

# Journal of Social and Political Sciences

Tanjung, Arsil, and Anwar, Syaiful. (2021), The Role of the Ministry of Defense in Preparing Strategic Logistics Reserve for Facing the National Food Emergency. In: *Journal of Social and Political Sciences*, Vol.4, No.2, 136-147.

ISSN 2615-3718

DOI: 10.31014/ajor.1991.04.02.282

The online version of this article can be found at: https://www.asianinstituteofresearch.org/

Published by:

The Asian Institute of Research

The *Journal of Social and Political Sciences* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research Social and Political Sciences is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of Social and Political Sciences, which include, but not limited to, Anthropology, Government Studies, Political Sciences, Sociology, International Relations, Public Administration, History, Philosophy, Arts, Education, Linguistics, and Cultural Studies. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The Journal of Social and Political Sciences aims to facilitate scholarly work on recent theoretical and practical aspects of Social and Political Sciences.





The Asian Institute of Research Journal of Social and Political Sciences

> Vol.4, No.2, 2021: 136-147 ISSN 2615-3718

Copyright © The Author(s). All Rights Reserved DOI: 10.31014/aior.1991.04.02.282

# The Role of the Ministry of Defense in Preparing Strategic Logistics Reserve for Facing the National Food Emergency

Arsil Tanjung<sup>1</sup>, Syaiful Anwar<sup>2</sup>

<sup>1</sup> Indonesia Defense University, Sentul, Indonesia

Correspondence: Arsil Tanjung. Email: arsilsps@gmail.com

#### **Abstract**

The theme of this article is about the role of the Ministry of Defense in preparing for national food security, especially the role of the Ministry of Defense through the Strategic Logistics Reserve Agency in anticipation of facing a national food emergency, especially in the context of Sishanta. Currently the Ministry of Defense is in the function of preparing universal defense by directing all national potential which is not yet maximized, especially in preparing the logistic needs for the needs of TNI troops as the core force as well as logistical needs for supporting components and reserve components. In this paper, the author tries to use several theories concerning the Strategic Logistics Reserve Agency program, which include the theory of the role of organization, logistics theory, food security theory and Sun Tzu's theory of war in his book The Art of War and submit proposed solutions to these problems in the Strategic Logistics Reserve Agency framework. The research method used is a qualitative method using secondary data, as well as literature study. The data analysis technique used a qualitative descriptive analysis. This article seeks to identify various problems in implementing Strategic Logistics Reserve Agency at the policy and operational levels. From the research results, there are findings that illustrate that logistics supplies in the face of universal defense are unable to support both the needs of the TNI and the needs of its supporters.

**Keywords:** Role, Reserves, Food, National, Logistics

# 1. Introduction

When evaluating in general the condition of adequacy, resilience and self-sufficiency of food, Indonesia is still in an inadequate condition, and is not yet independent in terms of supplying national food needs and reserves. The problem of food in Indonesia, especially regarding the national demand for rice, will tend to remain high, due to the growing population, and the relatively high per capita consumption of the Indonesian population (Febriaty, 2016). The increasing need for rice, on the other hand, is actually faced with the condition of the decreasing area of agricultural land due to the change of function that continues from year to year. This

<sup>&</sup>lt;sup>2</sup> Indonesia Defense University, Sentul, Indonesia

condition of inequality is exacerbated by the decline in the level of the nation's independence, because the fulfillment of part of the rice needs is filled through imports.

Based on the above problems, it appears that in 2020, especially until 2045 (when Republic of Indonesia turns 100), if Indonesia does not take strategic and fast steps in increasing the food production sector, then nationally Indonesia will be very dependent on imports from other countries in meeting their food needs. The implication is that the nation's independence will get weaker and this imbalance that is specifically related to national defense is that Indonesia's increasingly dominant position as an importer of foodstuffs is unhealthy in terms of economy, trade, as well as in terms of national defense and security, both in the short term. medium, let alone long term.

Overcoming the imbalance in food availability, sufficiency and security, the government has endeavored with various strategic steps. During the New Order era, one million hectares Peatland Development project was initiated, which was strengthened by Presidential Decree No. 82 of 1995 regarding the Peatland Development Project. But three years later the New Order government ended, and the project was abandoned. Subsequent presidents, such as President Megawati Soekarnoputri, to President Soesilo Bambang Yudhoyono, tried to revive neo-PLG, but they also failed. During the Joko Widodo administration, a Food Security Agency was formed which is under the control of the Ministry of Agriculture, together with Logistics Affairs Agency, Food Security Agency is trying to secure 11 national strategic foodstuffs, as stipulated by the National Food Security Agency. (Ministry of Agriculture's Food Security Agency, 2020). The government's next step is to form a food estate which in the first phase will be concentrated in Central Kalimantan Province. The government entrusts the handling of the national food barn to two ministries, namely the Ministry of Agriculture and the Ministry of Defense.

Regarding the food barn, the Ministry of Defense has a strategic role. From an organizational perspective, the government through the Ministry of Defense has formed a logistical reserve agency that is under the control of the Ministry of Defense, namely the Strategic Logistics Reserve Agency (SLRA). SLRA focuses more on ensuring the availability of strategic logistical reserves for national defense. The formation of BKP, SLRA, as well as strengthening and development Logistics Affairs Agency which has been established since 1967 is an implementation of the mandate of Law Nom, or 18 of 2012 concerning Food. The Ministry of Defense also formed an implementing company for the implementation of food barns for the portion to be handled by the Ministry of Defense, namely PT Agro Industri Nasional (PT Agrinas). Through Agrinas, the Ministry of Defense has collaborated with local governments in various provinces, among others.

The role of the Ministry of Defense in formulating a strategy to prepare strategic logistical reserves is the role of the Ministry of Defense in preparing land originating from forest land that is no longer productive, or agricultural land managed by the local government but does not produce. The role of the Ministry of Defense in preparing ADM to manage the SLRA program through various collaborations, including that carried out by Agrinas. The role of the Ministry of Defense in preparing modern agricultural tools through PT Pindad, the Ministry of Defense has identified one million hectares of land scattered on the large islands in Indonesia. The role of the Ministry of Defense in managing plants and production markets in collaboration with Perum Bulok and other related parties as well as aspects of distthousandtion and aspects of warehousing. From the several roles that the Ministry of Defense plays, it can be seen as very strategic, because it prepares logistics for national defense needs or during a national food emergency. Therefore, it is interesting to study how steps must be taken in preparing land, personnel, technology, cultivation, production, distribution and warehousing as national food reserves to face food emergencies.

#### 2. Method

The method used in this research is phenomenological qualitative descriptive method, which is a series of interpretive research techniques, by describing and finding the meaning of a phenomenon that occurs naturally in the social environment. Qualitative research aims to gain an in-depth understanding of a situation (Cooper & Schindler, 2014: 656).

Measuring the role of the Ministry of Defense in preparing national food security, among others, can be measured qualitatively with the following indicators:

- a. The role of the organization through Strategic Logistics Reserve Agency and Agrinas
- c. The role of providing land data
- d. The role of coordination and cooperation with relevant ministries, and Local government
- c. The role of the provision of manpower (personnel)
- d. The role of providing technology (modern agricultural equipment)
- e. The role of cultivation
- f. The role of the post-harvest production process
- g. The role of warehousing
- h. The role of food distribution
- i. The role of securing food locations, routes and warehouses.

Based on the technique of obtaining data, this study uses secondary data types. Secondary data is data that is obtained in finished form and has been processed by other parties, usually in the form of publications (Sekaran & Bougie, 2016). Secondary data collection techniques are carried out through library research, particularly through desk studies via the internet, by studying text book, scientific journals, internal agency documents, and relevant and credible publication news.

The analysis technique of this article is a qualitative-descriptive analysis to describe the data about the barns. Qualitative data analysis in this study followed four stages of qualitative analysis according to Miles, Hubarman & Saldana (2014: 31-33), namely: (i). data collection, (ii) data condensation, in the form of a process of selecting, focusing, simplifying data, (ii) presenting data, and (ii) drawing and verifying conclusions.

#### 3. Results and Discussion

Indonesia adheres to a universal defense system, or total defense, which in principle involves components outside the main component (Indonesian National Army or TNI). The two components that support national defense are the Reserve Component and Support Component. As stipulated by Law Number 3 of 2002 concerning State Defense, Article 1 paragraph (2) defines the state defense system as a national defense system that is universal in nature that involves all citizens, territories and other national resources, and is prepared early by the government and is carried out in a total, integrated, directed and continuous manner to uphold state sovereignty, territorial integrity and the safety of the entire nation. from all threats.

The National Defense Philosophy, especially in situations of war or long disasters, pandemics, force majeure and other emergency situations, obliges the Indonesian people to have sufficiency, independence and food security. In connection with the doctrine of national defense, which means that it involves all components of the nation. Therefore, the evaluation of the condition of adequacy, resilience and food self-sufficiency is in the context of the Indonesian nation as a whole.

In connection with the national defense doctrine, in a situation of war or emergency, four national strategic reserves are needed. The four national strategic reserves are (i) weapons or the main weaponry system, (ii) strategic food reserves (in the form of carbohydrates and protein), (iii) pharmaceutical reserves and strategic medical devices (primary drugs and main medical devices), and (iv) strategic energy reserves (renewable fuel oil) (Ministry of Defence of the Republic of Indonesia, 2020). One of the four national strategic reserves in the context of national defense is the national food reserve. The importance of food in winning the war has been recognized since BC.

One of the four national strategic reserves in the context of national defense is the national food reserve. National food reserves are an anticipation of: (i) the occurrence of non-military threats and food crises in support of national defense. (ii) as part of strengthening the total defense, namely components of natural resources and

artificial resources (Samego, 2015). Food reserves are defined in Article 1 of Law Number 18 of 2012 concerning Food as "the availability of food in the territory of Indonesia as a product of human consumption as well as in anticipation of price supply disruptions, food shortages and emergencies. One of the elaborations of this law is Government Regulation Number 17 of 2015 concerning Food Security and Nutrition.

An emergency that requires food reserves, is stated among others in Law Number 18 of 2012 concerning Food which states that an emergency is a condition or situation that arises beyond human capacity in order to avoid and prevent severe famine, natural disasters, and social conflict (including the result of war). Food, as intended in point (2) Article 1 of Presidential Decree No. 48 of 2016 concerning Assignment to Logistics Agency Public Company in the framework of National Resilience, covers 11 (eleven) kinds of foodstuffs. The eleven kinds of food are rice, corn, soybeans, sugar, cooking oil, wheat flour, shallots, chilies, beef, purebred chicken, and chicken eggs.

In connection with the doctrine of national defense, namely total defense, which means involving all components of the nation, what is meant by food needs is not only to meet the needs of the main component (TNI), but also the component of Indonesia's human resources (people). Therefore, the evaluation of conditions of adequacy (produced and reserved in sufficient quantities), independence (produced and reserved domestically), and resilience (produced and reserved in a sustainable manner, including in force majeure conditions), is in the context of the nation. Indonesia as a whole. Among the 11 kinds of foodstuffs, the Ministry of Defense and Strategic Logistics Reserve Agency focuses on the cultivation of three foodstuffs, namely rice (rice), corn and cassava (as an ingredient in tapioca flour).

When evaluating in general the conditions of adequacy, resilience and food independence, Indonesia is still insufficient, and is not yet independent in terms of supplying food needs and reserves. In Indonesia, there are 514 districts and cities, of which 81 districts (15.75% of the total city districts) are still categorized as food insecure. Today it is estimated that 19.4 million Indonesians are still experiencing hunger (Kurnia et al., 2020). If there is no strategic policy in dealing with food for the long term, in the next 10-20 years, Indonesia will experience a wider food crisis than just what 81 districts and cities are currently experiencing.

The calculation of population growth in a reticular way, and food growth are like the Malthus count sequence, in fact today it does not occur to the extreme extent of Malthus's calculations. However, this trend of imbalance is clear. Food and Agriculture (FAO) and UN (2019) data shows that as of 2019 there are still 820 million people in the world who are still suffering from hunger, while about two billion of the world's population is in a moderate place or experiencing food insecurity. This data is further away from the target of reaching a world without hunger (Zero Hunger) by 2030. Regarding the imbalance trend, it can be illustrated by the need for rice, as the main staple in Indonesia.

The total demand for rice (as of 2020) is 111.58 kilograms per capita per year. The total demand for rice includes direct household consumption of 94.47 Kg / Kap / Year plus consumption outside the household (animal feed, seeds / seeds, non-food industrial raw materials, and shrinkage / scattered) of 17.11 Kg / Kap. / Th (Ministry of Agriculture's Food Security Agency, 2020), If the total per capita rice demand per year is multiplied by the national population in 2020 (269,603,400 people), then the total national rice demand in 2020 is 30,082,347 tons, which means more than 30 million tons of rice per year. If the total population is projected to 2045 (when the Republic of Indonesia has its 100th birthday), namely 369 million people (BPS, 2020) or grows by around 37 percent, then the demand for rice in 2045 will increase to 41.1 million tons.

Dependence on imports to meet national food needs, means further weakening the independence, adequacy and security of national food. As explained in the dependency theory initiated by Johan Galtung in 1971 (Galtung, 1971), the dependence of another country will destroy local entrepreneurship, inhibit technological innovation, and weaken the position of domestic entrepreneurs. Indonesia's dependence on imported food, in addition to weakening the trade balance and the country's foreign exchange place, also weakens the place of Indonesian farmers and agricultural industries, keeps the Indonesian nation from achieving economic independence.

Apart from rice, corn food also has a deficit in demand, the availability of corn food (NBM, 2019) is  $1.45~{\rm Kg}$  / Kap / Th, while direct consumption of maize exceeds this availability, namely  $1.67~{\rm Kg}$  / Kap / Th. The need for maize does not include indirect needs, namely the need for corn for the feed industry of  $6.85~{\rm million}$  tons,  $3.48~{\rm million}$  tons for local animal feed, and  $6.01~{\rm million}$  tons for the non-feed industry (Ministry of Agriculture, 2020). If the per capita need per year ( $1.67~{\rm Kg}$  / Kap / Th) is multiplied by the national population ( $269~{\rm million}$ ), then the direct household need for corn is  $44.923~{\rm million}$  tonnes in  $2020~{\rm and}$  will increase to  $62.36~{\rm million}$  tonnes year 2045. If the direct demand for national maize in  $2020~{\rm is}$  added to the indirect demand for corn, the total demand for corn per  $2020~{\rm will}$  be  $61.26~{\rm million}$  tons. Meanwhile, the total national demand for corn in  $2045~{\rm will}$  be between  $85-90~{\rm million}$  tons.

The problem also occurs in cassava food. Indonesia is a cassava granary, but not yet global. This can be seen from the following data: (i) RI's cassava exports were only 1.44% of the total world singlong exports compared to Thailand which reached 58.0%. (ii) Indonesian cassava production ranks fourth in the world (after Nigeria, Congo and Thailand); (iii) Cassava production continued to decline from 2014 to 2018, due to the lack of investors and farmer funds to plant cassava. Whereas in the case of cassava, Indonesia has a comparative advantage in world cassava production and market, as recapitalized in Table 1.

Table 1: Production and Indonesian Cassava on the International Stage

Subject	Comparison	
	Indonesia 23 tonnes / ha (compared to Thailand 2 tonnes / ha; Vietnam 19 tonnes / ha; China 16 tonnes /	
Cassava production rate per hectare	ha). Indonesia has a competitive advantage	
World cassava production ranking	<ol> <li>Nigeria (59.485.947 ton)</li> <li>2 Kongo (31.596.046 ton)</li> <li>3 Thailand (30.973.292 ton)</li> <li>peringkat 4 Indonesia (19.046.000 ton).</li> </ol>	
The world's largest cassava export ranking	<ol> <li>Thailand (58,9%)</li> <li>Kamboja (13,3%)</li> <li>Vietnam (11,0%)</li> <li>China (7,48%)</li> <li>Laos (4,84%)</li> <li>Indonesia (1,44%).</li> </ol>	

Source: Ministry of Defense of the Republic of Indonesia, 2020.

Table 1 explained Indonesia still imports a lot of raw flour, where the number of imported tons of flour is almost the same as the total consumption of flour, which means that both the domestic flour production and the total Indonesian flour exports are very insignificant. Table 2 shows the need for flour raw material imports, which has barely changed its place from 2013 to 2018.

Table 2: Production, Import, Consumption and Export of Indonesian Flour Raw Materials (thousand tons)

Tahun	Import	Consumption
2013	6.744 (USD 2,4 billion)	6.744
2014	7,439 (USD 2,4 billion)	7.439
2015	7,418 (USD 2,1 billion)	7.418
2016	10,544 (USD 2,4 billion)	10.525
2017	11.442 (USD 2,6 billion)	11.442
2018	8.196 (USD 2,4 billion)	8.194
Rata-Rata	8.630 (USD 2.38 billion)	8,627

Source: Ministry of Defense of the Republic of Indonesia, 2020.

Based on the description above, it seems that from 2020 to 2045, if Indonesia does not take strategic and fast steps in increasing the food production sector, Indonesia will be very dependent on imports from other countries

to meet its food needs. The implication is that it will further weaken Indonesia in terms of national food sufficiency, independence and security. This will weaken Indonesia's defense posture.

## **Implementation Strategy**

First of all is land preparation. The Ministry of Defense prepares a strategic reserve of land or a strategic logistical reserve area, which is a certain area whose allotment is determined and managed to become a CLS area for national defense. The land target for the strategic logistics reserve area, has identified more than 1 million hectares in the form of forest so far. Broadly speaking, the land includes: (i) Non-forested forest areas in Central Kalimantan Province, consisting of 805,000 hectares consisting of seven blocks. As of 2019, there is still a need for follow-up collaboration with the Ministry of Environment and Forestry. (ii) Non-forested forest area of Merakue Regency, covering an area of 440,000 hectares consisting of three blocks. As of 2019, there is still a need for follow-up collaboration with the Ministry of Environment and Forestry. (iii) Food areas whose use has not been ideal, include the untapped rice fields of the ex-Peatland Development Central Kalimantan project, covering an area of 136,550 hectares. The rice fields for the opening of the Ministry of Defense and TNI 2015-2019 covering an area of 225 thousand hectares, and other land controlled by the local government and the private sector, which was submitted to the Ministry of Defense.

The provision of rice fields opened by the Ministry of Defense and TNI has been opened since 2015. Until 2019, the Ministry of Defense and TNI has succeeded in clearing non-productive land to become a rice field covering an area of 225,000 hectares. The lands that have been cleared by the Ministry of Defense and TNI are scattered throughout Indonesia, including: (i) Ogan Komering Ilir Regency, South Sumatra Province, covering an area of 16,993 hectares; (ii) Mesuji Regency, Lampung Province, covering an area of 10,185 hectares. (iii) Merauke Regency, Papua Province, covering an area of 8,915 hectares. (iv) Bima Regency, West Nusa Tenggara Province, covering an area of 7,387 hectares. (v) Sanggau Regency, West Kalimantan Province, covering an area of 7,050 hectares, and (vi) Tulang Bawang Regency, Lampung Province, covering an area of 6,571 hectares.

Table 3: The Scheme of Cassava and Rice Cultivation Land

Schemes	Detail	Main Match	Land Status (2020)
1	Land owned by the state (Ministry of Defence), which previously belonged to the Ministry of Environment and Forestry / Pemda. Agrimas manages this scheme 1 land for singlong / rice cultivation on the basis of orders from Ministry of Defence as the owner.	This land is in the form of:  1. Non-forested forest land belonging to the Ministry of Environment and Forestry of the Republic of Indonesia.  2. Local government paddy fields / plantations that are not managed optimally	Consists of: 1. About 800 thousand hectares of land Ministry of Environment and Forestry of the Republic of Indonesia in Central Kalimantan. 2. Approximately 400,000 hectares of land Ministry of Environment and Forestry of the Republic of Indonesia in Merauke
2	The land belongs to the state. The government manages this land for cassava / rice cultivation on the basis of long-term cooperation (borrow and use 20 years or more) with the Government).	In the form of rice fields / plantations owned by the local government that are not managed optimally.	Covers 5,000 hectares of local government land in Bangka Belitung.
3	Private land. The private sector manages this land for cultivation of cassava / rice on the basis of long-term cooperation (borrow and use 20 years or more) with the private sector.	In the form of private rice fields / plantations that are not managed optimally	Includes: 1. 130,000 hectares of land owned by a private company (Company "A") in East Kalimantan. 2. 180,000 hectares of land owned by a private

Schemes	Detail	Main Match	Land Status (2020)
			company (Company "B") in East Kalimantan.

Source: Ministry of Defense of the Republic of Indonesia, 2020.

Based on available data on cassava cultivation, Table 4 shows the plan to gradually produce cassava until it reaches one million hectares of planting land, absorbs a workforce of 60,758 people, and produces around 5 million tons of flour per year 2026 (Ministry of Defense, 2020).

Table 4: Cassava Production Plan (2021-2025)

Land Clearing Stage	Luas Lahan	Penyerapan Tenaga Kerja	Jumlah (ton)
Phase 1	60.000 Ha	2 brigade + 3.574 people	294 thousand
Phase 2	150.000 Ha	5 brigade + 8.935 people	735 thousand
Phase 3	300.000 Ha	10 brigade + 17.870 people	1,5 million thousand
Phase 4	510.000 Ha	30.379 people	2,5 million thousand
Total	1.020.00 Ha	60.758 people	5 million

Source: Ministry of Defense of the Republic of Indonesia, 2020.

The simulation is based on cassava plants, excluding maize and rice. The three food plants have different characteristics. Judging from the frequency of harvest, for example, maize is more productive than cassava. Corn can be harvested four times a year, while cassava harvest time is even longer, which is 8 months. Meanwhile, rice can be harvested 2-3 times a year (Permadi, 2020).

#### **Technology**

As many have reported in the media, the average land for a food barn is flat. However, not a few lands are still in the form of swamps, such as land for the ex-Peatland Development project. Of course, the technology used is adapted to land conditions, land area, and availability of labor. The development of the food estate area is carried out using intensive swampland optimization technology to increase production and cropping index (IP). The development of the food storage area is being worked on on a large scale, so it requires mechanization of modern tools.

In relation to meeting the needs for modern agricultural equipment, the Ministry of Defense had impact. So far the Ministry of Defense and PT Pindad has collaborated with the Ministry of Agriculture to produce agricultural tools and machinery. Among the agricultural tools and machinery that can be used in food estate projects are drones for fertilization, floating tractors for piracy purposes, planting rota, combine multi-commodities, paddy drawers for drying food (especially rice), to silos for storing crops. agricultural tools and machinery is suitable for productive agricultural mechanization on large areas. For example, a floating tractor can plow two hectares of land per day (Kompas.com, 09/10/2020. Regarding food estate, the Ministry of Defense c, q PT Pindad can also contribute to electricity needs. Electrical equipment that can be useful for a food estate includes electricity generators. As is known, the need for electric machines at PT PLN is now mostly fulfilled by the Ministry of Defense and Pindad.

#### **Employment**

Cassava production for 30,000 hectares, requires the establishment of one factory, and requires four battalions. workers. If the needs of these workers are simulated in military human resources (HR), it can be calculated as in Table 5 below:

Tabel 5: Simulation of Labor Needs in Cassava Cultivation

Human Resources Target Cultural Team Target Processing Team
---

Human Resources	Target Cultural Team	Target Processing Team
1 Brigade	Total land area of 30,000 ha per	Number of factories: 1 tapioca /
	brigade.	mocap factory.
	Production target of 600,000 tons	Production target: 500 tons of flour
	of tubers / year, covering 300	/ day
	working days, 2,000 tons of tubers /	
	day, with a productivity of 20 tons /	
	ha.	
4 Battalions	3 Cultivation battalions. 10,000 ha /	1 Battalion factory processing: 1
	battalion and 474 workers /	tapioca / mocap factory and 280
	battalion.	workers / battalion.
1 Company	Consists of four companies with	Processing company which consists
	the division: nursery company,	of: production company as well as
	planting and maintenance	infrastructure and engineering
	company, harvesting company, and	company.
	logistics company.	

Source: Ministry of Defense of the Republic of Indonesia, 2020.

Part of the workforce needs of Strategic Logistics Reserve Agency and Agrinas will be taken from the reserve component formation program (Komcad). The legal basis for taking Komcad for Strategic Logistics Reserve Agency and Agrinas workers is Law No. 23 of 19 about National Resource Management, in particular Article 1, Article 33, and Article 35. The target of Komcad participants for 2020 is 15,000. After basic military training, Komcad who wishes to join BC: S / Agrinas will undergo agricultural training, and work as Agrinas employees (Ministry of Defense RI, 2020). According to the Minister of Agriculture Syahrul Limpo, food estate efforts can create jobs in rural areas, can provide social protection, can increase farmer family income, in addition to ensuring national food security. The food estate development area will be built a farmer organization business model involving farmer groups per 100 hectares, and farmer groups association on land per 1,000 hectares (Kompas.com, 09/10/2020).

# Investation

The central government has budgeted for the printing of new rice fields at IDR 19 million per hectare, but not many local governments are interested. One reason is that the average paddy field in each region, especially in Java, is already at maximum (Permadi, 2020). In accordance with the 2020 Strategic Logistics Reserve Agency Presidential Decree, Strategic Logistics Reserve Agency funding comes from: (i) State Expenditure Budget, (b) Regional Expenditure Budget, and / or, (iii) other sources of funding that are legal and not binding in accordance with laws and regulations. Strategic Logistics Reserve Agency itself offers investors to invest in the Strategic Logistics Reserve Agency program with profit sharing scheme. Cooperation with investors can be in the form of land participation in the program, or equity participation in Strategic Logistics Reserve Agency (Permadi, 2020).

## Post-Harvest Production, Processing, Warehousing, and Distribution

Post-harvest production, processing, warehousing, and distribution of harvested or production products are of course adjusted to the area of Post-harvest production, processing, warehousing, and distribution activity. The products of Post-harvest production, processing, warehousing, and distribution whose activities are more focused on the central, eastern and western parts of Indonesia; can adapt post-harvest activities to these areas. Regarding the distribution and warehousing of the Ministry of Defense through its subsidiary PT Pindad (PT Pindad International Logistic), it can contribute to aspects of logistics transportation (especially distribution by sea and land), to warehousing.

Apart from carrying out various post-harvest activities on its own, Strategic Logistics Reserve Agency can also collaborate with related parties. For example, in the four stages of logistics specifically for food prepared by Strategic Logistics Reserve Agency (maize, cassava, rice), Strategic Logistics Reserve Agencycooperate with Logistics Agency Public Company. In accordance with Article 6 of the Presidential Decree No. 48 of 2016

concerning the Assignment of Logistics Agency Public Company in the Framework of National Resilience, the task of Logistics Agency Public Company is to control the availability and distribution of food, which includes procurement, processing, alignment of stock between regions as needed, and distribution. In the context of the four tasks of Logistics Agency Public Company, Strategic Logistics Reserve Agency and Bulog can complement and strengthen each other, and at the same time avoid overlapping functions and activities between institutions managing national food security.

Likewise, Strategic Logistics Reserve Agency cooperate with the Food Security Agency of the Ministry of Agriculture. This collaboration has now been formed between the Ministry of Agriculture and the Ministry of Defense. This can be seen from the division of tasks in the food estate program, in which there has been a division of tasks regarding the location of arable land, as well as the type of food. The Ministry of Agriculture focuses on rice, while the Ministry of Defense focuses on corn and cassava.

#### **Security System**

The Strategic Logistics Reserve Agency security system can be both general and special. The security system in general is regulated and implemented in the national security system which has so far been generally accepted. The security system is specifically established by the Ministry of Defense and Strategic Logistics Reserve Agency, which is regulated and implemented according to the needs of each Strategic Logistics Reserve Agency working area. The working area of Strategic Logistics Reserve Agency in general is the territory of Indonesia, but specifically is the area in which there are areas for food planting, namely the Provinces of Central Kalimantan, East Kalimantan, Papua, Bangka Belitung, South Sumatra, Lampung, and other provinces which were determined later by a Ministerial Decree. Defense as Head of the Strategic Logistics Reserve Agency. So far, the implementation of policies regarding national food reserves has been running. Food reserves have begun to be implemented both in terms of the statutory basis, organizational structure, command, and bureaucracy, human resources.

#### Control

The Strategic Logistics Reserve Agency is an agency that ensures the availability of strategic logistics reserves for national defense. As an organization, the agency is under and responsible to the President as Supreme Commander. Strategic Logistics Reserve Agency is led by the Head of the agency who is held by the Minister of Defense, and the Deputy Head who is held by the Deputy Minister of Defense. Furthermore, members of the Strategic Logistics Reserve Agency consisting of 10 ministers, the TNI Commander, the Chief of Police, and the Governor / Regent; deputy; and professional staff.

Regarding land provision, the Ministry of Defense Land Team coordinates with the Ministry of Environment and Forestry (LHK), Ministry of Agrarian Affairs and Spatial Planning. The National Land Agency and the Regional Government to seek potential land that is compatible with the characteristics of The Strategic Logistics Reserve Agency's land, namely: (i) Forest land has never been forested belonging to the Ministry of Environment and Forestry; (ii) Local government rice fields / plantations that are not managed optimally.

#### Conclusion

Based on the findings of the researchers above, the role of the Ministry of Defense in preparing national food security can be discussed through 10 qualitative measurements as mentioned above.

1. Organizational roles through Strategic Logistics Reserve Agency and Agrinas. Organizationally, the Ministry of Defense together with the Ministry of Agriculture has gained trust and responsibility in preparing a food barn (food estate). Especially for the Ministry of Defense, a Strategic Logistics Reserve Agency has been formed. Judging from its place, the Strategic Logistics Reserve Agency is quite important. because he is directly responsible to the President of the Republic of Indonesia. Strategic Logistics Reserve Agency members

consisting of 10 ministers, TNI Commander, Chief of Police, and Governor / Regent, deputies, and professional staff. Internally, the Ministry of Defense has formed an implementing company for the implementation of food storage for the part that will be handled by the Ministry of Defense, namely PT Agro Industri Nasional (PT Agrinas). However, considering that Bulog has also been formed since 1967, and the Defense Agency (BKP) under the Ministry of Agriculture, the related institutions must further clarify their place, function and clear division of duties, there is no overlapping. In addition, between the agency and other related institutions, coordination and close cooperation are needed, so that the goal of preparing national food security can be achieved optimally and on time.

- 2. The role of providing land data. The role of the Ministry of Defense and Strategic Logistics Reserve Agency in providing land is very important. One of the factors that has become the superiority of the Indonesian nation is that the Indonesian state has a large area of land. Unfortunately, so far, many of these vast lands have been controlled by the private sector for commercial purposes, so the people at large have not felt the benefits directly. Partly there is a lot of land that has been controlled by the state, but some of it is unproductive, or is forest that is not forested. In this case, the role of the Ministry of Defense is quite large in converting the land for the sake of preparing a national food barn. The plan to manage 1 million hectares of land is already an achievement. Of course, along with the increasing population of Indonesia, a larger area of land is needed than the targeted 1 million hectares.
- 3. The role of coordination and cooperation with relevant ministries and local governments. So far the Ministry of Defense and Strategic Logistics Reserve Agency have made various collaborative efforts with related ministries and the local government. Coordination and cooperation between the Ministry of Defense and related agencies is very important because most of the land has been controlled by the relevant ministries and the local government. This cooperation is needed not only at the land preparation stage, but also for later stages. It is hoped that when the government changes, this pattern of cooperation must continue.
- 4. The role of providing workers. It is appropriate if the Ministry of Defense provides its own staff for land preparation, cultivation, production processes, as well as warehousing and distribution. This is because the Ministry of Defense c.q TNI has a good command structure, has adequate and well-organized trained and disciplined human resources. It should be remembered, the reason that caused the failure of the 1 million hectare Peatland Development project during the New Order era was due to the lack of human resources, who at that time relied more on farmers. Farmers, especially local farmers, will of course be involved, but at the next stage of implementation and remain under the coordination and control of the Ministry of Defense and TNI.
- 5. The role of providing technology (modern agricultural equipment). The Ministry of Defense and PT Pindad is believed to be able to provide most of the needs for modern agricultural equipment for large land mechanization. Tool products of the Ministry of Defense c.q PT Pindad are not only for the cultivation stage, but also for the food processing and warehousing process.
- 6. The role of cultivation. The Ministry of Defense and TNI, through the deployment of staff in a systematic, structured and scheduled way, and supported by modern agricultural equipment, it is hoped that the cultivation of cassava and maize can be carried out massively, so that it can meet the set targets. At this stage, some farmers can be involved so that later they can become pioneers for other farmers.

#### References

Gustavsson, J., Cederberg, C., Sonesson, R., Otterdijk, V., (2011). Global food losses and food waste, food and agriculture organization of United Nations (FAO).

Sastry, R.K., Rashmi, R.B., Rao, N.H. (2011). Nanotechnology for enhancing food security in India. Food Policy, 36. 391-400.

- Aliyu, A.A., Singhry, I.M., Adamu, H, & Abubakar, M.M. (2015). Ontology, Epistemology, and Axiology in Quantitative and Qualitative Research: Elucidation of the Research Philophical Misconception. Proceedings of The Academic Conference: Mediterranean Publications & Research International on New Direction and Uncommon, 2(1), 22nd December, 2015, University of Agric, Abekuta, Abekuta State, Nigeria.
- Basundoro, A.F., & Sulaeman, F.H. (2020). Meninjau Pengembangan Food Estate sebagai Strategi Ketahanan pada Era Pandemi Covid-19, 8(2), 28-42.
- Cooper, D.R., & Schindler, P.S. (2014). Business Research Methods. Twelfth edition. International edition. New York: McGraw Hill.
- Creswell, J.W.; & Creswell, J.D. (2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Fifth edition. Thosand Oaks: SAGE Publications, Inc.
- Davis, C.G., Thomas, C.Y., & Amponsah, W.A. (2016). Globalization and poverty: lessons from the theory and practice of food security. The Globalization process, and the poor. American Journal of Agricultural Economics, 83(3), 714-721.
- Dewi, R. (2016). Gainingrecognotion through participatory mapping? The role of adat land in the implementation of the Merauke integrated food and energy estate in Papua, Indonesia. ASEAS- Autrian Journal of South-East Asian Studies, 1(9), 87-105, https://doi.org/10.14764/10.ASEAS-2016, 1-6.
- Febrianty, H. (2016). Analisis Perkembangan Impor Beras Indoensia. Dapat diunduh pada https://media.neliti.com/media/publications/77866-ID-analisis-perkembangan-impor-beras-di-ind.pdf.
- Food and Agriculture Organization of the United Nations. (2019). 2019: The State of Food security and Nutrution in the World: Safeguarding Against Economic Slowdown and Downturns Rome
- Galtung, J. (1971). A structural theory of imperialism". Working paper pada International Peace Research Institute, University of Oslo, Oslo.
- Hsio, H.I., van der Vorst, J.G.A.J., & Omta, S.W.F. (2006). Logistics outsourcing in food supply chain networks: theory and practices. Paper presented at the 7th International Conference on Management in AgriFood Chains and Networks, Ede, The Netherlands, 31 May- 2 June, 1-16.
- Ho, R. (2018). Understanding Statistics for the Social Sciences with IBM SPSS (First edit). Taylor & Francis. http://www.taylorandfrancis.com
- Kamim, A.B., Altamaha, R. (2019). Modernisasi Tanpa Pembangunan dalam Proyek Food Esatate di Bulungan dan Merauke. Bhumi, Jurnal Agraria dan Pertanahan, 5(2), 163-179.
- Kurnia, A.W., Sundari, S., & Purwanto, D.A. (2020). Implementasi Kebijakan Cadangan Pangan Nasional dalam Kondisi Darurat di Badan Ketahanan Pangan Guna Mendukung Pertahanan Negara. Manajemen Pertahanan, 6(1), 73-99.
- Mathus, T.R. (2018). An Essay on the Principle of Population. The 1803 edition. Edited by Shannon C. Stimson with essay by Niall O'Flaherty, Deborah Valenze, E.A. Wrigley, Kenneth Binmore, dan Karen O' Brien. New Haven & London: Yale University Press
- Maxwell, S., & Slater, R. (2003). Food Policy Old and New. Development Policy Review, 21(5-6), 531-553. Miles, M., Huberman, A., & Saldana, J. (2014). Qualitative Data Analysis, A
- Methods Sourcebook, Edition 3. USA: Sage Publications.
- O'Keef, A.M., & Li, Q. (2020). Modernization vs Dependency Revisirted: Effect of Foreign Direct Investment on Food Security in Less Developed Countries. Working paper, Princeton University, Texas A & M University.
- Pieris, K.W.D. (2015). Ketahanan dan Krisis Pangan dalam Perspektif Malthus, Dependensi, dan Gender (Women in Development). Jurnal Hubungan Internasional, 8(1), 1-13.
- Putri, A. (2019). Pengagendaan isu Pangan Sebagai Isu Pangan pada Pemerintahan Susilo Bambang Yudhoyono (SBY): Studi pada Kebijakan Food Estate. Jurnal PIR, 4(1), 16-31.
- Rostin, Nusnta, A.W., Rafiy, M., Rumbia, W., Putera, A., Saranani, F. (2018). Analytic Hiearachy Process Method in Arranging Grand Design of Food Estate in the Development of Fishing Industry in Southeast Sulawesi. IOSR Journal of Economics and Finance, 9 (4), Jul-Aug, 69-74.
- \_\_\_\_\_, Mas'ud, A.W.N., Baheri, & Balaka. (2018). Model Identification of Regional Competition as A Location of Food Estate Development in Indonesia: case Study at Southeast Sulawersi. International Journal of Civil Engineering and Technology (IJCIET), 9(6), 1430-1436.
- Sakanko, M.A., & David, J. (2018). An Economics Validation of Malthusian Theory: Evisdence in Nigeria. Signifikan: Jurnal Ilmu Ekonomi, 7(1): 77-90.
- Samego, I. (2015). Kontekstualisasi 'Sishanneg'; Pwemberdayaan Wilayah Pertahanan dalam Perspektif Perubahan. Jurnal Pertahanan, 5(1). 1-13.
- Sekaran, U., & Bougie, R. (2016). Research Methods for Business: A Skill Building Approach. Seventh edition. West Sussex: John Wiley & Sons Ltd.

- Setyo, P., & Elly, J. (2018). Problems Analysis on Increasing Rice Production Through Food Estate Program in Bulungan Regency, North Kalimantan.IOP Conference Series: Earth and Environmental Science, 147: xxx, doi: 10.1088/1755-315/147/1/0123.
- Shankar, R., Gupta, R., Pathak, D.K. (2018). Modeling critical success factors of traceability for food logistics system. Transportation Research Part E. Transportation Research.
- Silubun, A.J., Putri, S.G.A.(2018). Analysis of the implementation impact of Merauke Integrated Food and Energy Estate (MIFEE). IOP Conferencer Series: Earth and Envitronmental Services, 235, 1-6. Doi:10.1088/175-1315/235/012086
- Tzu, S. (2016). The Art of War. New Delhi: Rupa Publications India Pvt.Ltd