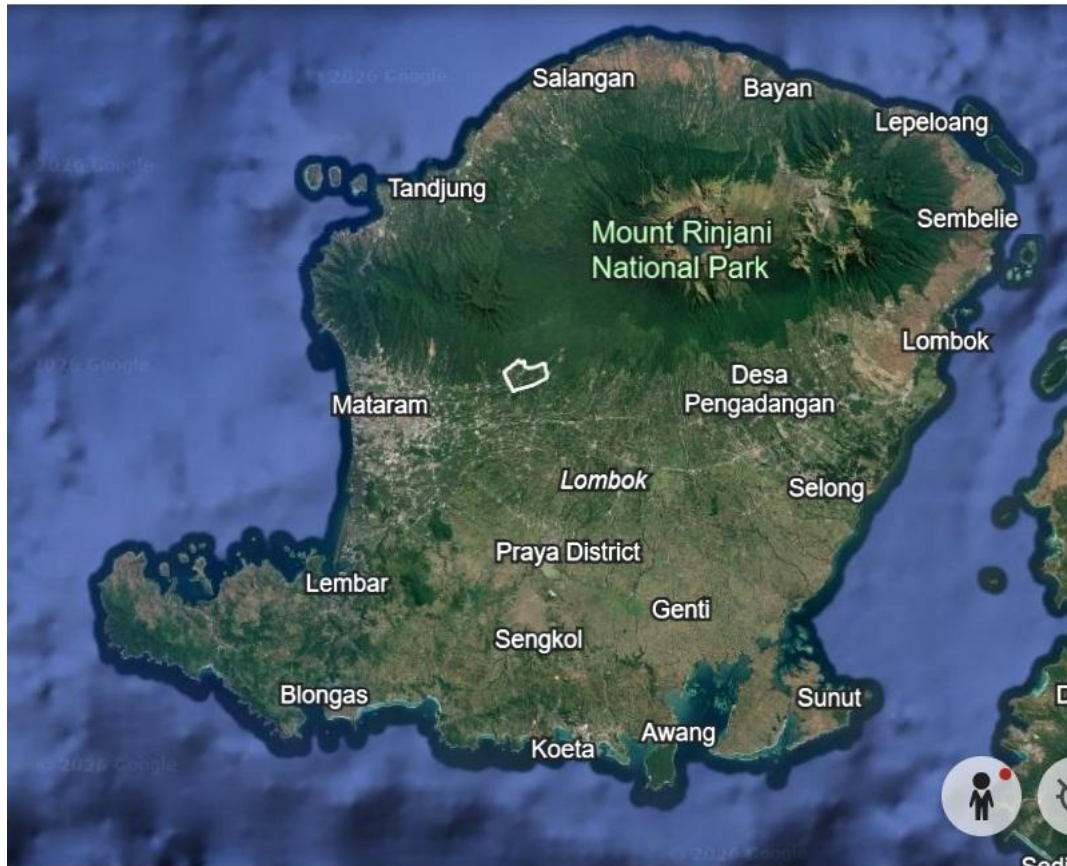


Annual Report 2025

MCSTO Mataram University – Lombok



Lombok-Indonesia

Data from 2024

Annual report 2025
MCSTO Mataram University - Lombok

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1. Destination Coverage

1.1. Sesaot Tourism Village, West Lombok-Indonesia

Sesaot Village is a rural destination within Narmada Subdistrict, West Lombok, which has increasingly developed a community-oriented nature tourism profile. The destination's tourism identity is anchored by PUREKMAS (*Pusat Rekreasi Masyarakat* – Centre for community recreation) and a set of complementary experiences that build on local natural assets, particularly springs, pools, streams, and forest landscapes. In national programming, Sesaot has gained formal recognition as “Desa Wisata Sesaot – Top 50 ADWI 2021” on Indonesia's official tourism village platform (Jadesta), reinforcing its positioning as a village tourism destination where community participation and local micro-enterprises (UMKM) play a visible role in the visitor economy.

From a geographic and environmental perspective, Sesaot is administratively one of the villages in Narmada, with a reported area of 4.94 km² (2023), equivalent to approximately 3.38% of the total area of Narmada Subdistrict. The destination's landscape character is strongly associated with water resources and surrounding forest settings.



Picture 1: Location of Sesaot Village

National destination promotion sources describe Sesaot as part of a geo-tourism route, situated within an ancient volcanic landscape, where tourism development is supported by abundant springs and a nearby protected forest area (reported at approximately 5,999.2 hectares). Accessibility is generally favourable for day-trip markets: Sesaot is located about 10.8 km from the Narmada Subdistrict capital, and approximately 40.5 km from Lombok International Airport (Zainuddin Abdul Madjid), with an estimated travel time of around 1 hour 15 minutes, depending on road and traffic conditions. These locational conditions are relevant to monitoring because they facilitate high weekend and holiday visitation and can increase short-term pressure on facilities and local services.

The demographic baseline provides an important reference for understanding tourism's potential benefits and pressures. Based on BPS subdistrict compilation data (2023), Sesaot has a population of 6,290 people, representing approximately 7.12% of Narmada's population. Population density is reported at ~1,273.08 persons/km², while the sex ratio is ~94.73 males

per 100 females. This baseline is useful for monitoring tourism intensity and for assessing whether tourism-generated opportunities—employment, micro-enterprises, and income—are reaching different segments of the community, while also informing service planning during peak visitation.

Sesaot's tourism products and visitor experiences are predominantly nature-based and family-oriented. PUREKMAS functions as a core attraction, built around spring and pool recreation that is accessible to a broad market. The destination also offers forest-based activities such as jungle tracking and trekking, including routes toward waterfall sites (commonly referenced in local tourism narratives) such as Tibu Sendalem, Tembiras, and Tibu Goa. Additional scenic and outdoor recreation spots—such as Taman Miring, Vetong Hill camping ground, Bawa' Goak, Berugak Elen, and Air Tangga—strengthen Sesaot's profile as a short-stay nature retreat that can be packaged into half-day or full-day itineraries. Supporting activities such as cycling, ATV rides, and guided tracking packages (including a Tracking Air Terjun Tembiras product) broaden the experience mix. Visitor services and facilities are present in a basic but functional form, including parking, meeting hall, public toilets, mosque, culinary options, selfie/photo areas, and tracking facilities. From a quality and safety standpoint, a key point for monitoring is that Sesaot/PUREKMAS is reported as holding CHSE certification (Cleanliness, Health, Safety, Environmental Sustainability), which provides a foundation for service assurance and risk management, particularly in water-based recreation and high-density holiday conditions.

Regarding visitation and demand, currently available evidence is strongest at the level of specific sites and peak events rather than consolidated destination-wide totals. A carrying-capacity study using KPH Rinjani Barat visitation data reports that the Aik Nyet nature tourism area recorded 36,788 visits in 2023, and the same study provides carrying capacity benchmarks—PCC 25,232; RCC 24,663; ECC 9,865—that can serve as an operational reference for managing crowding and environmental pressure. In addition, local reporting quoting BUMDes management indicates that New Year holidays at PUREKMAS generated approximately 5,000 visitors, with an estimated 3,000–3,500 visitors on 1 January, based on ticket-count indications.

In governance and management terms, Sesaot tourism is closely associated with a community-based approach, where local institutions and community enterprise play roles in managing attractions and capturing local benefits. Village tourism profiling and the prominence of UMKM in the destination narrative indicate that local economic actors are a visible component of the tourism system. For UNWTO/INSTO-style monitoring, the governance

dimension can be framed around four practical lenses: (i) participation and benefit sharing (including roles of community groups and enterprise structures), (ii) visitor management (crowd control, safety, and service quality, particularly at water-based sites), (iii) environmental safeguards for springs, streams, riparian zones, and forest trails, and (iv) coordination among village government, community groups, and forest-area management authorities to ensure that conservation objectives and tourism operations remain aligned.

Given Sesaot's product profile—water-based recreation combined with forest nature tourism—several sustainability issues warrant priority attention in the next monitoring cycle. The first is water quality and water availability, as springs and pools are core assets and may face stress during peak demand. The second is solid waste and sanitation pressure, which tends to rise on weekends and holidays and directly affects visitor satisfaction and environmental conditions. The third is visitor congestion and safety at core sites, including parking overflow, crowding near pools and river access points, and risk management on trekking and waterfall tracks. The fourth is ecosystem disturbance, particularly along trails and riparian zones, where carrying-capacity benchmarks from Aik Nyet can provide a basis for more systematic site management. The fifth is local economic inclusion, including the extent of UMKM participation, the quality of tourism-related jobs, and how tourism revenues are distributed across local actors.

To improve alignment with UNWTO/INSTO monitoring expectations, several data gaps should be addressed through targeted strengthening actions. Priority is the establishment of a unified destination visitation dataset that records monthly entries by attraction/site, distinguishes local versus non-local visitors, and clarifies whether counts reflect unique visitors or entries. A structured seasonality profile should be developed to document weekend versus weekday patterns and holiday peaks versus low season conditions. Monitoring should also be complemented by visitor satisfaction and perception surveys, implemented through a simple quarterly instrument to generate trend data. On environmental performance, the destination would benefit from defining practical indicators such as basic water quality parameters, waste volume and collection frequency, trail condition tracking, carrying-capacity compliance, and incident reporting. Finally, to strengthen the community-benefit narrative, local benefit indicators should be collected—such as the number of tourism MSMEs/UMKM engaged, estimates of tourism employment, and revenue distribution proxies (including community enterprise contributions and village-level income capture mechanisms).

2. Executive summary

This report presents the 2025 annual sustainability assessment of Sesaot Village, West Lombok, as part of the continuing monitoring activities of the Monitoring Centre of Sustainable Tourism Observatory (MCSTO) within the International Network of Sustainable Tourism Observatories. The assessment is grounded exclusively in the data, analyses, and findings documented in the 2025 draft report and represents the third reporting cycle for Sesaot following earlier submissions in 2016 and 2017. The primary objective of the 2025 report is to establish an updated sustainability status of the destination using a structured, indicator-based approach.

The assessment applies a Multi-criteria Sustainability Analysis (MSA) framework aligned with GSTC destination indicators and covers four sustainability pillars: sustainable tourism management, socio-economic sustainability, cultural sustainability, and environmental sustainability. A total of 38 indicators were assessed using an ordinal scoring system and aggregated to generate pillar-level and overall sustainability values. The results indicate that Sesaot achieved an overall sustainability score of 69.30, placing the destination within the “Sustainable” category. This confirms that sustainability practices are generally in place, although they are not yet fully institutionalised across all dimensions.

Pillar-level results show differentiated levels of maturity. Socio-economic sustainability records the highest performance, reflecting strong community benefits, local entrepreneurship support, and safety conditions, while cultural sustainability demonstrates stable and resilient community-based cultural governance. In contrast, sustainable tourism management and environmental sustainability remain constrained by a limited number of high-leverage factors, including monitoring and reporting mechanisms, business engagement in sustainability standards, energy conservation, wildlife protection, and climate-related mitigation.

The analysis is supported by robustness checks, including Random Iteration validation and uncertainty error estimation, which confirm the internal consistency and reliability of the results. Overall, the 2025 assessment provides a consolidated and evidence-based sustainability profile for Sesaot. This updated status establishes a critical empirical foundation for the subsequent 2026 monitoring cycle, which will move beyond descriptive assessment toward the identification of driving factors and structural priorities to support more targeted and adaptive destination management.

3. Continuity of INSTO Monitoring in Sesaot

3.1. Brief History of INSTO Monitoring in Sesaot (Since 2016)

Monitoring of sustainable tourism development in Sesaot formally commenced in 2016, following the establishment of the Monitoring Centre of Sustainable Tourism Observatory (MCSTO) at the University of Mataram under the auspices of UNWTO. The initial report positioned Sesaot as a priority nature-based destination within West Lombok Regency, characterised by extensive preserved forest areas, abundant water resources, and strong community–nature interactions. The 2016 baseline highlighted rapid growth in visitation, limited visitor data accuracy, and emerging sustainability concerns related to waste management, vendor activities within forest areas, water pollution, and weak regulatory enforcement.

The 2017 annual report represented the second phase of INSTO monitoring in Sesaot and shifted the emphasis from problem identification toward community participation and empowerment. Monitoring activities were combined with structured community empowerment programmes involving local stakeholders, village institutions, and students. Key developments included the establishment and early operation of a village-owned enterprise (BUMDes), cooperation with the Forest Management Unit, internal tourism marketing to local communities, and targeted capacity-building initiatives. At the same time, the 2017 report documented persistent challenges, particularly related to the effectiveness of local governance arrangements, waste management practices, visitor behaviour, and the operational capacity of village-level tourism institutions.

Together, the 2016 and 2017 reports demonstrate that INSTO monitoring in Sesaot has evolved from baseline diagnosis to action-oriented monitoring, with a strong emphasis on participatory approaches and institutional learning. These earlier reporting cycles established a qualitative understanding of sustainability challenges and responses, forming the foundation for more systematic and quantitative assessment in subsequent years.

3.2. The Current Reporting Focus (Why 2025–2026 Matters)

The 2025–2026 reporting cycle marks a significant methodological and analytical transition in INSTO monitoring for Sesaot. After nearly a decade of engagement since the initial baseline, the observatory moved toward a comprehensive, indicator-based sustainability assessment using the Multi-criteria Sustainability Analysis (MSA) framework aligned with GSTC indicators. The 2025 analysis consolidates accumulated monitoring experience into a

structured assessment across four sustainability pillars: sustainable tourism management, socio-economic sustainability, cultural sustainability, and environmental sustainability.

The results of the 2025 MSA analysis show that Sesaot has reached an overall “Sustainable” status, with notable variation across pillars. Socio-economic and cultural sustainability exhibit relatively higher maturity, while sustainable management and environmental sustainability remain constrained by specific high-leverage factors. Importantly, the analysis introduces robustness checks through Random Iteration and uncertainty error estimation, providing a validated empirical basis for interpretation and decision support.

Building on this status assessment, the 2026 focus is justified by the need to move beyond descriptive sustainability performance toward strategic prioritisation. The scenario and sensitivity analyses embedded in the 2025 results demonstrate that targeted improvement of selected driving factors could significantly elevate overall sustainability status within a short time horizon. This evidence underpins the rationale for applying combined MSA and Interpretive Structural Modelling (ISM) in 2026 to identify structural relationships, leverage points, and priority intervention pathways, rather than re-assessing baseline conditions.

Accordingly, the 2025–2026 reporting cycle represents a shift from “monitoring what is happening” to “understanding what drives change”, while remaining fully grounded in the long-term monitoring trajectory established since 2016. This continuity ensures that the current report adds analytical depth and policy relevance without repeating earlier descriptive content.

4. Focus of the 2025 Report

The 2025 reporting cycle is dedicated to establishing an updated sustainability status of Sesaot within the continuing monitoring mandate of the Monitoring Centre of Sustainable Tourism Observatory (MCSTO), operating as part of the International Network of Sustainable Tourism Observatories (INSTO) coordinated by the United Nations World Tourism Organization (UNWTO). This report represents the third formal submission on Sesaot and is explicitly designed as a continuation of previous monitoring cycles, focusing on consolidation and analytical refinement rather than on redefining baseline conditions (UNWTO, 2021).

The primary objective of the 2025 report is to deliver a comprehensive and integrated sustainability assessment that is consistent with internationally recognised destination-level sustainability principles, particularly those articulated in the Global Sustainable Tourism Council (GSTC) Destination Criteria and UNWTO–INSTO monitoring guidance. In line with INSTO’s mandate, the assessment is intended to support systematic monitoring, institutional

learning, and policy-relevant decision-making, rather than certification or benchmarking of destinations (GSTC, 2019; UNWTO, 2021).

The sustainability assessment is structured around four interrelated pillars: sustainable tourism management, socio-economic sustainability, cultural sustainability, and environmental sustainability. This four-pillar structure reflects the core architecture of the GSTC Destination Criteria and enables a balanced evaluation of governance capacity, community wellbeing, cultural continuity, and environmental stewardship (GSTC, 2019). The focus of the 2025 report is therefore on determining the current level of sustainability performance across these pillars and identifying priority areas that require strengthened attention in subsequent monitoring cycles.

By consolidating indicator-level evidence into a coherent sustainability profile, the 2025 report establishes an updated and validated reference point for Sesaot. This reference point provides the analytical foundation for the continuation of monitoring activities in 2026, which will extend beyond status identification toward the analysis of driving factors and structural priorities, consistent with the INSTO approach to adaptive and evidence-based destination management (UNWTO, 2021).

5. Sustainability Monitoring Framework

5.1 Methodological Position

The sustainability monitoring activities reported in 2025 apply a Multi-criteria Sustainability Analysis (MSA) framework to assess destination-level sustainability performance in a structured, transparent, and replicable manner. MSA is employed as a diagnostic and decision-support approach that allows multiple sustainability indicators to be integrated while preserving the multidimensional character of sustainable tourism systems (Munda, 2005; Bell & Morse, 2013).

Within the INSTO context, MSA is not applied as a certification or compliance mechanism. Instead, it functions as an analytical tool to support systematic monitoring, comparison over time, and evidence-based prioritisation for adaptive destination management, in line with UNWTO guidance on sustainability monitoring (UNWTO, 2004; UNWTO, 2021).

5.2 Rationale for Using Multi-criteria Sustainability Analysis

Tourism sustainability encompasses multiple interdependent criteria spanning governance, socio-economic outcomes, cultural integrity, and environmental protection. As recognised in sustainability assessment scholarship, multi-criteria approaches are particularly appropriate for analysing such complex systems where trade-offs and interrelationships are inherent (Munda, 2005; Singh et al., 2012).

MSA enables the aggregation of indicator scores within a coherent analytical structure, facilitates interpretation across sustainability pillars, and supports the identification of leverage factors that exert disproportionate influence on overall sustainability performance. These characteristics make MSA especially suitable for observatory-based monitoring, where the primary objective is to inform decision-making and policy learning rather than to rank or certify destinations (OECD, 2008; Bell & Morse, 2013).

5.3 Indicator Framework and Scoring System

The assessment framework applies destination-level sustainability indicators aligned with the GSTC Destination Criteria. Indicators are organised into four sustainability pillars corresponding to the analytical focus of the 2025 report (GSTC, 2019).

Each indicator is assessed using an ordinal scoring scale ranging from 0 to 4, where 0 indicates that the issue has not yet been addressed and 4 indicates full and consistent implementation.

The use of an ordinal scale reflects the qualitative nature of many destination sustainability indicators and is consistent with internationally accepted practices in composite and multi-criteria sustainability assessment (OECD, 2008).

5.4 Data Collection and Validation

Primary data were collected through structured focus group discussions involving key stakeholders in Sesaot, ensuring representation of local governance, community groups, cultural institutions, and destination operators. Evidence generated through these discussions was compiled and subsequently evaluated by an expert to ensure consistency, transparency, and objectivity in indicator scoring, in line with INSTO monitoring principles (UNWTO, 2021).

To strengthen analytical robustness, the MSA application incorporates validation procedures, including sensitivity analysis and random iteration. These procedures are used to test the stability of results and to minimise the influence of individual judgment on aggregated

sustainability values, reflecting best practices in sustainability monitoring and indicator-based assessment (OECD, 2008; Bell & Morse, 2013).

5.5 Aggregation and Interpretation of Results

Indicator scores are aggregated within each sustainability pillar to generate pillar-level sustainability values. These values are interpreted as relative sustainability positions, indicating the extent to which sustainability practices are present and functioning within the destination. The aggregation process does not imply full compensability among indicators but provides a synthetic representation of overall performance to support interpretation and comparison (Munda, 2005).

The interpretation logic follows a sequential approach: first identifying sustainability status, then recognising high-leverage factors, and finally using the results to inform management priorities and adaptive responses, consistent with the decision-support orientation of INSTO monitoring (UNWTO, 2021).

5.6 Methodological Continuity and Advancement

The application of MSA in the 2025 report represents a consolidation of long-term monitoring efforts in Sesaot. Earlier monitoring cycles emphasised descriptive and participatory approaches, while the current framework introduces a systematic indicator-based assessment that supports comparability and analytical depth over time. This methodological continuity ensures that the 2025 findings are directly relevant to the analytical extension planned for the 2026 monitoring cycle, particularly the identification of driving factors and structural relationships within the destination system.

6. Results – Sustainability Status Assessment (2025)

This section presents an analytical interpretation of the 2025 sustainability status assessment for Sesaot, based exclusively on the results of the Multi-criteria Sustainability Analysis (MSA) conducted using GSTC-aligned indicators. As part of the third reporting cycle to the International Network of Sustainable Tourism Observatories, the analysis focuses on identifying key patterns across sustainability pillars, validating the robustness of results, and discussing their implications for adaptive destination management.

The assessment covers four sustainability pillars and aggregates 38 indicators, producing both sustainability status scores and sensitivity-based leverage insights.

The aggregate results indicate that Sesaot reached an overall sustainability value of 69.30, placing the destination within the “**Sustainable**” category according to the default sustainability status classification. This confirms that sustainability practices are generally in place but have not yet reached a consistently optimal or institutionalised level across all pillars.

The results also show clear variation among pillars, highlighting differentiated levels of maturity rather than uniform sustainability performance. This pattern reinforces the importance of pillar-specific interpretation rather than relying solely on aggregated averages.

6.1 Sustainable Tourism Management

The sustainable tourism management pillar achieved a score of 63.64, categorised as Sustainable, but positioned in the lower range of the category. The indicator-level results reveal a structural imbalance between governance presence and operational depth.

Management responsibility, stakeholder involvement, visitor management, planning regulation, and climate change adaptation all show relatively strong real values (mostly 3 out of 4), indicating that governance arrangements and participatory mechanisms are largely in place. However, destination management strategies, monitoring and reporting, and risk and crisis management display lower real values (2), identifying these factors as operational constraints within the management system.

The sensitivity leverage values highlight involvement of business entities and sustainability standards as a critical leverage variable, indicating that improvements in this factor could disproportionately enhance overall management sustainability. This aligns with the system-oriented logic of MSA, where certain factors exert greater influence despite similar ordinal scores.

Random Iteration validation shows a minimal deviation between real and simulated values (63.64 vs. 63.41), with a very low respondent error (0.03), confirming the robustness and internal consistency of the management assessment.

6.2 Socio-economic Sustainability

Socio-economic sustainability recorded the highest score among all pillars at 78.13, placing it in the Very Sustainable category. This reflects strong performance in local entrepreneurship support, community support, safety and security, and economic contribution measurement, several of which achieved the maximum real value of 4.

Nevertheless, the results also reveal structural vulnerabilities, particularly in prevention of exploitation and discrimination, which scored only 1 and exhibited high sensitivity leverage. This indicates that while socio-economic benefits are substantial, protective and regulatory dimensions lag behind benefit generation.

The Random Iteration results show slightly higher variance compared to other pillars (validation value 1.57), yet the estimation error remains low (0.09). This suggests that socio-economic outcomes are more dynamic and potentially sensitive to stakeholder perception, while still remaining statistically reliable within the MSA framework.

6.3 Cultural Sustainability

Cultural sustainability achieved a score of 75, positioned at the threshold between Sustainable and Very Sustainable. Most cultural indicators—such as protection of cultural assets, intangible heritage, intellectual property rights, and site interpretation—scored consistently at level 3, while traditional access reached level 4, reflecting strong community-based cultural governance.

The primary constraint within this pillar is visitor management at cultural sites, which scored 2 and displayed higher sensitivity. This indicates that cultural values are well preserved internally, but external pressures related to visitation management remain an area requiring structured intervention.

Random Iteration validation confirms a very stable cultural sustainability profile, with negligible deviation between real and simulated values and low estimation error (0.07), underscoring the maturity and internal coherence of cultural sustainability practices in Sesaot .

6.4 Environmental Sustainability

Environmental sustainability recorded the lowest score among the four pillars at 60.42, yet still falls within the Sustainable category. The results reveal a dual pattern: relatively strong performance in spatial and resource-based management (e.g., protection of sensitive environments, water management, solid waste, low-impact transportation), contrasted with weak performance in energy conservation, exploitation of species and animal welfare, and GHG emissions mitigation, which scored between 1 and 2.

These weaker indicators also show high sensitivity leverage values, suggesting that environmental sustainability outcomes are highly dependent on a limited number of critical management interventions rather than broad-based incremental change.

The Random Iteration analysis confirms the reliability of the environmental results, with a small validation difference (0.62) and minimal respondent error (0.03), reinforcing confidence in the identification of priority environmental constraints.

6.5 Cross-Pillar Reliability and Validation

Across all pillars, the aggregate Random Iteration validation value of 0.7 and an average uncertainty error of only 0.09% demonstrate a high level of analytical robustness. This confirms that the 2025 sustainability status results are not only descriptive but also statistically and methodologically defensible within the MSA-EXSIMPRO framework.

6.6 Implications for the Next Monitoring Cycle

The 2025 sustainability assessment establishes a clear empirical baseline for strategic prioritisation. While socio-economic and cultural sustainability show relatively advanced maturity, sustainable management and environmental sustainability remain constrained by a limited set of high-leverage factors. These findings directly inform the analytical transition in the 2026 report toward driving factor identification and structural relationship analysis using MSA and ISM, ensuring continuity and cumulative knowledge development within the INSTO monitoring framework.

7. Conclusion and Way Forward

7.1 Background and Purpose

Sesaot Village, West Lombok, has been monitored under the Monitoring Centre of Sustainable Tourism Observatory (MCSTO) as part of the International Network of Sustainable Tourism Observatories (INSTO), coordinated by the United Nations World Tourism Organization (UNWTO). Since its initial reporting in 2016, sustainability monitoring in Sesaot has evolved from baseline identification toward more structured, indicator-based assessment. This policy brief synthesises key findings from the 2025 INSTO Annual Report and translates them into concise, policy-relevant messages for local and regional decision-makers. The purpose is to support evidence-based policy formulation and adaptive destination management rather than to provide certification or ranking.

7.2 Key Findings from the 2025 Sustainability Assessment

The 2025 assessment establishes an updated sustainability status for Sesaot using a Multi-criteria Sustainability Analysis (MSA) aligned with the Global Sustainable Tourism Council (GSTC) Destination Criteria. Overall, Sesaot is positioned within the “Sustainable” category, indicating that sustainability practices are generally in place but not yet fully institutionalised.

Performance across the four sustainability pillars is uneven. Socio-economic sustainability demonstrates the strongest performance, reflecting the positive role of tourism in supporting local livelihoods, small-scale entrepreneurship, and community welfare. Cultural sustainability is also relatively stable, underpinned by strong community-based cultural practices and continued access to cultural assets. In contrast, sustainable tourism management and environmental sustainability exhibit lower relative performance. These pillars are constrained not by a lack of initiatives, but by inconsistent implementation of key management instruments, limited systematic monitoring, and weaknesses in certain environmental control measures.

The analysis further indicates that a small number of factors exert disproportionate influence on overall sustainability outcomes. These leverage factors include destination monitoring and reporting mechanisms, engagement of tourism businesses in sustainability practices, environmental resource efficiency, and climate-related management. Addressing these factors offers the greatest potential for accelerating sustainability improvements.

7.3. Policy Implications

The 2025 findings suggest that Sesaot has moved beyond the initial stage of sustainability awareness and now requires a shift toward consolidation and institutional strengthening. Policy attention should therefore prioritise the quality and consistency of implementation rather than the introduction of new policy domains. Strengthening governance capacity, clarifying institutional roles, and embedding sustainability considerations into routine decision-making are critical steps.

From a socio-economic perspective, existing benefits should be safeguarded through clearer protection mechanisms to ensure inclusiveness and prevent potential social risks as tourism develops further. In the cultural domain, maintaining current strengths will depend on proactive visitor management to prevent pressure on cultural sites and practices.

Environmentally, targeted interventions in energy management, biodiversity protection, and climate-related actions are essential to secure long-term destination resilience.

7.4. Recommended Priority Actions

Based on the 2025 assessment, the following policy directions are recommended:

1. Strengthen destination governance and monitoring systems by formalising regular data collection, reporting, and feedback mechanisms within local planning processes.
2. Enhance engagement of tourism-related businesses in sustainability standards and practices to ensure shared responsibility across the destination.
3. Safeguard socio-economic gains by reinforcing social protection measures and ensuring equitable access to tourism benefits.
4. Improve visitor management at cultural and natural sites to maintain cultural integrity and environmental quality.
5. Integrate environmental and climate considerations into destination management, with particular attention to resource efficiency and emissions-related issues.

7.5. Way Forward

The 2025 INSTO assessment provides a robust empirical foundation for the next phase of monitoring and policy action in Sesaot. Building on this foundation, the 2026 monitoring cycle will focus on identifying driving factors and structural relationships that shape sustainability outcomes, using combined MSA and Interpretive Structural Modelling. This progression will enable more targeted prioritisation of actions and more efficient use of institutional resources.

By aligning local decision-making with INSTO monitoring insights, Sesaot can strengthen its position as a resilient and sustainable tourism destination while ensuring that tourism development continues to support community wellbeing, cultural continuity, and environmental stewardship.

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Annexes: Findings on Sustainability assessment for Sesaot

Tabel 1 Sensitivity Leverage variable and Indicators of all sustainable aspects and indicators of Sesaot

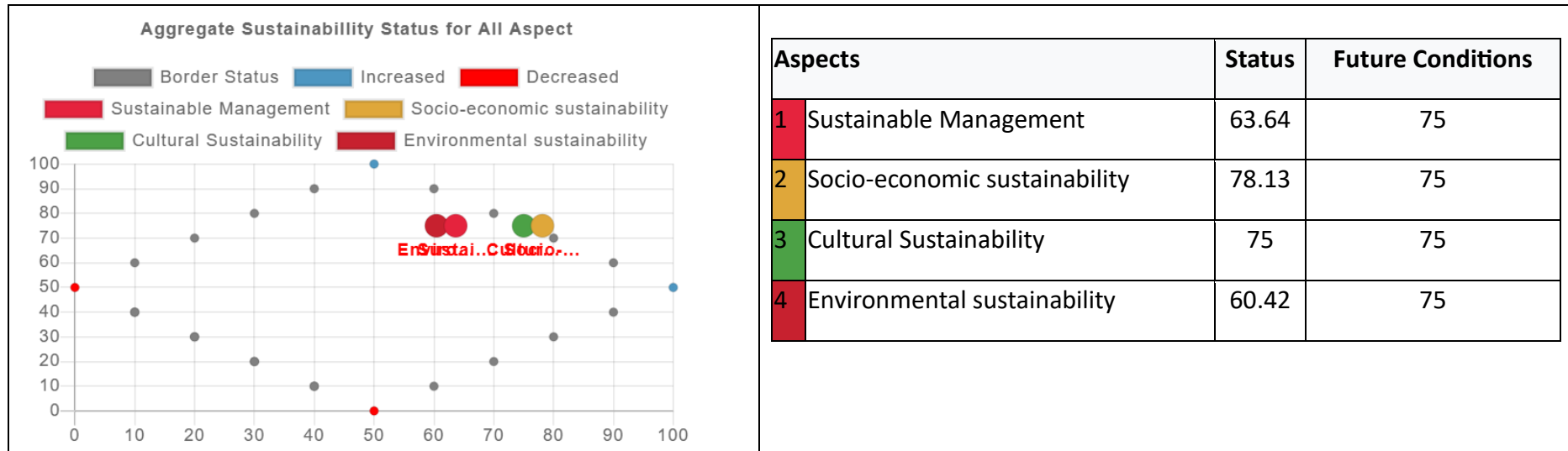
ASPECTS	FACTORS	INDICATORS		Sensitivity Leverage Variable			
		Real Value	Good Value	Sensitivity Max	Sensitivity Value	Random Iteration	Uncertainty Error
Sustainable Management (11 factors)	Responsibility for destination management	3	4	0,25	0.25	0.9	0.25
	Destination management strategies and action plans	2	4	0,25	0.5	1	0.25
	Monitoring and reporting	2	4	0,25	0.5	1	0.25
	Involvement of business entities and sustainability standards	1	4	0,25	0.75	0.9	0.25
	Involvement and feedback from local residents	3	4	0,25	0.25	1	0.25
	Involvement and feedback from visitors	3	4	0,25	0.25	1	0.25
	Promotion and information	3	4	0,25	0.25	0.9	0.25
	Manage the number and activities of visitors	3	4	0,25	0.25	1	0.25
	Planning regulations and development control	3	4	0,25	0.25	1	0.25
	Climate change adaptation	3	4	0,25	0.25	1	0.25
	Risk and crisis management	2	4	0,25	0.5	1	0.25
Socio-Economic sustainability (8 factors)	Measuring the economic contribution of tourism	3	4	0,25	0.25	0.9	0.25
	Job and career opportunities	3	4	0,25	0.25	1	0.25
	Support local entrepreneurship and fair trade	4	4	0,25	0	0.9	0.5

	Support for the community	4	4	0,25	0	0.9	0.5
	Prevention of exploitation and discrimination	1	4	0,25	0.75	1	0.25
	Ownership and user rights	3	4	0,25	0	1	0.25
	Safety and security	4	4	0,25	0	0.7	0.5
	Access for all	3	4	0,25	0.25	0.9	0.25
Cultural Sustainability (7 factors)	Protection of cultural assets	3	4	0,25	0.25	1	0.25
	Cultural Artifacts	3	4	0,25	0.25	0.8	0.25
	Intangible heritage	3	4	0,25	0.25	0.9	0.25
	Traditional Access	4	4	0,25	0	1	0.5
	Intellectual property rights	3	4	0,25	0.25	1	0.25
	Visitor management at cultural sites	2	4	0,25	0.5	0.9	0.25
	Site Interpretation	3	4	0,25	0.25	0.9	0.25
Environmental Sustainability (12 factors)	Protection of sensitive environments	3	4	0,25	0.25	1	0.25
	Visitor management on natural sites	3	4	0,25	0.25	1	0.25
	Interaction with wildlife	2	4	0,25	0.5	1	0.25
	Exploitation of species and animal welfare	1	4	0,25	0.75	1	0.25
	Energy Conservation	1	4	0,25	0.75	1	0.25
	Water management	3	4	0,25	0.25	0.8	0.25
	Water Quality	3	4	0,25	0.25	1	0.25
	Waste water	2	4	0,25	0.5	1	0.25
	Solid waste	3	4	0,25	0.25	1	0.25
	GHG emissions and climate change mitigation	2	4	0,25	0.5	0.9	0.25
	Low-impact transportation	3	4	0,25	0.25	1	0.25
	Noise Pollution	3	4	0,25	0.25	1	0.25
Aggregate	38 factors						

Note. GSTC Sustainable Tourism Indicators and the results of MSA Analysis

Aggregate Graph

Table 2 Aggregate Graph (sustainability status and future conditions/expectations)



Random Iteration (RI)

Table 3 RI of Sustainable management aspects

Name Factor	Code Factors	Value Real	Value Random Iteration
Responsibility for destination management	Sus-F1	3.1	3

Name Factor	Code Factors	Value Real	Value Random Iteration
Destination management strategies and action plans	Sus-F2	2	2
Monitoring and reporting	Sus-F3	2	2
Involvement of business entities and sustainability standards	Sus-F4	0.9	1
Involvement and feedback from local residents	Sus-F5	3	3
Involvement and feedback from visitors	Sus-F6	3	3
Promotion and information	Sus-F7	2.9	3
Manage the number and activities of visitors	Sus-F8	3	3
Planning regulations and development control	Sus-F9	3	3
Climate change adaptation	Sus-F10	3	3
Risk and crisis management	Sus-F11	2	2

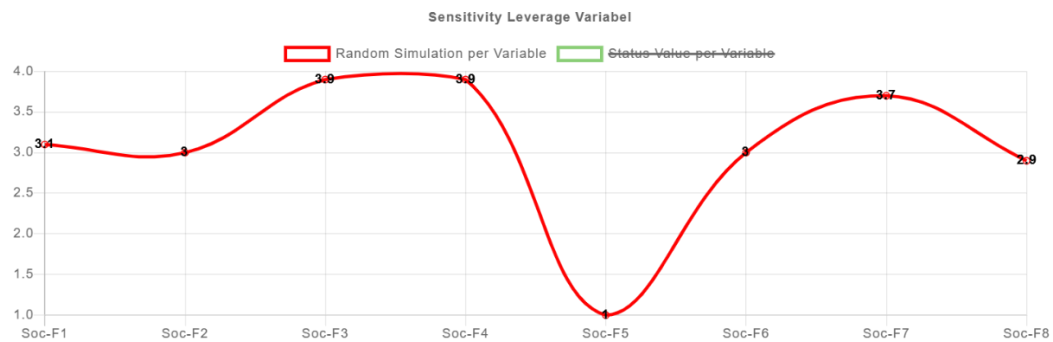
Table 4 Aggregate RI for Sustainable Management Aspects

Status Real	63.64
Random Iteration Status	63.41

Status Validation	0.23
Estimation Respondent Error	0.03

Socio-economic sustainability

Graph 1 Random Iteration of socio-economic sustainability



Graph 2 Random Iteration of socio-economic sustainability

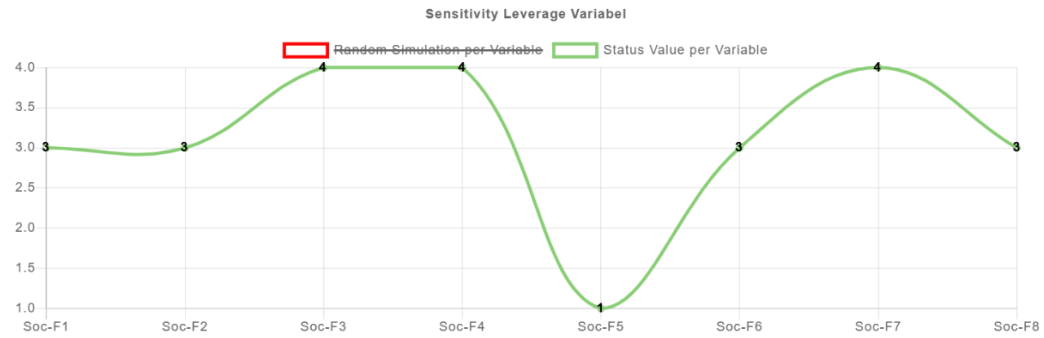
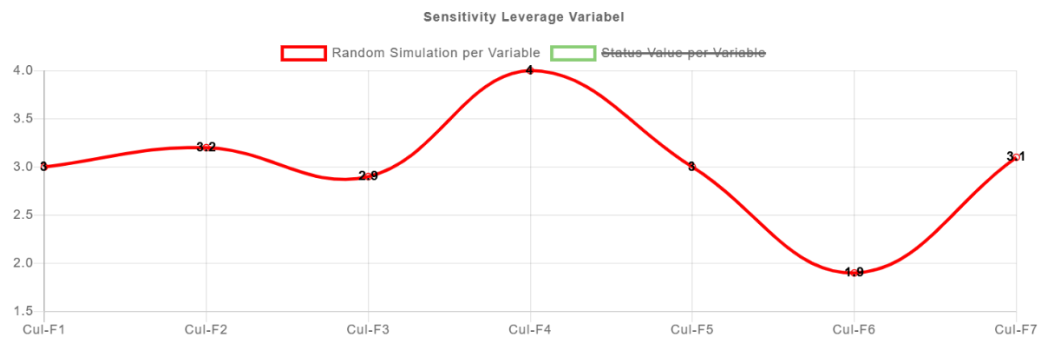


Table 5 Random Iteration of socio-economic sustainability

Status Real	78.13
Random Iteration Status	76.56
Status Validation	1.57
Estimation Respondent Error	0.09

Cultural sustainability

Graph 3. Random iteration of Cultural sustainability



Graph 4. Random iteration of Cultural sustainability

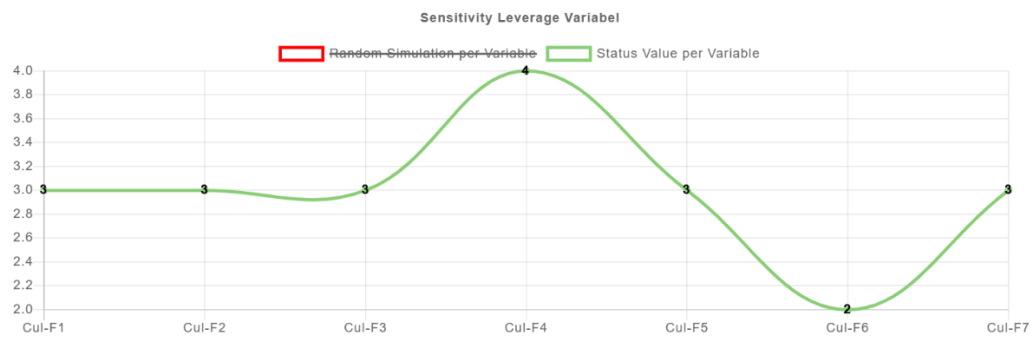
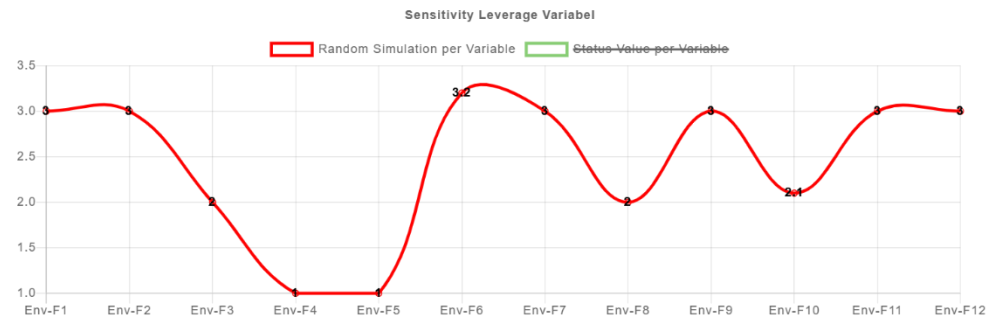


Table 6. Random iteration of Cultural sustainability

Status Real	75
Random Iteration Status	75.36
Status Validation	0.36
Estimation Respondent Error	0.07

Environmental sustainability

Graph 5. Random iteration of Environmental sustainability



Graph 6. Random iteration of Environmental sustainability

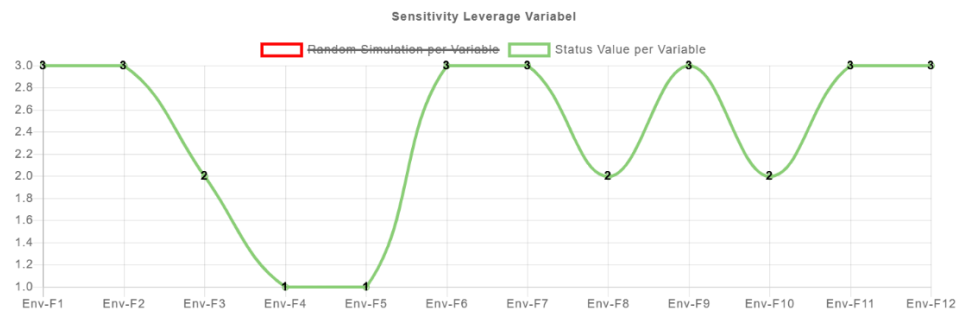


Table 7. Random iteration of Environmental sustainability

Status Real	60.42
Random Iteration Status	61.04
Status Validation	0.62
Estimation Respondent Error	0.03

Table 8. Aggregate Random Iteration

Aspect Name	Sensitivity Random Iteration
Sustainable Management	0.23
Socio-economic sustainability	1.57
Cultural Sustainability	0.36

Aspect Name	Sensitivity Random Iteration
Environmental sustainability	0.62
Validation Random Iteration	0.7

Table 9. Uncertainty error

No.	Name Aspect	Error Value
1	Sustainable Management	0.1%
2	Socio-economic sustainability	0.06%
3	Cultural Sustainability	0.09%
4	Environmental sustainability	0.1%
Total Average		0.09%

Table 10 Default Status Sustainability

Value	Status Sustainability
0 - 25	Unsustainable
> 25 - 50	Low Sustainable

> 50 - 75	Sustainable
> 75 - 100	Very Sustainable

Sustainability Value scenario (2 years)

Table 11 Sustainable Management scenario

No.	Factor	Scenario 1	Scenario 2	Scenario 3
Scenario 1				
1	Involvement of business entities and sustainability standards	2	-	-
2	Risk and crisis management	3	-	-
3	Planning regulations and development control	3	-	-
Scenario 2				
4	Involvement of business entities and sustainability standards	-	3	-
5	Destination management strategies and action plans	-	3	-
6	Monitoring and reporting	-	3	-
7	Risk and crisis management	-	3	-
8	Planning regulations and development control	-	4	-

Table 12. Socio-economic sustainability scenario

No.	Factor	Scenario 1	Scenario 2	Scenario 3
Scenario 1				
1	Prevention of exploitation and discrimination	2	-	-
2	Job and career opportunities	3	-	-
3	Measuring the economic contribution of tourism	3	-	-
Scenario 2				
4	Prevention of exploitation and discrimination	-	3	-
5	Job and career opportunities	-	3	-
6	Ownership and user rights	-	3	-
7	Measuring the economic contribution of tourism	-	3	-
8	Access for all	-	3	-

Table 13. Cultural sustainability secenario

No.	Factor	Scenario 1	Scenario 2	Scenario 3
Scenario 1				
1	Visitor management at cultural sites	3	-	-
2	Protection of cultural assets	3	-	-
3	Intangible heritage	3	-	-
Scenario 2				
4	Visitor management at cultural sites	-	3	-
5	Protection of cultural assets	-	3	-
6	Intellectual property rights	-	3	-
7	Intangible heritage	-	3	-
8	Site Interpretation	-	3	-
9	Cultural Artifacts	-	3	-

Table 14. Environmental sustainability scenario

No.	Factor	Scenario 1	Scenario 2	Scenario 3
Scenario 1				
1	Exploitation of species and animal welfare	2	-	-
2	Energy Conservation	2	-	-
3	Interaction with wildlife	3	-	-
Scenario 2				
4	Exploitation of species and animal welfare	-	3	-
5	Energy Conservation	-	3	-
6	Interaction with wildlife	-	3	-
7	Waste water	-	4	-
8	GHG emissions and climate change mitigation	-	3	-

Table 15. Aggregate Sustainability value for scenario 1 and 2

No.	Aspect	Existing	S1	S2
1	Sustainable Management	63.64	68.18	77.27
2	Socio-economic sustainability	78.13	81.25	84.38
3	Cultural Sustainability	75	78.57	78.57
4	Environmental sustainability	60.42	66.67	77.08
Total Average		69.3	73.67	79.32
Status Sustainability		Sustainable	Sustainable	Very Sustainable

Graph 7. Scenario 1 and 2

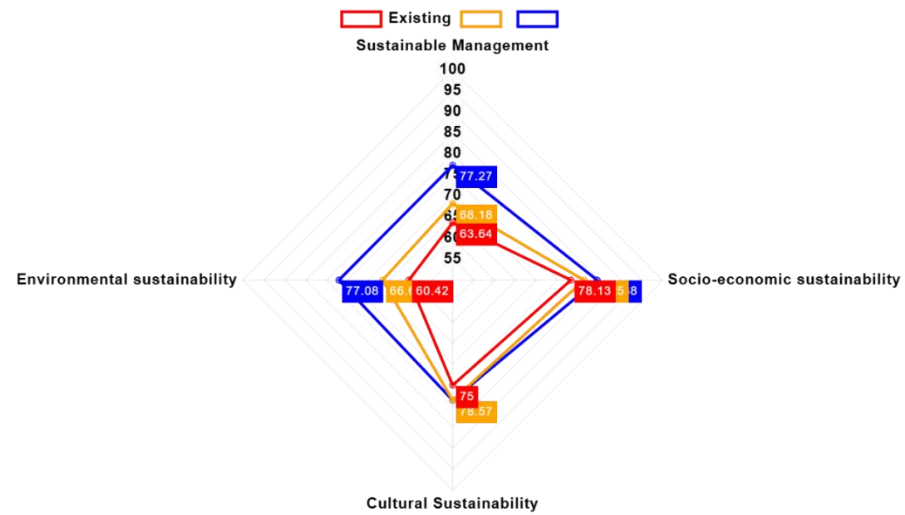


Table 16. Scenario Priority

Aspect	$\Delta S1S$	$\Delta S2S$	$\Delta S2S/\Delta S1S$
Sustainable Management	4.54	13.63	3
Socio-economic sustainability	3.12	6.25	2
Cultural Sustainability	3.57	3.57	1
Environmental sustainability	6.25	16.66	2.67
Average Scenario Priority		2.17	