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THE ROLE OF THE INDONESIAN MINISTRY OF DEFENSE AGAINST THREATS TO THE AGRICULTURAL SECTOR FROM A NON-MILITARY DEFENSE PERSPECTIVE

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Abstract

The agricultural sector is the main element in the food supply, especially to achieve food security, climate change, damage to agricultural infrastructure, land conversion and declining agricultural production are threats in the agricultural sector that are currently occurring both globally and nationally can cause a food crisis. One of the government's efforts to maintain sustainable food availability is the food estate program involving the Ministry of Defense. This study aims to identify the role of the Indonesian Ministry of Defense in overcoming threats to the agricultural sector for the welfare and interests of national defense. This study uses a qualitative method with a literature study approach. The data collection technique is to examine empirical information or data sourced from books, journals, scientific research reports, and other literature that has links to the national defense sector and the agricultural sector, as well as open library materials such as magazines, newspapers, and websites. From the perspective of non-military defense, it can be concluded that the role of defense institutions in overcoming non-military threats, in this case, the threat of a food crisis, is as a form of support capacity in securing national food availability, both production and distribution as well as supporting non-military defense functions in the context of realizing national logistics reserves. To support the implementation of a non-military defense system in agriculture that can maintain the safety of the nation from the threat of a food crisis, it is necessary to empower non-military defense so that it has strong deterrence in preventing all threats that arise.

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INTRODUCTION

On April 27, 1952, Soekarno as President of the Republic of Indonesia at that time proclaimed the importance of food availability for the people, so much so that President Soekarno called food a matter of life or death for this nation. relevant as one of the priorities faced by the Indonesian nation. The urgency becomes very important, among others, due to climate change, limited natural resources, and increasing population. Food as a matter of life and death of the nation will not stop at one time but will become a national problem that needs to be answered throughout the ages (Krisnamurthi, 2012). The foundation of that spirit was then continued by President Soeharto, President BJ Habibie, President Abdurrahman Wahid, President Megawati Soekarnoputri, President Susilo Bambang Yudhoyono and President Joko Widodo. Through national food policies and national food security management, all presidents have laid the foundations, strategies, plans, and actions and have worked hard to realize national food security (Hikam, 2015). Underlying this, food is important for the people and the nation so that food is categorized as a strategic commodity that can affect economic, socio-political conditions, and even defense and security. According to Hajkowitz et al. (2012), the depletion of mineral resources, energy, water, and natural food is a growing trend that, when juxtaposed with population growth and economic development, has put pressure on resources. However, if it is understood according to food is a human right so that everyone must have access to safe, nutritious, and culturally appropriate food both in quantity and quality to ensure a healthy life as a dignified human being (Hadi, Rusli, & Alexandri, 2019). Every nation should declare that access to food is a constitutional right and guarantee the development of the primary sector to ensure the real realization of this fundamental right (right to food). To meet national food needs, the agricultural sector is the main element

in providing food and as a source of income for the farming community and can improve the nation's economy. In line with this, the agricultural sector becomes the primary sector as one of the sectors that can maintain the stability of state security. However, in carrying out agricultural development today, some challenges are still faced by the agricultural sector including (Agustian, Suryana, Rachman, Muslim, & Susilowati, 2019), 1) damage to the environment and climate change, 2) problems with land and water infrastructure, 3) narrow land ownership, 4) national seed and nursery system, 5) farmers' access to institutional capital for farmers and extension workers, and 6) related to inter-sectoral integration and coordination. Jonesa and Thorton's opinion in Bantacut (2014) states that climate change has had a significant impact on agricultural production, the rainy season is not only patterned but also uncertain in intensity. Many crops fail due to flooding during the rainy season or drought during the dry season. Moreover, climate change results in decreased productivity, erosion, land damage, and pest and disease attacks. Based on the report *Tim Analisis Evaluasi Hukum & Kurniatmanto* (2005) the source of the decline in the quality of agricultural land is currently dominated by non-agricultural activities such as industrial development and mining and forest burning in the form of pollution and environmental destruction such as direct pollution of heavy metals and organic and inorganic polluting materials and erosion due to displacement of the land surface from mining activities. Furthermore, the problem of land resources faced is that the control of agricultural land per capita is getting narrower and the number of smallholders is increasing every year (the number of smallholders is 13.7 million families and the rate of increase is 2.4% per year), the rate of conversion of agricultural land to agricultural land is increasing. non-agricultural land (+ 110,000 ha/year) and very minimal agricultural infrastructure have an impact

on decreasing agricultural productivity. Not yet optimal coordination of water management institutions, most of the irrigation infrastructure was lightly damaged to around 53% so that its function decreased, several islands in Indonesia (Java, Sumatra, Sulawesi, Bali, Kalimantan) which are centers of agricultural producers have experienced a water deficit (Kementerian Pertanian, 2015). One of the government's efforts to maintain food availability sustainably is the food estate program. The budget allocation for food security so far is quite large. In 2018 the food security budget was allocated Rp. 89.5 trillion, increasing to Rp. 104.2 trillion in the 2021 State Budget Draft. However, the high allocation of the food security budget does not appear to be effective in maintaining national food security (Nasution & Bangun, 2020). In 2021, the Government will implement a food estate development program in Central Kalimantan, South Sumatra, and Papua (Merauke). Food estate is a popular term for large-scale (>25 ha) plant cultivation activities carried out with the concept of agriculture as an industrial system based on science and technology (science and technology), capital, as well as modern organization and management. The food estate concept was developed as a strategic logistics reserve for food security, both for national defense and as a center for food agriculture. The food commodities to be produced are rice, cassava, corn, and other strategic commodities that are adapted to land conditions. Indonesian President Joko Widodo in a press release at the Palace on July 9, 2020, stated that logistical reserves are used to anticipate food crises as warned by the Food and Agriculture Organization (FAO) that there is a potential threat of a world food crisis, in the times to come as the outbreak spreads. the COVID-19 pandemic, or any crises caused by other factors. Therefore, it is necessary to anticipate as early as possible so as not to experience a food crisis. Defense Minister Prabowo Subianto was appointed by

President Joko Widodo to be the leading sector to work on food granaries, in synergy with the Minister of Agriculture and the Minister of Environment and Forestry, President Jokowi explained the appointment of Prabowo. The reason is that the defense sector is not only limited to the main tools of the weapon system, food security is also included in it (Prasetya, 2020). The Presidential Regulation of the Republic of Indonesia Number 8 of 2021 concerning the General Policy of State Defense in 2021 explains that one of the potential threats that need to be prevented is an economic crisis in which food production is involved so that the President appoints the Minister of Defense to be the driving force in empowering the agricultural sector together with the Minister of Agriculture.

Related to this, the Ministry of Agriculture has the potential to support the productivity of the agricultural sector, among others, carrying out the functions of formulating and determining policies in the field of providing agricultural infrastructure and facilities, increasing agricultural production, as well as increasing added value, competitiveness, quality, and marketing of agricultural products. The appointment of the Minister of Defense as the leading sector in realizing food security has pros and cons as reported in the media Sari, Munandar, Cahyadi, Borowy, & Adha (2021) according to Commission I member of the House of Representatives, Syarif Hasan, the task of providing food storage is not the task of the Ministry of Defense, it would be better if it was led by the Minister of Agriculture because the institution is closest to food. Meanwhile, according to Ahmad Ali, Deputy Chairman of the Nasdem Party, this does not need to be a polemic, the appointment of the Minister of Defense is considered reasonable because the Ministry of Defense is also responsible for food security.

In Law Number 23 of 2019 concerning Management of National Resources for National Defense, it is explained that in

certain circumstances all potential national resources, as well as national facilities and infrastructure, are functioned as an important part of the component of national defense as well as for the welfare of the people. Responding to the problems in the agricultural sector that have been described, the government has sought strategic programs in improving the agricultural sector which is a fundamental thing for a country, especially during the COVID-19 pandemic that has hit the world. The World Food Organization predicts there will be a food crisis due to the COVID-19 pandemic worldwide. Competition for agricultural resources has become asymmetrical, related to food security and the population of a country that is in a prominent vulnerability to availability, a deficit of productive land, water, and nutrients (Zhou, Dellmuth, Adams, Neset, & Uexkull, 2020). Nations and international organizations such as the United States and the United Nations continue to develop policies and mobilize the workforce to prepare for, respond to, and even prevent threats to food security. Research results from Siddiq (2017) explain food security and national security are two of the main issues in Pakistan. The condition of food security will become worse if the necessary actions are not taken by the government. National efforts are needed in line with the government's efforts to deal with the worsening situation. There need to be policies that can help control the situation and move to a more satisfactory stage. Increasing agricultural productivity and production will help maintain and control the situation, not only food availability but at the same time accessibility, proper utilization, and stability are equally important. As a comparison, research conducted by Kennedy (2018) is a case study of the construction of the Trans Papua road. The construction of 4325 km of the Trans Papua road which is covered in forest and security threats is the main obstacle. Engineers who have been trained can carry it out well, which civil agencies cannot. In addition to

eliminating threats, defense programs must also be able to provide a multiplier effect on people's welfare, as has been done by the Indonesian armed forces in assisting infrastructure development in Papua. This shows an example that a productive defense program can boost the economy and prosperity in the region, where the private sector cannot/dare to enter due to various obstacles in the region. Based on the description above, to realize food security, it is very necessary, to begin with, a paradigm shift and national spirit to be involved in efforts to improve the agricultural sector to realize national security in the food sector by involving defense institutions. Food sufficiency for the community will have an impact on the welfare of the community. When the community is prosperous, the love for the homeland will grow. Thus, the Indonesian people will always be ready to carry out their rights and obligations as citizens, which in turn creates conditions that can strengthen national defense. Non-military defense strategy is to overcome non-military threats by placing ministries/agencies as the main element, including local governments. Ontology and axiology of non-military defense is an effort to mobilize non-military forces in resolving or overcoming all forms and nature of threats. A non-military defense strategy that is directed at utilizing all national resources requires a response to non-military and military capabilities (Prihantoro & Swastanto, 2021).

Defense science as a scientific discipline examines all aspects related to security on a national scale attached to the objectives of state administration. The need to study defense issues philosophically stems from the existence of an entity called the state, and the need to be able to defend against all threats. The object of defense science is the behavior of the state when facing threats, if the threat is military then the state will face it by military means, but if the threat is non-military then the state will face it with the same side, namely by non-military means

(Supriyatno, 2014). According to (Armawi, 2006) when associated with the defense system in Indonesia, non-military defense is manifested in the universal people's defense system, which has 3 (three) main characteristics, namely 1) people-oriented because it is intended to create a sense of security and security public, 2) the involvement is universal, that every citizen and facility can be involved in defense efforts, and 3) held in the archipelago on a regional basis to raise their respective resilience. The efficacy of this system is the availability of logistical resources from the people. In essence, non-military defense is emphasized on other forces, besides military power. The development of non-military defense capabilities is carried out by the ministry or institution through the formulation of policies and implementation in their respective environments coordinated with the ministry of defense. The development of non-military defense capabilities is directed through increasing early vigilance, state defense, diplomacy, science and technology, economics, social, moral, and state defense support to increase professionalism to realize the order of life in society, nation and state and independence of the nation in the context of realizing national interests (Kementerian Pertahanan Republik Indonesia, 2015). This study aims to identify the role of defense institutions in overcoming threats to the agricultural sector for the sake of welfare and the interests of national defense.

METHODS

This study uses a qualitative method with a literature study approach, to be able to identify and explain the role of defense institutions in dealing with threats to the agricultural sector which is one of the strategic sectors. The technique of collecting data is by reviewing information or empirical data sourced from books, journals, scientific research reports, and other literature that has a relationship with the national defense sector and the agricultural sector, as well as open library

materials such as magazines, newspapers, and websites. This research is presented in a descriptive analysis to reveal data or facts by describing each aspect as it is.

RESULT AND DISCUSSION

Characteristics of Threats in the Agricultural Sector that have an Impact on National Defense and Security

Food security is one of the most pressing problems for mankind, and agricultural production is essential to achieving it. The agricultural sector has various functions including providing benefits to the community's economy, social conditions, and the environment. However, the most basic objective of the agricultural sector is to ensure food security. Eradicating hunger is also the main goal of countries and the international community. Despite the trend of increasing food production and availability, household income, access to food remains unequal in Indonesia and food insecurity remains a problem. Indonesia is ranked 65th out of 113 countries in the Global Food Security Index (GFSI) which is published regularly by the Economist Intelligence Unit (The Economist, 2018). It ranks below Association of Southeast Asian Nations (ASEAN) peers such as Singapore (1), Malaysia (40), Thailand (54), and Vietnam (62), largely because access to food in Indonesia is quite low (Asian Development Bank, 2019). Today, food security is widely recognized as a global security issue. Hunger and poverty make communities vulnerable to violence, conflict, and instability. The Global Food Security Act (GFSA) states, "it is in the national interest of the United States to promote global food security, security, and nutrition, consistent with national food security investment plans".

Released from the Central Statistics Agency, in 2020, the rice harvested area is 10.66 million hectares with a production of 54.65 million tons of milled dry grain (MDG). If converted into rice, rice production in 2020 will reach 31.33 million tons. The rice harvested area in 2020 is

10.66 million hectares, a decrease of 20.61 thousand hectares or 0.19 percent compared to 2019 which was 10.68 million hectares. This indicates that at this time Indonesia is still not safe from the threat of food insecurity which could continue to become a food crisis in the future. The results of the 2020 Population Census noted that the total population of Indonesia was 270.20 million people. This number is projected to continue to increase where in 2045 Indonesia's population will reach 311.6-319.0 million people. With Indonesia's land area of 1.9 million km², the population density of Indonesia is 141 people per km². The increase in population can result in an increase in food needs in the community if the rate of food demand due to the increase in population is not matched by the growth rate of national food productivity and the limited capacity of the land to produce food can result in food scarcity. When food becomes scarce, it will have an impact on the issue of rising food prices which can disturb the social conditions of the community, especially the lower classes. The food crisis could also impact the social and political turmoil that threatens the resilience and the national security (national security) that happened during the global food crisis in 2008 horizontal conflict in the West African country, precisely in Cameroon and Burkina Faso deadly (Hikam, 2015). For example, in Egypt, the public demanded a government that was deemed unable to stabilize prices that had skyrocketed, and eventually ended up overthrowing the leadership of Hosni Mubarak. Not infrequently the lower class of society who cannot afford food prices commit theft or looting to maintain their lives. Even reform movements such as those in Africa (Mudrieq, 2014).

From the national strategic environment, the unfavorable factor is the conversion of agricultural land related to spatial planning and building planning carried out by the Regional Government. The rate of conversion of paddy fields for non-agricultural development so far is relatively

large, reaching an average of 100 thousand hectares per year, while new rice fields that can be printed are no more than 50 thousand hectares/year (Hikam, 2015). Prof. Achmad Suryana, Researcher at the Center for Socio-Economic and Agricultural Policy, stated that currently the Indonesian people are faced with competition for land use. The phenomenon of conversion or conversion of agricultural land is a serious threat that can disrupt national food security and nutrient availability. If food productivity decreases, it will affect the food system as a whole (Halim & Ambarita, 2020). The occurrence of economic transformation can have consequences for the increasing need for land for the non-agricultural sector, Millar and Roots Prasada & Rosa (2018) state that agricultural land is the most widely used land for land conversion activities. This is because the land area in the agricultural sector is relatively larger than the land area in other sectors so that agricultural land is considered very potential for land conversion for the non-agricultural sector. Such as residential houses, investments, warehousing businesses, industrial centers, and tourism. The change in the function of agricultural land has the potential to decrease rice or rice production, if the conversion of agricultural land cannot be controlled it will threaten the food availability of the population which has implications for social problems.

Climate change is a global phenomenon that directly affects the agricultural sector. For Indonesia, the threat of climate change has a serious impact on the achievement of sustainable development targets. According to the intensity of extreme weather events, changes in rain patterns, and increases in temperature and sea level can cause several things Nuraisah & Kusumo (2019), including 1) planting and harvesting failures, resulting in decreased productivity and production, 2) agricultural land resources are damaged, 3) often causes floods and droughts, 4) increase in humidity, and 5) cause the intensity of

plant-disturbing patterns of organisms. The food crop sector is the sector most impacted by climate change. So that cropping patterns, production, and agricultural planning are carried out with a high level of uncertainty. If the pattern of global climate change is prolonged, it will affect the quality of rice production. Methods for dealing with climate change in a development context require effective climate risk management, and at the same time being able to develop development systems that are resistant to long-term weather changes. These efforts require cross-sectoral support and synergy at the regional, national, and regional levels. It should be noted that adaptation efforts must be accompanied by effective mitigation efforts if the rate of climate change exceeds the ability to adapt. Another important contributor to the decline in the quality and quantity of the agricultural sector is that the profession of farmers is becoming increasingly bleak from the aspect of social status, even being a beggar is more economically profitable than being a farmer. The number of young farmers continues to decline, both in absolute and relative terms, while older farmers continue to increase. Susilowati (2016) stated that various factors have caused the decline in interest of young workers in the agricultural sector, including the portrait of the agricultural sector which is less prestigious, always at risk, does not provide income guarantees, the average land tenure is narrow, diversification of non-agricultural businesses and the agricultural industry in the village is slow to develop, a succession of farming management is low, incentive policies for farmers do not yet exist, and the influence of the postmodern era on the perspective of today's youth. Youth has a strategic role in determining the survival of the nation, as an important element in the strength of national development, including development in the agricultural sector. If the existence of youth is not used properly it will boomerang for the nation, if it cannot be absorbed in the labor market it will cause

unemployment which adds to the burden on the state. For this reason, youth must be empowered to have quality and competitive advantage to face challenges and competition in the global era.

Another unfavorable factor is that some of the existing food crop agricultural infrastructure is experiencing severe and moderate damage. Due to damaged infrastructure, food production and crop productivity have fallen. The Central Government and Local Governments do not seem to have moved to allocate budget and human resources to build and maintain the infrastructure that is vital for food production (Hikam, 2015). The high consumption of rice in Indonesia is one of the main reasons why Indonesia imports rice in large quantities and has not been able to meet its rice needs independently. Rice imports in Indonesia experienced a surplus. Aspects that cause imports are the high price of domestic rice, an increase in population, and an increase in consumption (Ariska & Qurniawan, 2021). As reported by Anwar (2021), the Central Statistics Agency recorded a cumulative 356,286 tons of rice imports throughout 2020, a total value equivalent to 195.4 million US dollars. This figure represents the accumulated value of rice imports to Indonesia from January to December 2020. The largest rice import occurred in 2018. At that time, Indonesia imported 2,253,824 tons of rice, or US\$1.037 billion. Imports in 2020 are generally distributed to certain locations such as hotels, restaurants, or cafes instead of general rice that is usually consumed by the public and some special rice such as rice with low sugar content and so on. Yayusofiana (2018) states that import rice impact on several factors, resulting in the land conversion of agricultural into a land of industry, the production of food country itself hampered, availability food is limited so that the causal dependence of imports, the pattern of household consumption becomes stable, and impactful also on economic growth so that food security in Indonesia is declining and

unstable.

Along with the characteristics of threats to the agricultural sector, it can have implications for the existence of the nation and state because it can lead to food scarcity so that the problem cannot be separated from the overall national interest. The development of non-military defense in the agricultural sector is intended to eliminate non-military threats, namely the threat of a food crisis food is not only a commodity and a basic need in everyone's life but also a national interest and national security for a country. As mandated in Law Number 3 of 2002 concerning National Defense, that the contribution of defense institutions to the agricultural sector is one of the functions of the state government as an effort to realize a unified national defense as well as to achieve national goals in promoting the general welfare.

The Role of the Ministry of Defense in the Agricultural Sector

Recognizing the threat of a food crisis, the Indonesian government is committed to developing the agricultural sector in this case strengthening food security and the smooth running of the food supply chain from upstream to downstream, one of which is making strategic food reserves, in the hope of helping to increase food crop production in each province. In this regard, President Joko Widodo has assigned Defense Minister Prabowo to be in charge of the development of strategic food reserves. The reason was conveyed that defense was not only concerned with the main tools of the weapon system but also food security (Khadafi, 2020). By Presidential Regulation Number 8 of 2021 concerning the General Policy of State Defense for 2020-2024, that the development of non-military defense capabilities is directed at increasing the synergy of ministries and agencies in dealing with non-military threats by their respective dimensions and aligning strategies to counteract and overcome threats according to their duties. and its

function. What was conveyed by the President regarding strengthening food security, smoothing the food supply chain, and building strategic food reserves, is essentially part of fostering non-military defense capabilities to deal with the food crisis. Responding to food safety issues that have become a global issue, the U.S. Department of Defense (DoD) supports the U.S. government's efforts in food security, especially through the involvement of military personnel in the context of international and national assistance. To support U.S. capacity-building activities overseas, DoD contributes to surveillance and response systems programs as well as resource needs assistance. DoD also provides support to civil authorities through research, preparation, monitoring, and response efforts when food security fails. Although food security is not inherent in the Department of Defense, malfunctioning food security can exacerbate political, economic, or social stability leading to requests for U.S. military assistance (Katsos, 2017).

The Ministry of Defense's program in realizing the development of strategic food reserves for national defense, one of which is by developing a food estate in Central Kalimantan, as a center for food agriculture. An area of 30,000 hectares located in Gunung Mas Regency was developed as a cassava plantation area. There are 3 (three) things that are the focus of the food estate arrangement, namely the preparation of the National Strategic Logistics Reserve Agency (NSLRA), regional logistics arrangement, and spatial planning for the production of food reserves in Indonesia, in collaboration with several related parties (Kementerian Pertahanan Republik Indonesia, 2021). Furthermore, the Ministry of National Development Planning/Bappenas prepares a master plan for the development of a food estate with a social-ecological system (SES) approach as the foundation for the principles of sustainability, integration, resilience, inclusion, as well as advanced and modern.

In addition, the development of the food production center area ensures upstream-downstream integration by covering three main aspects, namely geospatial aspects, on-farm aspects, and off-farm aspects (Riswan, 2021). Based on the results of a survey that has been conducted by Subagio et al. (2021), the choice of location is in Central Kalimantan. The investment value for 1 Brigade (30 thousand ha) is estimated at 8.1 trillion which includes land clearing of 30 thousand ha and the construction of 34 Tapioca factories and modified cassava flour (MOCAF), each with a capacity of 4000 tons/day on a raw material basis. Through this program, it is expected that in 2024-2025, 1) the availability of national strategic food reserves for 120 days of 10 million tons of carbohydrates in the form of tapioca and MOCAF, 2) the availability of national strategic food reserves in the form of 66 thousand tons of beef carcasses, 3) an increase in the country's foreign exchange worth Rp. 26 trillion/year, 4) the availability of raw materials for bio-industry worth 62 trillion/year, 5) the availability of new jobs as many as 67.4 thousand, and 6) mastery of upstream-downstream bioindustry based on carbohydrates.

The contribution of defense institutions to the development of the agricultural sector has been carried out since the reign of President Soeharto, where the Indonesian army was assigned a civic mission, in the TNI in common to Build Villages (TMMD) program. The main objective of TMMD is for the Indonesian army to unite with the community to jointly develop in the countryside and help improve welfare, in addition to fostering a defense base area that is prepared as a regional logistics base and population consolidation area during a state of war emergency or natural disaster. TMMD activities are carried out not only focused on the agricultural sector, including the construction of public facilities, road and building infrastructure, and education. In 2021 the 111th TMMD will be held in several regencies in each province,

adjusting to the acceleration program of each district and cooperating with district offices, communities, and other related elements. The new paddy field printing program is a program to help farmer groups who intend to use unused land in paddy fields. The purpose of the new paddy field printing program is to expand the planting area and increase agricultural land standards, which is one of the demands of the central government to expand the planting area to support the National Rice Improvement Program and rice self-sufficiency. The Indonesian Army in collaboration with the Agriculture Service in the regions is trying to achieve food self-sufficiency through the Special Efforts Program for Rice, Corn, and Soybeans (*Upsus Pajale*) (Susanto & Putri, 2019). Furthermore, Herawan (2019) The Indonesian Army and the Indonesian Ministry of Agriculture in 2019 are continuing the rice field printing program with a target of 6,000 hectares in 28 districts. This rice field printing program is a continuation to add raw rice fields and as a substitute for land, conversion to produce rice production. Likewise, the Navy empowers the potential of coastal rice fields to produce agricultural products that can help food availability. The mission of military operations other than war is implemented using the method of territorial development and maritime potential development by strengthening internal and external coordination involving all agricultural stakeholders in Indonesia.

Attention to the agricultural sector did not escape the U.S. Department of Defense, according to American Farmland Trust (2011) The U.S. Department of Defense and military leaders had reached out to farming communities, especially in villages around military installations to help conserve agricultural land habitat, support land growth for agricultural purposes, sustain local economies and protect natural resources. About 30 million acres of rural land are managed in collaboration between the Department of Defense and the

American Farmland Trust while promoting development consistent with the military's task of ensuring America's security. In line with what was conveyed by Scholl, Army Chief of Staff General Andika Perkasa in a meeting with army officials conveyed that to support the nation's independence policy in the food sector, land owned by the Indonesian Army which is not in the form of military installations can be converted into agricultural land, especially for food crops that are easy to cultivate (Nugraha, 2020). In supporting the development of a national food barn, as an example, 0906 Tenggara Military District Commander carried out the construction of a food barn in Tanjung Batu village as an underdeveloped area because it does not have a wealth of natural resources like its neighboring village to become a logistical force in the region. This started from the aspirations of the community to non-commissioned officers and Military Rayon Command and then received a response from a third party, namely a company to realize its micro concept. The challenges faced are also limited human resources (HR). Therefore, in working on this program, the 0906 Military District Commander invited the University of Kutai Kartanegara to be involved in realizing the food barn. The construction of the food barn uses an area of 460 hectares, 33 hectares are in the process of cultivation and 2 hectares have been completed complete with a shelter or rest cottage for farmers (Jalil, 2020). In the context of the U.S. Pacific Command (USPACOM) and U.S. Special Operations Command (USSOCOM) food security campaigns, they send their personnel to attend formal agricultural development training such as agricultural assessment courses and evaluation training. After graduation, these personnel become trainers in their respective units and are tasked with advising commanders on tactical-level food safety issues (Katsos, 2017).

The Indonesian Navy through the Maritime Potential Staff has carried out the

development of maritime potential in the field of food security in the form of integrated agriculture, namely planting superior rice seeds *Sidenuk* (*hasil dedikasi nuklir* or the result of nuclear dedication), *Bestari* (*beras super teknologi radiasi* or super rice radiation technology) which is the result of cooperation with the National Atomic Energy Agency. Planting vegetables and plantations which include: shallots, mustard greens, spinach and kale, and freshwater fish cultivation. Integrated agriculture is carried out as a research facility to produce superior seeds which will later be submitted as a national food security program to be disseminated to the entire community (Pusat Hidrografi dan Oseanografi TNI Angkatan Laut, 2020). In the United States, there is the USDA DoD Fresh program, a partnership program between the Department of Agriculture (USDA) and the Department of Defense (DoD) Defense Logistics Agency (DLA). The program leverages the DoD procurement system to provide schools with a variety of nutritious fresh fruit and vegetables grown in the United States. Schools receive two types of support from the USDA. Most assistance is provided in the form of cash reimbursements for meals served, and a second form is a support ability to order food purchased by USDA Foods which can account for approximately 15-20% of the value of meals served in the national school lunch program (U.S. Department of Agriculture, 2021).

In discussing the role of defense institutions in tackling threats to the agricultural sector in Indonesia, and resistance to them, it is important to understand practices in other countries. Basically in almost every country in handling food threats there is an opportunity for the involvement of state defense institutions. The role of defense institutions in supporting government programs to overcome the threat of the agricultural sector and realizing regional logistics reserves as described in the description above is very important because

logistical reserves can support the availability of food for the community. An explanation from Purwaningsih (2008) that the functions of regional logistics reserves include: (1) As a reserve for food supply in the event of crop failure or natural disasters. (2) In the event of excess production during the main harvest season, farmers can regulate their supply by storing their harvests in the barn. (3) As a place to store seeds at harvest time, the results are sorted and the good quality is stored in the barn as seeds. (4) Has a social role, for example: can help farmers' food needs in times of famine. The contribution of defense institutions in overcoming threats in the agricultural sector that have an impact on the food crisis is not an act of militarism that enforces military regulations in the life of society and the state to achieve military goals, but as a military way is to use military culture to achieve general goals, namely high efficiency, minimum loss, and maximum yield. The United States Department of Defense supports food

security efforts primarily through the involvement of military personnel and assistance to civilian authorities through research, preparation, surveillance, and emergency response efforts (Katsos, 2017).

Empowerment of Non-Military Defense in Facing Threats on the Agricultural Sector

As described in the previous chapter, in dealing with the threat of a food crisis from a non-military defense perspective, the main element in its management is the ministry of agriculture or the national logistics affairs agency, while other ministries and agencies can provide support according to their functions and capabilities. each. For more clarity, it can be seen in the matrix for the implementation of non-military defense, as can be seen in Table 1. The model that can be developed in the empowerment of non-military defense in the agricultural sector can be seen in Figure 1

Table 1. The matrix for the implementation of non-military defense

Dimension	Threat Type	Main Element	Supporting Element
Economy	Food Crisis	Ministry of Agriculture	Ministry of Villages, Development of Disadvantaged Regions and Transmigration, Ministry of Social Affairs, National Land Agency, Ministry of National Development Planning, National Logistics Affairs Agency, and other related ministries.

Source: Extracted from the 2020-2024, State Defense General Policy

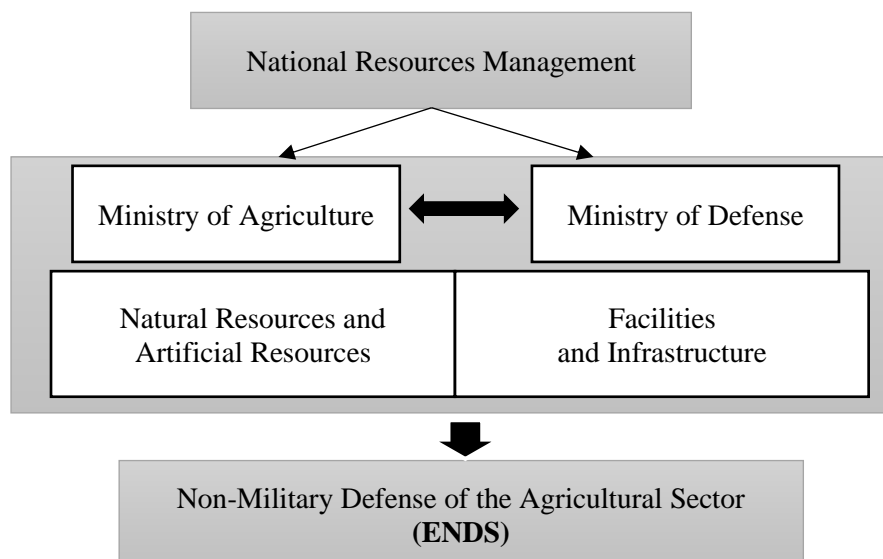


Figure 1. Managing non-military defense
Source: Processed by the Authors, 2021

National resources as one of the components of defense need to be managed so that they are ready for the implementation of non-military defense in the agricultural sector. Natural resources and man-made resources are resources that have been utilized for the benefit of non-military defense. Components of facilities and infrastructure are the result of cultivation that can be used as a supporting tool to support non-military defense in the agricultural sector. In this view, it can be stated that if the management of non-military defense in the agricultural sector can be carried out optimally and dynamically, the economic, social benefits and the availability of logistical reserves can be felt by the nation and state. Schematically it can be depicted in Figure 2.

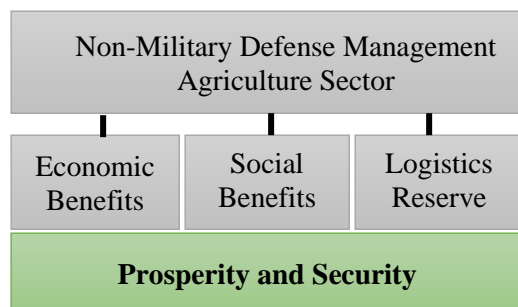


Figure 2. The Link Between Non-Military Defense Management in the Agricultural Sector and Prosperity and Security

Source: Processed by the Authors, 2021

CONCLUSIONS, RECOMMENDATION, AND LIMITATION

From the perspective of non-military defense, it can be concluded that the role of defense institutions in this case the ministry of defense and the Indonesian armed forces in overcoming non-military threats, including the threat of a food crisis, is as a form of carrying capacity in securing national food availability, both production and distribution as well as supporting the function of non-military defense to realize national logistics reserves. To support the implementation of a non-military defense

system in agriculture that can maintain the safety of the nation from the threat of a food crisis, it is necessary to empower non-military defense so that it has strong deterrence in preventing all threats that arise. The implementation of non-military defense in the face of non-military threats such as the food crisis, which is the main element in dealing with it is the ministry of agriculture while the ministry of defense and other relevant ministries as supporters to accelerate overcoming threats to the agricultural sector, as has been explained in the general policy of national defense and defense strategy non-military. However, in its implementation, it is necessary to have an institution that coordinates issues related to non-military defense, to provide a comprehensive understanding to ministries/agencies and local governments in overcoming non-military threats in their respective fields, not only in overcoming the food crisis. This study is only limited to describing the role of the ministry of defense in supporting agricultural sector programs based on the existing literature, while the relationship between the defense sector and the agricultural sector has not been discussed quantitatively in this study.

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