

National Defense Education and Training Strategies in Utilizing Demographic Bonuses to Strengthen National Defense

Fatwa Budiyanthi¹, Afrizal Hendra², Almuchalif Suryo³, Muhammad Noor Gibran⁴

^{1,2,3,4}, Universitas Pertahanan Republik Indonesia

Corresponding Author: fatwabudiyanthi3@gmail.com

Abstract

Defending the country, supported by love for the homeland, is increasingly important in the face of global threats such as terrorism, cyber conflicts, and natural disasters. The demographic bonus provides great potential for the younger generation, especially generations Y and Z, to strengthen defense through national defense education that integrates technology, digital literacy, and adaptation to modern challenges. The purpose of this study is to analyze the Optimization of Strengthening the Competitiveness of National Films to Maintain Cultural Resilience of National Defense Education and Training Strategies in Utilizing Demographic Bonuses to Strengthen National Defense. The method used in this study is qualitative with SWOT analysis. The results of the research show that first, integrating national defense education in formal and digital curricula, utilizing educational infrastructure and technology to reach the young generation throughout Indonesia, including remote areas. Second, increasing private sector participation through cooperation that supports training and facilities, expanding opportunities for communities to contribute to the country's defense. Third, strengthening international collaboration in defense education, utilizing cooperation with developed countries for knowledge and technology transfer, improving the quality of Indonesia's national defense program through student exchanges and international training.

Keyword: Demographic Bonus; Education; State Defense Training; National Defense

INTRODUCTION

In today's era of globalization and geopolitical dynamics, threats to state sovereignty come not only from conventional military attacks, but also from non-conventional threats such as terrorism, cyber conflicts, natural disasters, and pandemics. The importance of defending the

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country supported by love for the homeland is becoming increasingly crucial to strengthen the country's defense. Defending the country is the effort of every citizen in defending the sovereignty and integrity of the nation. In the midst of global challenges, the spirit of defending the country must be fostered not only in military personnel but also in all levels of society (Zubair, 2021).

Indonesia, as an archipelagic country with a wealth of natural resources and a strategic geographical position, faces various global threats. Geopolitical competition between major countries such as the United States and China in the Asia-Pacific region, especially in the South China Sea region, raises potential conflicts that could affect regional stability and national security. Other global threats such as cross-border crime, climate change, and cyber hacking also add to Indonesia's vulnerability (Hamzah, 2020).

Based on data from the Central Statistics Agency (BPS, 2018), Indonesia received a demographic bonus in 2020. According to the United Nations Population Fund, the demographic bonus is a condition when people of productive age are more than people of non-productive age. Where the productive age (15-64 years) is 70.72% and the non-productive age (<15 years and >64 years) is 29.28% of the total population of 270.20 million people (Johari, 2019). In the demographic bonus map, the composition of the productive generation today consists of the following generations:

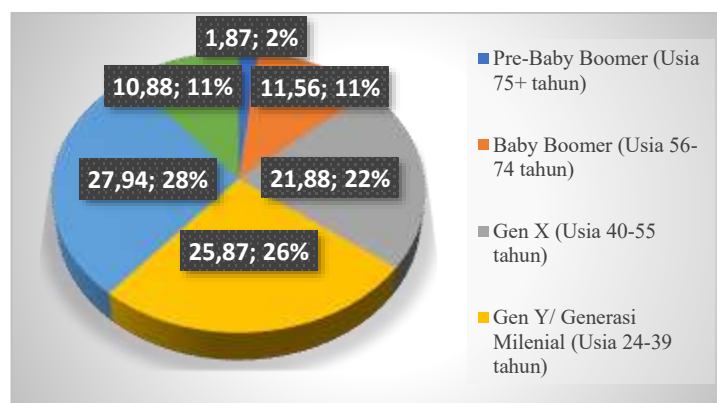


Figure 1. Workforce Demographic Bonus in Indonesia in 2022

Source : BPS, 2021 (Data Processed by Researchers)

Based on figure 1, it can be understood that the current condition that occurs is the dominance of generations Y and Z in the world of work. Where the figure shows that 27.94% of generation Z and millennials (gen Y) are 25.87% of the total population of 270.20 million people. According to the Central Statistics Agency (BPS), the number of millennials is 69.9 million people



out of 181 million people of productive age, so it can be concluded that the millennial generation is the dominant generation in Indonesia, and the millennial generation will be one of the population categories that will be the focus and that will determine the face of Indonesia in the future. Howe and Strauss (1991) define the millennial group as consisting of individuals born between 1982 – 2000 or the generation that in 2023 will be 23-41 years old.

Generation Y or millennials are the generation that uses the most technology, information and communication such as smartphones, email and instant messaging. This is because the millennial generation is growing and developing when the internet is booming (Lyons Dalam Putra, 2016). The general characteristics of this generation are open-minded towards politics and the economy, committed, working wholeheartedly, flexible, and not liking convoluted rules. When working, the millennial generation focuses on team orientation because it contains new feedback and challenges to develop better (Lyons Dalam Putra, 2016).

In addition to facing the state of VUCA (volatility, uncertainty, complexity and ambiguity) and rapid technological developments, companies must also respond to the general characteristics of the millennial generation. Moreover, the long history of Human Resource Management (HRM) today has placed humans no longer as a factor of production, but as an aspect of human capital. Where humans are not only seen as assets to support the achievement of goals, but also a key factor in determining the success of a company. Thus, good human resource management will produce optimal performance and show the company's resilience in the digital era (Freeman, 2017).

This demographic bonus results in a larger productive age population, providing strategic advantages for nation development, including in the aspect of national defense. However, to maximize this potential, national defense education and training must be designed with the right strategy, especially in utilizing the characteristics of the younger generation who are more familiar with technology, information, and communication (Nasution, 2021).

Generations Y and Z, with characteristics such as flexibility, openness to change, and an orientation to collaboration and technology, can be an invaluable asset for national defense if managed well. Therefore, a national defense education strategy should include training that focuses not only on traditional military skills but also on improving digital literacy, adaptability to VUCA (volatility, uncertainty, complexity, ambiguity) situations, and mastery of the latest technologies.

National defense education that integrates digital technology and social media, for example, will be more relevant and effective in developing a sense of love for the homeland as well as awareness of non-traditional threats such as cyberattacks. Thus, national defense



training must also involve an innovative approach, combining the use of technology, the development of soft skills, and the enhancement of collaborative capabilities to face contemporary challenges (United States Department of Defense, 2021).

In addition, this generation can play an important role in strengthening national defense, not only through the formal military but also in non-military aspects such as cyber defense, crisis management, and involvement in the TNI's reserve component. Therefore, a comprehensive and responsive national defense education and training strategy will help Indonesia make optimal use of the demographic bonus to strengthen national defense in the future (National Research Council, 2018).

Based on data obtained from the MIT Technology Review (2024), data was obtained that Indonesia is ranked 20 out of 20 countries and is included in 5 countries making slow and uneven progress or commitment to creating cyber defense.

The Cyber Defense Index		1. Critical infrastructure		2. Cybersecurity resources		3. Organizational capacity		4. Policy commitment	
Rank/20 Country	Score/10	Rank/20 Country	Score/10	Rank/20 Country	Score/10	Rank/20 Country	Score/10	Rank/20 Country	Score/10
11 Italy	6.37	11 Germany	6.89	11 Canada	7.12	11 United States	6.80	11 Italy	5.51
12 China	6.27	12 France	6.33	12 India	7.01	12 Spain	5.09	12 United Kingdom	5.31
13 Germany	6.24	13 Saudi Arabia	5.89	13 China	6.92	13 India	5.08	13 China	5.11
14 Spain	6.13	14 Spain	5.69	14 Japan	6.49	14 Germany	4.86	14 Spain	4.98
15 Saudi Arabia	5.55	15 China	5.25	15 Switzerland	6.29	15 Switzerland	4.85	15 Mexico	4.91
16 Mexico	5.31	16 Mexico	4.84	16 Brazil	5.87	16 Saudi Arabia	4.52	16 France	4.54
17 India	4.87	17 Brazil	4.63	17 Turkey	5.59	17 Italy	4.46	17 India	3.78
18 Brazil	4.75	18 Turkey	4.31	18 Mexico	5.42	18 Brazil	4.24	18 Indonesia	3.10
19 Turkey	4.26	19 Indonesia	3.30	19 Saudi Arabia	5.40	19 Turkey	2.90	19 Brazil	3.04
20 Indonesia	3.46	20 India	2.78	20 Indonesia	4.72	20 Indonesia	1.79	20 Turkey	2.88

Figure 2. Cyber Defense Index and Pillars Cyber Defense

Source : MIT Technology Review (2024)

In this analysis, MIT Technology Review uses 4 pillars, namely Pillar 1 *Critical Infrastructure*, evaluating the reliability and security of digital and telecommunications infrastructure that supports economic activities. Indicators include ICT infrastructure capacity, colocation data centers per million population, secure internet servers per million population in 2020, as well as the relative strength and security of critical infrastructure assets in each country. This pillar accounts for 30% of the CDI score. Pillar 2, *Cybersecurity Resources*. Assess technology and law enforcement related to cybersecurity in each country. Indicators include cybersecurity commitments, data privacy laws, as well as the strength of some cybersecurity organization's capabilities such as AI and anti-ransomware response. This pillar accounts for 35% of CDI scores. Pillar 3, *Organizational Capacity Measures the cybersecurity maturity and digital experience of*



businesses and institutions in each country. Indicators include the effectiveness of digital participation between the government and the private sector, the readiness of government AI technology, and the integration of cybersecurity practices in organizational operations. This pillar accounts for 20% of the CDI score. Pillar 4, *Policy Commitment*. Assess the effectiveness of government and the quality of cybersecurity regulations, as well as the resilience and completeness of regulations to promote resilient cybersecurity practices. Indicators include regulatory quality, government effectiveness, business perceptions of regulatory resilience, and completeness of cybersecurity frameworks. This pillar accounts for 15% of the CDI score. With this position, Indonesia has a strategy to integrate AI in cyber defense.

The integration of AI in cyber defense offers many benefits, including improved detection capabilities, faster response, and better threat prediction. However, to maximize these benefits, organizations need to address the technical and ethical challenges associated with using AI. With the right approach, AI can be a highly effective tool in improving cybersecurity and protecting digital assets from increasingly complex threats.

Currently, Indonesia has various policies and programs that support national defense efforts. One of these forms is the conscription program for civilians and the development of reserve components, which serve as a form of real contribution from the state in defending sovereignty. In addition, the policy of character education and increasing awareness of love for the homeland has also been implemented in schools through a curriculum that aims to form a generation that is more aware of the importance of their role in maintaining the nation's sovereignty. However, evolving global threats, such as terrorism, cyber, and climate change, require a more integrated and sustainable strategy. The involvement of civil society, especially the younger generation, is very important in strengthening the country's defense (Walsh, 2019).

In the future, stronger and more comprehensive policies are needed to deal with the increasingly complex dynamics of global threats. The state must actively encourage the participation of all elements of society through a national defense campaign involving not only the military aspect, but also the non-military aspect. Increasing digital literacy is crucial in dealing with cyber threats, as well as disaster preparedness that requires training in all vulnerable areas. The development of cyber defense capabilities must also be strengthened, given the increasing threats in the digital space. To achieve this goal, closer coordination is needed between the government, the private sector, and academia, so that national defense strategies can be adapted to the times and be able to respond to global challenges effectively.

METHOD





In this study, the method used is a descriptive qualitative method, which aims to describe and solve problems based on the results of in-depth analysis. The data collection techniques used are literature review and literature study, as explained by Soerjono Soekanto (1998), where this approach allows researchers to analyze secondary information related to the national film industry, including cultural policy analysis and creative economy. This method also involves searching relevant literature to understand the context of the role of film in strengthening cultural identity and national resilience. According to B. Waluyo (1996), literature research is effective in researching secondary data, including legal provisions or regulations related to the development of the film industry.

An approach similar to the above research can be applied to national defense education and training strategies in utilizing demographic bonuses to strengthen national defense. In this context, literature reviews and literature studies are needed to analyze defense policies, education, and the role of the younger generation in defending the country. In addition, SWOT analysis can be used to identify strengths (e.g., the great potential of Indonesia's young generation), weaknesses (such as lack of understanding of the role of defense), opportunities (such as national training and education programs), and threats (such as the negative influence of globalization) related to efforts to leverage demographic bonuses in strengthening national defense. Using the right methodology and analysis, innovative strategies can be formulated to optimize the contribution of the demographic bonus to national defense.

RESULTS AND DISCUSSION

Defending the country and love for the homeland are two fundamental concepts in maintaining Indonesia's sovereignty in the midst of various global threats that continue to grow. The threat is not only limited to the military aspect, but also includes terrorism, cybercrime, climate change, and global pandemics. In the era of globalization, threats are increasingly complex, so national defense strategies must be adjusted to face these new challenges. For example, the threat of terrorism is still a real threat in Indonesia, with 77 attacks recorded in 2022 according to the Global Terrorism Index. In addition, cyberattacks also continue to increase, with more than 200 million cyberattacks reported by the State Cyber and Cryptography Agency (BSSN) in 2022. This threat shows that strengthening cyber defense is very important in national defense strategies (Walsh, 2019).

In addition to traditional security threats, climate change also adds to Indonesia's vulnerability. As an archipelagic country, Indonesia is highly vulnerable to natural disasters such as floods, earthquakes, and sea level rise. Data from the National Disaster Management Agency





(BNPB) shows that more than 3,000 natural disasters occurred in Indonesia in 2023. Therefore, national defense efforts must include disaster preparedness, by actively involving communities in disaster mitigation and management, as well as raising awareness of the impacts of climate change (Reynolds, E. B., & Brady, 2020).

Education also plays an important role in instilling the spirit of defending the country and love for the homeland. This concept has been integrated into the national education curriculum, as stipulated in Presidential Regulation No. 87 of 2017 concerning Strengthening Character Education. However, the increasingly digital global challenge requires increasing digital literacy. Data from the Ministry of Communication and Information Technology shows that the digital literacy level in Indonesia is only at an index of 3.49 out of a scale of 5. Stronger digital literacy is needed to equip the younger generation in dealing with cyber threats and digital propaganda that can threaten the integrity of the nation (Saleh, 2017).

Community participation is also a key aspect in the country's defense strategy. Based on Law No. 23 of 2019 concerning the Management of National Resources for State Defense, the state defense program is designed to actively involve the community, both through the reserve and supporting components. In 2022, the Ministry of Defense has launched the Reserve Component, which engages thousands of civilians in defense training to deal with emergency situations. This initiative emphasizes the importance of collaboration between governments and citizens in strengthening national resilience (Min, S. H., & Lee, 2019).

At the international level, Indonesia also needs to strengthen regional and global security cooperation. Through forums such as the ASEAN Defense Ministers' Meeting (ADMM) and the ASEAN Regional Forum (ARF), Indonesia can collaborate with other countries in dealing with cross-border threats, such as terrorism and cybercrime. This cooperation allows Indonesia to share technology, information, and strategies in an effort to effectively deal with global threats (United Nations Department of Economic and Social Affairs, 2019).

Overall, facing increasingly complex global threats requires a holistic and integrated national defense strategy. Education, digital literacy, disaster preparedness, community participation, and international cooperation are important elements in strengthening the country's defense. Data and facts show that threats such as terrorism, cybercrime, and natural disasters cannot be addressed in isolation, but rather require an approach that involves all elements of the nation. Thus, the spirit of defending the country and love for the homeland must continue to be fostered through concrete actions that are relevant to the challenges of the times (Rafferty, 2018).



Human resource management within the TNI organization is currently implementing the Strategy from the 2015 State Defense Strategy Book, which states that defense resources are managed through a transformation process to transform the potential of national resources into elements of national strength. The elements of national power consist of: Military defense resources and non-military defense resources. Military Defense Resources consist of National Facilities and Infrastructure, Main Components, Reserve Components, and Supporting Components. On the other hand, Non-Military Defense Resources consist of Main Elements which are collaborations of ministries and institutions outside the defense sector that carry out tasks in accordance with the form and nature of the threats faced (Kemenhan, 2020).

The TNI Reserve Component Element (Komcad) has been recruited from 2021 to 2023. With the number of members recruited in 2021 as many as 3,103 personnel, in 2022 as many as 2,974 personnel, and in 2023 as many as 2,497 personnel. So that the total personnel that have been recruited is 8,574 personnel. This number consists of 3 dimensions, with details, namely: 1,497 members of the land dimension, 500 members of the sea dimension, and 500 members of the air dimension, in the 2023 recruitment (Colom, 2020).



Figure 3. Total Components of the TNI Reserve

Source : Ministry of Defense, 2023

In Law Number 3 of 2002 concerning State Defense, reserve components and supporting components were formed, which was preceded by the development of national defense awareness to build the character of national nationalism, which shows the universality of the state defense system. These provisions should be regulated again in the Law. Nevertheless, the preparation of national defense resource management is a strategic step to build and implement a complete state defense system, which results in the competitiveness of national defense in the international arena (Buzan, B., Wæver, O., & De Wilde, 1998).



Figure 4. Defense Resource Elements

Source : Indonesian Defense Strategy Book, 2015

To support the country's defense system, efforts to manage defense resources are needed. The defense resources that Indonesia can have can be used for national defense, and if these defense resources are properly managed legally, it will become a component of national power that will ultimately result in national competitiveness (McCrindle, 2014).

According to Article 9 paragraph (2) of Law Number 3 of 2002 concerning State Defense, state defense efforts in the context of defense implementation can be carried out through: a. civic education; b. mandatory basic military training; c. voluntary or compulsory service as a soldier of the Indonesian National Army; and d. devotion to something

The theory (concept) of Human Resource Management (HR), states: Without good quality of Human Resources (HR), it is difficult for the country to achieve rapid progress.

Meanwhile, improving the quality of human resources can only be done with good and correct human resource planning.

Based on Global Fire Power 2023 data, Indonesia's military ranking is 0.2221 (Power Index), occupying the No. 13 position in the World out of 145 countries. Indonesia's military is recorded as the strongest in ASEAN. Meanwhile, in terms of world rankings, Indonesia has risen two places, from 15th position in 2022, to 13th position in 2023.



Figure 5. Defense of Indonesia's military strength 2023

Source : Global Fire Power, 2023

In early 2024, the global military power index is released and updated by a global armed forces ranking site known as Global Fire Power (GFP). The GFP is examining 140 countries this 2024. In its assessment, the GFP uses more than 50 individual indicators of a country. A small country may be able to compete with a large country because it has an advantage in one of the indicators. Indonesia remains ranked 13th globally, with a Power Index of 0.2221 as in the previous year, 2023. However, keep in mind that this ranking is usually judged by quantity rather than quality.



Figure 6. Defense of Indonesia's military strength 2024

Source : Global Fire Power, 2024

The policy of development and development of human resources (HR) of the main component (TNI soldiers) is strategic, so it must consider and be oriented in the long term (long-term), and responsive to change. In addition, the Industrial Revolution 4.0 led to the Revolution in Military Affairs (RMA), which changed the military's war strategy and combat tactics. To use modern detection and weaponry system technology, the Main Component HR must have high academic competence and skills. It also requires rapid adaptation and evolution to become more responsive and flexible to the changing times (Komisi Pertahanan Nasional Indonesia, 2019).

To face the opportunities and challenges of the Industrial Revolution 4.0, the development and development of the main component human resources (TNI soldiers) must be based on digital technology, big data, and artificial intelligence. This policy will help understand and control situations and conditions when strategic dynamics and environmental geopolitical changes occur rapidly. In the midst of the advances and threats that accompany today's military organizations, stakeholders need courageous leaders who realize that we are living in an era of lasting transformation and do not stand idly by to allow their organizations to be swept away in the flow of transformation. Therefore, policies must be made to improve the capabilities of

human resources in accordance with the ability and ability to master weapons technology and information technology (Badan Pengkajian dan Penerapan Teknologi, 2020).

SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis is an effective combination of methodologies for strategic decision-making. SWOT identifies internal and external factors that affect the strategy.

Table 1 SWOT Strategi Integrasi Artificial Intelligence dalam Pertahanan Siber

STRENGTH	OPPORTUNITIES
• Large Number of Young Generation: Indonesia has a very large population of young people as a result of the demographic bonus. They are potential assets that can be empowered through education and training in defending the country. • High Spirit of Nationalism: Many of the younger generation have a strong spirit of love for the homeland, which can be the basis for strengthening participation in national defense programs. • Expanded Education Infrastructure: With the growing educational network, including schools and universities across Indonesia, national defense training can be effectively integrated into the formal education system.	• Utilization of Educational Technology: Digital technology and online platforms can be used to reach more youth in national defense training programs, even in remote areas. • Cooperation with the Private Sector: The government can establish cooperation with the private sector to support national defense education programs through sponsorship or material support. • Integration with International Programs: There are opportunities to cooperate with other countries in defense and security education, as well as learn from successful programs in other countries to be implemented in Indonesia.
WEAKNESS	THREATS
• Limited Understanding of State Defense: Not all young generations understand the importance of defending the country in the context of national defense, thus creating challenges in increasing	• Foreign Cultural Influences: The current of globalization and the influence of foreign cultures can weaken the spirit of nationalism of the younger generation, especially if they are more exposed to

awareness and participation. • Varying Quality of Education: The quality of education in various regions in Indonesia still varies, which can affect the effectiveness of the delivery of national defense materials, especially in remote or disadvantaged areas. • Limited Funding: National defense education and training programs require significant resources, and limited availability of funds can be an obstacle to their optimal implementation throughout Indonesia.	the values of individualism and materialism that are contrary to the concept of defending the country. • Political and Economic Instability: Political or economic instability can distract from the priorities of national defense and defense education, so training programs may not receive adequate support. • Non-Conventional Security Threats: Cyber threats and non-conventional attacks from non-state actors are on the rise, and if the younger generation is not trained to deal with these threats, it could weaken the country's defenses in the future.
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Source : Data Processed by Researchers, 2024

Based on this analysis, the strategy obtained is SO or Strength Opportunity with the following quadrants and matrices:



Chart 1. SWOT Quadrant

Source : Data Processed by Researchers (2024)

Based on the SWOT analysis, the alternative strategies produced are as follows:

1. Integrating National Defense Education in Formal and Digital Curriculum

Taking advantage of the large number of young people and the extensive educational infrastructure, the strategy aims to strengthen national defence training by incorporating such materials into the formal education curriculum in schools and universities. With the support of digital technology as an opportunity, national defense education can be disseminated through online platforms, thus reaching more young generations, including those in remote areas. This will increase the scope and effectiveness of the state defense education program (Putra, 2016).

2. Increasing Private Sector Participation in State Defense Programs

By harnessing the high spirit of nationalism among the younger generation as a strength, the government can collaborate with the private sector to support national defense training programs. The form of support from the private sector can be in the form of sponsorship, the provision of facilities, or special skills training related to national defense. This will create more opportunities for public participation in strengthening national defense through education (Lyons, S. T., Schweitzer, L. 2016).

3. Strengthening International Collaboration in Defence Education

With extensive educational infrastructure and the spirit of nationalism, the government can take advantage of opportunities for international cooperation with countries that have advanced national defense programs or defense education. This collaboration allows the transfer of knowledge, technology, and experience to be applied in Indonesia, which can ultimately improve the quality and relevance of national defense education programs. Through student exchange programs, international training, and conferences, Indonesia can strengthen a more modern and integrated education-based national defense strategy (United Nations Population Fund, 2017).

These strategies combine Indonesia's existing strengths with external opportunities to create comprehensive, innovative, and inclusive national defense education and training programs, in order to strengthen national defense in the era of demographic bonuses.

CONCLUSION

The conclusion of the analysis of the country's defense strategy in facing global threats in Indonesia shows that the approach used must be holistic, integrated, and responsive to the dynamics of the times. Defending the country is not only about military readiness, but also



involves education, digital literacy, disaster preparedness, and international collaboration. Non-traditional threats, such as cyberattacks, terrorism, climate change, and global pandemics, are increasingly dominating the security landscape. In facing this challenge, human resource management (HR) through education and training in national defense is key. This strategy has been implemented through the formation of the TNI reserve component and efforts to develop technology-based human resources to strengthen national defense capabilities in the era of the Industrial Revolution 4.0. Other challenges such as education inequality, funding limitations, and the influence of globalization also require serious attention so that the national defense program can run effectively. Public participation in the national defense program, supported by cooperation between ministries, institutions, and the private sector, is a strategic step that can strengthen national defense. Furthermore, international cooperation in regional and global forums allows Indonesia to adapt to evolving cross-border threats. The integration of technology, especially artificial intelligence (AI), is a great opportunity to strengthen Indonesia's cyber defense. Thus, strengthening the awareness of nationalism and love for the homeland needs to be instilled through policies that are adaptive and in line with the challenges of the times so that the nation's sovereignty is maintained in the face of various global threats.

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