



Logistics Support Strategy as an Operational Force Multiplier by the Army Transportation Service: A Case Study of the 1976 Free Aceh Movement Insurgency

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Abstract

The military operation conducted to address the Free Aceh Movement (Gerakan Aceh Merdeka/GAM) insurgency in 1976 required a logistics system capable of ensuring mobility, sustainability, and operational effectiveness of the Indonesian Army. In this context, the Army Transportation Service (Dinas Angkutan Angkatan Darat/DAAD) played a strategic role in supporting combat operations, particularly amid limited infrastructure, difficult geographical terrain, and the dynamics of protracted armed conflict in Aceh. This study aims to analyze both the role and the logistics support strategy implemented by DAAD during Operation Nanggala in 1976. This research employs a qualitative descriptive approach, utilizing interviews, document analysis, and triangulation of data sources. The analytical framework is based on Arthur F. Lykke Jr.'s Ends–Ways–Means strategy model and military logistics theory to examine the alignment between operational objectives, logistical courses of action, and available resources. The findings indicate that DAAD logistics functioned not merely as a technical support element but as a strategic enabler of operational success. DAAD ensured troop mobility, distribution of ammunition and supplies, medical evacuation, and the security of transportation routes. The strategy implemented was adaptive, layered, and coordinated, allowing the maintenance of operational tempo despite geographical and security constraints. This study concludes that military logistics, particularly transportation support, constitutes a strategic foundation for operational effectiveness. Strengthening doctrine, institutional coordination, and adaptive logistics systems is therefore essential for future Indonesian Army operations, both in combat and non-war military missions.

Keywords: Strategy, Military Logistics, Transportation Support, DAAD, Free Aceh Movement, Nanggala Operation



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INTRODUCTION

The Free Aceh Movement (Gerakan Aceh Merdeka/GAM), proclaimed by Hasan di Tiro on 4 December 1976, marked the beginning of a prolonged separatist conflict between the Acehnese insurgent movement and the Government of Indonesia. The emergence of GAM was rooted in political dissatisfaction, perceived economic inequality in natural resource management, and resistance to centralized governance during the New Order era (Hasbullah, 2020; Muslim et al., 2022). In response to the escalating security threat, the Government of Indonesia launched Operation Nanggala in 1977 as a military strategy to dismantle GAM's organizational structure and operational capabilities. Operation Nanggala was conducted in geographically complex areas, including Pidie, North Aceh, and East Aceh, characterized by mountainous terrain, dense forests, and limited infrastructure. These conditions required not only combat readiness but also a sustainable and adaptive logistics system. Military operations in such environments demonstrate that logistics is not merely a supporting function, but a strategic determinant of operational effectiveness (Eccles, 1959; van Fenema & van Kampen, 2021). The ability to maintain mobility, ensure supply continuity, and secure transportation routes directly influences the tempo and endurance of military forces.

Within this operational context, the Army Transportation Service (Dinas Angkutan Angkatan Darat/DAAD) played a critical role in supporting troop deployment, ammunition distribution, fuel supply, medical evacuation, and route security. The blockade of GAM's supply chains and control over transportation corridors formed an integral part of the broader military strategy (Hasbullah, 2020). Referring to Lykke's Ends-Ways-Means framework, effective military strategy requires alignment between political objectives (ends), operational approaches (ways), and available resources (means) (Lykke, 1989). In this case, logistics particularly land transportation constituted an essential "means" enabling operational "ways" to achieve strategic "ends." Despite the strategic importance of logistics in domestic military operations, limited academic studies specifically examine the institutional role and logistics strategy of DAAD during the early phase of the GAM insurgency. Therefore, this study aims to analyze the role and logistics support strategy of DAAD in the 1976-1977 operations, positioning logistics as a force multiplier in military operations. By examining this historical case, the study contributes to the broader discourse on military logistics as a strategic instrument in national defense operations.

Research Gap and Novelty

Existing studies on military logistics generally focus on supply chain management, infrastructure development, and logistics efficiency in contemporary operations (Yanuarico et al., 2024; Maharani et al., 2023). Several historical studies discuss logistics in revolutionary or insurgency contexts (Hutagalung et al., 2024), yet they tend to emphasize general defense logistics rather than institutional strategies within specific military branches. Research on logistics in Indonesian military operations has also explored airbase logistics support and disaster-response missions (Sagala et al., 2023), but limited attention has been given to land transportation logistics in domestic counterinsurgency operations. There remains a significant research gap concerning the strategic role of the Army Transportation Service (Dinas Angkutan Angkatan Darat/DAAD) in supporting combat operations during the early phase of the Gerakan Aceh Merdeka (GAM) insurgency in 1976. Previous literature rarely examines military transportation logistics through a strategic framework that integrates ends, ways, and means within the operational context of domestic armed conflict. This study offers novelty by analyzing DAAD's logistics support strategy during Operation Nanggala using the Ends-Ways-Means framework. It contributes theoretically by positioning military transportation logistics as a strategic force multiplier rather than merely a supporting function. Practically, this research provides institutional insights into how adaptive and layered logistics strategies sustained operational tempo in geographically complex and security-constrained environments.

RESEARCH METHODS

This study employs a qualitative research design using a case-study approach to analyze the role and strategy of the Army Transportation Service (Dinas Angkutan Angkatan Darat/DAAD) in supporting military operations during the handling of the Free Aceh Movement (GAM) insurgency in 1976. A qualitative approach is considered appropriate to explore strategic decision-making, operational constraints, and logistical practices within a complex conflict environment. Data were collected through in-depth interviews with key informants, document analysis of official military reports and operational records, and triangulation of secondary sources to ensure credibility and validity. The analytical framework applies Arthur F. Lykke Jr.'s Ends-Ways-Means model to assess the alignment between operational objectives, logistical methods, and available resources (Lykke, 1989). In addition, military logistics theory as articulated by Eccles emphasizes the interdependence between strategy, tactics, and logistics



in sustaining combat power (Eccles, 1959). Data were analyzed through systematic coding, data reduction, categorization, and interpretation to identify patterns related to mobility support, supply continuity, distribution management, and logistical coordination. This methodological design enables a comprehensive understanding of logistics as a strategic force multiplier in domestic military operations.

RESEARCH RESULTS AND DISCUSSION

This section presents the empirical findings derived from interviews, document analysis, and data reduction conducted in Chapter IV of the thesis. The findings indicate that the Army Transportation Service (Dinas Angkutan Angkatan Darat/DAAD) played a strategic role in sustaining operational mobility and logistical continuity during Operation Nanggala in 1976. First, in terms of operational role, DAAD was responsible for troop transportation, distribution of ammunition, fuel, and general supplies, as well as medical evacuation support across key operational areas, including Pidie, North Aceh, and East Aceh. The logistics distribution system was organized in phased movements through intermediate supply points to minimize vulnerability along supply routes. These findings confirm that operational sustainability depends heavily on the continuity of supply chains in complex conflict environments (Fenema & van Kampen, 2021). Second, regarding logistics support strategy, the study reveals that DAAD implemented an adaptive and layered distribution system aligned with the overall operational objectives. Control of transportation routes, logistical blockade strategies against GAM forces, and rapid mobilization to mountainous areas formed part of an integrated strategic design. This approach reflects the *Ends-Ways-Means* framework, where operational objectives (ends) were supported by coordinated distribution methods (ways) and available transportation assets and personnel (means) (Lykke, 1989). Furthermore, the findings emphasize that military success during Operation Nanggala was not determined solely by combat capability but by the ability to maintain operational sustainment under geographically and politically challenging conditions. This supports Eccles' (1959) argument that strategy and logistics are inseparable components in achieving military objectives. In conclusion, the study demonstrates that DAAD functioned not merely as a supporting element but as a force multiplier that significantly influenced operational effectiveness during the suppression of the Free Aceh Movement (GAM) insurgency in 1976.

Discussion

The findings of this study demonstrate that the logistics support strategy implemented by the Army Transportation Service (Dinas Angkutan Angkatan Darat/DAAD) during Operation Nanggala in 1976 functioned not merely as a technical support element but as a strategic instrument that significantly influenced operational effectiveness. As presented in the research results, DAAD ensured troop mobility, maintained supply continuity, secured transportation routes, and supported medical evacuation across operational areas in Pidie, North Aceh, and East Aceh. These findings confirm that logistics sustainability constitutes a decisive factor in military operations conducted in geographically complex and conflict-prone environments. This aligns with Eccles' assertion that logistics and strategy are inseparable components in achieving military objectives (Eccles, 1959). From the perspective of Arthur F. Lykke Jr.'s *Ends-Ways-Means* framework, the strategic end of Operation Nanggala was the degradation of GAM's operational capacity and the restoration of state control. The ways adopted involved a layered logistics distribution system, route control, and logistical blockade strategies targeting insurgent supply networks. The means consisted of military transportation assets, personnel, and coordinated command structures. The relative success of DAAD in maintaining operational tempo reflects a functional balance between ends, ways, and means, supporting Lykke's



proposition that strategic effectiveness depends on the alignment of these three elements (Lykke, 1989). Furthermore, the study reveals that logistics distribution was executed in phased movements through intermediate logistics posts to reduce vulnerability along supply lines. This approach demonstrates principles of integration, responsiveness, and sustainability in military logistics management (Yanuarico et al., 2024). In a conflict environment characterized by mountainous terrain, limited infrastructure, and security threats, adaptability became a key determinant of logistics resilience. The ability of DAAD to anticipate sabotage risks and maintain supply chain continuity illustrates the application of military logistics theory, which emphasizes flexibility and operational readiness (Fenema & van Kampen, 2021).

The discussion also highlights that the effectiveness of the logistical blockade strategy contributed to the gradual weakening of GAM's operational mobility. Historical accounts indicate that the disruption of insurgent supply networks reduced their capacity to sustain armed resistance (Hasbullah, 2020). In this regard, logistics functioned as a force multiplier rather than a passive support mechanism. This finding reinforces the argument that military success in domestic counterinsurgency operations is not solely determined by combat superiority, but also by sustained logistical dominance. In the broader theoretical context of defense value creation, DAAD's role reflects the integration of materiel logistics, personnel logistics, and operational logistics into a cohesive support system. The phased preparation, deployment, and sustainment of combat forces demonstrate that operational readiness is fundamentally dependent on logistics infrastructure and coordination mechanisms. Therefore, this study affirms that logistics support constitutes a strategic foundation for operational success, particularly in prolonged and geographically challenging military engagements.

CONCLUSION

This study concludes that the logistics support strategy implemented by the Army Transportation Service (Dinas Angkutan Angkatan Darat/DAAD) in handling the Free Aceh Movement (GAM) insurgency in 1976 constituted a decisive strategic factor in ensuring operational effectiveness. Within the framework of Operation Nanggala, DAAD played a critical role in guaranteeing troop mobility, sustaining supply continuity, securing transportation corridors, and distributing ammunition, fuel, personnel, and operational equipment across geographically complex and high-risk areas such as Pidie, North Aceh, and East Aceh. The findings demonstrate that the sustainability of logistics directly influenced operational tempo, force endurance, and the overall ability of the Indonesian Army to maintain pressure against insurgent elements under conditions of limited infrastructure and persistent security threats. From a strategic perspective, the alignment between operational objectives, logistical methods, and available transportation assets reflects a structured and adaptive support system. The implementation of layered distribution mechanisms, logistical blockade measures, and control of key supply routes contributed to weakening insurgent operational capacity and strengthening state control in contested areas. This study affirms that military logistics, particularly land transportation support, functioned not merely as a supporting component but as a force multiplier that shaped operational outcomes. Accordingly, future Indonesian Army operations should continue strengthening logistics doctrine, institutional coordination, transportation readiness, and sustainment planning to ensure integrated, adaptive, and resilient support in both combat and non-combat missions.

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