



UDC 338

MODEL OF NATIONAL RESOURCE MANAGEMENT IN THE OUTER ISLANDS FOR NATIONAL DEFENSE: A CASE STUDY OF MIANGAS ISLAND

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ABSTRACT

Miangas Island is the outer island in North Sulawesi, bordering the Philippines. The history of the name Miangas comes from the word "to weep", which can be traced back to the attack by pirates from Sulu that took place on this island. Therefore, weeping has always colored the lives of the natives at that time. Moreover, it is still susceptible to infiltration today. Apart from this, the geographical location is quite far from the district capital and the weather influences the scarcity of basic goods. Efforts have been made to develop infrastructure, but infrastructure development is not in balance with human resources and infrastructure, resulting in an inefficient process. This condition has an impact on the high level of dependence on the Philippines, for example in the areas of education, health and the economy. So if this is allowed to continue, the distrust of the people of Miangas towards the government may grow. Moreover, cases of Sipadan Ligitan may be repeated. Therefore, the national resources in Miangas Island must be properly managed so that they can improve the welfare of the community. It can also be used for national defense to maintain the integrity of the Unitary State of the Republic of Indonesia. This research aims to find a model for the management of resources on the outer islands that is limited to human resources, natural resources and artificial resources. The research method used is a qualitative method with a case study, observation and literature approach. The research results show the latest model for the management of resources on the outer islands, namely universal regional resilience. Therefore, regulations are needed to help synchronize the management of defense and development areas to create space, tools and tough combat conditions.

KEY WORDS

National resources, management, outer islands, national defense.

Global problems are still characterized by struggles over resources and living space, such as the conflict in Ukraine. On the other hand, there are also conflicts in the South China Sea region that can be traced back to the struggle for resources. Apart from this, overlapping territorial claims have the potential to cause conflict in the region. As an island state, Indonesia has maritime territories bordering 10 countries. On the basis of Presidential Decree No. 6 of 2017 on the designation of small outermost islands, the maritime border area comprises 111 small outer islands spread over 22 provinces. However, the social situation of the people on the small outermost islands is still associated with various obstacles and challenges, such as on the island of Miangas. The island of Miangas is currently quite dependent on the Philippines in the areas of education, health and the economy. If the resources of the outer islands are not properly managed immediately for the benefit of the local population, this will undermine confidence in the government and state sovereignty. The release of the island could have an impact on the loss of rich marine resources and the basis for surveying Indonesian territorial waters (UNCLOS, 1992). Efforts to conserve marine resources will boost the regional economy and national income and promote the social well-being of surrounding communities in support of the government. This is the result of a study by Hanani et al. (2008). One of the government programs is to improve the regional economy to increase national resilience by optimizing potential local resources in each region, improving the quality of human resources by improving education levels and skills, and providing supporting facilities and infrastructure. Law No. 27 of 2007 on the Management of Coastal Areas and Small Islands states that the management of coastal



areas and small islands is carried out in a sustainable manner to improve community welfare and maintain the integrity of the Unitary State of the Republic of Indonesia by integrating intergovernmental and cross-sectoral activities. Puspitawati (2015) explains that the basic norm of archipelagic state principles is to restore the function of the sea in Indonesia to equally unite the nation for optimal utilization of marine resources for the common good. So there are 2 interests, namely the government's interest in improving the welfare of society and the military's interest in preserving the integrity of the country, which must cooperate in the management of resources. Currently, there is still a gap in relations between the military and civilians in Indonesia. This is because there is no regulatory policy that specifically governs the operational level in each territorial dimension, which is the core of an island nation characterized by the unity of territorial land, water and air space, including the natural wealth contained therein (Aditya & Al-Fatih, 2017). This research aims to identify the factors underlying the need to manage national resources in the outermost islands for defense purposes and how these can be implemented through a case study in Miangas Island.

METHODS OF RESEARCH

The research was carried out on the island of Miangas. The key respondents were the Forkopimcam, the community, students and BCA Philippines employees. The research method used qualitative methods with a case study approach, observation and literature review, and analysis of the management of the national resources of Miangas Island for national defense. The data analysis technique used was Miles and Huberman's data analysis model (Husaini & Purnomo, 2008) with the phases of data reduction, data presentation and drawing conclusions or verification. The SWOT analysis technique (Simbolon, 1999) was used to structure problems, in particular by analyzing environmental strategies. To measure the analysis of the processed data, the Venn diagram method (John Venn, 1880) is used, in which discrete objects and the relationships between the objects are represented by graphical diagrams to show the relationship between the members of a group.

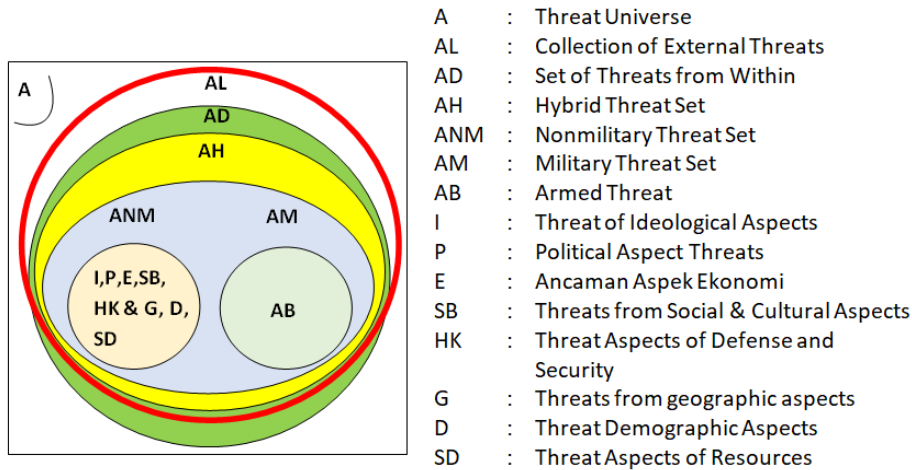
RESULTS AND DISCUSSION

In the history of the struggle of the Indonesian people, independence was not a gift, but a long struggle involving the entire Indonesian people. The struggle was waged against Dutch military aggression in order to maintain Indonesian independence. Based on the historical experience of universal popular resistance, the universal defense and security system was born as Indonesia's national defense and security strategy, which is still enshrined in the 1945 Constitution. The national security and defense system is universal in nature. It encompasses all national resources prepared by the government at an early stage and deployed in a comprehensive, integrated, targeted and sustainable manner to safeguard state sovereignty, territorial integrity and the security of the entire nation from all forms of threats. In terms of national security, threats are categorised into military and non-military threats that encompass all aspects of Asta Gatra life (Wan Usman, 2003). According to Purnomo (2019), threats are all actual (real) and potential (not yet real) activities both inside and outside the country that are considered to endanger the territory of the Unitary State of the Republic of Indonesia and the security of the nation, or any efforts that stand in the way of or hinder national interests. The struggle for resources and living space is still an issue that leads to conflict on a global and national level. Therefore, the management of national resources in the outermost islands, which are of strategic importance for state sovereignty, is very important so that they can become a supporting force for state defense to counter threats.

If you simplify and apply the Venn diagrams on the universe of threats, then logical operations show that AH (hybrid threats), which are a combination of AM (military threats) and ANM (non-military threats), are part of AD (threats that come from within) and AL (threats that come from without). AD (threats originating from within) overlaps with AL (threats originating from abroad) and is a subset of A (universal threats), so AH (hybrid



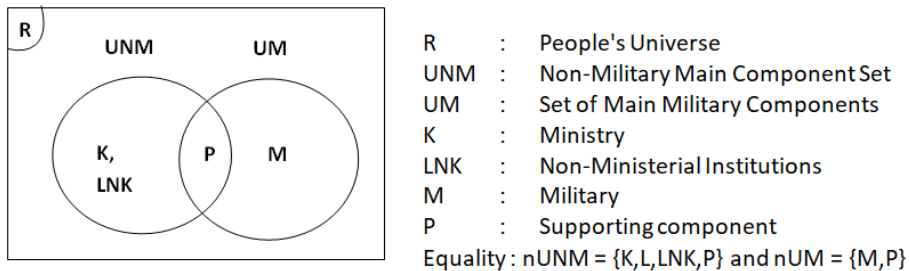
threats) is a new entity created by combining AM (military threats) and ANM (non-military threats), as Aris Sarjito (2022) states. ANM (non-military threat) and AM (military threat) are mutually exclusive, as ANM (non-military threat) is not associated with AM (military threat). In a broader sense, the three groups of threats AH, AM, ANM, originating from inside and outside the country, are located in A (universe of threats), from which other threats may emerge in the future, whose nature and characteristics are newer, as each epoch has its own type of war - the conditions that limit them, and their own prejudices (Clausewitz, 1873). Thus, to counter possible threats, early management of national resources is needed, which can be used as a supporting component to counter non-military or military threats or other threats within the framework of independent regional resilience on each of Indonesia's outermost islands.



Equality: $n_{ANM} = \{I, P, E, SB, HK, G, D, SD\}$ and $n_{AM} = \{AB\}$

By performing set operations on ANM and AM, we obtain:

- i. $(AH \cap AD) \subset AL - A^c$
- ii. $AH \cup AD \cup AL \subset A$
- iii. $AH = ANM \cup AM$
- iv. $ANM \cap AM = \emptyset$ karena $ANM \cap AM = \emptyset$



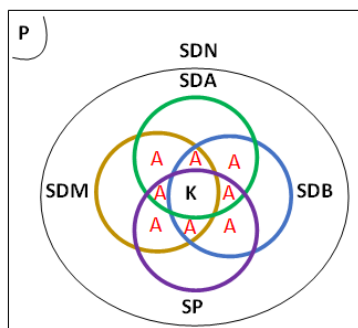
By performing set operations on UNM and UM, we obtain:

- i. $UNM \cap UM = P$
- ii. $UNM \cup UM = \{K, LNK, P, M\}$
- iii. $\{K, LNK, P, M\} \in R$

The logic of the Venn diagram above describes that UNM (main non-military component) consists of K (ministry), LNK (non-ministerial institution) and P (supporting component), while UM (main military component) consists of M (military) and P (supporting component). P (supporting component), which is an intersection of UNM (non-military major component) and UM (military major component), can be utilized and used to increase the capabilities of K (ministries), LNK (non-ministerial institutions) and M (military). Under real conditions, all components $\{K, LNK, P, M\}$ will be stronger if they form a unit with the universe R (the people). The alignment of the components $\{K, LNK, P$ and $M\}$ shows that it is important that P (supporting components) is built in accordance with the schedule of the



development program of the main As for national defense, this is in accordance with Law No. 23 of the Republic of Indonesia of 2019 on the Management of National Resources for National Defense, which transforms national resources into national defense forces that are operational for the purposes of national defense. The supporting components consist of citizens, natural resources, man-made resources, and national facilities and infrastructures.



- P : Universe of Supporting Components
- SDN : National Resources Association
- SDM : Human Resources Association
- SDB : Set of Artificial Resources
- SP : Collection of Facilities and Infrastructure
- K : Strength
- A : Threat
- Equality: $n_{SDN} = SDA, SDM, SDB, SP$

By carrying out set operations on SDM, SDA, SDB and SP then:

- i. $SDM \cap SDA \cap SDB \cap SP = K$
- ii. $(SDM \cup SDA \cup SDB) - SP = A$
- iii. $(SDM \cup SDA \cup SP) - SDB = A$
- iv. $(SDM \cup SP \cup SDB) - SDA = A$
- v. $(SP \cup SDA \cup SDB) - SDM = A$
- vi. $SDM, SDA, SDB, SP \in K$

The result of the operation of the universal Venn diagram of the supporting components representing the intersection of HR (human resources), SDA (natural resources), SDB (man-made resources) and SP (facilities and infrastructure) is K (strength). The combination of 4 sets (HR, SDA, SDB, SP), when one of the SDN sets (national resources) is reduced, results in a threat corresponding to the characteristics of the subtracted set. Thus, NSDA, nSDM, nSDB and nSP have conditions that are interrelated and mutually supportive. When managed with synergistic and sustainable regional spatial management and regional defense planning, they become a universal strength of supporting components in countering non-military threats. Since the government successful strategy against a threat depends on the government and military's ability to manage national resources, this is achieved no less than 85% of the time (Chris Mason, 2021).

Law No. 23 of the Republic of Indonesia of 2019 on the Management of National Resources for National Defense defines national resources as human resources, natural resources and man-made resources, as well as national facilities and infrastructure.

Werther (1996) explains that human resources are "employees who are willing, able and attentive to achieve the goals of the organization". It has been stated that the main dimension of human resources is their contribution to the organization, while the main dimension of people is the treatment of their contribution to determine the quality and ability of their lives. According to Nadler (1969), personnel development involves a person who generally needs to improve their skills through learning experiences in order to change their performance for the better. From the results of the data reduction using Miles and Huberman's data analysis model, two main issues related to human resources in Miangas Island emerged, namely the community's ability to utilise the fishing potential, which is still low, and the decreasing tolerance among communities. The results of the calculations using the SWOT approach yielded the internal IFE factors and the external EFE factors with SO values of 3.7, ST of 2.35, WT of 1.45, WO of 2.8.

The strategy with the highest value is SO in quadrant I coordinates (0.9 : 1.34). This shows a very effective situation for improving individual performance, which can be slowly, comprehensively and continuously transformed into a hard fighting tool (Habracken, 1976) for defense. The use of aggressive or growth-oriented strategies can be done by improving community education services and fisheries training, as well as improving public health services through synergy between related institutions and ministries.



Table 1 – SWOT Matrix Human Resources Analysis Diagram

No	Internal	Score	External	Score
1	Strength	1,7	Opportunity	2,0
2	Weakness	-0,8	Threat	-0,65
Deviation		0,9		1,34

Source: Processed by the authors, 2023.

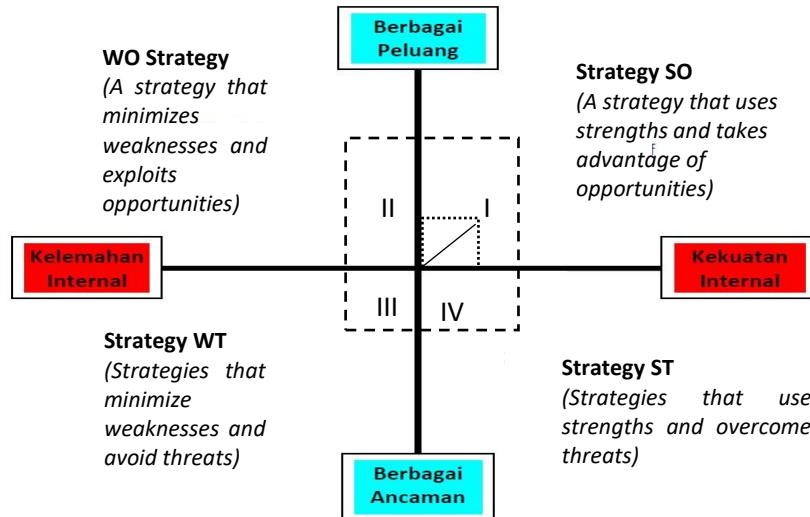


Figure 1 – Human resources analysis diagram (Source: Processed by the authors, 2023)

Table 2 – SWOT matrix diagram for the analysis of natural resources

No	Internal	Score	External	Score
1	Strength	1,6	Opportunity	1,85
2	Weakness	-0,85	Threat	-0,95
Deviation		0,75		0,7

Source: Processed by the authors, 2023.

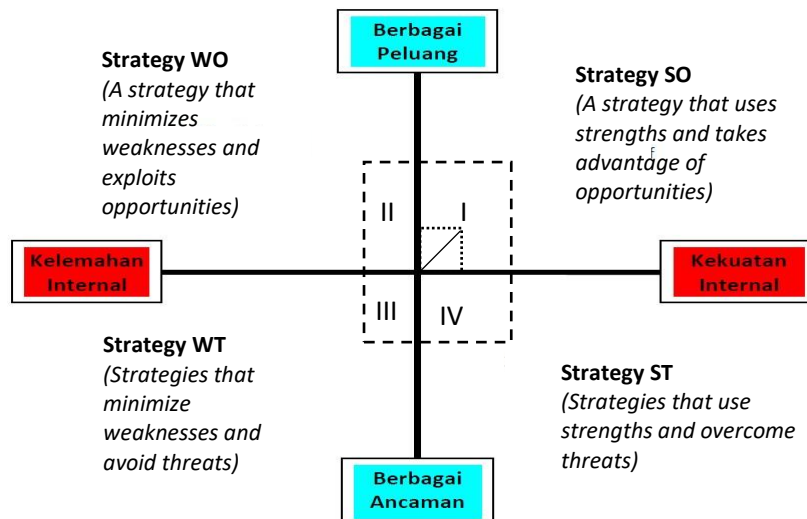


Figure 2 – Natural Resources Analysis Diagram (Source: Processed by the authors, 2023)

According to Abdullah (2007), natural resources are all wealth in the form of inanimate and living objects that exist on earth and can be used to satisfy human needs. Therefore, it is necessary to manage the natural resources on the island of Miangas so that they can be transformed into a strong fighting space to counter non-military and military threats. Due to the major problems in Miangas Island, it has the potential to become a place for terrorist activities and illegal activities. Moreover, fishing productivity is still low. Through data



reduction and SWOT analysis, the results of the internal factors of IFE and the external factors of EFE were obtained with SO values of 3.45, ST of 2.55, WT of 1.75 and WO of 2.85. The strategy with the highest value is SO in quadrant I coordinates (0.75 : 0.7), so it represents a very favorable situation for increasing productivity to meet the sustainable needs of the community. It can be transformed into a powerful spatial tool as a supporting component to counter threats from the strategy aggressive or growth-oriented by providing fishermen with boats to catch fish up to the Indonesian Exclusive economic zone, building fish management facilities and providing marketing support, and accompanying fishermen who catch fish up to the Indonesian Exclusive economic zone.

According to Kartasasmita (1997), artificial resources are the result of the utilization of natural resources by existing human resources. The presence of artificial resources in the form of infrastructure in various areas will greatly enhance the development of a region. Artificial resources are the result of artificial development of biological or non-biological natural resources that is carried out to harness resources that are not yet usable and also to increase the quality, quantity and/or carrying capacity of these resources. Artificial resources can also be referred to as facilities and infrastructure, i.e. anything that acts as a supporting component for the development process. At present, much of the infrastructure in Miangas Island, though built, is still unable to meet health, education and employment needs, and there is a shortage of basic necessities, making dependence on neighboring countries quite high. The data analysis using the SWOT method produced the following results: IFE internal factors and EFE external factors with SO values of 2.7, ST of 1.8, WT of 2.1, WO of 2.9. The strategy that has the highest value is WO in quadrant II, namely coordinates (-0.2 : 0.8), so it shows a situation that can increase the carrying capacity of artificial resources in the development process to fulfill the welfare of the community and as a tough battle condition for defense with the strategy to reverse, namely the amendment of strategic matters through the reconstruction of laws on fisheries and border crossing agreements related to restrictions on fishing areas for local fishermen and maritime trade with the Philippines and the reconstruction of border development administration to improve the function of airports, ports, health facilities, education and markets, by creating regulations to synchronize regional governance with regional defense governance.

Table 3 – SWOT Matrix Artificial Resources Analysis Diagram

No	Internal	Score	External	Score
1	Strength	1,1	Opportunity	1,6
2	Weakness	-1,3	Threat	-0,8
	Deviation	-0,2		0,8

Source: Processed by the authors, 2023.

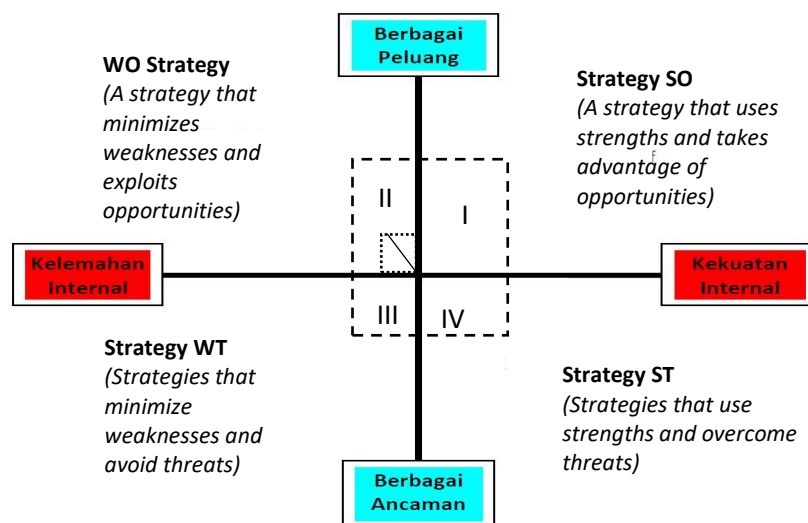
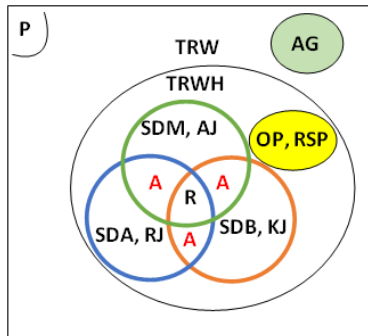


Figure 6 – Artificial Resources Analysis Diagram (Source: Processed by the authors, 2023)



Based on the results of the above analysis of the case study on national resource management in Miangas Island, it is necessary to compare and classify data sets through operations with Venn diagrams.

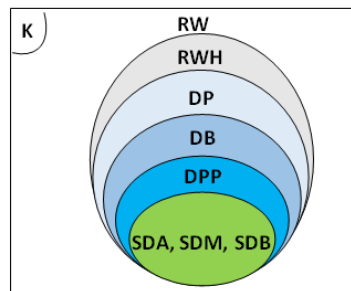
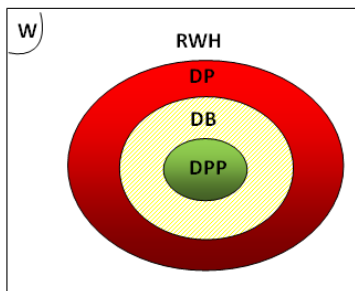


- P : Development Universe
- TRW : Regional Spatial Planning Collection
- TRWH : Collection of Defense Area Spatial Planning
- SDA : Natural resources
- SDM : Human Resources
- SDB : Artificial Resources
- AJ : Fighting Tools
- RJ : Fighting Space
- KJ : Fighting Conditions
- R : Regulations
- AG : Budget
- OP : Defense Organization
- RSP : Defense Resources
- A : Threat Set

Equality : $nTRWH = \{SDM, AJ, SDB, KJ, SDA, RJ\}$

By performing set operations on SDM, AJ, SDB, KJ, SDA, RJ then:

- i. $\{SDM, AJ\} \cap \{SDA, RJ\} \cap \{SDB, KJ\} = R$
- ii. $\{SDM, AJ\} \cup \{SDA, RJ\} - \{SDB, KJ\} = A$
- iii. $\{SDM, AJ\} \cup \{SDB, KJ\} - \{SDA, RJ\} = A$
- iv. $\{SDB, KJ\} \cup \{SDA, RJ\} - \{SDM, AJ\} = A$
- v. $\{O, RS\} \subset TRWH$
- vi. $\{AG\} \subset TRW$
- vii. $TRW \cup TRWH \in P$



- K : Regional Resilience Universe
- W : Territory Universe
- RWH : Defense Area Space Set
- DP : Battle Area
- DB : Back Area
- DPP : Resistance Base Area
- SDA : Natural resources
- SDM : Human Resources
- SDB : Artificial Resources

Equality : $nRW = \{DP, DB, DPP\}$

By performing set operations on DP, DB, DPP, we obtain:

- i. $DP \cup DB \cup DPP = RWH \in W$
- ii. $DP, DB, DPP \in RWH$
- iii. $DPP \subset DB \subset DP$
- iv. $SDM, SDA, SDB \subset DPP \subset DB \subset DP \subset RWH \subset RW \in K$

The result of the operation of the Venn diagram for the development of the outermost islands is R (regulation), which is an intersection of {HR, AJ} (human resources and combat resources), {SDA, RJ} (natural resources and combat space), {SDB, KJ} (artificial resources and combat conditions). This means that arrangements are needed to synchronize the



regional governance and spatial planning of the defense sector in managing the superior natural resources, human resources and SDB, and a strong fighting RAK to counter a range of threats in the context of the independence of the outermost islands, due to the cooperation, collaboration and unity between the civilian and military sectors. In achieving national security and national development is very important (Ricks, 2013). When the capabilities of these 3 groups are reduced, a threat emerges that matches the characteristics of the reduced group. OP (defense organization) and RSP (defense resources) are subsets of TRWH (regional defense spatial planning), which are adapted to the needs of each region. AG (budget) is a subset of RTW (regional territorial planning) as an implementation of civilian control over the military in democratic civilian supremacy (Ricks, 2013). Whereby the definition of space under Law No. 11 of 2020 is a container that includes land, sea and air space, including space within the earth as a unified territory in which humans and other living beings live, carry out activities and ensure their survival.

The operation of the Venn diagram of the universe of regional resistance shows that the combination of the DP set (combat area) and the DB set (rear area) and the DPP set (base area of resistance) is RWH (defense area space) and is a coherent unit with W (regional universe). The DP (combat area), DB (rear area), DPP (resistance base area) set are connected to each other and form a unified RWH (defense area space). The DPP set (resistance base area) is part of the DB set (rear area) and part of the DP set (combat area). The set of HR (human resources), SDA (natural resources), SDB (man-made resources) is part of DPP set (resistance base area), part of DB set (rear area), part of DP set (combat area), part of RWH set (defense area) and part of RW set (regional area), which are related to each other and form a unit as set K (universe of regional resistance)

CONCLUSION

The resources on the outermost islands have a high strategic value, as they can influence the definition of the borders of Indonesian sovereignty. Therefore, they need to be managed early through synergistic governance between regional spatial planning and regional defense planning so that they become a universe of supporting forces that can strengthen the country's development and defense in the face of non-military and military threats or hybrid threats. The results of the Miangas Island case study showed that there is a need to develop the overall existing productivity potential and that there is a need to revise the regulations on residents' trade with neighboring countries and the regulations on residents' restrictions on fishing. By using processed datasets, a universal regional resilience model was found, namely regional independence in dealing with threats, disturbances, obstacles and challenges.

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