



# Management of human resources in national defense depend on defense economics point of view

Ratih Rachma Kurnia<sup>1</sup>, Guntur Eko Saputro<sup>2</sup>, Sri Murtiana<sup>3</sup>

<sup>1,2,3</sup>Defense Management Faculty, Indonesia Defense University, Indonesia

## Article Info

### Article history:

Received: Mar 12, 2023

Revised: Apr 09, 2023

Accepted: Apr 25, 2023

### Keywords:

Defense Economic;  
Economic;  
Human Resources;  
Management Human  
Resources;  
National Defense.

## ABSTRACT

Indonesia is a country with abundant human resources but the number of military forces does not match with population and area. This paper aims to explain how the role of human resources as the main in the country's defense efforts to support the national economy because human resources (HR) is the most crucial resource and the element that determines the development of civilization, including the aspect of national defense. The method used is a descriptive qualitative method with a literature study research approach by collecting information from journals, books, and other media to obtain topic-related materials. The result of this writing is that it can be concluded that the competence of a systematic and professional state defense management and implementation system is necessary to face threats to state defense, it is necessary to develop the strength and capabilities of state defense including the development of human resources, natural resources, artificial resources, facilities and infrastructure, technology, and defense industry as well as a value system to improve capabilities defense of the country and support the national economy.

This is an open access article under the [CC BY-NC](https://creativecommons.org/licenses/by-nc/4.0/) license.



## Corresponding Author:

Ratih Rachma Kurnia,  
Defense Management Faculty,  
Indonesia Defense University,  
Jl. Salemba Raya No. 3, Jakarta Pusat, 10430, Indonesia  
Email: [ratihrachmakurnia@gmail.com](mailto:ratihrachmakurnia@gmail.com)

## 1. INTRODUCTION

Indonesia is the fourth most populous country in the world, meaning that Indonesia has large human resources (HR). The Directorate General of Population and Civil Registration of the Ministry of Home Affairs recorded that Indonesia's population in June 2022 reached 277.75 million people (DUKCAPIL, 2022). The existence of industrial revolution 4.0 encourages the government to immediately improve the quality of human resources that support the welfare of the community. Science and technology that continues to develop also provide new potential threats so that the development of defense systems is accompanied by the development of qualified human resources. In addition, climate change, extreme weather, and the impact of the global pandemic present challenges to the success of the organization (Nijssen & Paauwe, 2012) including the management of national resources in national defense efforts. The number of active Indonesian soldiers is estimated to reach 400 thousand personnel, military personnel reserves 400 thousand personnel, and paramilitaries as many as 280 thousand personnel in 2021, while Indonesia's population is 277.75 million people. This means that the number of human resources in the defense sector is 0.004% of the total population in Indonesia.

Indonesia's geographical condition as an archipelagic country with 80% of its sea area and 20% of its land area provides a potential threat, plus Indonesia's position lies in world trade traffic ([Annisa & Najicha, 2021](#)).

In the field of defense, the Indonesian National Army is the main component assisted by reserve components and supporting components in the implementation of national defense ([Roringkon et al., 2022](#)). In other words, the most influential element in defending the country is the quality, quantity, and mobility of human resources. Human resources specially trained in the field of defense must have good planning, organization, leadership, and control in national defense efforts so that they are effective and efficient. The number of the Indonesian National Army is relatively small compared to countries such as America and China. But military capability and strength are not only determined by quantity but also more on the expertise, training, and skills of personnel. The National Army in Indonesia is divided into 3 dimensions, namely land, sea, and air ([Savitri & Prabandari, 2020](#)) then the reserve components that are trained are the right strategy in the country's defense ([Indrawan & Efriza, 2018](#)), so it is necessary to have qualified human resource management so that the country's defense efforts are carried out optimally. The output results that will be obtained if human resources in the defense sector are managed properly will have a positive effect on optimizing the use of technology ([Awaludin, 2019](#)), international cooperation, and the implementation of national security and defense.

The development of the type and intensity of dynamic environmental change requires ingenious solutions to constantly adapt to threats and opportunities ([Weber & Tarba, 2014](#)). Adjustment to threats with policies in human resource management can be managed for the occurrence of these threats but is more effective if there is planning to prepare for a crisis ([Williams et al., 2017](#)). This study aims to examine the problem of the gap between the number of military forces and the population and area in Indonesia. In addition, the author also intends to explain how the role of human resources as the most influential national resource in national defense efforts. The author collects information from various sources such as books, journals, and other media. Human resource development is basically human development as a subject (human capital) and object (human resources) of national development. Value for workers in addition to referring to income also refers to non-monetary benefits such as use value, identity, and achievements obtained ([Meijerink & Bondarouk, 2018](#)). Human resources are the most important resources as the most determining element of civilizational development because they have the potential for empowerment with reason, feelings, abilities, skills, and knowledge that can develop sustainably. The ability of a country to build up its defensive forces should always be linked to the ability to convert national resources into effective instruments of armed forces ([Sebastian, 2015](#)). Thus, an understanding of human resource management in strategic agility is very important for the continuity of an organization here ([Ahammad et al., 2020](#)), especially discussing the country's defense efforts.

Management and rearrangement of organizational systems and strategies in accordance with changes in the strategic environment that occur responsively by collecting and utilizing information quickly so that it can be transformed into opportunities to improve performance due to competitive activities and relevant responses to the environment ([Liwång, 2022](#))([Shin et al., 2015](#))([Tallon & Pinsonneault, 2011](#)). Human resources are an essential aspect as planners, implementers, developers, and managers of other resources in the implementation of national defense efforts. The development of resilience and well-being of human resources is essential to prepare oneself in the face of threats that may arise ([Cooke et al., 2020](#)). Effective performance and compensation aligned with organizational strategies and objectives are important for managing risks related to managing human resources ([Becker & Smidt, 2016](#)). The government should adjust regulations on human resource management systems to inform about new human resource initiatives in government and military organizations ([Reiter-Palmon et al., 2006](#)). Researchers hope that this study can be a consideration for the country in deciding policies to be taken, especially in the management of human resources in the defense sector.

## 2. RESEARCH METHOD

Seeing the limitations of human resources in the field of defense faced by the geographical and vast conditions of Indonesia. So, the problem that the author takes in this paper is how the role of human resources as the main component in the country's defense efforts. Researchers take the title "Management Human Resources in National Defense Depend on Defense Economics Point of View" where in the country's defense efforts, human investment is needed so that the potential of human resources and other national resources can be optimally utilized for national defense efforts.

The method that the author used in this study is a descriptive method using a literature study approach. Literature review plays a role in forming a frame of mind in research both qualitative and quantitative types (Mertens & McLaughlin, 2004). Researchers use qualitative literature reviews through narrative reviews or systematic literature reviews (Suárez et al., 2017). The literature study carried out is the collection of data and related information about human resources in national defense. The collection of data that researchers carry out through several stages, namely the search for scientific references related to the topic of human resources in the defense of the country in the form of books and journals related to the topic taken. Furthermore, researchers grouped by year of publication of the collected scientific references. Finally, researchers compare data obtained from scientific references that have a relationship with human resources in national defense. The reference collection is carried out online through scientific journals using the keywords "defense economic", "economic", "human resources", "management human resources", and "national defense".

## 3. RESULTS AND DISCUSSIONS

### 3.1. Defense economics.

Defense economics is a branch of science that applies economics to a country's defense problems. Issues of the defense economy on a macro scale are the allocation of national resources, income, income distribution, expenditure, growth, and inflation associated with the country's defense sector. Defense economics is the widely accepted application of efficient ideas in the allocation of resources to national security (McGuire, 1995). The study of defense economics aims to implement a theory about the relationship of phenomena that occur in aspects of state defense that have a causal and functional relationship to the implementation of the state economy. The background of the study of defense economics is (1) defense of a highly capable and ideal state, (2) a defense budget that determines the defense posture of a country, (3) a military force aimed at maintaining the stability of the country, national security, and national interests, and (4) defense expenditures provided for strong military defense (Tippe, 2015).

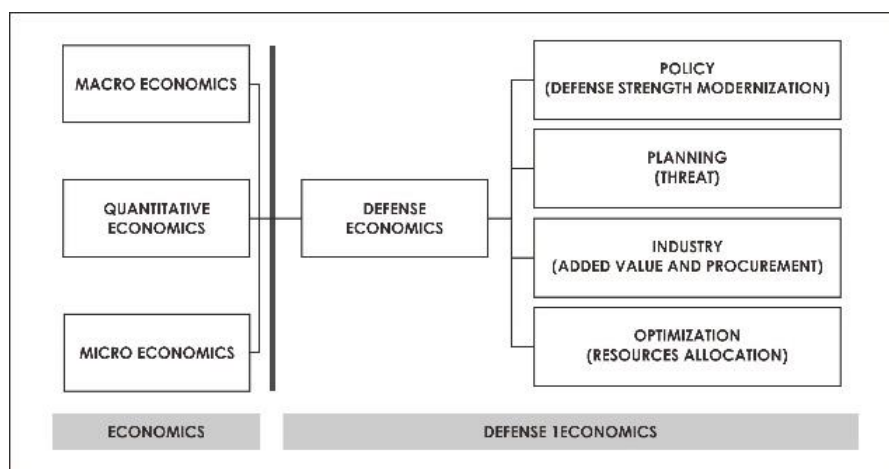


Figure 1. Scope of Defense Economics

Economics is crucial for understanding direct and future sources of conflict such as resource scarcity due to surging global demand (McGuire, 2007). Studies in defense economics are aimed at creating a

national economic strategy. Theory in defense economics is to study and understand the strategic environment for the country's defense needs and its sources of financing through macroeconomic implementation mechanisms. The defense economy applies economic principles and formulates strategies for solving them through various policies for the welfare of the people

### 3.2. Human resources in defense.

Indonesia's defense is structured in a universal defense system to achieve national goals. Universal defense is essentially a defense that involves all citizens according to their roles and functions. Defense and security organizations and entire communities face challenges related to how to manage current and future threats (Liwång, 2022). The involvement of every citizen is based on a love for his homeland that is oriented towards common ideals in realizing national interests (Pertahanan, 2015). Organizations can be referred to as sociotechnical systems where social and technical factors are interrelated with each other and affect their governance and operations (Ho & Gross, 2021). State defense is any effort to maintain the sovereignty of the state, the territorial integrity of the state, and the safety of the entire nation from threats and disturbances to the integrity of the nation and state. (Pertahanan, 2014). State defense is an effort to maintain state sovereignty, territorial integrity, and the safety of the entire nation from threats and disturbances to the integrity of the nation and state. The country's defense efforts are carried out to anticipate various forms of threats that may be faced. A country's defense capability requires a strategy to continue to increase the country's defense strength, one of which is by standardizing the main component, namely human resources to support the country's defense efforts.

The implementation of state defense rests on the strength, capability, and title of human resources, namely the Indonesian people, both military and non-military, supported by the main tools of weapons systems and reliable defense management. The integration of the three elements results in a high-deterrent state defense (Pertahanan, 2014). Resources are an important factor for good policy implementation, so adequate human resources are needed and increased capabilities are possessed by policy implementers. Human resources are very influential in the success of policy implementation. Because without reliable human resources, the implementation of policies will not run smoothly (Prakoso et al., 2019).

Human resources are the main factor that determines the development of national defense which has an active and dominant role as a planner, thinker, and driver so that national defense goals can be achieved. Human resource management focuses on a series of mutually influencing efforts to shape behavior and skills (Huo et al., 2015). Human resources have a position as inputs or capital needed in the national defense business where the output is services and efforts as a driver in supporting the implementation of the country's defense business. The implementation of state defense is any activity to carry out the country's defense policy (Pertahanan, 2014). The awareness of state defense has been written in the 1945 Constitution Article 27 paragraph (3) concerning the Rights and Obligations of Citizens in State Defense Efforts which states that "Every citizen has the right and obligation to participate in the defense of the state". In addition, Article 30 paragraph (1) of the 1945 Constitution on Defense and Security states that "Every citizen has the right and obligation to participate in the defense and security efforts of the state".

The number of Indonesian active soldiers is estimated to reach 400 thousand personnel, military personnel reserves of 400 thousand personnel, and paramilitaries as many as 280 thousand personnel in 2021, while the total population of Indonesia is 272.68 million people. This means that the amount of human resources in the defense sector is 0.004% of the total population in Indonesia. This condition shows that the amount of human resources in the country's defense is still not ideal in supporting the national defense. The purpose of state defense is to maintain and protect the state's territory, the territorial integrity of the Republic of Indonesia, and the safety of the entire nation from all forms of threats (Pertahanan, 2014). To achieve a change, organizations need human resources who have knowledge, skills, abilities, and behavioral trends because human resources will play a central role in improving organizational change (Alqudah et al., 2022). Planning, organizing,

coordinating, implementing, and supervising are needed when managing human resources in utilizing other resources. Thus, human resource management is needed in state defense efforts to improve technical, theoretical, conceptual, and moral capabilities as an effective and efficient improvement in the quality of human resources in the framework of efforts to implement national defense. The general policy of state defense is structured as a unified policy direction in its management and implementation including integration in military and nonmilitary defense. Military defense rests on the Indonesian National Army as the main component supported by reserve components and supporting components through prepared and organized mobilization to deal with military threats. Meanwhile, non-military defense is the role of ministries or agencies outside the field of defense in dealing with threats with ideological, political, economic, sociocultural, technological, and threats with general safety dimensions (Pertahanan, 2014).

As science and technology develop, threats to national defense change not only in the form of armed warfare but in other aspects such as economic strategy, cyber warfare, psychological warfare, and so on. To keep up with the development of world defense technology, various forms of cooperation are needed such as technology transfer, joint production, or development research which is also supported by domestic human resource capabilities. So quality human resources are indispensable for the mastery, implementation, and development in the defense industry including expertise, including expertise, competence, organization, and information intellectual property.

The competence of human resources needed in the field of national defense is not only expertise in mastering weapons, but includes excellence in the form of knowledge, skills, and attitudes related to influencing roles, responsibilities, and performance in positions that can be measured by acceptable standards, and improved through training and development efforts.

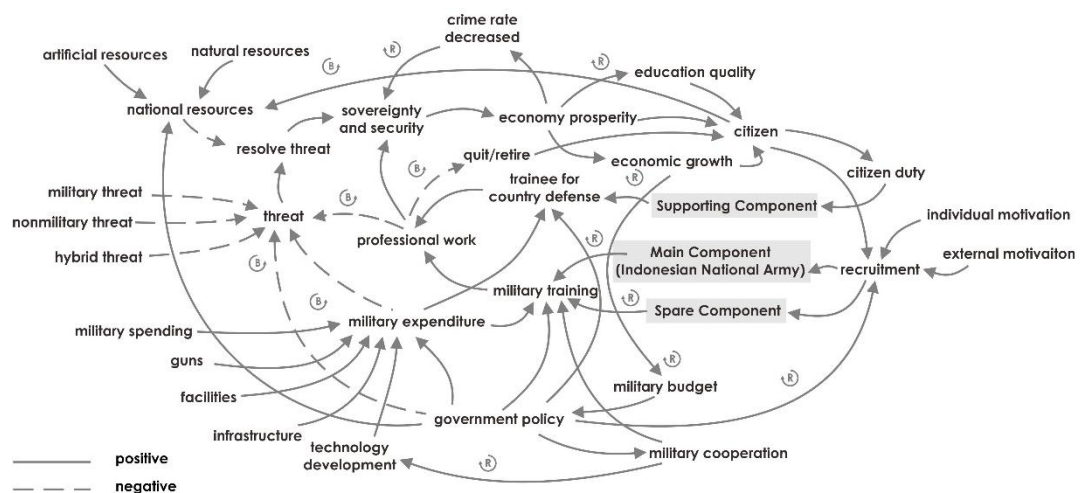


Figure 2. Systems Thinking of Human Resources in Defense

Human resources as the center of the nirmiliter defense force have indicators that can be measured by the attitude of love for the homeland, awareness of nation and state, based on Pancasila and the 1945 Constitution, willingness to sacrifice for the nation, and the initial ability to defend the state which includes psychic and physical abilities. The strategic objectives to be achieved and developed are to increase the productivity of inventions and to strengthen the transformation of a competitive and sustainable economy. As well as the increase in good governance in the context of bureaucratic reform. Keep in mind that building science and technology cannot be instantaneous. Requires a long process and the support of sufficient human and financial resources (Hidayat & Haetami, 2022). Who is part of himself has, so that he can carry out the appearance of certain cognitions, affections, and psychomotor behaviors (Sudarmanto, 2009). The competence of human resources needed in the field

of national defense is not only expertise in mastering weapons, but includes excellence in the form of knowledge, skills, and attitudes related to influencing roles, responsibilities, and performance in positions that can be measured by acceptable standards, and improved through training and development efforts.

### 3.2. Indonesian national army as the main component of national defense.

Indonesia is the country with the 4th largest population in the world after China, India, and America. This means that Indonesia has many human resources that can be empowered in various aspects of the life of the nation and state. The main component is the Indonesian National Army which is ready to be used to carry out defense tasks (Pertahanan, 2014). The Universal People's Security Defense System is a concept used by the Indonesian nation with the Indonesian National Army as its main component. The Indonesian National Army is an armed force that plays a role in carrying out its duties based on state policies and political decisions in the field of defense.

The Indonesian National Army is the main component of the country's defense system which has functioned as a deterrent against any form of military threat and armed threat from outside and within the country. In addition, the Indonesian National Army also serves as a recovery to the state security conditions that have been disrupted due to security chaos. The attitude of the Indonesian National Army related to professionalism can be stated as follows (Tippe, 2015):

- a. Professional soldiers in addition to being well educated and armed, also need to understand the norms with universal rules and take root to the people,
- b. The professionalism of the Indonesian National Army is not like that of overseas soldiers as mercenaries as in England whose work is only war,
- c. The so-called professional soldiers for the Indonesian National Army are soldiers who are tough, proficient, have reliable knowledge, or are experts in soldiering, life, and death for soldiering,
- d. Professional Indonesian National Army soldiers must love the state and nation above all else and be willing to sacrifice under any circumstances by putting the interests of the state above the interests of anyone else.

The main task of the Indonesian National Army is to uphold state sovereignty, maintain the territorial integrity of the Republic of Indonesia, and protect the entire nation and all Indonesian bloodshed from threats and disturbances to the integrity of the nation and state. Strategic environmental developments on a global, regional, and national scale are increasingly complex so various threats to national defense come from various aspects as well. A military threat is a threat using organized armed force that is considered to have the ability to endanger state sovereignty, the territorial integrity of the country, and the safety of the entire nation. These characteristics of military threats have implications for the need for defense force preparedness in both capacity as an antidote force and a counter-force for responsive needs (Pertahanan, 2014).

The tasks of the Indonesian National Army in strategic planning of national resource management for the benefit of national defense are (TNI, 2010):

- a. Providing capabilities through education and exercises in order to carry out the task of national defense.
- b. Integrating the multiplier force derived from the reserve component and the supporting component into the organization of the country's defense forces.
- c. Foster and maintain the capability of reserve components and supporting components in a multilevel and continuous manner to ensure preparedness.
- d. Use backup components and support components to deal with threats.

Although Indonesia is in a state of peace, it does not rule out the possibility of a military invasion as happened in the dispute between Russia and Ukraine. In this case, the Indonesian National Army is prepared to carry out conventional warfare and make every effort to empower all defense equipment owned both by land, sea, and air. The strength of the Indonesian National Army is directed to realize the development of strength in each dimension (land power, sea power, and air power). The land dimension embodies the totality of ground power built from the strength of the Army, strength

as an organizational unit, and strategic industry. The eye of the sea embodies the totality of sea power built from maritime power. The air dimension realizes the totality of air power with the development of military aviation fleets, civil aviation fleets, industrial, and aerospace services. The development according to the three dimensions can be grouped into three defense components, namely the main component, the reserve component, and the supporting component (Pertahanan, 2014).

Air, sea, and tank countermeasures are placed in the right place to protect strategic places such as military installations, national vital objects, hospitals, and others. In addition, several islands where the enemy is estimated to be coming are placed in Field Artillery and Air Defense Artillery weapons, especially air and sea attack deterrent missiles. Air Power The Air Force is prepared to destroy enemy aircraft, as well as the Navy carries out tasks according to its dimensions (Rusfiana, 2021).

### **3.3. Reserve component as national defense human resources.**

Reserve components are national resources that have been prepared to be deployed through mobilization to enlarge and strengthen the strengths and capabilities of key components. The number of Indonesian National Army as the main component, which is only 0.004% of the total population in Indonesia, is considered not comparable to the area and geographical location of the country. The need for human resources in the field of state defense is helped by the establishment of a reserve component. The reserve component consists of citizens, natural resources, artificial resources, and national facilities and infrastructure that are used and utilized in the country's defense efforts.

The reserve component is prepared not only to enlarge and strengthen the strength of the key component capabilities in the face of military threats but also to deal with hybrid threats. Thus, the reserve component is built according to its dimensions to improve the quality, use value, and usability for the benefit of the country's defense. Hybrid threats are threats that can be categorized as real and unreal threats such as terrorism, natural disasters, theft of natural resources, cyber, open conflict, conventional warfare, border violations, disease outbreaks, espionage, and narcotics. The backup component has two states, namely being in active service and not being in active service. In case of emergency or war, the reserve component is mobilized by the president under the command of the commander-in-chief of the Indonesian National Army with the approval of the DPR. Furthermore, demobilization was also instructed by the president gradually to restore the general functions and duties of government and the socioeconomic life of the people. By having a reserve component, the country can increase the quantity and quality of the country's defense forces. The organization of the reserve component is adapted to its nature as a component for strengthening and enlarging the main component. The arrangement and construction of reserve components are adjusted to the organization and guidance of the Army, Navy, and Air Force with their respective peculiarities.

### **3.4. Increasing the role of national defense human resources.**

The history of the struggle of the Indonesian nation in seizing and defending independence involves the role of all people and national resources. So the role of the people in the implementation of state defense was very meaningful until finally the Indonesian National Army was formed from the people's army. The Indonesian National Army faces various duties and responsibilities in upholding state sovereignty, maintaining the territorial integrity of the Republic of Indonesia based on Pancasila and the 1945 Constitution, and protecting the entire nation and all Indonesian bloodshed.

State defense is organized to prevent and address threats of both actual and potential nature. The threat is any business and activity both from within the country and abroad that is considered to endanger state sovereignty, territorial integrity, and national safety. Actual threats are real threats, in the form of armed separatists, terrorism, radical groups, communal conflicts, and theft of natural wealth such as illegal fishing, illegal logging, illegal mining, and natural disasters. Meanwhile, potential threats are the seeds of threats that can arise at any time such as border disputes, national disintegration, conflicts between groups, social unrest, efforts to replace Pancasila ideology, and so on (Pertahanan, 2014).

To anticipate all threats, it is necessary to make systematic efforts to strengthen Indonesia's defense, it is necessary to establish the military defense, especially the quality of human resources that

have superior competence, professionals supported by the main tools of modern weapons systems to achieve deterrence standards. In the field of non-military defense, human resources need to follow the development of science and technology about all aspects which are developed to achieve the standards of national defense in the multidimensional field

The state defense system is a universal defense system that involves all citizens, territories, and other national resources, and is prepared early by the government and organized in a total, integrated, directed, and continuous manner to uphold state sovereignty, territorial integrity, and the safety of the entire nation from all threats (Pertahanan, 2014).

A systematic and professional state defense management and administration system is necessary to deal with threats to national defense. Human resources in the field of defense need to be prepared to carry out tasks and responsibilities related to intellectual, physical, and emotional abilities needed in building strength in national defense efforts. In addition, human resources that are prepared to be the main component of national defense must have professionalism by not doing practical politics and not doing business but focusing on Peace Support Operations and Military Operation Besides War.

The country's defense resource management has aspects that include planning, organizing, using, supervising, and communicating that must be carried out professionally through careful calculations and supported by effective supervision and communication. The effectiveness of defense resource management is determined by organizations and leadership that are able to adapt and accommodate any changes and are supported by a professional attitude demonstrated by a high level of proficiency supported by a highly selective recruitment system and a dynamic work environment (Pertahanan, 2014).

Factors that influence the development of human resource competencies in defense include beliefs and values towards themselves and towards others, skills related to competence, experiences that have been carried out, individual personality traits, motivations given, individual intellectual abilities, and culture developed in an organizational environment. Social capabilities can be developed through education, health, disaster management, and compliance with the law as well as factors that contribute to the country's defense efforts including the role of mass media, communication systems, and optimized public information in supporting the implementation of social capabilities for the success of state defense efforts (Pertahanan, 2015).

The improvement of professionalism apart from being seen from the development of human resources is also realized through the construction of defense equipment. The availability of defense technology must be based on three strategic reasons, namely:

- a. The presence of threats,
- b. Expired, harmful, damaged, or modernized defense equipment programs, and
- c. On the basis of macro and sustainable plans, both in terms of funding and implementation of the project (Sebastian, 2015).

Increasing professionalism in reserve components and supporting components is realized through increasing competence supported by the realization of cutting-edge technology according to the profession aimed at the interests of national defense. Human resources as actors of science and technology as well as the defense industry are expected to be able to inventory all forms of threats, both military and non-military, so that an HR network can be formed that can be empowered for the benefit of national defense.

The implementation of state defense capability development is carried out in accordance with the state defense implementation policy and remains guided by the main provisions of state defense implementation. The development of the country's defense strength and capabilities includes the development of human resources, natural resources, artificial resources, facilities and infrastructure, technology, and defense industries as well as value systems to improve the country's defense capabilities (Pertahanan, 2014).

The strategy of building a key component force towards the ideal to anticipate threats has been implemented in the Minimum Essential Force (MEF) program. The direction of the MEF is not

only in arms races and as a force-building strategy to win total wars, but as a form of basic force that meets certain standards and has a deterrent effect. Posture building is carried out to realize the Indonesian National Army which is militarily and nonmilitary able to realize reliable state defense, able to support the World Maritime Axis policy, and able to maintain regional stability and peace and secure national interests from the evolution of potential and nature of threats and challenges both from within the country and from abroad. For this reason, it requires the support of professional, resilient and insightful human resources, supported by reliable, adequate and independent defense tools and infrastructure (Rifai, et. al, 2022).

Minimum Essential Force (MEF) is a national development mandate in the field of defense and security as an ideal posture for national defense which serves as a guide for the formulation of policies related to the development of the Indonesian National Army posture. The development of the Indonesian National Army posture should not adhere to the Minimal Essential Force (MEF) but the human resources formed must be strong, reliable, and modern given the increasingly high level of threat. Things that need to be prioritized in the realization of HR empowerment beyond the Minimum Essential Force (MEF) are (Putro, 2022):

- a. The research and development program of the Ministry of Defense related to defense equipment.
- b. Development of technology and defense industry/domestic industrial defense equipment products,
- c. Selective synergy of three pillars of science and technology actors, namely universities, research institutions, as well as development, industry, and human resources as users,
- d. Research and development cooperation in the field of science and technology and the domestic and foreign defense industry.

In an effort to increase the role of human resources in defense wars, synergy is needed in the spatial arrangement of defense areas, management of national resources, and empowerment of defense areas. Coordination and synchronization of development by stakeholders in development throughout the region should pay attention to aspects of national welfare and defense. Defense offices placed in each region are expected to be a bridge to realize regional spatial planning, national resource empowerment, and regional empowerment not only to support community welfare but also as a support for national defense efforts.

#### 4. CONCLUSION

The history of the struggle of the Indonesian nation in winning and maintaining independence involves the role of all people and national resources. The Universal People's Security Defense System is a concept used by the Indonesian nation with the Indonesian National Army as its main component. A country's defense capability requires a strategy to continue to increase the country's defense strength, one of which is by standardizing the main component, namely human resources to support the country's defense efforts. Human resources have a position as inputs or capital needed in national defense efforts where the output is services and efforts as a driving force in supporting the implementation of national defense efforts. The development of the strategic environment on a global, regional, and national scale is increasingly complex so various threats to national defense come from various aspects as well. The competence of human resources needed in the field of national defense is not only expertise in mastering weapons, but includes excellence in the form of knowledge, skills, and attitudes related to influencing roles, responsibilities, and performance in positions that can be measured by acceptable standards, and improved through training and development efforts. A systematic and professional system of managing and administering state defense is necessary to deal with threats to national defense. Human resources prepared to become the main component of national defense must have professionalism by not doing practical politics and not doing business but focusing on the operation. Human resources are a very important aspect in the implementation of state defense to be able to act as planners, implementers, developers, and managers of other national resources as well as fellow human resources. Therefore, it is necessary to carry out intense training and

guidance on human resources in various aspects of the military and non-military in the national defense effort. In order for the research carried out in the future to be more focused and not too widespread than the limitations to be conveyed, the researcher limits the scope of research to the continuation of this research, namely systems thinking and system dynamics from human resources in the field of defense. Increasing professionalism in addition to human resource development is also realized through the development of defense equipment. Meanwhile, increasing professionalism in reserve components and supporting components is realized through increasing competence supported by the realization of cutting-edge technology according to the profession aimed at national defense. In addition, in an effort to increase the role of human resources in the defense sector, synergy is needed in the spatial arrangement of defense areas, management of national resources, and empowerment of defense areas. Human resources are a very important aspect in the implementation of national defense to be able to act as planners, implementers, developers, and managers of other national resources and fellow human resources. It is necessary to conduct intense training and coaching on human resources in various military and non-military aspects of national defense efforts. In order for future research to be more focused and not too broad than the limits to be conveyed, the researcher limits the scope of research to efforts to increase the role of human resources in Indonesia's national defense efforts.

#### ACKNOWLEDGEMENTS

Thank you to all parties who helped complete this study and thank you to IJOSEA for the cooperation so that my article can be published.

#### REFERENCES

- Ahammad, M. F., Glaister, K. W., & Gomes, E. (2020). Strategic agility and human resource management. *Human Resource Management Review*, 30(1), 100700.
- Alqudah, I. H. A., Carballo-Penela, A., & Ruzo-Sanmartín, E. (2022). High-performance human resource management practices and readiness for change: An integrative model including affective commitment, employees' performance, and the moderating role of hierarchy culture. *European Research on Management and Business Economics*, 28(1), 100177.
- Annisa, H., & Najicha, F. U. (2021). Konsekuensi Geopolitik Atas Perdagangan Internasional Indonesia. *Jurnal Global Citizen: Jurnal Ilmiah Kajian Pendidikan Kewarganegaraan*, 10(2), 8–14.
- Awaludin, L. (2019). Strategi penguatan kompetensi SDM Teknologi Informasi&Komunikasi (TIK) dalam mengoptimalkan penerapan Sistem Pemerintahan Berbasis Elektronik (SPBE). *Paradigma POLISTAAT: Jurnal Ilmu Sosial Dan Ilmu Politik*, 2(2), 118–134.
- Becker, K., & Smidt, M. (2016). A risk perspective on human resource management: A review and directions for future research. *Human Resource Management Review*, 26(2), 149–165.
- Cooke, F. L., Schuler, R., & Varma, A. (2020). Human resource management research and practice in Asia: Past, present and future. *Human Resource Management Review*, 30(4), 100778.
- DUKCAPIL. (2022). *Data Kependudukan*. KEMENDAGRI. <https://dukcapil.kemendagri.go.id/page/read/7/data-kependudukan>
- Hidayat, M., & Haetami, H. (2022). Riset Dan Pengembangan Dan Revolusi Industri 4.0 Dalam Membangun Ekonomi Pertahanan. *Ekonomi Pertahanan*, 8(1), 14–22.
- Ho, S. M., & Gross, M. (2021). Consciousness of cyber defense: A collective activity system for developing organizational cyber awareness. *Computers & Security*, 108(September), 102357. <https://doi.org/https://doi.org/10.1016/j.cose.2021.102357>
- Huo, B., Han, Z., Chen, H., & Zhao, X. (2015). The effect of high-involvement human resource management practices on supply chain integration. *International Journal of Physical Distribution & Logistics Management*, 45(8), 716–746. <https://doi.org/https://doi.org/10.1108/IJPDLM-05-2014-0112>
- Indrawan, R. M. J., & Efriza, E. (2018). Membangun Komponen Cadangan berbasis Kemampuan Bela Negara sebagai Kekuatan Pertahanan Indonesia Menghadapi Ancaman Nir-Militer. *Jurnal Pertahanan & Bela Negara*, 8(2), 21–40. <https://doi.org/http://dx.doi.org/10.33172/jpbh.v8i2.395>
- Liwāng, H. (2022). Defense development: The role of co-creation in filling the gap between policy-makers and technology development. *Technology in Society*, 68(February), 101913. <https://doi.org/https://doi.org/10.1016/j.techsoc.2022.101913>
- McGuire, M. C. (1995). Defense economics and international security. *Handbook of Defense Economics*, 1(April),

- 13-43. [https://doi.org/https://doi.org/10.1016/S1574-0013\(05\)80004-3](https://doi.org/https://doi.org/10.1016/S1574-0013(05)80004-3)
- McGuire, M. C. (2007). Economics of defense in a globalized world. In *Handbook of defense economics* (21st ed., Vol. 2, Issue March, pp. 623-648). Elsevier. [https://doi.org/https://doi.org/10.1016/S1574-0013\(06\)02021-7](https://doi.org/https://doi.org/10.1016/S1574-0013(06)02021-7)
- Meijerink, J., & Bondarouk, T. (2018). Uncovering configurations of HRM service provider intellectual capital and worker human capital for creating high HRM service value using fsQCA. *Journal of Business Research*, 82(January), 31-45. <https://doi.org/https://doi.org/10.1016/j.jbusres.2017.08.028>
- Mertens, D. M., & McLaughlin, J. A. (2004). *Research and evaluation methods in special education* (J. Y. Ysseldyke (ed.)). Corwin Press.
- Nijssen, M., & Paauwe, J. (2012). HRM in turbulent times: how to achieve organizational agility? *The International Journal of Human Resource Management*, 23(16), 3315-3335. <https://doi.org/https://doi.org/10.1080/09585192.2012.689160>
- Pertahanan, K. (2014). Doktrin pertahanan negara. In *Jakarta: Kementerian Pertahanan*.
- Pertahanan, K. (2015). Buku putih pertahanan Indonesia. In *Jakarta: Kementerian Pertahanan Republik Indonesia*.
- Prakoso, L. Y., Suhirwan, Toruan, G. T. L., Sianturi, D., & Damayanti, R. (2019). Defence State Model for Facing Threats of Radicalism and Terrorism in Indonesian Higher Education. *Proceedings 3rd Indonesia International Defense Science Seminar Jakarta, 8-9 July, 2019At: Jakarta, Volume: 1, July*, 107-118.
- Putro, D. A. (2022). Peran Sumber Daya Manusia dalam Industri Pertahanan Nasional Guna Keamanan Negara. *Publik: Jurnal Manajemen Sumber Daya Manusia, Administrasi Dan Pelayanan Publik*, 9(2), 345-355. <https://doi.org/https://doi.org/10.37606/publik.v9i2.322>
- Reiter-Palmon, R., Mumford, M. D., & Campion, M. A. (2006). Introduction to the Special Issue: What We Can Learn from Large Scale Human Resources Initiatives in the Federal Government and Department of Defense. *Human Resource Management Review*, 16(3), 281-283. <https://digitalcommons.unomaha.edu/cgi/viewcontent.cgi?article=1028&context=psychfacpub>
- Roringkon, D. L., Sarjito, A., & Saragih, H. J. R. (2022). Kesiapan Kapasitas Pengelolaan Komponen Cadangan Matra Darat Guna Memperkuat Komponen Utama TNI. *Manajemen Pertahanan: Jurnal Pemikiran Dan Penelitian Manajemen Pertahanan*, 8(1), 85-104. <https://jurnalprodi.idu.ac.id/index.php/MP/article/view/1126/945>
- Rusfiana, Y. (2021). Aktualisasi Sistem Pertahanan Rakyat Semesta (Sishanta) dan Dinamika Potensi Ancaman. *Jurnal Moderat*, 7(3), 483-492.
- Savitri, R. N. R., & Prabandari, A. P. (2020). TNI Angkatan Udara dan Keamanan Wilayah Udara Indonesia. *Jurnal Pembangunan Hukum Indonesia*, 2(2), 236-245. <https://doi.org/https://doi.org/10.14710/jjphi.v2i2.236-245>
- Sebastian, E. (2015). Peningkatan peranan SDM pertahanan nasional guna menghadapi perang generasi keempat. *Jurnal Pertahanan & Bela Negara*, 5(1), 109-128. <https://doi.org/http://dx.doi.org/10.33172/jpbh.v5i1.351>
- Shin, H., Lee, J.-N., Kim, D., & Rhim, H. (2015). Strategic agility of Korean small and medium enterprises and its influence on operational and firm performance. *International Journal of Production Economics*, 168(October), 181-196. <https://doi.org/https://doi.org/10.1016/j.ijpe.2015.06.015>
- Suárez, E., Calvo-Mora, A., Roldán, J. L., & Periañez-Cristóbal, R. (2017). Quantitative research on the EFQM excellence model: A systematic literature review (1991-2015). *European Research on Management and Business Economics*, 23(3), 147-156. <https://doi.org/https://doi.org/10.1016/j.iedeen.2017.05.002>
- Sudarmanto, K. (2009). Pengembangan Kompetensi SDM. In *Yogyakarta: Pustaka Pelajar* (1st ed.). Pustaka Pelajar.
- Tallon, P. P., & Pinsonneault, A. (2011). Competing perspectives on the link between strategic information technology alignment and organizational agility: insights from a mediation model. *MIS Quarterly*, 35(2), 463-486. <https://doi.org/https://doi.org/10.2307/23044052>
- Tippe, S. (2015). Ilmu pertahanan: sejarah, konsep, teori dan implementasi. In *Jakarta: Salemba Humanika*. Salemba Humanika.
- TNI, M. K. M. J. (2010). Kajian tentang peran kodam dalam menyiapkan komponen cadangan guna mendukung sistem pertahanan semesta. In *Komandan Seskoad* (2nd ed., pp. 1-65). Seskoad TNI. [https://seskoad.mil.id/admin/file/kajian/21\\_Kajian\\_Komcad.pdf](https://seskoad.mil.id/admin/file/kajian/21_Kajian_Komcad.pdf)
- Weber, Y., & Tarba, S. Y. (2014). Strategic agility: A state of the art introduction to the special section on strategic agility. *California Management Review*, 56(3), 5-12. <https://doi.org/https://doi.org/10.1525/cmr.2014.56.3.5>
- Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management Annals*, 11(2), 733-769. <https://doi.org/https://doi.org/10.5465/annals.2015.0134>