Abstract

Purpose: This paper is to analyze the military effectiveness of the mobilization resources constituting the mobilization forces and to suggest a plan to strengthen it. The military capability, military potential capacity, and military reputation of the mobilization forces are measures of military effectiveness. Improving the military effectiveness of mobilizing forces will enhance interoperability with the armed forces in peacetime and enhance deterrence capabilities in peacetime.

Method: The research method utilizes literature research and case study techniques. For reference, mobilization policy-related papers and research reports of research institutes will be reviewed, and security experts’ advice and case studies of countries operating mobilization forces will be reviewed. The subject of analysis is the troop structure constituting the mobilization division. The troop is the mobilized reserve force which accounts for more than 90% of the unit organization.

Results: The troop structure of the mobilization division shows a poor composition that is less than the minimum economic operation scale. In the Army Standing Division, about 80% of the wartime formation is active duty, while the mobilization division consists of only about 7% active duty soldiers. And about 45% of them are being replaced every year. Mobilization training is also conducted for three days and two nights every year, but the schedule is insufficient for individual combat skills. The period of mobilization training for reserve forces is only 4~8% of that of active duty training.

Conclusion: First, we need to redesign the concept of “mobilization” of the ROK military. Mobilization should be the concept of utilizing well-prepared and trained potential forces with modernized resources for operations in case of emergency. Second, it is necessary to intensively nurture combat reservist by introducing a selective reserve system. The military and government should boldly push ahead with policies to increase the military effectiveness of mobilized resources before the inevitable time of choice, presupposing the pessimistic situation of future security.

Keywords: Mobilization Division, Deterrence, Reserve Forces, Force Structure, Mobilization Troop

1. Introduction

The current international situation is in which the US-led international system and China and Russia are escalating tensions to the extent that it can be called the ‘second Cold War’, heralding military clashes in the Taiwan Strait and Eastern Europe[1]. The United States is reorganizing its military power as it withdrew its troops from Afghanistan, and is keeping China and Russia in check from emerging as “regional hegemons.” This can be interpreted as a paving stone based on the US “offshore balance strategy”.

Some strategists worry that when Taiwan is in crisis, Korea could be in trouble too. This is because that the United States may not only call out US forces in Korea, but also request support
from the South Korean military. On the other hand, there is also the possibility of North Korea taking advantage of the situation in Taiwan to make provocations. The Taiwanese military has been using a conscription system since 2018. Taiwan's reserve force is 2.2 million. However, it is evaluated that the effectiveness as a military force is low, such as training only once or twice a year. This point is also acknowledged by the generals of the Taiwanese military. It is difficult to counter the Chinese army with the combat power possessed by the Taiwan Reserve Army[2].

It is necessary to check Korea's defense posture during this time. According to Defense Reform 2.0, the number of South Korean troops will be reduced to 500,000 by the end of this year. The period of military service has been shortened to 18 months based on the Army standard, requiring 200,000 military service resources each year. However, from 2030 onwards, there will be a shortage of young people to join the military. The rate of decline in the youth population goes faster than the rate of military drawdown. By the mid-2030s, military service resources equivalent to the size of five divisions are expected to become scarce. In the end, the military will have no choice but to re-establish defense policy and military strategy with 300,000 to 400,000 personnel.

The military said that it would fill the void in the standing force lacking with advanced weapon systems, but use of AI, drones, and robots in military is still in its infancy[3]. In addition, the reserve force, which is continuously mentioned as an alternative force to the declined standing force, also said that it would make 2.75 million elite, but it is uncertain whether the goal will be achieved with 0.4% of the national defense budget. The military is concentrating its efforts on making the mobilization force elite and improving the mobilization system. This is because these units are combat units that must operate from the front along with the standing forces at the beginning of the war.

This paper intends to analyze the military effectiveness of the troop structure as a part of the mobilization force and suggests alternatives for its insufficiency. Improving the military effectiveness of mobilizing forces will enhance interoperability with the standing army in peacetime and enhance deterrence capabilities in peacetime. The results of this study also include policy and institutional proposals necessary for structural improvement of the mobilization divisions to replace the vacancy of the reduced standing force.

The scope of the study and the subject of analysis is the troop structure constituting the mobilization division. The troop is the mobilized reservist, which accounts for more than 90% of the unit organization. The research method utilizes literature research and case study techniques. For reference, mobilization policy-related papers and research reports of research institutes will be reviewed, and security experts' advice and case studies of countries operating mobilization forces will be reviewed.

2. The Role and Value of Military Power

2.1. Theoretical discussion

Historically, in the international community, countries have secured vital national interests of their own survival and safety through the means of military force. The state pursues strategic competition to achieve its own political purpose and to gain an edge in national relations through the use of military force. A nation's military power is used as a determinant and influence for security, or it performs roles and functions such as a coordinator of international politics or a diplomatic guardian[4].
Even today, most countries recognize military power as a prerequisite for national security and an essential means for pursuing national interests. However, unlike the past, today's military power attaches greater significance to the influence in peacetime than to the importance of military force in wartime. Therefore, the operating concept is also changing[5].

Modern military power is perceived to be more beneficial when it is not used than when it is used. Possession of military power itself is useful. Therefore, military power is more interested in the political relations of the enemy than military objectives of its own. Rather, the use of force has come to mean the breakdown of military force. That country's military capability could be evaluated as low. This means the effectiveness of military force emphasizes that force must not be overtly used. Military power was transformed from warfare to the concept of policy support, and from the explicit use of the military force to the concept of implicit use[6].

Nevertheless, for the survival of the country and the preservation of its core interests, military power is still recognized as an important tool for the performance of national functions. This is because military power is the last resort unless the country's survival instinct and the motive for power domination over the others disappear. Therefore, countries are strategically constructing an appropriate scale of military force and infrastructure in preparation for crisis[7].

South Korea's defense policy and military strategists also recognize that military power is a direct and practical national power for security, and the capabilities and capacities to carry out military operations[8]. Klaus Knorr describes military power by adding military reputation to these. He divided the forms of military power in international politics into war, threat, and reputation. Its success was seen to depend on the components of military power, namely, military capabilities, military capacities, and military reputations[9].

The actual military capabilities are largely determined by the size and composition of the army, equipment and materials, weapon system, and logistical capability. The actual military power is a major factor in determining the strength and weakness of a country's military power, but in an emergency, it could be limited by the quantity and quality of national resources that can be mobilized, that is, its potential capabilities. Military potential affects the structure, capability, and continuity of existing military forces. Therefore, it can be said that a nation's military power is the sum of its actual capabilities, potential, and reputation of the military multiplied as shown in <Figure 1>[10].

Ahn KH argues that the reason why the US included the reserve force in its total force policy is because the military effectiveness of the reserve force has been verified. He analyzed that changes in perceptions of the reserve forces by the actors of the Ministry of National Defense, the army, and the parliament and the political and military factors of the reserve forces were influential in this policy decision.
Lee WH analyzed in detail the case of ‘Operation Iraqi Freedom’ as a successful case in which the US directly deployed its reserve forces for combat missions or used them as combat service support function in the rear area.

Shin DW · Jung CW also argues that the success factors of the U.S. reserve force are due to the “National Defense Act” of 1920 and the “Total Forces Policy” of 1973. Therefore, it is their argument that the Republic of Korea should also be able to play its role as a component of the total force through revision of laws and regulations.

Park JG argues that the reserve force should be included in the ROK military organization in order to establish a desirable military force and to establish the status of the reserve force. Despite the rapidly changing external and domestic environment of the reserve force organization, it points out the duality of the legal system for reasons that are not different from when the reserve force was established.

2.2. Foreign military cases

The United States applies the concept of potential mobilization forces to form its troop structure. About 860,000 reservists are being operated full-time and part-time in a ratio of about 1:9. Full-time employees serve 180 days or more a year during the contract period for the purpose of relieving the service burden of the standing army, and receive the same remuneration and welfare system as active duty service members. They support training preparation, administrative work, and unit equipment management for part-time reserve soldiers. Part-time reserve forces must participate in weekend training for 24 days a year and mobilization training for 2 weeks as a basis. For remuneration, training allowances corresponding to the active duty class are paid for each working day, and weekend training is paid twice as much as weekdays. If you have served 20 years or more as part-time workers, you can receive a pension after the age of 60. It is estimated that the US reserve force can be operated at 14% of the cost of the standing army[11][12].

Israel has a conscription system for men and women, and runs 170,000 standing troops and 460,000 reserve troops. After completing active duty, both men and women serve in the reserve forces. The number of mobilization reserve force is about 400,000, and it is organized into infantry, armored, and mechanized units based on the residential area, and it is elite so that it can exhibit the same combat capabilities as active duty soldiers. There are 54 days per year for service. They take the mobilization training once a year for one week and perform for 25 days operational duty once in a three-year cycle at a designated unit. This is to fill the need for active duty forces lacking in peacetime with reserve forces. It is known that the reserve forces have completed even the brigade general training, and thus their military availability is quite high. When reservists are mobilized, the state pays the same level of remuneration as the social wage for each individual[13].

Singapore has a conscription system for men and has 70,000 full-time soldiers and 310,000 reserve soldiers. In Singapore, all men with citizenship and permanent residency are assigned to the reserve army for 10 years after serving 24 months of military service, and remain available for mobilization at all times. Its size is about 300,000 people. The most of the soldiers are assigned to the battalion for 10 years and participate in mobilization training for 6 to 14 days a year, up to 40 days. Reservist service is 40 years old for soldiers and 50 years old for officers, and the government pays the company-set remuneration for the mobilization reserve army for the number of days participating in training[14].

Germany has the Verstaerkungs Reserve, the Personal Reserve, and the Allgemeine Reserve force. The Verstaerkungs Reserve is about 8,000 soldiers. They serve in the standing military units and mobilization units under the regional defense units in each region. It is managed separately from the standing army, and prepares for the operation of mobilization supplementary
units and regional defense units in peacetime and rapid mobilization in wartime. There are also about 8,000 personnel in the Personal Reserve. These are the reserve forces to support or replace the role played by active duty military personnel. They are managed as part of a standing army formation, and when the reserve army or active duty is absent due to consignment education, overseas dispatch, long-term vacation, health or personal reasons, the duty is performed by substitution. To this end, they receive regular education and training together with active duty officers. The Verstaerkungs Reserve and the Personal Reserve can serve up to 10 months a year in the military during peacetime. The Allgemeine Reserve is a reservist convened when a wartime mobilization order is declared. These are men between the ages of 18 and 60 who have been in the reserve or have not yet served.

3. Problems and Improvements with Mobilization Division

3.1. Force structure with limited combat power

Mobilization force is mostly composed of mobilized resources. This is also a part of the force structure and has a relationship with the organization and composition necessary to perform military missions. The troop structure, a part of force structure, refers to the composition system of manpower for each type of military service and status that forms the military organization[15].

The troop structure of the mobilization division shows a poor composition that is less than the minimum scale economic operational. The army maintains about 40% of active duty compared to that of wartime, but the mobilization division is about 7%. As of 2021, the Mobilization Division is operating in peacetime 7% active duty, 0.1% military personnel, and 0.1% part-time reserve force[16].

Mobilization Divisions must be able to quickly mobilize at an early stage and display combat power immediately due to the nature of their wartime missions. Therefore, securing excellent combatants is important. In order to do this, mobilization resources, that is, reserve forces, must be fixedly assigned to the unit organization so that they can demonstrate their combat power in case of emergency through appropriate education and training throughout the year. This could be also good for the resources effectiveness[17]. However, 45% of the mobilized reservist are being replaced every year as shown in table 1. Mobilization training is also conducted for three days and two nights every year, but the schedule is insufficient for individual combat skills. The period of mobilization training for reserve forces is only 4~8% of that of active duty training. It is preparing for maintaining national security in wartime and peacetime with the fewest days of mobilization training among countries that operate reserve forces[18].

Table 1. Average annual change ratio in mobilization battalion.

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<th>Ratio(%)</th>
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<th>Reason for change</th>
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<tr>
<td></td>
<td></td>
<td>Subtotal</td>
<td>Annual</td>
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<tr>
<td>100</td>
<td>~45</td>
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Note: Figures may vary depending on the unit.

As such, it is not easy at present to designate and manage resources by matching the ranks, classes, and specialties of the reserve forces in accordance with the organization of the mobilization division, and to maintain combat power through sufficient education and training[19]. In addition, even if the right personnel are designated for the organization, it is necessary to extend the training period for the mobilization unit to create and maintain combat power. However it is difficult to even discuss it because it is a sensitive issue that can accompany social conflicts.
3.2. The new concept of mobilization and operation of full-time reserve force

The current concept of mobilization refers to the control, management, and operation of human and material resources for security in case of emergency[20]. However, in the case of the mobilization division, it should be that the concept of mobilization should be reset from the point of view of the modern military utility of 'deterrence' rather than from an economic point of view. The reason is that it is necessary to ensure that the mobilization division can carry out its mission well in wartime. Normally, the time limit for occupying the operational area given to the mobilization division is within 48 hours after the mobilization order is issued. Therefore, the concept of 'mobilization' should be the concept of securing 100% of weapons, equipment, and materials necessary for wartime from normal times and using them[21].

The second reason is to achieve the goal of the Defense Reform[22]. In particular, the mobilization division, the core force among the mobilization units, is assigned to the corps in an emergency. In fact, the mobilization division is carrying out the wartime mission of the decommissioned standing division while reducing 100,000 troops[23]. If the wartime capability of the mobilization division is evaluated as unreliable as a military force, it cannot be evaluated that the defense reform has been completed[24].

In order to secure a stable troop of the mobilization divisions, it is proposed to introduce a system of 'selective reserve' based on the concept of recruitment[25]. These reservists must participate in individual and unit training and mobilization training for two weeks within a range of 40 days per year[26][27]. The recruit target will be preferentially selected from the 1st to 4th years, and then 5th to 8th years of the reserve army, depending on the application rate, the application can be extended up to the age of 40[28]. Compensation for them should be set in an advantageous manner for the reserve army by applying the social hourly wage or the unit cost of construction labor. In particular, double allowance is paid for weekend training[29].

If a mobilization division is formed as a selective reserve and used for operational units, first, it is possible to prepare a force that can replace the insufficient standing force without breaking the framework of the Levée en masse[30]. Second, the selective reserve can exert their strong combat power at all times or in an emergency. Third, in terms of the budget required for the operation of the selective reserve, it is possible to maintain the operation with a lower budget than the recruitment system. Fourth, the selective reserve system can measure the public’s preference for the future direction of change in the military service system, and can serve as a measure and guide for system components[31].

4. Conclusion

A country’s negative reputation for its military power works as an implicit instrument to measure the country’s deterring will and the level of its armed forces. The military effectiveness places greater value on deterrence of war than that of physical strength. The state’s war deterrence and will to wage war are also the reputation of its political leadership and the people. These are because their resolve and inclinations are projected into defense policies, systems, and military strategies[32].

If living things do not adapt to natural changes, they become extinct. As such, if even a country fails to properly prepare and respond to changes in the international security environment, it will inevitably perish. There is no national interest and prosperity if armaments and reputation are downplayed as the last resort for national survival. Military reputation is hard to gain but easy to lose.

This paper proposes a Korean Selective Reserve System, focusing on the same system of other countries that actively utilize the reserve forces. Before seeking changes of the military service
system, it is necessary to strengthen the reserve force first. Currently, in terms of military effectiveness, there is few gap between active duty and reserve forces in the skills and utilities. Therefore, with the concept of selective reserve, a part of the reserve forces is selected and equipped with systematic training and mobilization posture every two to three years, but special preferential policies should be pursued. Through this, it is possible to possess and operate more effective war power than in reality. In addition, while operating this system, it is intended to prepare a sound framework for the future military service system, and to secure a balance and flexibility in supply and demand of troops in the standing and the reserve as a total force.

For this, first, the concept of military mobilization must be redesigned. Preparation and training of resources in peacetime should be excluded from the concept of mobilization. Second, the mobilization division must ensure the integrity and stability of the troop structure with selective reservists and maintain the state of completing tactical training.

The Selective Reserve System would be to realize the salaries, allowances and welfare of the reserve in peacetime without compromising the principle of Korea’s "Levée en masse". This can be said to be a form of selective recruitment for the reserve. Because it is possible to mix the standing and the reserve, it is able to replenish the military's insufficient strength without changing the current military service system. Even if high-tech equipment is introduced into the military, eventually people must operate it. In order to secure professionalism and flexibility, an environment and conditions must be prepared in which the operating personnel can serve in the military for a long time. Combining military experience and free will, it can be an excellent human resource.

The military power does not have the effectiveness just because it has been replenished. The essential principle is that both the standing and the reserve should be modernized with a standardized weapon system, equipment, and materials, regardless of wartime and peacetime. And the tactics appropriate for each troop must be mastered through sufficient education and training[33].

The military must be well prepared for the overall military force in order not to endanger the people. For the military to be well prepared, it must prepare for war based on its capabilities at a reasonable level. This is the military’s responsibility and duty. With a different approach from the past, the military will have to pursue the construction of a military force that aims to enhance the effectiveness of the military force without distinguishing between the standing and the reserve.

5. References

5.1. Journal articles


[28] Lee DH & Kang WS. A Study on the Feasibility of Transition from Conscription to Volunteer


5.2. Books


6. Appendix

6.1. Authors contribution

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