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Leadership Strategies for Addressing Border Threats in Papua to Improve Surveillance in Indonesian Territory

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Abstract

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Background: This study examines leadership strategies to address security challenges along the Papua border, an area vulnerable to cross-border threats and separatist conflicts. This study aims to formulate leadership strategies for addressing threats at the Papua border to strengthen Indonesia's regional surveillance. Using a qualitative case study approach, this research examines the role of strategic leadership in tackling security, social, and economic challenges in Papua's border areas. Through the Pentahelix model—collaborating with government, academia, private sector, communities, and media—and leveraging modern technology such as drones and blockchain, this study finds that adaptive and collaborative leadership significantly enhances border surveillance effectiveness. Active community participation and international cooperation with neighbouring countries also contribute to creating sustainable national stability and security. The results underscore the importance of a holistic approach to border surveillance strategies that emphasize not only security but also community empowerment and infrastructure development.

Keywords: Strategic Leadership, Border Surveillance, Papua, Pentahelix, Modern Technology, National Security.

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1. INTRODUCTION

Indonesia, categorized as the largest archipelagic country in the world, is required to face significant challenges in maintaining its stability and security, especially in border areas. Papua, which directly borders Papua New Guinea, is one region that faces unique security and monitoring challenges. Papua's vast and remote geographical conditions, along with its cultural and socio-economic diversity and natural resources, make it highly vulnerable to various threats, both domestic and foreign. Its inaccessible geographical characteristics, such as high mountains, dense forests, and limited infrastructure, provide a strategic advantage for separatist groups who often use the difficult terrain to conduct attacks and other illegal activities (Löfflmann, 2022).

2. METHODS

For a study focused on leadership strategies in border monitoring in Papua, an appropriate methodology includes a qualitative approach with the following elements:

- Case Study: Utilizing a case study on the Papua border region to conduct an in-depth analysis of how leadership strategies are implemented in facing security challenges. This involves understanding the social, economic, and geographical contexts that influence security in the region.
- Document Analysis: Conducting a review of relevant documents, including security policy documents, government reports, and academic literature, to understand the strategies and policies that have been implemented.

3. Triangulation Technique: Using data triangulation from interviews, observations, and document analysis to ensure the validity and accuracy of findings. This triangulation will help to gain a more comprehensive perspective on the effectiveness of leadership strategies and cross-sector collaboration.

This methodological approach aims to gain a deep and thorough understanding of the dynamics of leadership in Papua border monitoring and its relevance in the context of national security.

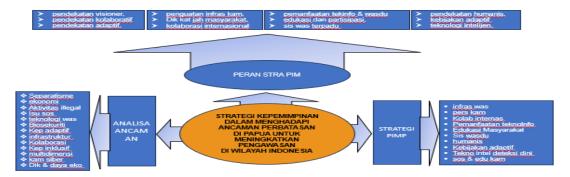


Fig. 1. Brainstorming

3. RESULTS AND DISCUSSION

3.1 Border Threat Analysis in Papua

The Papua border region, which directly borders Papua New Guinea, faces a variety of threats that involve not only physical security aspects but also social, economic, and political dimensions. The challenging geographic terrain, limited infrastructure, and the presence of separatist movements create high vulnerability in this region. This situation requires strategic leadership that focuses not only on security but also on an inclusive approach that takes into account the needs of the local community. The analysis of border threats in Papua can be viewed from several perspectives: 1) Security threats and separatism, 2) Economic threats and illegal activities, 3) Social issues and economic disparities, 4) Utilization of technology in surveillance, 5) The role of biosecurity in public health, 6) Adaptive leadership in facing dynamic conditions, 7) Infrastructure development as a foundation for stability, 8) Cross-country collaboration in addressing cross-border threats, 9) Inclusive leadership and community involvement, 10) A multidimensional approach to achieving long-term stability, 11) Strengthening cyber security to protect digital systems, and 12) Education and economic empowerment as long-term solutions.

Security Threats and Separatism
 One of the biggest challenges facing the Papua border region is the threat from armed groups with separatist objectives. These groups often use the border area as a refuge, relying on logistical support from both domestic and international sources. Addressing this threat requires an integrated approach that includes military action as well as diplomatic efforts. Synergy

between agencies, such as the Military, Police, and Civil Authorities, is essential to prevent conflicts from escalating and to contain potential conflict escalation (McPherson, J., et al., 2022).

Such an approach allows for a more balanced distribution of responsibilities and the utilization of expertise from various sectors to create more innovative and adaptive solutions (Gonzalez & Martinez, 2022). This refers to how a cross-sectoral, Pentahelix collaborative approach in border security can enhance effectiveness, efficiency, and flexibility in facing various challenges.

2) Economic Threats and Illegal Activities

Threats at the Papua border also include economic aspects, especially through illegal smuggling activities such as weapons and drugs, which can create a black market. These activities undermine local economic stability and exacerbate the social conditions of communities around the border. The spread of illegal goods can trigger even greater social damage, increasing tensions between citizens and decreasing trust in the government (Richard, R., et al., 2022).

In this context, the government needs to promote the development of formal economies involving local communities to prevent dependency on illegal activities. Programs such as skills enhancement and job training can provide legitimate and sustainable alternatives for communities to earn a living, while also raising awareness to safeguard the border region from illegal activities (Jenner et al., 2022).

3) Social Issues and Economic Disparities

The dissatisfaction of the people of Papua with the government is often exploited by certain groups aiming to push a separatist agenda. This issue is mainly caused by economic disparities and lack of access to basic services. Papua also faces horizontal conflicts involving tensions between indigenous populations and migrant groups. Economic injustice and the sense of marginalization aggravate these horizontal conflicts, often resulting in violence and riots (Patel, R., & Lopez, 2023). Collaborative and inclusive leadership is crucial to building good relationships between the government and the people. Leaders who focus on social welfare and engage in dialogue with the community are more likely to successfully mitigate potential conflicts (Zachara-Szymańska, 2023). This strategy not only secures the border but also advances economic and social development.

- Utilization of Technology in Surveillance Overcoming the geographical challenges in Papua for surveillance requires modern technology. The use of community-based satellite technology, implemented in several countries with remote areas, could be a strategic step to enhance surveillance effectiveness (Rowe, M., & Adams, 2021). This technology allows for more effective and real-time monitoring in areas that are difficult to access. The use of drones and aerial monitoring technology has started to be introduced to address this issue, but challenges in its implementation remain significant (Elisha & Moore, 2022). Drones can be used to monitor movement in border areas, detect suspicious activities, and send information to command centers to allow for swift action. The use of this technology is crucial to enhancing surveillance effectiveness and minimizing the risk of threats in border regions (Robinson, T., et al., 2020).
- 5) The Role of Biosecurity in Public Health High mobility at the border also brings the risk of infectious disease spread. Biosecurity programs can strengthen health surveillance by involving local communities in preventive efforts, including education on the importance of hygiene and methods to prevent disease transmission. This biosecurity approach is expected to reduce the incidence of crossborder diseases and maintain community health, while also fostering a sense of responsibility among communities to protect their regions from non-traditional threats (Thompson, L., et al., 2022).
- 6) Adaptive Leadership in Facing Dynamic Conditions
 The diverse and often fluctuating environment of the
 Papua border requires flexible and adaptive
 leadership. Leaders with adaptive skills can respond
 to situations more efficiently and optimize available
 resources. Adaptive leadership also facilitates better
 coordination between agencies and improves
 efficiency in maintaining security and stability at the
 border (Oleksa-Marewska & Tokar, 2022).

- Infrastructure Development as a Foundation for Stability
 Infrastructure development in Papua is a key element in creating stability and improving accessibility in border areas. Adequate transportation and
 - in creating stability and improving accessibility in border areas. Adequate transportation and communication infrastructure will assist security forces in conducting surveillance more effectively. Easier access to basic infrastructure will also improve the welfare of the community, which in turn reduces tensions and potential conflicts (Zhang & Liang, 2023).
- 8) Cross-country collaboration in addressing crossborder threats
 - Cross-country collaboration, especially with Papua New Guinea, is essential to prevent smuggling and other illegal activities. This collaboration can include information sharing, joint patrols, and special agreements to address cross-border threats of a global nature. Strong diplomatic relations between neighboring countries will support Indonesia's efforts to maintain the security of its region and reduce harmful cross-border crimes (Schreyer et al., 2020).
- 9) Inclusive Leadership and Community Involvement
 The importance of community involvement in
 maintaining the security of border regions cannot be
 overlooked. Inclusive leadership, which involves
 local communities in security efforts, can create a
 more conducive environment. When communities
 feel included, they tend to be more proactive in
 protecting their areas. The government can leverage
 the role of communities in identifying potential
 threats and supporting surveillance, which can reduce
 the surveillance burden on security forces and
 increase public trust in the government (Richard et al.,
 2022)
- 10) A Multidimensional Approach to Achieving Long-Term Stability
 - Long-term stability in the Papua border region is determined not only by physical security strength but also by social, economic, and public health welfare. The penta-helix model, which involves the government, academia, industry, civil society, and the media, can be an effective solution in addressing complex issues such as corruption and social dissatisfaction in the region (Purnamasari et al., 2022). This collaborative approach enables stakeholders from various sectors to work together, share resources, and create more effective policies to maintain stability.
- 11) Strengthening Cybersecurity to Protect Digital Systems
 - Surveillance technology in the Papua border region is vulnerable to cyberattacks. Digital surveillance systems such as CCTV cameras and drones must be equipped with strong cybersecurity protection to keep the data collected secure. Cybersecurity measures like data encryption and firewalls are crucial to maintaining the confidentiality of collected information and preventing unauthorized access that

could disrupt surveillance efforts (Sarilita et al., 2024).

12) Education and Economic Empowerment as Long-Term Solutions

Education programs tailored to the needs of local communities can help them transition to the formal economy sector. Community-based education initiatives that provide skills and job training can reduce community reliance on illegal activities for livelihood. Local economic empowerment through small and medium-sized enterprise programs can also help communities improve their welfare while supporting government efforts to maintain stability at the border (Desai et al., 2021).

Based on the explanations above, it can be concluded that managing threats at the Papua border requires a holistic approach that involves all aspects, from physical security to the social-economic welfare of the community. Cross-sectoral collaboration, the use of modern technology, strengthening the economy, and local education can create a solid foundation for security and stability. Leadership that can integrate all these elements with an inclusive and adaptive approach will be the key to success in maintaining a secure and prosperous border region.

This approach is expected to yield long-term results by maintaining security and building a better future for local communities. With a comprehensive strategy, the Papua border region will not only be secure but also support development and the welfare of the people, creating sustainable stability.

3.2 The Strategic Role of Leadership in Addressing Threats in the Papua Border Region

The Papua border region faces significant and complex challenges encompassing various threats, both physical and socio-political. In addressing these conditions, strategic leadership is essential to create sustainable security and stability. The strategic role of leadership that is considered capable of countering threats in the Papua border region is that of a leader who applies a visionary, collaborative, and adaptive leadership approach. In addition, leadership is needed that can strengthen security infrastructure as a foundation for stability, improve education and the welfare of the community, foster international collaboration, and utilize information technology in integrated surveillance, as well as educate and involve the community in security efforts. Furthermore, there is also a need for the strategic role of leadership that can implement integrated surveillance systems, a humanistic approach, adaptive policies, and intelligence technology as key elements in effectively addressing threats at the Papua border.

1) Visionary Leadership: Preparing Infrastructure and the Future of Papua

Visionary leadership is fundamental in addressing the challenges in Papua. A leader with a forwardlooking vision not only focuses on immediate threats but also prepares Papua for future challenges. Such leadership plays a crucial role in the development of strategic infrastructure, such as transportation routes connecting remote areas to economic hubs and surveillance posts along the border. Adequate infrastructure supports the mobility of security personnel and facilitates access to basic services for the community, reducing socio-economic disparities strengthening the community's connection to the border region (Zhang, Y., & Liang, 2023). With robust infrastructure, the Papua border will not only be secure but also support economic growth and community development.

 Collaborative Leadership: Building Networks to Maintain Stability

Papua is an area that requires cross-institutional collaboration. It involves not just security forces like the TNI and Polri, but also local governments, the Maritime Security Agency, and other parties to address various challenges. Collaborative leadership allows these institutions to work in an integrated manner, utilizing their respective expertise and complementing each other to create sustainable security (Hernandez et al., 2022).

This collaboration also includes the involvement of local communities, who play an important role as "eyes and ears" on the ground. This collaboration accelerates the response to threats and strengthens the community's sense of ownership over the stability of their region (West et al., 2021).

3) Adaptive Leadership: Flexibility in Facing the Dynamics of Papua

The Papua region has geographical conditions and socio-political situations that are often subject to change. Therefore, adaptive leadership, which understands the culture and values of the Papua people, is required to respond quickly and flexibly to various changes so that policies are more acceptable and supported by the community. For example, in facing new challenges like separatist movements or cross-border illegal activities, adaptive leaders can adjust strategies without losing sight of the main goal of maintaining stability (Udod et al., 2024).

In addition to a culture-based approach, adaptive leaders also utilize modern surveillance technology, such as drones and CCTV, to address threats in hard-to-reach areas. The use of this technology provides early detection capabilities, enabling faster and more efficient responses to threats (Oleksa-Marewska et al., 2022).

4) Strengthening Security Infrastructure as a Foundation for Stability Good security infrastructure is the foundation for

effective surveillance. The construction of surveillance posts, communication routes, and structured transportation networks helps security personnel respond to threats more quickly. This infrastructure also acts as a deterrent to illegal activities, such as drug smuggling or human trafficking, which often exploit Papua's difficult-to-access geographical conditions (Zhang & Liang, 2023).

Building infrastructure for security purposes, as well as public facilities like health clinics, schools, and vocational training centers, strengthens the state's presence in border regions, builds trust among the community, and facilitates easier access to essential services (Götz & Staun, 2022).

5) Education and Improving Community Welfare
As part of the threat mitigation strategy,
improving the welfare of the community should
also be prioritized. Education and vocational
training help people transition away from illegal
activities that may have been their source of
income. Communities with access to good
education and diverse economic opportunities are
more likely to support regional stability and are
less likely to engage in illegal activities (Amran et
al., 2022).

Education at the border should be aimed at building community capacity to detect and report potential threats around them. With relevant education, communities not only benefit economically but also play an active role in safeguarding the security of their region. This creates a more conducive environment for long-term stability (Udod et al., 2024).

- International Collaboration: Building Trust and Cross-Border Coordination International cooperation at the Papua border, which shares a boundary with Papua New Guinea, is essential. Strong diplomatic relations and cooperation between Indonesian and Papua New Guinea security forces allow both countries to share information and coordinate in tackling cross-border threats. This collaboration helps prevent illegal activities such as human trafficking and smuggling, which often occur in border areas (Schreyer et al., 2020). Through good cooperation, both countries can conduct joint patrols and respond to threats more effectively. Furthermore, this coordination also serves as a means to build trust between the two countries, creating a more stable and secure border region.
- 7) Utilizing Information Technology in Integrated Surveillance

The use of advanced information technology is critical in border surveillance. The use of blockchain for data management can improve transparency and the security of information needed for rapid and effective decision-making

(Caraka et al., 2021). This system allows real-time data sharing between relevant agencies, improving coordination and accelerating responses to emerging threats. This technological innovation enables local communities to contribute to border surveillance, creating a more inclusive and responsive system (Amran et al., 2022).

8) Education and Community Participation in Security

Security education and socialization programs provide the community with a better understanding of the threats in their area and how they can contribute to surveillance efforts. Through effective socialization programs, the community understands the importance of security and actively participates in reporting activities. This suspicious community participation helps prevent potential threats and strengthens the synergy between security forces and local communities (Hernandez et al., 2022). Moreover, this socialization helps build trust between the community and the government.

9) Integrated Surveillance System: Enabling Quick and Effective Response

Using an integrated surveillance system that combines surveillance cameras, sensors, and GPS provides early detection capabilities for threats in hard-to-reach areas. This system enables better coordination between various security agencies involved, allowing them to access the same information in real-time, thus making responses to threats quicker and more effective (Richard et al., 2022).

This system not only improves the accuracy and operational efficiency but also allows each security agency involved to collaborate better in maintaining stability at the border.

10) Humanitarian Approach: Building a Sense of Safety and Ownership

A humanitarian approach is an essential element in creating stability in border regions. Leaders who empathize with the needs of local communities are able to build better relationships with them. When the community feels that the government is paying attention to them, they are more likely to support the security policies in place (Park et al., 2023).

This humanitarian approach allows the government not only to monitor but also to involve the community in maintaining stability. This creates a stronger emotional bond between the community and the security forces, supporting the creation of a safer environment.

11) Adaptive Policy: Adjusting Measures to the Field Dynamics

Threats at the Papua border continue to evolve, ranging from smuggling activities to separatist movements. Therefore, the policies implemented

must be adaptive and flexible. Adaptive leaders can adjust their policies to the changing conditions on the ground and respond to threats in a timely manner. This flexibility facilitates the allocation of resources and personnel to areas that require intensive surveillance, maintaining regional stability more efficiently (West et al., 2021).

With adaptive policies, the government can also respond to threats more quickly, ensuring that the security policies applied in Papua remain relevant and effective in facing dynamic challenges.

12) Intelligence Technology: Detecting Threats Before They Escalate

The use of data-based intelligence technology allows the government to perform early threat detection. With collected and analyzed data, the government can identify suspicious activity patterns and respond before they escalate into larger threats. This technology supports a more effective preventive approach, reducing unwanted incidents and improving overall security (Amran et al., 2022). This intelligence technology also helps the government predict and respond to emerging threats. This capability improves surveillance effectiveness and ensures rapid responses to

As outlined above, it can be concluded that addressing the complex challenges at the Papua border requires a holistic strategic approach, encompassing visionary, collaborative, and adaptive leadership. The development of adequate infrastructure, the use of technology, and collaboration between agencies and neighboring countries are key elements in maintaining stability and security in this region (Ogbonna et al., 2023).

With responsive leadership strategies, strong community participation, and the use of modern technology, Papua can evolve into a stable region that supports Indonesia's sovereignty. This holistic approach is expected to create sustainable security and development that supports the welfare of local communities.

3.3 Leadership Strategy for Border Surveillance in Papua

potential threats.

Referring to the analysis of threats and the strategic role of leadership outlined above, a leadership strategy for surveillance at the Papua border needs to be established. Border surveillance in Papua is a complex and challenging task, with threats ranging from smuggling to cross-border disturbances that require comprehensive solutions. The leadership strategies for surveillance at the Papua border that need to be implemented are: 1) Enhancement of surveillance infrastructure, 2) Strengthening the capacity of security personnel, 3) International and inter-agency collaboration, 4) Utilization of information technology in surveillance, 5) Education and community involvement, 6)

Utilization of an integrated surveillance system, 7) A humanitarian approach in border surveillance, 8) Adaptive and flexible policies, 9) Intelligence technology for early detection, and 10) Security socialization and education programs.

- Infrastructure plays a crucial role in effective border surveillance. The construction of observation posts and adequate communication networks is the initial step needed for security forces to monitor and respond to threats more quickly and effectively. Good infrastructure also has a positive impact on the surrounding communities, strengthening the government's presence in remote areas and providing better access to basic services such as healthcare and education, which in turn strengthens social security (Zhang & Liang, 2023).
 - In addition to observation posts, surveillance technologies such as CCTV, drones, and sensors need to be utilized in hard-to-reach areas. Drones, for example, provide real-time surveillance in areas that were previously inaccessible, allowing security forces to detect threats earlier. This technology helps reduce the need for personnel to be deployed directly on the ground, optimizing available resources and improving operational effectiveness (Amran et al., 2022).
- 2) Strengthening the Capacity of Security Personnel Adequate infrastructure will only be effective if supported by well-trained security personnel. In securing the Papua border, training for security personnel should include not only technical skills but also knowledge of the local geographical conditions and culture. Skilled and adaptive personnel will be better prepared to face changing situations and respond to threats in the most appropriate manner (Sarilita et al., 2024). Ongoing training is also essential so that
 - personnel can operate surveillance technologies effectively, both in detecting and responding to potential threats. With a good command of technology, personnel are expected to significantly enhance surveillance capabilities and become more effective in maintaining security in the challenging border region (Richard et al., 2022).
- 3) International and Inter-Agency Collaboration International collaboration is a key element in border surveillance in Papua, especially because this region shares a direct border with Papua New Guinea. Strong relations with neighboring countries enable information exchange and coordination in addressing cross-border threats. This is crucial in preventing illegal activities such as smuggling, human trafficking, and other legal violations that frequently occur in border areas (Schreyer et al., 2020).

In addition to international collaboration, coordination with various domestic agencies is also very important. Synergy between the Indonesian National Army (TNI), the Indonesian National Police (Polri), the Indonesian Maritime Security Agency, and other agencies allows for a more coordinated and comprehensive surveillance approach. Each agency has specific expertise and responsibilities, and by working together, they can maximize the effectiveness of border surveillance (Purnamasari et al., 2022).

4) Utilization of Information Technology in Surveillance

In the digital age, information technology has become a crucial tool in supporting border surveillance. Cloud-based information systems allow for centralized and efficient data management, as well as enabling various agencies to share data in real-time. This enhances coordination and speeds up the response to emerging threats.

Application-based technology also allows local communities to report suspicious activities more easily. Leaders who are open to technological innovations can build a more responsive surveillance system and involve the community in the security of their region, expanding the surveillance network even to remote areas (Amran et al., 2022).

- 5) Education and Community Involvement
- A good surveillance strategy not only relies on security forces but also requires the active involvement of local communities. Education and socialization help the community understand the importance of border security and the roles they can play. With a better understanding, the community is more likely to participate in maintaining the security of their own area.
 - Through training and socialization, the community can be equipped with basic knowledge about the threats around them and how to report suspicious events. By involving the community in surveillance, the government also builds trust, which is crucial for social stability in border regions (Hernandez et al., 2022).
- 6) Utilization of an Integrated Surveillance System Using an integrated surveillance system that combines various technologies such as surveillance cameras, sensors, and GPS enables more accurate real-time monitoring and a rapid response to potential threats. This integrated surveillance system allows simultaneous access to information by various agencies involved in monitoring, improving operational efficiency and coordination (Richard et al., 2022).

This integrated surveillance not only provides advantages in terms of efficiency but also enhances the accuracy and speed of responses to threats in areas that are difficult to reach. With

- data that can be accessed quickly, security personnel can immediately determine the appropriate action, reducing the potential for escalation of conflict or illegal activities.
- 7) A Humanitarian Approach in Border Surveillance Successful border surveillance relies not only on technology and infrastructure but also on a humanistic approach that takes into account the needs and interests of the local community. Leaders who can empathize and understand the needs of the local people will be more effective in maintaining stability at the border. This approach involves open dialogue between the government and the community, creating an environment conducive to cooperation in maintaining security. Programs that improve community welfare, such as skills training and economic support, also contribute to fostering good relations between the government and the community. With improved welfare, the community is more likely to support security efforts and actively participate in maintaining the stability of their region (Park et al., 2023).
- 8) Adaptive and Flexible Policies
 - The situation in the Papua border region often changes rapidly, especially with the emergence of new threats such as smuggling and other illegal activities. Therefore, surveillance policies must be flexible and able to adapt quickly. Adaptive leadership allows the government to adjust policies according to the conditions on the ground and respond to threats in a timely manner.
 - Adaptive policies also make it easier for the government to allocate resources efficiently. For example, when there is an increase in threats in a particular area, personnel and equipment can be quickly redirected to that area, ensuring that regional stability is maintained (West et al., 2021).
- 9) Intelligence Technology for Early Detection
 The use of data-based intelligence technology is a
 key component in the border surveillance
 strategy. This technology allows for early
 detection of suspicious activities, such as the
 movement of armed groups or smuggling
 activities. Accurate data analysis enables security
 forces to predict threat patterns and respond
 before they develop into more serious issues.
 With intelligence technology, a more proactive
 and preventive surveillance approach can be
 implemented, which helps reduce unwanted
 incidents. This also enhances overall security in
 the border region (Amran et al., 2022).
- 10) Security Socialization and Education Programs Involving the community through security education and socialization programs provides an understanding of the importance of border area security. These programs also teach the community how to report suspicious incidents

effectively, supporting more comprehensive surveillance efforts. Community participation in surveillance enhances the sense of ownership over the security of their region, creating synergy between security forces and the community (Sarilita et al., 2024).

Based on the above description, it can be concluded that an inclusive, adaptive, and technology-based leadership strategy provides a strong foundation for border surveillance in Papua. By combining adequate infrastructure, modern technology, community involvement, and international cooperation, surveillance can be carried out more effectively and integratively.

Responsive and human-centered leadership strengthens community support and improves well-being in border areas. With this integrated surveillance strategy, Papua can become a safer, more stable region that supports Indonesia's sovereignty. It is hoped that this approach will create security and drive sustainable development that benefits local communities.

4. CONCLUSIONS

Papua is a strategic region for Indonesia, but the challenges of surveillance at its vast and complex border require a structured and comprehensive leadership approach. The threats faced are not only physical, such as separatism, smuggling, and illegal movements, but also include social, economic, and even digital threats. Therefore, the success of maintaining stability in the Papua border region greatly depends on a leadership strategy capable of integrating various elements, such as improving surveillance infrastructure, utilizing modern technology, engaging the community, and collaborating with neighboring countries.

Improving infrastructure is the main foundation for strengthening surveillance at the Papua border. The construction of surveillance posts, communication networks, and access roads enables security forces to respond to threats more quickly and efficiently. Good infrastructure helps create connectivity between remote areas and security centers, enhancing operational effectiveness on the ground.

International collaboration with Papua New Guinea and other neighboring countries is also an important aspect of the surveillance strategy. Through joint patrols, information exchange, and joint training, the Indonesian government and neighboring countries can work together to prevent crossborder threats, such as human trafficking and smuggling of illegal goods. This cross-border collaboration strengthens Indonesia's position in maintaining stability at the border, while also building trust between the involved parties. This cooperation not only enhances surveillance but also enables faster and more effective responses to potential threats.

The involvement of local communities in surveillance efforts has also proven to have a positive impact on the stability of the border region. Education and socialization programs conducted by the government aim to provide the community with an understanding of the importance of border security and how they can contribute. With proper education, the community

becomes more aware of the threats around them and feels a sense of responsibility for maintaining the security of their own region. Community participation in surveillance increases the effectiveness of government policies because the community becomes a partner in efforts to achieve stability and security.

In today's digital era, technology plays a crucial role in border surveillance. The use of drones, CCTV cameras, and Blockchain as a data-driven information system allows security forces to monitor in real-time, even in hard-to-reach areas. This technology helps in the early detection of suspicious activities, allowing for quicker and more targeted responses. By utilizing this technology, security in the Papua border region can be better maintained, and authorities can respond to threats proactively.

Overall, an effective leadership approach to maintaining security at the Papua border requires a combination of various strategic elements in a holistic manner. Adequate infrastructure, international cooperation, and pentagon collaboration with modern technology, all supporting each other to create a comprehensive and resilient surveillance system, can create a more stable and conducive environment for development in the border region.

This visionary and collaborative leadership approach gives hope that Papua will become a secure region and also a place where local communities feel protected and have opportunities to thrive. With support from all stakeholders, security and wellbeing in the Papua border region are expected to be achieved sustainably, strengthening Indonesia's sovereignty and the welfare of its people.

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Conflicts of Interest

The authors declare no conflict of interest.

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