Military Geography in Determining the Socio-Economic Improvement in the Foremost Island for Developing the Integrated Military Bases

Novky Asmoro¹, Djoko Andreas Navalino²
¹² Republic of Indonesia Defense University, Bogor-Indonesia

ABSTRACT: The role of geography in the military strategy decision-making process has a significant position. This is inseparable from the development of technology that supports geography, such as the use of Unmanned Aerial Vehicles (UAVs) or drones, geospatial information-based weaponry and efforts to develop military bases based on the strategic location of a place. The purpose of this study is to analyze (1) The projection of the government's plan to develop Selaru Island as an integrated military base based on military geography (2) The social and economic impacts of the community that need to be anticipated when an integrated military facility is established related to economic growth, inflation and unemployment rates. The data in this study were analyzed using qualitative methods obtained as a result of in-depth interviews, observations, library research and focused group discussions. This study indicates that analysis of military geography and geospatial information is very much needed by the Indonesian Armed Forces (TNI) in developing its capabilities, especially in strengthening national defense system comprehensively. Therefore, the results of this study recommend the relocation and capacity building of several TNI bases around the island of Selaru so that national defense and economic growth can strengthen together in the foremost islands of the Republic of Indonesia.

KEYWORDS: Military Geography, Economic Improvement, Foremost Islands, Integrated Military Bases, National Defense System

INTRODUCTION

The Indonesian Armed Forces (TNI) will strengthen the foremost islands in Eastern Indonesia, such as in Southwest Maluku Regency and Tanimbar Islands Regency, Maluku Province, due to the lack of TNI personnel and defense equipment. Saumlaki Island as a part of Maluku Province which is directly adjacent to Australia there is a radar to detect aircraft entering Indonesian territory, but if an aircraft enters Indonesian territory it cannot be submitted to the National Air Operation Command to send fighter aircraft from Makassar Airforce Base (Supriyadi, 2020).

It is an interesting research if correlated with economic improvement on Selaru Island as one of Indonesia’s foremost islands based on data of local wisdom, economic and social conditions regarding the stipulation of two others islands namely Natuna Island and Bitung Island as integrated military bases (Saha, 2019). Whether there are cultural, social, economic motives to the peculiarities of threat trends at the border can be a challenge for the government and local communities to start their development efforts. Need a review specifically to the strength of the TNI in the islands bordering the Republic of Indonesia (Kennedy et al, 2018). Selaru Island as a part of Tanimbar Islands Regency will be built some military facilities such as military district command of army, submarine maintenance facility and airforce base.

Economic improvement of a region is an important aspect that needs to be considered in order to assess the success of the regional development plan (Muruwito et al, 2013). This is proof that whatever form of development takes into account several macroeconomic variables, including development in the defense and security aspect. Development of defense capacity, which is identical to the development of the military aspect, so far The indicators used are only limited to capacity building in the fields of building facilities, logistics, personnel and combat equipment in order to achieve an optimal deterrent effect (Chard, 2005).

According to the article of Indo-Pacific Defense (2021) If the construction of a military base is only accommodating military personnel and logistics, then the problem will be solved if the government is limited to successfully building TNI facilities such as Army Military Command, Naval docks and Airforce base facilities without any expected strategic value. Military facilities that
Military Geography in Determining the Socio-Economic Improvement in the Foremost Island for Developing the Integrated Military Bases

will be built on Selaru Island to fulfill the strategic aspect not only to increase the ability of deploying TNI on the front island but also to bolster economic improvement. Specifically, these facilities must be able to significantly impact on increasing GDP growth, stabilizing inflation and decreasing unemployment rates on the Selaru island.

However, if the concept of developing the TNI's strength puts forward socio-economic factors where social impacts and economic growth are also a priority, then it is necessary to elaborate proportionally. Kennedy, et al (2019) stated that the dual use concept will become an important reference when efforts to develop TNI capabilities need to be in line with the improving economy of the surrounding community. If referring to the concept of macroeconomic growth, where all social activities must be able to have a positive impact on the variables, it is necessary to study to assess the feasibility of the existence of a military facility construction in having an effect on aspects of economic growth, inflation and unemployment rates (Rowe, 2017). If the projected facilities are able to deal with potential flash points from the direction of the threat, then the feasibility study in the context of strategic values needs to be expanded to touch on how the economic condition of the surrounding community will improve. In this review, in the future the paradigm of strategic value in looking at plans for the construction of military facilities is not only due to the defense and security aspects but also economic factors as a reference (Wignaraja, 2005).

LITERATURE REVIEW

Scenario Planning

The theory of scenario planning is the basis of this research. Scenario Planning itself is a simple approach to identify complex problems by placing positive elements on one side against negative elements on the other.

![Diagram of Scenario Planning](figure1)

**Figure 1. The elements of Scenario Planning**

*Source: Paul J. Schoemaker (1995)*

Determining the theoretical basis for this research was built on a series of processes for determining scenario planning including determining basic trends, drivers of changes, key uncertainties, rules of interaction and multiple scenarios. In addition, the value of the urgency of establishing a military base also needs to be studied theoretically.

The results of the analysis will be elaborated through sharpening the analysis based on predictions of causal phenomena or the Rules of Interactions. The results of the analysis process are Multiple Scenarios which are expected to have the highest level of probability to be realized based on the existing data compilation (Schoemaker, 1995). In general, the resulting scenarios are in the form of multiple scenarios as a product of analysis within the Scenario Planning framework which places the island management format at the forefront in supporting the independence of the national defense system.

Strategic Value of Military Base Establishment

The theory of the establishment of a military base can be viewed from a theory about "The Politics of Military Base Closing: A New Theory of Influence". In his review, it was stated that the closure/establishment of a military base is closely related to geographic & demographic variables, gubernatorial power and the ideology or policies of the country's political system (Whicker & Giannatasio, 1997).

If the construction of military bases is merely "accommodating" military personnel and logistics, then the problem will be solved if the government only succeeds in building TNI facilities such as Army headquarters, Naval docks and Airforce base facilities without any strategic value expected. Military facilities, including those to be built on Selaru Island, are said to fulfill a strategic aspect, if not just to increase the ability to deploy the TNI on the frontier island. Specifically, the facility must be able to significantly impact on increasing GDP growth, stabilizing inflation and reducing the unemployment rate on the island. However,
Military Geography in Determining the Socio-Economic Improvement in the Foremost Island for Developing the Integrated Military Bases

if the concept of building TNI forces puts forward socio-economic factors where social impacts and economic growth are also a priority, then it needs elaboration which is demanded proportionally.

If the projected facilities are able to face potential flash points from the direction of threat, then the feasibility study in a strategic context needs to be expanded to touch on how the economic conditions of the surrounding community are improving. In this review, in the future the strategic value paradigm in viewing plans to build military facilities is not only due to the defense and security aspects but also economic factors as a reference. The effect of economic improvement can be an important variable in seeing the important urgency or not of a military facility construction being held on several frontier islands of the Unitary State of the Republic of Indonesia. If this is realized, there needs to be effective collaboration not only from Defense and Security Stakeholders but also parties related to people's economic development.

Macroeconomic Indicators
The economic recovery of a community is an important aspect that needs to be considered in order to assess the extent to which military bases have been built in a particular area. If so far, the indicators used are limited to the security sector, then it needs to be investigated further, how the existence of these bases can restore economic conditions in the frontier islands of the Unitary State of the Republic of Indonesia.

Macroeconomic indicators in the inflation rate, unemployment rate and Gross Domestic Product (GDP) are the most relevant benchmarks to determine the extent of economic growth in an economy. Specifically in measuring GDP and its components, it is a measurement on the National Income and Production Account on the basis of Aggregate Production as an accumulation of Aggregate Expenditure and Aggregate Income so that the measurement is based on an approach to the Expenditure Approach and Income Approach (Parkin, 2010, p. 491).

Method
The research will be designed as a qualitative research with some elaboration of Scenario Planning approach and so that the data collected based on the sample is a representation of some informants whose results can be determined. There are several criteria that need to be considered namely comprehensive parameters in determining an area, including the foremost island area to be determined as a TNI military base.

All of these explanations will be described through an approach in the perspective of military geography and socio-economic improvement where government actors and local communities are the main actors. It is possible that there will be external variables other than those related to theory that will intervene in these actors so that there is a simplification to make this research applicable when applied (Illustration is below).

Refer to Goundar (2012) which is to formulate questions systematically and in accordance with the target, it is formulated a research process design that is able to reflect the potential of research results by fulfilling the validity of qualitative research rules. In order to achieve this, it is necessary to achieve a comprehensive understanding of the conceptualization between the research topic and the concept or theory that underlies the scenario planning approach regarding the establishment of a military base in relation to the economic growth of the Selaru Island.
Military Geography in Determining the Socio-Economic Improvement in the Foremost Island for Developing the Integrated Military Bases

RESULTS

Military Geography for Establishing Integrated Military Base

Integrated military base in particular area always has three dimensions of defense sector namely Army, Naval and Air Force bases. Military Resort Command 151 Binaiya is a regional defense command Army which includes overseeing five Military District Commands. As shown in the following figure, during its development, Korem 151/Binaiya became five Kodim namely Kodim 1501/Masohi, Kodim 1503/Tual, Kodim 1504/Ambon, Kodim 1506/Namlea and Kodim 1507/Saumlaki.

The Military District Command-1507/Saumlaki is one of the army unit commands under Military Resort Command-151/Binaiya. This unit commnad is located in the capital of the Tanimbar Islands Regency, Saumlaki and has territory in the Yamdena Island area and several surrounding islands. One of the Regional Military Commands under Military District Command-1507 is the Selaru’s Military Rayon Command. The military force developments approach both defense equipment and personnel are certainly very relevant to the development or construction of new TNI units. The impact and calculations based on the economic empowerment of the surrounding community are correlated with implementing of military geography. These two aspects of defense and socio economic which are the main considerations of Military District Command-1507 Saumlaki and Military Rayon Command of Selaru become very important for the effectiveness of research results.

![Figure 3. Deployment of Army Military District Command](image.png)

It is also necessary to add a composite battalion in Selaru. This scenario of building a composite battalion is a strategy to make the unit's strike force effective because the Combat Unit and Combat Support elements are present in the unit. The strength of the Composite Batallion consists of companies of Air Defense Artillery, Infantry, Engineers and Ground Artillery (interview with Lt. Col. Inf. Rahmad Saerodin, Commander of the Army Military Command Saumlaki, 2019).

Meanwhile, Naval Bases in Saumlaki and Selaru have been controlled by Naval Main Base-IX Ambon, Maluku. This base has the main task of organizing operation, logistical and administrative support for elements of the Fleet Command as well as carrying out development of maritime potential to become a national defense force at sea. Dewi (2020) stated that for implementing operations in enforcing sovereignty and law in the seas of national jurisdiction by utilizing the facilities and infrastructure owned by the base itself or by side units.

Seeing that its main tasks are quite complex, especially in terms of providing logistical support, fostering maritime potential and patrol duties, the position of Naval Main Base-IX/Ambon is very strategic if the construction of an integrated military base will be built in Saumlaki or Selaru.

![Figure 4. Main Naval Base-IX/Ambon as part of Working Area of 3rd Fleet Command](image.png)
Military Geography in Determining the Socio-Economic Improvement in the Foremost Island for Developing the Integrated Military Bases

It can be seen that Naval Main Base-IX Ambon has a strategic position if it is associated with the presence of units under it, both the Indonesian Navy Base and the Indonesian Navy Post. That naval main base has a working area that is exactly the boundary of Australia’s maritime territorial sovereignty. There are four Naval Bases under controlled by Naval Main Base-IX Ambon, namely Ternate Naval Base, Tual Nava Base, Saumlaki Naval Base and Morotai Naval Base, while Naval Post under their controls including plans for the development of several naval posts are Banda Naval Post, Buru Naval Post, Wetar Naval Post, Moa Naval Post and Bula Naval Post as well as Selaru Naval Post (Insprasi1 Nusantara, 2018).

Saumlaki’s Naval Base and Selaru’s Naval Post became an important element when the Integrated Fleet Weapon System as a combination of strategic combat forces with complete and intact logistical supporters had to move or operate in various Indonesian Navy missions (Ecless, 1997). As it is known that the history of the Navy Base is always inseparable from the existence of the history of the founding of the Navy itself, because the Base is one of the Integrated Fleet Weapon Systems which consists of Bases, Ships, Marines and Aircraft.

Saumlaki Naval Base with several elements of the existing ships, it will be of important value both related to the development of defense equipment strength, personnel and strategic positions owned. Saumlaki Naval Base with the current organizational structure, apart from carrying out operational and logistical support tasks, will of course be more complex in line with the projected construction of an integrated military base in both Saumlaki and Selaru. Like the Army and Air Force units, it is not only about the sovereignty of the territory of the Republic of Indonesia but also to secure National Vital Objects sat Masela Block as the Offshore Oil Refineries in the Arafura Sea. According to in-depth interview with the staff officer of Operation Division of Naval Main Base-IX Ambon state that submarine dock has also been built around Selaru Island. Especially for the Indonesian Air Force, there is no need to build another radar site in Selaru because the radar coverage of Radar Unit 245 Saumlaki has already fulfilled its airspace coverage. In addition to shifting and upgrading the status of Army and Naval units,

The security referred to is from all aspects of life including security from possible threats from outside the territory of Indonesia. Since 1982 based on the United Convention on the Law of the Sea (UNCLOS 1982) Indonesia has been recognized as an archipelagic country with an area of 6,184,280 km² of water and has been ratified in Law Number 17 of 1985. Air sovereignty becomes a point of concern for the projected construction of an integrated military base, including on Selaru Island. It needs fully support from Air Force operational unit such Air Squadron, Radar Unit and Air Force Base which must be improved as an integrated military base. The Bare Base Concept model has become the Indonesian Air Force choice in securing airspace at the border (Interview with Colonel Agung Sasongkojati, Secretary of Air Space Potential Service, 2019) This concept is an effort to prepare an air base with the support of facilities and minimal manpower, which can be needed at any time upgraded quickly so as to be able to support an air operation (https://tni-au.mil.id , 2010)

Mastery of national airspace is absolutely necessary for the survival of the nation and state. In order to maintain control of the airspace, National Air Operation Command carries out air defense operations which are carried out continuously, both in times of peace and or war. In order to support this task, it is necessary to deploy an air defense force in accordance with the needs. Radar Unit-245 Saumlaki which is operationally under the National Air Operation Command as shown in figure 6
Military Geography in Determining the Socio-Economic Improvement in the Foremost Island for Developing the Integrated Military Bases

Figure 6. Radar Coverage of National Air Operation Command (Air Force Radar Unit-245 on Saumlaki Island/Red Dash line)

Refering to Bourbonniere and Haeck (2001) that deploying the radar, it can cover the entire national airspace and is operated continuously so that it can quickly ward off and act on any threats that come through the air, But in reality, currently the radar that is deployed and operated has not been able to reach all of the national airspace. This condition is caused by geographical conditions in the form of oceans and mountains which have resulted in the deployment of radar defense equipment to be not ideal which the determination of the degree point is not in accordance with the position with the best coverage. The most of the radars in operation have begun to decline due to various factors, and the lack of radar equipment (Bole and Norris, 2014).

The geographical conditions of Eastern Indonesia, including the Maluku region, consist of large and small islands and a very wide ocean. Part of the land in the form of mountains and hills. Mountains and hills are very influential on the operation of the radar considering the properties of the high frequency electromagnetic waves used have line of sight propagation. Mountains, hills and artificial objects become obstacles that result in coverage radar is not optimal and the area behind the obstacle becomes a blank area as the area that cannot be detected by radar. The maximum radar detection distance is 440 km (240 Nautical Miles/Nm) at an altitude of 40,000 feet, this means that air targets can only be detected at a distance 440 km if the target is flying at an altitude of 40,000 ft, below that the target cannot be monitored.

In general, the TNI’s perspective on the policy of building an integrated military base in Selaru is dominated by the defense aspect. There are at least two perspectives that develop in TNI stakeholders regarding this plan, namely the existence of military facilities being developed to certain regions or islands, which must be followed by the shifting of existing units. If they are already in Saumlaki, then the status of the units must be upgraded from District Military Command to Military Resort Command or Military Rayon Command to Selaru’s Military District Command. For Naval Bases, Selaru’s Naval Post will become Naval Base. Other plans is to add an unit of Army battalion level on Selaru Island, especially Composite Battalions for strengthening integrated military bases with other dimensions.

Forward Position Concept for the Development of Military Capability

Any military units must refer to the Spatial Planning and Regional Administration policy with proportional capability of personnel. The combat units here are composite battalions, marine battalions or special force battalions. Except for the Indonesian Air Force, it still needs to build a base as an auxiliary and main base.

Figure 6. Deployment Plan of Combat Unit Projection in Selaru Island
Military Geography in Determining the Socio-Economic Improvement in the Foremost Island for Developing the Integrated Military Bases

The existence of this combat unit can effectively work well when supported by regional units whose positions are not in Selaru but utilize the existing regional units in Saumlaki. From the aspect of economic empowerment, macroeconomic variables do not significantly increase economic growth except for the establishment of transportation access. This situation will only increase local economic growth through which the road access connecting the combat units is limited.

The existence of the local government of the Tanimbar Islands and Selaru District is very important in the plan to develop Selaru Island as an integrated military base. As if as a classic problem, land acquisition in the Saumlaki and Selaru areas is also a major obstacle, although in principle, with the encouragement of the local government and the result of coordination with TNI institutions in the region, in this case the Army Military District Command, the community can provide the land. It is undeniable that there are still some rejections from the community regarding this land dispute so that the progress of the construction of military facilities can be said to be insignificant. This seems different if possible compared to Natuna Island, where progress is very fast, so the development of integrated military facilities is even faster.

Figure 7. Selaru as a Defense and Security Zone and the Position of Lingat Village Projected as an Air field (Former Japanese Air Field in World War II)

Some of the progress that has appeared to be realized is the designation of land in the village of Lingat, Selaru as an airfield plan where previously this area had a runway built by the Japanese military during the 2nd World War (Interview with Piet Rangkoratat, Secretary of the Tanimbar Islands at the Regent’s Office, 2019). In addition, Selaru Island has also been designated by the Ministry of Agrarian Affairs as a defense and security development zone (Interview with S. Sopakua, Head of Regional Economy & Infrastructure, in a FGD, 2019). The results of the research in the field also found that around Adaut as the capital city of Selaru District land acquisition has also been carried out for the development of the Selaru Naval Post.

Established the Composite Battalion in Saumlaki but the Army, Navy and Air Force units have the same capacity and status as they are today. Actually, this condition has started to be programmed where Battalion-734 will later become a composite battalion (Interview with Lt. Col. Inf. Rahmad Saerodin, Commander of the Army Military District Command Saumlaki 2019).

CONCLUSION

The establishment of a military base in improving the socio economy of the people in Selaru Island is mainly associated with several important points to be used as references in the implementation stage. To analyze the condition of a national defense system are most relevant to current conditions are geographical position, historical background and demographic conditions. These three factors produce the character of the region as the basis for the development of its development patterns, including the development of military facilities in Selaru. Positive community response factors related to the construction of integrated military facilities in Selaru, open access to transportation and improvement in economic and trade indicators are positive values that will continue to develop in a more positive direction.

The positive response actors from the community regarding the construction of an integrated military facility in Selaru is the result of development activities programmed by the government, including opening up access to transportation which is beneficial for improving economic indicators and trade. The outcome of the various analyzes are considered the most influential for the establishment of a military base in improving the economy of the people of Selaru Island are presented in the form of policy scenarios. This is expected to be accepted by the community so that various problems and misunderstandings related to social friction and land disputes between the TNI and the community can be resolved and instead result in a unified understanding with the TNI to jointly create a security situation that is conducive for regional economic development to achieve a level of equality and welfare for society.
REFERENCES


There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0 (https://creativecommons.org/licenses/by-nc/4.0/), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.