GDP, national income) and based on benchmark input-output accounting.

The TTSA is also described by the U.S. Department of Commerce as an indispensable instrument measuring the size/importance of travel and tourism and its contribution to GDP, noting that TTSAs are an international standard endorsed and approved in UN statistical processes.

Measuring environmental and sustainability dimensions: SEEA, SDG 12.b.1, SF-MST

SDG indicator 12.b.1 explicitly connects tourism sustainability monitoring to implementation of TSA and SEEA tables and treats implementation as a preparedness and capacity signal. This operationalization is important: destinations cannot manage sustainability trade-offs without governance systems that can

regularly produce economic and environmental accounts and translate them into policy and investment decisions.

The SF-MST further extends this measurement logic by providing "data organization structures" across tourism's economic, environmental, and social effects. In 2024, UN Tourism materials explicitly describe the SF-MST as a multipurpose framework organizing tourism sustainability impacts holistically, including across geographic scales. OECD policy materials also highlight SF-MST endorsement in 2024 and recommend tailored indicator toolkits to support destination-level decision-making.

Sustainability standards for destinations and accommodation enterprises: GSTC and ISO

Beyond statistical accounts, destinations and firms increasingly rely on sustainability standards to demonstrate governance, reduce negative impacts, and improve accountability. The Global Sustainable Tourism Council destination criteria are organized around major themes (sustainable management; socio-economic impacts; cultural impacts; environmental impacts) and define minimum expectations for destinations.

At the enterprise level, ISO 21401 specifies environmental, social, and economic requirements for implementing a sustainability management system in accommodation establishments, and is positioned as a way to improve sustainability management and related stakeholder relationships. Together, GSTC (destination scale) and ISO 21401 (enterprise scale) can function as actionable governance complements to TSA/SEEA/SF-MST measurement.

Theoretical framework

This paper adopts an integrated governance-and-accounting framework grounded in three propositions derived from official sustainability and measurement standards.

Proposition one: Measurement is a governance capability. Implementation of TSA and SEEA tables is directly positioned in SDG indicator metadata as part of monitoring tourism sustainability. Thus, measurement capacity reflects institutional capability, not merely technical statistics.

Proposition two: Sustainability requires multi-scale alignment. Sustainable tourism is defined as simultaneously managing environmental resources, socio-cultural authenticity, and long-term economic viability. This inherently spans multiple scales (enterprise → destination → national accounts), consistent with SF-MST's multi-scale conceptual design.

Proposition three: Standards can translate abstract sustainability goals into operational requirements. GSTC destination criteria and ISO 21401 provide operational sustainability norms (destination governance and accommodation management systems) that can be linked to measurement indicators in TSA/SEEA/SF-MST.

Methodology

This is a conceptual and policy-analytic study based on secondary sources and official frameworks. It does not claim original econometric estimation or new primary fieldwork.

The methodology proceeds in three steps:

1. Framework extraction from primary sources: UN sustainable tourism framing; SDG targets and indicator definitions; TSA/SEEA/SF-MST measurement standards; GSTC destination criteria; ISO 21401 scope and requirements.

2. Crosswalk synthesis that aligns measurement constructs (economic contribution, environmental flows, governance indicators) with standards-based management requirements (destination and accommodation levels).

3. Illustrative application using hypothetical destination scenarios to demonstrate how the framework supports decision-making. All numeric scenarios are labeled "illustrative," and are not presented as empirical estimates.

Data and case examples

Case example one: Using SDG 12.b.1 to diagnose sustainability measurement readiness (illustrative)

SDG 12.b.1 evaluates implementation of standard accounting tools for tourism sustainability monitoring by focusing on TSA and SEEA tables. This can be applied as a readiness diagnostic at national or destination program levels:

• Illustrative scenario: Destination Country A has a TSA but lacks SEEA-related tables relevant to tourism; Country B has both TSA and selected SEEA tables and publishes them regularly. Under SDG 12.b.1 logic, Country B demonstrates stronger institutional readiness for sustainability monitoring and therefore can more credibly manage (and report on) trade-offs in policies such as visitor caps, transport pricing, or waste infrastructure investment.

This example shows that "sustainable tourism" governance begins with the ability to produce standardized accounts rather than relying solely on marketing claims or single indicators.

Case example two: Linking destination criteria (GSTC) with accounting frameworks (SF-MST)

GSTC destination criteria (v2.0) define minimum sustainability expectations organized around sustainable management and impact pillars, including socio-

economic and environmental impacts. SF-MST provides a data organization structure for tourism sustainability impacts across economy, environment, and society, enabling a destination to translate such criteria into indicators and reporting cycles.

• Illustrative crosswalk logic:

o GSTC requirements for monitoring and public reporting can be operationalized via SF-MST-aligned dashboards.

o GSTC socio-economic impacts can be linked to TSA indicators (tourism GDP/value added, tourism jobs).

o GSTC environmental impacts can be linked to SEEA-type environmental flow accounts used in SDG 12.b.1 metadata.

Case example three: Enterprise-level sustainability management in accommodations (ISO 21401 as a measurable lever)

ISO 21401 specifies environmental, social, and economic requirements for a sustainability management system in accommodation establishments, applicable regardless of size/location. Because accommodations are often a large contributor to destination-level energy use, water use, and waste generation, the diffusion of ISO 21401-like management systems is a plausible mechanisms for destination-scale environmental improvements—provided monitoring exists.

Findings and analysis

Finding one: "Sustainable growth" is a measurement-and-governance problem, not only a product positioning problem

UN Tourism defines sustainable tourism as optimizing environmental resource use, respecting socio-cultural authenticity, and ensuring long-term economic viability. Achieving this requires recurring decisions about investment and regulation (transport systems, water/waste infrastructure, pricing and dispersion, business licensing). These are governance questions that demand integrated evidence. The SDG measurement framing (TSA/SEEA) makes explicit that monitoring tools are part of sustainability progress.

Finding two: TSAs provide the backbone for credible economic impact claims, but "economic impact" is not sufficient for sustainability

The TSA's purpose is to analyze tourism demand and link it to supply within the economy, enabling consistent measurement of tourism economic contribution. The U.S. TTSA is designed to be consistent with GDP and national accounts methods. However, economic contribution alone does not capture environmental externalities or ecological constraints; SDG indicator 12.b.1 and SF-MST explicitly push measurement toward integrating economic and environmental accounts.

Finding three: SF-MST operates as a "common language layer" connecting local destination management to national/international comparability

SF-MST is explicitly described as a holistic framework to organize tourism sustainability data (economic, environmental, social) and can be implemented incrementally. This matters because destination impacts are experienced locally, while key policy levers (taxation, national reporting, investment promotion) are often national. A common measurement language reduces fragmentation and improves accountability.

Finding four: Standards-based governance (GSTC, ISO) strengthens the "implementation layer" between measurement and outcomes

GSTC destination criteria define minimum governance and impact expectations for destinations. ISO 21401 provides a structured sustainability management system for accommodations, explicitly spanning environmental, social, and economic requirements. When paired with destination measurement systems (TSA/SEEA/SF-MST), such standards offer a credible pathway from indicators → actions → verified routines → measurable changes.

Strategic, policy, and managerial implications

Policy implication one: Build sustainability governance around internationally comparable accounts and indicators. Governments and destination systems can use TSA/SEEA/SF-MST as the backbone measurement architecture and then customize a small destination toolkit aligned with local priorities (water scarcity, congestion, emissions, cultural heritage), consistent with OECD guidance encouraging tailored indicator toolkits and SF-MST adoption.

Policy implication two: Align tourism growth strategies with climate action governance.
UN Tourism notes the launch of climate action policy guidance in 2024 to support national tourism administrations, indicating the increasing formalization of climate policy in tourism governance. A destination's growth plan should therefore include decarbonization and adaptation indicators where feasible, integrated into SF-MST structures.

Managerial implication: Treat sustainability standards as operational control systems, not certifications alone.
ISO 21401 is framed as strengthening accommodation management and improving relationships with suppliers, employees, and communities. For destination managers, incentivizing such enterprise-level management systems can be a pragmatic lever for reducing environmental footprint while maintaining service quality.

Investment implication: define "sustainable investment" criteria for tourism using governance plus measurement evidence. UNCTAD's guiding principles for sustainable investment in tourism emphasize that appropriately promoted and regulated tourism investment can support long-term growth, quality employment, inclusion, innovation/technology, and environmental protection. Requiring transparent reporting aligned with TSA/SEEA/SF-MST can operationalize this as due diligence.

Conclusion

This article argues that balancing tourism growth with environmental responsibility is not primarily a branding challenge; it is an institutional capability challenge requiring integrated measurement, multi-scale governance, and enforceable operational standards. The TSA provides a credible basis for tourism economic contribution; SDG 12.b.1 and SEEA link economic and environmental accounting; and SF-MST offers a holistic data organization structure that destinations can implement incrementally. Complementing these measurement standards with GSTC destination criteria and ISO 21401 enterprise sustainability management systems strengthen the translation from metrics to action.

A practical next step for empirical work is to pilot an SF-MST-aligned destination dashboard, tie it to TSA/SEEA tables where available, and evaluate whether standards adoption (e.g., ISO 21401 in accommodations) is associated with measurable changes in resource intensity and tourism value outcomes over time.

REFERENCES:

World Tourism Organization. (2024). *Statistical Framework for Measuring the Sustainability of Tourism (SF-MST)*.

United Nations Statistics Division. (2008). *Tourism Satellite Account: Recommended Methodological Framework*.

Global Sustainable Tourism Council. (2019). *GSTC Destination Criteria*.

International Organization for Standardization. (2018). *ISO 21401 Tourism sustainability management systems*.

United Nations Environment Programme. (2025). *SDG Indicator 12.b.1 methodology*.

Sharpley, R. (2020). Tourism and sustainable development. *Journal of Sustainable Tourism*.

Bramwell, B., & Lane, B. (2011). Critical research on sustainability in tourism. *Journal of Sustainable Tourism*.

United Nations Conference on Trade and Development. (2024). *Sustainable tourism investment guidelines.*