

Assessing the Reputation of Malim Gunung Perhutanan (MGP) After the Mount Liang Incident: Implications from Value-Based Management and Reputation Repair Theory

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Abstract: *Malim Gunung Perhutanan (MGP) is a structured mountain guiding initiative established by the Department of Forestry Peninsular Malaysia to enhance hiking safety, environmental protection, and professional guiding standards. However, the Mount Liang incident on 10 October 2025 raised significant public concern regarding the institutional credibility and effectiveness of MGP. This study examines the online reputation of MGP following the incident by analysing 1,247 public comments collected from Facebook, TikTok, Instagram, and X (Twitter) using social media sentiment analysis. The findings indicate that negative sentiment toward MGP predominated, reflecting reputational challenges and reduced public confidence in the institution's crisis management and safety assurance roles. Despite this, sentiment toward hiking activity remained largely positive, suggesting that reputational damage was directed toward the institution rather than the broader hiking ecosystem. Guided by Reputation Repair Theory, this study interprets the findings as indicative of a need for corrective institutional strategies to restore public trust and organizational legitimacy. In response, the study proposes the adoption of Value-Based Management (VBM), specifically through the MS 1900 Shariah-Based Quality Management System, as a strategic framework to strengthen ethical governance, accountability, and service professionalism. The integration of reputation repair strategies and value-based management offers a structured pathway for enhancing institutional credibility and supporting the sustainable development of Malaysia's hiking and ecotourism sector. This study contributes to the literature by integrating sentiment analysis, reputation repair theory, and value-based management in examining institutional reputation within the context of forestry and adventure tourism management.*

Keywords: Mountain Guide; Malim Gunung Perhutanan; Online Reputation; Sentiment Analysis; Value-Based Management; MS 1900; Reputation Repair Theory

1. Introduction

Hiking has emerged as a major lifestyle trend in Malaysia, with a significant surge in participation following the pandemic (The Star, 2023). This popularity is driven by the country's rich biodiversity, which is recognized as one of the premier hiking destinations in Southeast Asia (AllTrails, 2023). However, the rise in these activities necessitates stricter permit management by the Department of Forestry Peninsular Malaysia (JPSM) to ensure the safety of hikers and the sustainability of permanent forest reserves (JPSM, 2023).

The economic contribution of hiking and eco-tourism is becoming increasingly visible. Permit fees for hiking in permanent forest reserves range from RM 5 to RM 20 for locals and RM 30 to RM 800 for foreign visitors, depending on state regulations (Meowtain People, 2025). In Sabah alone, the Forestry Department recorded RM 58 million in 'other forest-reserve revenues' in 2023, including permit and license fees (Daily Express, 2023). At a national scale, Malaysia's ecotourism market was valued at USD 926.6 million (\approx RM 4.5 billion) in 2024 and is projected to reach USD 2.45 billion by 2033 (IMARC Group, 2024). These figures suggest that structured hiking and forest-recreation management are not only socially beneficial but also economically significant.

Forestry Mountain Guides, also known as Malim Gunung Perhutanan (MGP), are essential to the country's hiking community. Beyond leading trails, they act as first responders and protectors of safety in emergencies (Astro Awani, 2023). The reputation of MGP faced significant challenges following a high-profile incident at Mount Liang on October 10th, 2025. Public discourse, particularly through social media sentiment, highlighted that mountain guides must transition beyond being mere trail guides to becoming essential first responders and safety guardians during emergencies (Astro Awani, 2023). The role of these guides is critical because they serve as a primary link to relevant authorities like the forestry department during forest-based crises. The incident underscored the necessity for the rigorous training MGPs undergo encompassing safety, rescue, and emergency management to be effectively translated into ensuring the seamless execution of mountaineering expeditions (Laporan Jawatankuasa Kira-kira Wang Negara, 2024; Manap, 2025). Consequently, the tragedy became a focal point for assessing how leadership competence and risk management are perceived by the public in Malaysia's growing hiking economy.

Despite the increasing importance of Malim Gunung Perhutanan in Malaysia's hiking ecosystem, limited academic research has examined their online reputation, particularly following crisis incidents. Existing studies focus primarily on tourism safety and guide professionalism but do not explore how public perception evolves during crisis situations. Therefore, this study aims to analyse online sentiment toward MGP following the Mount Liang incident and to propose a value-based management framework to support institutional reputation recovery.

1.1 Malim Gunung Perhutanan (MGP) Establishment in Malaysia

Understanding the importance of the role of mountain guides, the Jabatan Perhutanan Semenanjung Malaysia (JPSM), in collaboration with the Jabatan Bomba dan Penyelamat Malaysia (BOMBA), introduced the Forestry Mountain Guide development programme (Malim Gunung Perhutanan, MGP), an initiative to develop a structured management model for hiking activity within Permanent Forest Reserves. Prompted by reported incidents in Forest Eco-Parks and State Forest Parks such as injuries during hikes and cases of missing or lost hikers who had deviated from the trails had amounted to the MGP programme establishment to strengthen preventive measures, enhance emergency preparedness, and promote safer recreational use of forested areas. The initiative also reflects JPSM's commitment to the formal registration of local guides under the National Forestry Act 1984, enabling systematic regulation of guiding activities within Permanent Forest Reserves to ensure legal compliance, promote responsible ecotourism practices, and safeguard both visitors and the forest environment (JPSM, 2024).

Malim Gunung Perhutanan (MGP) programme is a core character to promote a safer and secure recreation activity within peninsular Malaysia. The Mountain Guide Programme is undergoing

continuous refinement and enhancement, informed by constructive feedback and training experiences gathered from climbers, particularly those with extensive involvement in expeditions on Mount Kinabalu. In its latest development, all participants of the Mountain Guide Training-of-Trainer's initiative are being deployed to Nepal to examine and learn from Nepal's established mountaineering management system. The insights gained from this study visit are expected to contribute significantly to the further strengthening and professionalisation of the programme (Jawatankuasa Kira-kira Wang Negara, 2024).

By requiring certified MGP guides for selected expeditions, the forestry and tourism authorities indirectly promote formal employment pathways and reduce the prevalence of unregistered, unsafe hiking practices. However, the credibility and reputation of MGP came under intense public scrutiny following the Mount Liang incident in late 2025, when questions emerged about leadership competence, risk management, and accountability. This paper investigates the online sentiment and reputation dynamics surrounding MGP after the Mount Liang case, analyzing social-media discourse to understand how such crises affect trust, participation, and reputation in Malaysia's growing hiking economy.

1.2 Malim Gunung Perhutanan (MGP) in term of Malaysia's security landscape

Forestry Mountain Guides or Malim Gunung Perhutanan (MGP) play a critical role in the nation's hiking ecosystem. They are not merely trail guides; they serve as first responders and safety guardians during emergency situations (Astro Awani, 2023). Their professionalism is the backbone of the adventure tourism industry's reputation, where comprehensive training is essential to minimize the risk of accidents in mountainous terrains (Hamid et al., 2021). The training undergone by MGPs was significant to enhance Malaysia's national security. The responsibility for national security management is no longer solely dominated by the government agency. Every entity in this country must assume an equal role in executing their respective duties, consistent with their functional mandates, expertise, roles, and obligations as permanent members of "Malaysia Citizen". The obligations of these entities are translated into the commitment of the entire government machinery, accompanied by cooperation across all segments of society in confronting any challenges within the realm of national security management, in line with the "Whole of Government, Whole of Society" approach (National Security Strategy Centre, 2021; Kertas Putih Pertahanan, 2020).

Hence, MGPs can be seen as another significant entity to Malaysia's security landscape as they do not only serve in terms of professional guide hiking activity but also standing by for emergency situations in the forest and acting as first responder for forestry department and relevant authorities. Consequently, MGPs are comprehensively trained in skills encompassing safety, rescue, rudimentary forestry, and emergency management. This rigorous training transforms them into competent and crucial personnel in ensuring the safety and seamless execution of every mountaineering expedition (Laporan Jawatankuasa Kira-kira Wang Negara, 2024; Manap, 2025).

This study addresses the following research questions:

- RQ1: What is the overall public sentiment toward Malim Gunung Perhutanan following the Mount Liang incident?
- RQ2: How does sentiment toward MGP compare with sentiment toward hiking activity in general?
- RQ3: How can value-based management contribute to restoring institutional reputation?

2. Literature Review

Past literature has recognized the importance of professional hiking organizations in ensuring safety, sustainability, and community development (Hassan & Rahim, 2020). Guided hiking systems similar to those implemented by the Malim Gunung Perhutanan (MGP) play multiple roles: safety regulation, environmental protection, and economic empowerment. The Mount Liang case represents a critical moment for assessing public trust in these systems. Social media has become a key platform for crisis communication and reputation management (Lim, 2023). Furthermore, hiking's growing role in Malaysia's rural economy has been discussed in the context of eco-tourism development (Mustafa & Cheong, 2023). MGP's integration into this structure adds value not only through safety and training but also by generating traceable income streams that contribute to local and national economic growth.

2.1 The Criticality of Online Reputation for Malim Gunung Perhutanan

In the digital age, the reputation of specialized services like Malim Gunung Perhutanan is increasingly constructed through online discourse and social media interactions. Online reputation acts as a digital proxy for trust, where a single crisis can trigger a "firestorm" of negative sentiment that overshadows institutional credibility. For mountain guides, reputation is not merely a marketing asset but a safety indicator; prospective hikers rely on digital footprints to assess competence before committing to high-risk expeditions. Research indicates that in the tourism and adventure sectors, negative online sentiment following an incident often stems from perceived failures in transparency and crisis communication (Lim, 2023). Therefore, maintaining a robust online reputation is essential for Malim Gunung Perhutanan to sustain its role as a key player in professionalizing the hiking ecosystem.

2.2 Value-Based Management and MS 1900

Value-Based Management (VBM) shifts the organizational focus from purely functional metrics to the cultivation of core ethical and service values. In the context of Malim Gunung Perhutanan, VBM provides a framework where climber safety and environmental stewardship are internalized as primary performance metrics (National Security Strategy Centre, 2021). In Malaysia, this is effectively operationalized through the MS 1900 Shariah-based Quality Management System (Ab. Mumin, 2012). Unlike conventional systems, MS 1900 emphasizes universal ethical values—such as *Insaniyyah* (humanity), integrity, and justice—which are applicable to any organization regardless of its religious orientation (Arni et al., 2022). By embedding these values into service delivery, the organization can foster a working culture that prioritizes professional ethics and risk minimization (Hasan et al., 2014). This value-driven approach is particularly effective for reputation repair, as it demonstrates a commitment to moral accountability that resonates with public expectations.

2.3 Reputation Repair Theory

Reputation Repair Theory provides a theoretical framework for understanding how organizations respond to reputational damage following crisis events. According to Benoit (1997), organizational reputation represents a valuable intangible asset that influences stakeholder trust, credibility, and legitimacy. When a crisis occurs, stakeholders reassess the organization's competence, accountability, and reliability, which may result in reputational decline. Reputation repair refers to the strategic actions taken by organizations to restore public trust and rebuild institutional credibility after reputational harm.

Benoit (1997) identifies several key reputation repair strategies, including corrective action, mortification, reducing offensiveness, and denial. Among these, corrective action is

particularly relevant in safety-critical sectors, as it involves implementing tangible improvements to prevent future incidents and demonstrate organizational accountability. This strategy signals to stakeholders that the organization is committed to addressing weaknesses and improving its operational effectiveness.

In the context of tourism and outdoor recreation, reputation repair is especially important because safety and trust are fundamental determinants of stakeholder confidence (Lim, 2023). Crisis incidents involving guides or safety personnel can significantly influence public perception, particularly when such personnel are viewed as responsible for risk management and emergency response. Effective reputation repair requires not only operational improvements but also visible institutional commitment to ethical governance, professional standards, and stakeholder safety.

Furthermore, value-based management frameworks can function as a reputation repair mechanism by reinforcing ethical conduct, accountability, and service integrity. The adoption of structured management systems, such as the MS 1900 Shariah-Based Quality Management System, can demonstrate organizational commitment to professional excellence and ethical responsibility. Such reforms enhance stakeholder confidence by signalling that institutional changes are being implemented to strengthen governance and prevent future incidents. Therefore, Reputation Repair Theory provides a relevant theoretical lens for understanding how management reforms and value-based governance can contribute to restoring institutional credibility following crisis events.

3. Methodology

This study adopts a mixed-method online sentiment analysis framework. Data were collected from Facebook, TikTok, Instagram, and X (Twitter) between September and October 2025, covering public discussions related to the “Mount Liang and Gunung Liang” keyword and the “MGP” tag. A total of 1,247 comments were collected (Facebook: 780; TikTok: 270; Instagram: 122; X: 75). Sentiment classification was conducted using a bilingual Malay-English lexicon-based sentiment analysis model. The classifier categorized comments into positive, neutral, and negative sentiment based on polarity scoring. To ensure reliability, a random subset of 100 comments was manually validated, achieving an agreement rate of 91%. Descriptive statistics and visualization were used to present the sentiment distribution.

The sample size of 1,247 comments was deemed sufficient for this study’s objectives. Prior social media sentiment research in tourism and crisis communication commonly utilizes datasets ranging from 500 to 2,000 comments to represent online discourse during specific events (Lim, 2023; Kaplan & Haenlein, 2020). In this study, data saturation was achieved at approximately 1,000 comments, where recurring sentiment patterns and thematic consistencies became evident across platforms. The inclusion of four major social networks further strengthened the representativeness of the dataset, ensuring that multiple audience demographics and engagement types were captured. Therefore, the selected sample size provides a valid and balanced basis for analysing public sentiment toward MGP and the hiking community following the Mount Liang incident.

4. Results and Discussion

The findings of this study indicate that Malim Gunung Perhutanan (MGP) experienced significant reputational challenges following the Mount Liang incident, as reflected in the

predominance of negative sentiment across social media platforms. This outcome highlights the fragility of institutional reputation in safety-critical sectors, where public trust is strongly influenced by perceived competence, accountability, and crisis management effectiveness. Reputation Repair Theory explains that organizational reputation represents a critical intangible asset, and crisis events can trigger stakeholder reassessment of institutional credibility and legitimacy (Benoit, 1997). In this context, the Mount Liang incident served as a reputational disruption, prompting public evaluation of MGP’s preparedness, professionalism, and institutional effectiveness.

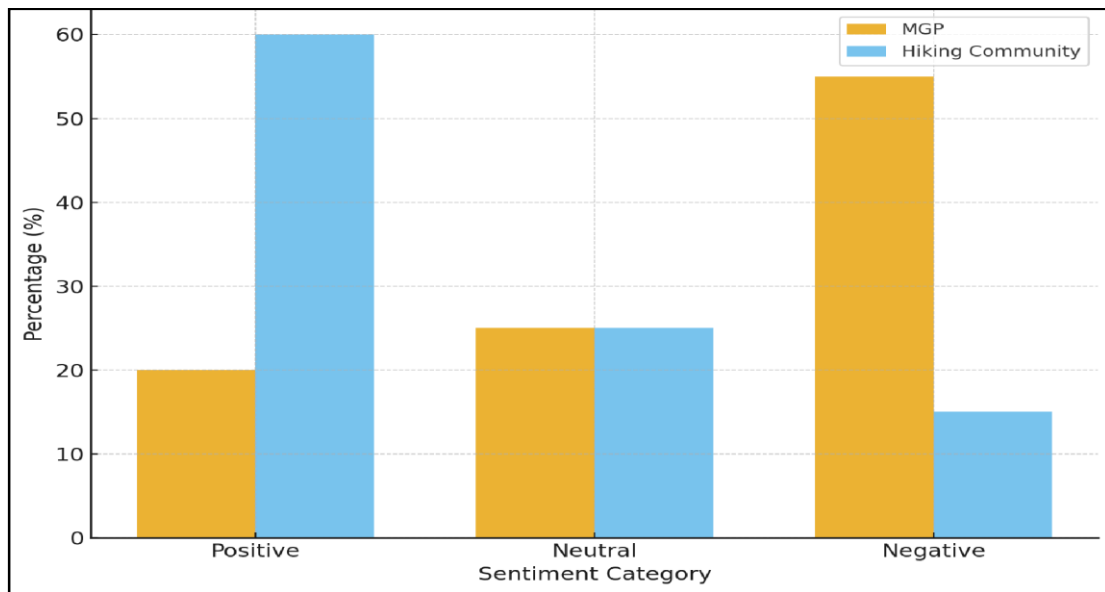


Figure 1: Comparison of Public Sentiment on MGP and Hiking Community

Sentiment Percentage Interpretation

Negative	55%	Reputation damage and institutional criticism
Neutral	25%	Informational or procedural discussions
Positive	20%	Recognition of past contributions

As frontline personnel responsible for guiding hikers and ensuring safety in forest environments, MGP personnel are perceived as key actors in risk mitigation and emergency response (Astro Awani, 2023; Hamid et al., 2021). Consequently, any incident involving safety concerns may lead stakeholders to question not only individual performance but also the effectiveness of the broader institutional framework. Reputation Repair Theory emphasizes that reputational damage is influenced not only by the crisis event itself but also by stakeholder perceptions of the organization’s ability to prevent, manage, and respond to such incidents (Benoit, 1997). In the digital era, social media platforms further amplify reputational impact, as they enable rapid dissemination of public opinion and collective evaluation of institutional performance (Lim, 2023). The predominance of negative sentiment observed in this study therefore reflects stakeholder concern regarding institutional accountability and crisis management capacity.

However, the findings also demonstrate that public sentiment toward hiking activity remained largely positive despite the reputational challenges faced by MGP. This distinction is particularly important from a reputation repair perspective, as it suggests that the reputational impact was directed toward the institution rather than the broader hiking ecosystem. This

pattern indicates that stakeholders continue to recognize the value and importance of hiking activities but expect stronger institutional governance, professionalism, and safety assurance from guiding authorities. According to Reputation Repair Theory, such conditions provide a viable pathway for reputation recovery, as stakeholder trust can be gradually restored through corrective actions and organizational improvements that demonstrate accountability and commitment to excellence (Benoit, 1997; Lim, 2023).

One of the most effective strategies for reputation repair involves the implementation of corrective measures that address institutional weaknesses and reinforce stakeholder confidence. In this regard, the adoption of a value-based management framework, such as the MS 1900 Shariah-Based Quality Management System, represents a strategic approach to strengthening organizational credibility and governance (Ab. Mumin, 2012; Arni et al., 2022). Value-based management emphasizes ethical conduct, integrity, accountability, and service responsibility, which are essential elements in rebuilding public trust following reputational disruption. By embedding these principles within operational procedures, training programmes, and service delivery systems, MGP can enhance both its operational effectiveness and its institutional legitimacy.

Furthermore, strengthening governance structures and aligning MGP's operational practices with national security and safety frameworks reinforces its strategic role in Malaysia's environmental and security ecosystem (National Security Strategy Centre, 2021). As MGP personnel serve not only as hiking guides but also as first responders in forest emergencies, their institutional credibility is essential for ensuring public safety and sustaining confidence in Malaysia's forest recreation management system. The implementation of structured governance reforms and continuous professional development initiatives demonstrates institutional accountability and commitment to improvement, which are critical components of successful reputation repair (Benoit, 1997).

Overall, the findings suggest that while the Mount Liang incident negatively affected MGP's institutional reputation, the damage is not irreversible. Reputation Repair Theory emphasizes that organizations can restore stakeholder trust through corrective action, transparency, and sustained commitment to professional and ethical standards (Benoit, 1997). By adopting value-based management practices, strengthening governance frameworks, and enhancing operational professionalism, MGP can progressively rebuild public confidence and reinforce its role as a trusted authority within Malaysia's hiking and forest recreation sector. Such efforts are essential for ensuring long-term institutional resilience, stakeholder trust, and the sustainable development of Malaysia's growing ecotourism and outdoor recreation industry (Lim, 2023).

5. Conclusion

This study examined the online reputation of Malim Gunung Perhutanan (MGP) following the Mount Liang incident by analysing public sentiment expressed across multiple social media platforms. The findings revealed that MGP experienced predominantly negative sentiment, reflecting a decline in institutional reputation and public confidence in its operational effectiveness and crisis management capacity. However, the study also found that public sentiment toward hiking activity remained largely positive, indicating that the reputational impact was directed toward the institution rather than the broader hiking ecosystem. This distinction highlights that while MGP's credibility was temporarily affected, the overall

legitimacy and importance of structured mountain guiding systems remain recognized by the public.

From a theoretical perspective, the findings support the principles of Reputation Repair Theory, which suggest that reputational damage resulting from crisis events can be mitigated through corrective action, organizational reform, and demonstrated commitment to professional and ethical standards (Benoit, 1997). The negative sentiment observed reflects stakeholder expectations for higher standards of safety assurance, accountability, and professionalism in safety-critical roles such as forestry mountain guides. As frontline personnel responsible for risk mitigation and emergency response, MGP personnel play a critical role in ensuring public safety and maintaining trust in Malaysia's forest recreation management system.

This study also highlights the strategic importance of value-based management as a mechanism for strengthening institutional credibility and facilitating reputation recovery. The adoption of structured governance frameworks such as the MS 1900 Shariah-Based Quality Management System offers a comprehensive approach to enhancing organizational integrity, accountability, and service quality. By embedding ethical values and professional standards into its operational culture, MGP can reinforce stakeholder confidence and demonstrate its commitment to continuous improvement. Such reforms are essential not only for restoring public trust but also for ensuring the long-term sustainability and professionalism of Malaysia's hiking and ecotourism sector.

Practically, the findings of this study provide valuable insights for policymakers, forestry authorities, and tourism stakeholders regarding the importance of proactive reputation management and institutional accountability. Strengthening training programmes, improving operational transparency, and institutionalizing value-based governance practices can enhance both organizational resilience and public confidence. Furthermore, this study contributes to the academic literature by integrating sentiment analysis and Reputation Repair Theory to examine institutional reputation dynamics within the context of adventure tourism and forestry management.

In conclusion, while the Mount Liang incident posed significant reputational challenges for MGP, it also presents an opportunity for institutional reflection, reform, and strengthening. Through the implementation of corrective measures, ethical governance, and value-based management, MGP can progressively restore its institutional credibility and reinforce its role as a trusted authority in Malaysia's hiking ecosystem. Ensuring sustained commitment to professionalism, accountability, and stakeholder safety will be essential for maintaining public trust and supporting the sustainable development of Malaysia's outdoor recreation and ecotourism sector.

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Conflict of Interest Statement

The authors declare that there is no conflict of interest regarding the publication of this study.

References

- Arni, H. A. (2022). Impact of Insaniyyah Factors in Shariah-Based Quality Management System MS 1900 Implementation: A Study in Malaysian Islamic Higher Education Institution. *Journal Usuluddin* 50 (1), 119-148.
- Ab. Mumin, A. H. (2012). Kesan Sistem Pengurusan yang Islami dan Holistik Terhadap Kepuasan Pekerja dalam Mendepani Realiti Serta Cabaran Masa Depan. *World Conference on Islamic Thought 2012: Contemporary Challenges and Realities (WCIT2012)*. Kuala Kangsar.
- AllTrails. (2023). Best Hiking Trails in Malaysia. Retrieved from <https://www.alltrails.com/malaysia>
- Arni, H. A., et al. (2022). Impact of Insaniyyah Factors in Shariah-Based Quality Management System MS 1900 Implementation: A Study in Malaysian Islamic Higher Education Institution. *Journal Usuluddin*, 50(1), 119-148.
- Astro Awani. (2023, October 20). Malim gunung bukan sekadar penunjuk arah, mereka penyelamat situasi. *Astro Awani Online*.
- Benoit, W. L. (1997). Image repair discourse and crisis communication. *Public Relations Review*, 23(2), 177–186.
- Hamid, A. S., et al. (2021). The role of mountain guides in ensuring hikers' safety: A case study in Peninsular Malaysia. *Journal of Outdoor Recreation and Tourism*, 35, 100-11
- Hasan, A. M. (2014). Quality Management System From Islamic Perspective MS 1900 Within Malaysia's Higher Education Institution: A Contemporary Challenges. *GJAT Vol 4 (Issue 2)*, 99-113.
- Centre, N. S. (2021). *Dasar Keselamatan Negara 2021-2025*. Putrajaya: Majlis Keselamatan Negara, Jabatan Perdana Menteri.
- Department of Statistics Malaysia. (2024). *Domestic Tourism Survey 2024*. Putrajaya: DOSM.
- Daily Express. (2023, August). Sabah's forest reserve revenue hits RM58 million.
- Hassan, M., & Rahim, N. (2020). Adventure tourism in Malaysia: Trends and Safety Management. *Journal of Tourism Studies*, 18(2), 45–59.
- Pertahanan, K. (2020). *Kertas Putih Pertahanan*. Kuala Lumpur: Kementerian Pertahanan (MINDEF).
- IMARC Group. (2024). *Malaysia eco-tourism market report 2024–2033*. Kuala Lumpur: IMARC Research.
- Jabatan Perhutanan Semenanjung Malaysia (JPSM). (2023). *Panduan Permohonan Permit Memasuki Hutan Simpanan Kekal*. Putrajaya: JPSM.
- Jabatan Perhutanan Semenanjung Malaysia (JPSM) (Accessed 21 November 2025). *Sejarah Malim Gunung Perhutanan*. Retrieved from [Malim Gunung Perhutanan.com: https://malimgunungperhutanan.com/](https://malimgunungperhutanan.com/)
- Jawatankuasa Kira-kira Wang Negara (PAC). (2023). *Laporan Jawatankuasa Kira-kira Wang Negara Parlimen Terhadap Tindakan Susulan Kementerian Sumber Asli dan Kelestarian Alam bagi Syor-syor Laporan PAC Parlimen Berhubung Pengurusan Hutan dan Impak Kepada Alam Sekitar*. Kuala Lumpur: Parlimen Malaysia.
- Jawatankuasa Kira-kira Wang Negara (PAC). (2024). *Laporan Pengurusan Hutan dan Impak Kepada Alam Sekitar (Laporan DR.39/2024)*. Kuala Lumpur: Parlimen Malaysia.
- Kaplan, A. M., & Haenlein, M. (2020). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59–68.
- Lim, J. (2023). Crisis communication and online reputation management in tourism sectors. *Asia Pacific Journal of Communication*, 33(4), 477–494.
- Mustafa, R., & Cheong, L. (2023). Eco-tourism as a Catalyst for Rural Economic Growth in Malaysia. *Tourism Economics*, 29(3), 501–518.

- Manap, A. H. (2025). *Malim Gunung Bukan Sekadar Jurupandu Arah*. Seremban: Berita Harian.
- National Security Strategy Centre. (2021). *National Security Policy 2021-2025*. Putrajaya: National Security Council, Prime Minister's Department.
- Rahman, S., Ismail, F., & Tan, K. (2021). Community-based Tourism and Guide Professionalism in Malaysia. *Journal of Sustainable Tourism*, 29(9), 1345–1362.
- The Star. (2023, May 15). Hiking gains popularity among Malaysians post-pandemic. The Star Online.