

Conception of Logistics Terminal Governance at Sjamsudin Noor Air Force Base to Support Operations Capital City of the Archipelago

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ABSTRACT

The background of this research is the importance of efficient logistics management at Lanud Sjamsudin Noor to support the operations of the Nusantara Capital City, considering its strategic location near the new capital. The objective of this study is to formulate a concept of logistics terminal management that can enhance operational effectiveness and efficiency. The method used in this research is a qualitative approach, with data collection through interviews, observations, and document studies to analyze the current conditions and challenges faced. The results indicate a pressing need to improve logistics infrastructure and the implementation of an integrated information system to facilitate coordination among units. The recommendations include the necessity for collaboration between relevant agencies to develop a comprehensive logistics development plan and training for personnel in logistics management to achieve the established strategic objectives.

INTRODUCTION

"The Concept of Logistics Terminal Management at Sjamsudin Noor Air Force Base to Support the Operation of the Indonesian Capital" is an effort to present systematic and integrated logistics management in a strategic location. With the rapid growth and transformation of the new Indonesian Capital City, the existence of Sjamsudin Noor Air Force Base as a logistics center is expected to provide optimal operational support, both for military and civilian needs. In this context, literature includes the understanding that efficient logistics management is not only related to physical infrastructure, but also involves careful managerial processes, collaboration between institutions, and the application of appropriate technology. This study focuses on the importance of efficient logistics management at Sjamsudin Noor Air Force Base to support the operations of the Indonesian Capital City. With a strategic location and proximity to the new capital city, Sjamsudin Noor Air Force Base is expected to play a vital role as a logistics center in supporting various military and civilian activities. Given the dynamics of the rapid development of the Indonesian Capital City and to explore the potential and challenges in logistics management in this area, as well as the importance of collaboration between agencies to improve the efficiency and effectiveness of the existing logistics system.

The purpose of this study is to formulate a concept of logistics terminal governance that can improve operational effectiveness and efficiency at Sjamsudin Noor Air Force Base. In this context, this study aims to identify strategies that can be implemented in logistics management, including infrastructure development and the application of integrated information technology. By formulating a clear concept, it is hoped that this study can provide valuable recommendations for decision makers in logistics management in the Air Force Base environment and support the operational success of the Indonesian Capital City.

The research method used in this study is a qualitative approach, with data collection through interviews, observations, and document studies to analyze current conditions and challenges faced. The results of the study are expected to provide a comprehensive picture of the urgent need to improve logistics infrastructure, as well as the importance of implementing an integrated information system to facilitate coordination between units. Through these findings, it is hoped that constructive suggestions can be formulated, including the need for collaboration between related agencies to develop a comprehensive logistics development plan and training for personnel in logistics management in order to achieve the strategic goals that have been set.

LITERATURE REVIEW

Theory Governance

According to John Carver Governance is the process by which an organization defines objectives, establishes strategies, and manages risks to achieve desired outcomes, while maintaining accountability and transparency. (Carver, 2006) Governance as "the process by which an organization defines objectives, establishes strategies, and manages risks to achieve desired outcomes, while maintaining accountability and transparency" includes key elements that

ensure effective governance. Defining objectives is the initial step that establishes specific directions and goals for the organization, ensuring alignment with the vision and needs of stakeholders. After that, establishing strategies involves planning and allocating the resources needed to achieve those objectives. Managing risk is a critical component that allows organizations to identify and address potential issues that could interfere with the achievement of objectives. Accountability ensures that all parties in the organization are held accountable for their decisions and actions, while transparency ensures openness of information that allows stakeholders to understand and monitor the process and results. The combination of these elements supports effective and responsible governance in the organization.

Ostrom contributed to the understanding of governance through research on common pool resource management. She showed that local communities can sustainably manage natural resources without strong government intervention. Her contributions emphasized the importance of collaborative and participatory approaches to governance. (Ostrom, 1990) Governance refers to the systems and processes used to direct, manage, and oversee organizations or institutions, including governments, corporations, or other institutions. Governance includes the organizational structures, policies, procedures, and practices that govern how decisions are made, how responsibilities are distributed, and how accountability and transparency are maintained.

Mark Bevir developed the concept of governance with a focus on the network and interaction aspects between various actors in government. He argued that governance is not only about formal structures, but also about how these actors collaborate and communicate to achieve common goals. This concept underlines the importance of flexibility and adaptation in the governance process. (Bevir, 2010). In the context of a country, governance involves the legal and regulatory framework, government institutions, the judicial system, and oversight mechanisms that ensure that the government carries out its functions effectively, fairly, and responsibly. The main objectives of governance are to create an efficient, effective, and accountable system, minimize the risk of abuse of power, and ensure that the public interest is met.

Operational Theory

Womack and Jones in the *Lean Thinking concept* suggest that operations should be focused on reducing waste and increasing efficiency in all processes. They emphasize the importance of continuous value flow and continuous improvement in operations. (Womack, 1996) The explanation of how operations should be focused on reducing waste and increasing efficiency, as stated by James P. Womack and Daniel T. Jones in the *Lean Thinking concept*, emphasizes the fundamental principles in operations management to improve the effectiveness and efficiency of the organization. Waste reduction focuses on eliminating non-value-adding activities, excessive resource use, and unproductive waiting time, with the aim of improving resource efficiency and product quality. Efficiency improvement involves simplifying and optimizing processes to maximize results with minimal resources, including through the automation of manual tasks. Continuous value flow ensures that each step in the

process contributes to the creation of value for customers and avoids bottlenecks that can disrupt the flow. In addition, continuous improvement or Kaizen emphasizes the importance of continuous innovation and adaptation to change to maintain the relevance and effectiveness of the process. By integrating these principles, organizations can achieve optimal results while remaining responsive to evolving challenges and opportunities.

Operational Theory according to Michael Porter refers to the daily activities carried out to run and organize certain functions or processes in an organization or system. Operations include all practical and technical aspects required to carry out planned activities and achieve predetermined goals. In a business context, operations include production management, logistics, human resource management, facility maintenance, and quality control. The purpose of operations is to ensure that processes run smoothly, efficiently, and effectively, and that the products or services produced meet quality standards and customer needs. Operations also include planning, implementing, monitoring, and continuous improvement to increase organizational productivity and performance.

Military Logistics Theory

This theory covers the concepts, principles, and practices of logistics management in a military context. This includes aspects such as procurement, storage, distribution, and maintenance of defense equipment and other logistics. (Sunaryo, 2018). Military Logistics Theory by Martin van Creveld highlights that logistics is an integral part of military strategy. In his book, he explains how logistics management can affect the flexibility and responsiveness of an armed force. (Van Creveld, 2004) Military logistics theory provides a conceptual and practical basis for designing and managing an effective and efficient logistics system. In the context of the Sjamsudin Noor Air Force Base (Lanud), the application of military logistics principles is very relevant to support the operations of the Indonesian Capital City. This discussion will describe how military logistics theory is applied in the management of logistics terminals at Sjamsudin Noor Air Force Base. The application of military logistics theory in the management of logistics terminals at Sjamsudin Noor Air Force Base is very important to support the operations of the Indonesian Capital City. By adopting the principles of anticipation and flexibility, efficiency and effectiveness, reliability and resilience, and coordination and integration, Sjamsudin Noor Air Force Base can ensure the smooth and successful flow of logistics needed to support the needs of the Indonesian Capital City. This optimization not only increases readiness and responsiveness, but also makes a significant contribution to overall operational success.

Regional Logistics Theory

According to Desi Ariani, regional logistics are logistics that originate from natural resources and artificial resources, facilities and infrastructure as well as strategic material reserves that exist in the region and can be utilized to support the overall defense system (protracted war). (Desi Ariani & Bambang Munas, 2013) H. John Heinz stated that regional logistics involves the

management of resources and information flows related to the distribution of goods and services within a region. He emphasized the importance of collaboration between various actors in the supply chain to improve efficiency and effectiveness. (Heinz, 2004) RK Srivastava developed a regional logistics model that emphasizes the importance of logistics planning and control based on the geographic and demographic characteristics of a region. He argues that spatial analysis can help in better decision making in logistics distribution. (Srivastava, 2007) Regional logistics are logistics used to support defense operations in regions that rely on the capabilities of resources in the relevant region. The relationship between regional logistics that support defense operations at Sjamsudin Noor Air Force Base, in the context of supporting the operations of the Indonesian Capital City, can be understood as follows:

1. Sjamsudin Noor Air Force Base (SAM) has a strategic role in supporting defense operations in the South Kalimantan region, as well as being an important element in the concept of the Indonesian Capital City as an alternative center of government for Indonesia. The concept of logistics terminal governance at SAM Air Force Base not only includes aviation infrastructure that supports military mobility, but is also important in managing the flow of logistics and resources in the region.
2. Regional logistics at SAM Air Force Base involves effective management of the resources and facilities in the surrounding area. This includes the distribution of food, fuel, military equipment, and the management of human resources that support military and administrative operations in the Indonesian Capital. The role of regional logistics is critical in ensuring operational continuity and reliability of supply for all aspects of life and operations in the Indonesian Capital.
3. In the context of defense, good logistics capabilities at SAM Air Force Base will support a rapid response to security threats in the South Kalimantan region, as well as ensure the readiness and mobility of military forces to maintain national security. Therefore, the development of the concept of logistics terminal governance at Sjamsudin Noor Air Force Base not only has an impact on operational efficiency, but also strengthens national resilience through the provision of timely and effective infrastructure and resources.

Theory Supply Chain Management

The concept of supply chain management considers the entire process from production to distribution of goods or services to customers. In the context of Sjamsudin Noor Air Force Base, this includes the management of defense equipment, fuel, and other supplies. (Soesanto, 2017). Supply Chain Management (SCM) theory offers a comprehensive guide to managing the flow of goods, information, and resources throughout the supply network. Chopra and Meindl developed a supply chain model that includes two main dimensions: design and management. They explain that supply chain management involves coordination and collaboration between various parties to increase value and efficiency. (Chopra, 2016). While Martin Christopher explains that the supply chain must be designed to face rapidly changing market dynamics. He emphasizes the importance of flexibility and speed in supply chain management,

as well as the need for integration between various functions within the organization to achieve efficiency. (Christopher, 2005) In the context of the Sjamsudin Noor Air Force Base (Lanud), the application of SCM principles is very relevant to optimize the governance of logistics terminals to support the operations of the Indonesian Capital City. This discussion will describe how SCM theory can be applied in logistics governance at Sjamsudin Noor Air Force Base. SCM encompasses the planning and management of all activities involved in procurement, sourcing, conversion, and all logistics management activities. It also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. The main objective of SCM is to create efficiency and increase value for all stakeholders. The application of Supply Chain Management (SCM) theory in the governance of logistics terminals at Sjamsudin Noor Air Force Base is very important to support the operations of the Indonesian Capital City. By integrating SCM principles such as integration and collaboration, visibility, responsiveness, and lean management, Sjamsudin Noor Air Force Base can optimize logistics flows, increase efficiency, and ensure operational readiness and reliability. This optimization will contribute significantly to the success of logistics support for the operations of the Indonesian Capital City

Warehousing or Goods Terminal Theory

Warehousing is the activity of storing in a warehouse Warman, (2010:75). Warehousing is all efforts to manage a warehouse that includes receiving, maintaining, storing, maintaining, distributing, controlling and destroying, and reporting materials and equipment so that quality and quantity are guaranteed. (BNPB, 2009) Donald J. Bowersox defines warehousing as an activity related to storing and managing goods to meet market demand. He emphasized the importance of efficient warehouse management in the supply chain to minimize costs and improve customer service. (Bowersox, 2007) Warehousing is not only an activity of storing goods, but also a process of handling goods starting from receiving goods and recording, storing, selecting, labeling, to the process of shipping goods. Through warehouse management, it will be possible to shorten the transportation distance in the distribution of goods and can also increase the frequency of item retrieval and delivery to customers. Warehouses are needed in the process of coordinating the distribution of goods that arise as a result of the imbalance in the supply and demand processes. The imbalance between the supply and demand process encourages the emergence of inventory, inventory requires space as a temporary storage place called a warehouse. Robert A. Novack stated that the terminalization of goods includes various activities related to the management of storage and distribution facilities. He highlighted the importance of the design and operation of facilities to support supply chain efficiency. (Novack, 2003).

METHODOLOGY

This study uses a qualitative analysis method with a focus on optimizing the logistics terminal at the Sjamsudin Noor Air Force Base (Lanud) to support the operation of the Indonesian Capital City. According to (Moleong, 2013)

defines qualitative research as research that is intended to understand the phenomenon of what is experienced by the research subject, for example the perpetrator, perception, motivation, action and others holistically and in a descriptive way in the form of words and language in a specific natural context and by utilizing various scientific methods . (Fiantika, 2022) In a qualitative study on the Concept of Logistics Terminal Governance at Sjamsudin Noor Air Force Base to Support the Operation of the Indonesian Capital City, the methods used include primary and secondary data collection. Primary data were obtained through in-depth interviews with stakeholders, such as representatives of the Indonesian Air Force and logistics managers, as well as focus group discussions involving members of the Indonesian Air Force to explore challenges and solutions in logistics management. Meanwhile, secondary data were taken from official documents and related literature that discuss the theory and practice of military logistics. For analysis, this study used thematic analysis to identify key patterns and themes from the data collected. . In addition, data triangulation was carried out to ensure the reliability of the findings, so that the results of the study can provide effective evidence-based recommendations to support the operations of the Indonesian Capital City.

This qualitative approach includes several main steps, namely: analysis of various official documents and relevant laws and regulations to understand the legal framework and regulations governing logistics management at Sjamsudin Noor Air Force Base; using an appropriate theoretical framework to formulate a rationale for resolving problems related to logistics terminal governance, data collection through direct observation, interviews with related parties, and analysis of existing reports and documents to describe the current situation and identify existing problems; analysis of the results of the TNI AU coordination meeting to gain insight and recommendations related to the development and management of logistics facilities; qualitative data analysis to identify relevant patterns, themes, and relationships, and formulate a concept for optimizing logistics terminals at Sjamsudin Noor Air Force Base; and compiling recommendations to improve the efficiency and effectiveness of logistics terminals at Sjamsudin Noor Air Force Base, covering aspects of infrastructure, coordination, and security. Through this approach, the research is expected to provide a significant contribution in supporting the success of the relocation and operation of the Indonesian Capital City.

RESEARCH RESULT

Current condition of logistics terminal at SAM Air Force Base .

The current condition of the logistics terminal at Sjamsudin Noor Air Force Base (SAM) shows a significant gap between the real conditions and the ideal conditions expected. Based on governance theory, logistics management at SAM Air Force Base should integrate various important elements such as infrastructure, management systems, and human resources. However, current conditions show that the existing infrastructure is still inadequate. Warehouse and terminal facilities do not fully meet modern standards, thus hampering efficiency in logistics distribution. According to governance theory, stakeholders within the organization must collaborate to create a more efficient system, but

currently there are limitations in collaboration and integration between units that affect logistics management.

In the context of warehousing or goods terminal theory, the management of warehousing facilities and processes at SAM Air Force Base is not yet optimal. Processes that are mostly done manually have the potential to increase the risk of errors and slow down the flow of information. In addition, limited accessibility of multimodal transportation also results in longer delivery times and higher logistics costs. In other words, the current logistics management at SAM Air Force Base cannot facilitate the distribution of goods and materials efficiently. To achieve the ideal conditions expected, SAM Air Force Base needs to develop an integrated logistics management system and implement clear and standardized operational procedures. This will ensure that all aspects of logistics management run well, so that it can support more effective and efficient operations in the context of national defense and security needs.

This discussion emphasizes the importance of implementing governance and warehousing theories in improving the condition of logistics terminals at Sjamsudin Noor Air Force Base (SAM) because these two theories provide a solid framework to improve the efficiency and effectiveness of logistics management. Governance theory focuses on the structures and processes needed to optimally manage resources, create synergy between stakeholders, and ensure that all elements in the logistics system function harmoniously. By implementing good governance principles, SAM Air Force Base can improve transparency, accountability, and responsiveness in logistics management.

Meanwhile, the theory of warehousing or goods terminals focuses on optimizing facilities, processes, and technologies used in warehouse and terminal management. By applying this theory, SAM Air Force Base can identify deficiencies in existing infrastructure and management systems, and develop strategies to improve processes that are not yet optimal. Through proper problem identification and structured solution recommendations, including investment in infrastructure, personnel training, and information system integration, it is expected that logistics management at SAM Air Force Base can improve significantly. This will not only improve operational efficiency at SAM Air Force Base but also directly support the operations of the Indonesian Capital City by ensuring that logistics can be better managed and responsive to evolving needs. Thus, the application of both theories is very relevant and important to achieve strategic goals in effective logistics management.

Implementation of logistics terminal governance at SAM Air Force Base at present

The implementation of logistics terminal governance at Sjamsudin Noor Air Force Base (SAM) currently reflects the need to integrate various logistics theories to create a more efficient and responsive system. In the context of **Governance Theory**, the organizational structure and processes at SAM Air Force Base need to be strengthened to ensure that logistics management runs in a transparent and accountable manner. This includes establishing clear roles and responsibilities for each stakeholder, as well as creating an effective communication mechanism. The involvement of various parties, both internal

and external, must be increased to facilitate collaboration in managing logistics resources, so that each element can function optimally in supporting operations. From the perspective of **Warehousing or Goods Terminal theory**, the condition of the existing infrastructure at SAM Air Force Base shows a lack of warehouse and terminal facilities that meet modern standards. Although there have been efforts to improve infrastructure, many processes are still carried out manually, which hinders distribution efficiency. The application of more sophisticated information technology, such as inventory management systems and real-time monitoring, needs to be a priority to improve operational effectiveness.

The Regional Logistics Theory is also relevant in the context of SAM Air Force Base, especially in creating a more integrated logistics network with the surrounding area. This regional approach requires SAM Air Force Base to establish partnerships with various parties, including local governments and the private sector, in order to create better synergy in logistics management. This will enable faster and more efficient logistics distribution, as well as improve response to emergency situations. In the context of **Military Logistics Theory**, SAM Air Force Base must focus on the maintenance and readiness of defense equipment as a key element in supporting defense operations. Logistics readiness does not only include the management of goods and materials, but also ensuring that all defense equipment is in a ready-to-use condition. Therefore, it is important to strengthen maintenance facilities and personnel training so that they are able to operate modern logistics technology efficiently.

Overall, the implementation of logistics terminal governance at Sjamsudin Noor Air Force Base (SAM) currently requires a comprehensive approach by integrating various logistics theories to create a more effective and efficient system. This approach is important to ensure that all elements in logistics management support each other. First, the governance aspect needs to be improved by establishing a clear organizational structure and integrated standard operating procedures, so that each stakeholder understands their roles and responsibilities. Furthermore, modern and integrated logistics infrastructure must be considered. This includes the construction and improvement of warehouse facilities, terminals, and adequate transportation systems to support optimal logistics distribution. With appropriate facilities, delivery times can be accelerated and logistics costs can be reduced, which are important factors in supporting military operations.

Regional collaboration is also key to creating better synergy in logistics management. SAM Air Force Base must actively establish partnerships with various stakeholders, including local governments and the private sector, to build a more effective logistics network. This will allow for smoother exchange of information and resources, and create a faster response to operational needs and military readiness must be a primary focus in logistics management. SAM Air Force Base needs to ensure that defense equipment is always ready to use and that logistics personnel have the necessary skills to operate modern technology. With this approach, SAM Air Force Base will not only improve the effectiveness of logistics management, but also strengthen its capabilities in

facing various challenges that may arise, thus supporting better and more responsive operations in the context of national defense.

Plan for the management of logistics terminals at SAM Air Force Base to support the operations of the Indonesian Capital City in the future.

The application of Governance Theory in logistics management at Sjamsudin Noor Air Force Base (SAM) plays an important role in creating a transparent and accountable system. The principle of transparency allows all stakeholders, both internal and external, to understand the logistics management process, including decision making, resource allocation, and budget use. Thus, the risk of deviation or abuse of authority can be minimized. Accountability is also key in ensuring that every action taken by the logistics manager can be accounted for. To achieve this, a clear organizational structure is needed with delineation of duties and responsibilities, so that each individual in the team has a good understanding of their role in the overall logistics process. In addition, the implementation of standardized operational procedures serves to improve efficiency and consistency in logistics management at SAM Air Force Base. These procedures must be designed by considering best practices in the logistics industry and the specific needs of SAM Air Force Base. Determining clear and measurable performance indicators is also very important to evaluate the effectiveness of logistics management. Through periodic monitoring and evaluation of performance, SAM Air Force Base can identify areas that require improvement and make necessary adjustments. By implementing the principles of good governance, SAM Air Force Base will not only improve operational efficiency, but also build trust among stakeholders and support the achievement of strategic goals in supporting the operations of the Indonesian Capital City.

Improvements to the warehousing and terminal infrastructure at Sjamsudin Noor Air Force Base (SAM) must be based on the theory of warehousing and goods terminals, which emphasize the importance of efficiency in goods management. Modern warehousing facilities equipped with the latest information technology, such as RFID or barcode-based inventory management systems, will enable real-time monitoring of goods and reduce the risk of errors or loss of goods. The use of this technology can also speed up the process of recording and tracking incoming and outgoing goods, which is very important in large-scale logistics operations. In addition, the implementation of automated storage and retrieval systems can increase storage capacity and speed up access to needed goods. The development of a multimodal transportation system is also an important part of infrastructure improvement. With good connectivity between air, land, and sea transportation modes, logistics distribution will be more efficient and flexible. This system allows SAM Air Force Base to optimize the most efficient shipping routes based on operational needs and field conditions. The development of terminal facilities that are able to support multimodal transportation will not only speed up the distribution process, but also reduce overall logistics costs, by minimizing delays and errors in the shipping process. These steps, if implemented properly, will significantly increase the capacity and efficiency of logistics management at SAM Air Force

Base, which in turn supports more effective operations for the Indonesian Capital.

The emphasis on regional collaboration in the logistics terminal arrangement plan at Sjamsudin Noor Air Force Base (SAM) based on the Regional Logistics Theory is very important to create a broad and efficient logistics network. Collaboration with local governments, civil agencies, and various other stakeholders allows SAM Air Force Base to utilize existing local resources and infrastructure optimally. This synergy will not only strengthen the flow of logistics under normal conditions, but also facilitate coordination in emergency situations, such as natural disasters or security crises, where rapid response and effective resource delivery are crucial. By expanding the regional collaboration network, SAM Air Force Base can also improve logistics resilience in the Indonesian Capital Region. This collaboration allows for the creation of a more flexible logistics system, where resources can be allocated more efficiently between the military and civil sectors. In addition, this collaboration can accelerate the development of supporting infrastructure, such as transportation routes and storage facilities, which will strengthen the supply chain throughout the region, supporting the operational logistics needs of SAM Air Force Base and various agencies operating in the region.

Focusing on military readiness and responsiveness through the application of **Military Logistics Theory** is essential in ensuring optimal operational of defense equipment at SAM Air Force Base. In this context, operational readiness of defense equipment must be a top priority. To achieve this, SAM Air Force Base needs to allocate resources effectively in the maintenance and repair of defense equipment to ensure that all military equipment is in a ready-to-use condition. This process includes not only routine maintenance, but also technology-based monitoring to detect potential technical problems before critical failures occur. In addition, training of logistics personnel is an important aspect that must be improved. This training not only focuses on technical skills, but also on mastering modern technology used in military logistics management. With trained personnel and a system supported by advanced technology, SAM Air Force Base will be more responsive to various operational threats and challenges. This readiness allows the Indonesian Air Force to act quickly and effectively, both in emergency situations and in daily military operations, supporting the resilience and security of strategic areas such as the Indonesian Capital City.

Optimizing operational processes at SAM Air Force Base through the application of **Operational Theory and Supply Chain Theory** (*Supply Chain Management*) is very important to improve logistics efficiency and support the operations of the Indonesian Capital City. **Operational Theory** emphasizes increasing productivity by minimizing waste and increasing work efficiency. By applying lean principles, each stage of the logistics process can be optimized to reduce waiting time, accelerate the distribution of goods, and maximize the use of existing resources. The application of lean in SAM Air Force Base operations will enable leaner, more responsive, and more cost-effective logistics management. **Supply Chain Theory** complements operational theory with a

holistic approach to the flow of goods and information, from suppliers to end consumers. With the implementation of an efficient supply chain management system supported by the latest information technology, such as inventory management software and real-time monitoring, the logistics control process can be carried out more effectively. Real-time monitoring of the flow of goods allows early detection of problems in the supply chain and accelerates decision making to ensure smooth distribution. As a result, SAM Air Force Base can respond to logistics needs more quickly and precisely, thus supporting smooth operations and military readiness in the Indonesian Capital City area.

The results of the study show that the development of facilities and logistics management at Sjamsudin Noor Air Force Base is very necessary to support the operations of the Indonesian Capital City (IKN). The main facilities needed include:

1. Logistics Distribution Center

This facility will serve as a collection and distribution point for goods and military equipment needed to support operational activities in the IKN.

2. Integrated Storage Warehouse

A warehouse is needed that can store various types of materials and equipment, equipped with an efficient inventory management system to ensure timely availability of goods.

3. Defense Equipment Maintenance and Repair Facilities

The construction of facilities for the maintenance and repair of the main weapons systems (alutsista) is important to ensure the operational readiness of the Indonesian Air Force in supporting national security.

4. Multimodal Transport Terminal

This facility is needed to support logistics transportation by various modes of transportation, such as land, sea, and air, to facilitate fast and efficient distribution.

The development of logistics facilities at Sjamsudin Noor Air Force Base is very important in the context of the national defense strategy because it functions as an operational base that supports the defense and security of the IKN. As a new administrative and economic center, the IKN has the potential to attract various threats, both from within and outside the country. By having adequate logistics facilities, the Indonesian Air Force can respond to any potential threats quickly and effectively, ensuring that resources and defense equipment are ready for use. This is in line with the government's efforts to strengthen national resilience through the development of infrastructure that can support a broader defense strategy. The results of this study directly support the operation of the IKN by providing a framework for efficient and responsive logistics management. With logistics facilities developed according to research recommendations, the Indonesian Air Force will be able to optimize the use of resources in supporting the operation of the IKN. In addition, this study also provides a deeper understanding of the challenges and needs in logistics management, allowing stakeholders to make better decisions regarding infrastructure development. Thus, this study not only offers theoretical solutions

but also creates practical relevance that can be implemented to improve readiness and security in the Indonesian Capital City.

CONCLUSIONS AND RECOMMENDATIONS

The current condition of the logistics terminal at SAM Air Force Base still faces various significant challenges. The existing infrastructure does not fully meet modern standards, with limited warehousing facilities and transportation terminals that are less than optimal to support operational efficiency. In addition, multimodal transportation accessibility is also limited, so that logistics delivery times are longer and distribution costs increase. The logistics management system used is still largely done manually, increasing the risk of errors and slowing down the process of managing the flow of goods. The availability of human resources trained in the use of modern technology is also still limited, thus impacting the effectiveness of logistics operations.

The implementation of logistics terminal governance at SAM Air Force Base is currently not fully structured. Although there is a basic framework for managing logistics, many processes are not yet standardized, so efficiency and accountability still need to be improved. The existing governance has not integrated the principles of good governance, such as transparency, accountability, and participation optimally. In addition, the lack of clear performance indicators makes it difficult to measure the effectiveness of logistics management. Limitations in information management technology and integration between units are also major obstacles in efforts to improve overall logistics management.

The plan to organize the logistics terminal governance at SAM Air Force Base to support the future operations of the Indonesian Capital City requires a comprehensive approach that integrates various logistics theories. The arrangement must include the development of modern warehousing and terminal infrastructure that is integrated with information technology for inventory management and real-time monitoring. In addition, the implementation of an efficient supply chain management system is needed to optimize the flow of goods from suppliers to end consumers. Regional collaboration with local governments and related agencies is also important to create a wider and more efficient logistics network, which is able to support the operations of the Indonesian Capital City in a sustainable manner. Investment in logistics personnel training and maintenance of defense equipment is also a priority to ensure military readiness in facing various operational challenges.

The results of the study indicate that the development of logistics facilities at Sjamsudin Noor Air Force Base is crucial to support the operations of the Indonesian Capital City (IKN). The main facilities required include a logistics distribution center, an integrated storage warehouse with an efficient inventory management system, a defense equipment maintenance and repair facility, and a multimodal transportation terminal to accelerate logistics distribution. The development of this infrastructure is important to support the national defense strategy, allowing the Indonesian Air Force to respond to threats quickly and effectively to maintain the security of the IKN. With

efficient and responsive logistics management, resources and defense equipment will be ready to use whenever needed, strengthening national resilience. This study provides practical recommendations for stakeholders to optimize infrastructure development and improve defense readiness in the future.

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ADVANCED RESEARCH

Future research can focus on designing an integrated smart logistics system tailored to the operational needs of military airbases like SAM Air Force Base, particularly in support of strategic hubs such as the Indonesian Capital City (IKN). This includes the development of a digital logistics governance model that leverages artificial intelligence, Internet of Things (IoT), and blockchain technology to improve inventory accuracy, predictive maintenance of defense equipment, and real-time coordination between multimodal transportation modes. Additionally, research should explore frameworks for inter-agency logistics collaboration, evaluating how civil-military logistics integration can enhance national resilience, efficiency, and responsiveness in the face of security threats or national emergencies.

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