Policy Implications
Strategic Management of Military Capabilities

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Introduction

In this chapter, we discuss how to build defense capabilities that are functional for a long period of time yet adaptable to a changing security environment. This is a common task for many countries.

In recent years, the role of military forces has expanded to include operations outside of the realm of traditional national defense. Military forces are now called upon to handle various types of missions including settling global disputes, humanitarian assistance/disaster relief, counter-piracy initiatives and cyber defense. Under such circumstances, Japan has also changed its policy in order to establish more dynamic defense capabilities focusing on the operation of the Japan Self-Defense Forces (SDF), and, in 2010, it pledged to promote such transformation over the next 10 years. This initiative defines the future direction of defense capabilities that Japan should build up; that is, to maintain capabilities for taking immediate action to respond to developing situations, contribute to regional stability, and increase the reliability of deterrence capabilities.

However, it would have been difficult to predict the current situation in which defense elements have to carry out a diverse range of functions, amid such adverse economic conditions. Recently in Japan, just after the publishing of the National Defense Program Guidelines in December 2010, an unprecedented natural disaster, the Great East Japan Earthquake, struck the country, which resulted in the dispatch of 100,000 personnel for disaster relief missions, the largest-ever number. The theme of the colloquium – adapting to changes in the security environment – considers how to adjust defense capabilities in accordance with the difficulty in predicting changes in the security environment. The issue can be seen as a question of how defense assets can be allocated efficiently under the current fiscal austerity measures in order to prepare for an uncertain security environment.

This discussion approaches the above issue as follows: firstly, it seeks basic principles of how to recognize and respond to the uncertainty of the security environment. Secondly, it discusses the role of defense capabilities under such uncertainty, and it discusses the methods to build such defense capabilities. Lastly, it considers how to build military capabilities as a structural element of overall defense capabilities.

Approaches to the Issues

(1) The issues of uncertainty

Uncertainty means that although it is possible to explore various situations that may occur, the probability of the occurrence of a particular situation cannot be calculated. For example, even though the capabilities of future weapons may be predicted from trends in military technologies, it is not possible to accurately calculate the probability that each technology will be realized. Therefore, it is difficult to predict future battle conditions based on combinations of weapons and technologies. The only realistic approach is to examine different battle conditions that vary depending on the combinations of technologies and equipment, and assume the worst situation and scenarios that will always occur no matter what combination of circumstances are involved. This approach similarly applies to natural disasters.

There are two possible methods to respond to such uncertainty. One of them is to improve the accuracy when predicting the future and the other is to maintain capabilities that can effectively respond to any situation. However, there is a limit to the accuracy of the prediction in the former, and there is a financial limit to the response capabilities in the latter. Therefore, the realistic solution is to combine the above two methods. In other words, the basic principle is to explore the aspects of situations that may occur as specifically as possible, examine their intensity and scope, and maintain capabilities that are able to limit the impact on the security environment to within an acceptable range.

(2) The role of defense capabilities under uncertain circumstances

The roles of defense capabilities can be summarized into the following three categories: deterrence and response, contribution to stabilization of regional security environments, and contribution to improvement of the global security

environment.

Needless to say, military capabilities are required to fulfill such roles even under uncertain circumstances. However, the realistic approach is to set evaluation standards in which the effectiveness of the capabilities can be determined by the degree of achievement of these roles, or to form a consensus to build defense capabilities under uncertain circumstances.

Taking disaster response capabilities as an example, what is needed is to consider the impact on the stability of the affected countries and regions caused by the social anxiety that results from direct damage, set the acceptable scope of the impact, and then based on that determination, work backwards to determine the necessary capabilities for limiting the direct damage. This can be considered one form of effective defense capabilities. In addition, in the globalized world economy, if the damaged areas are important production bases or trade routes, supply chains could be disrupted, and as a result the global security environment could be greatly affected for a long time. In such cases, not only should the initial response capability be focused on saving lives, but also the capability to support the necessary early recovery required to keep the impact on supply chains within an acceptable scope will be considered an effective form of defense capabilities.

(3) Building defense capabilities under uncertain circumstances

As uncertainty increases in the future security environment, it is expected that the entire range of necessary defense capabilities may no longer be maintained by a single nation or solely by military forces. Therefore, defense capabilities to be maintained should be built not only by unilateral military force but also under a multilayered security system with allied or friendly nations. In addition, it will be necessary to include the capabilities of local governments and private sector organizations in the planning. This means that comprehensive approaches are required for defense capabilities to handle uncertainty.

(4) Building military forces as a structural element of defense capabilities

Traditionally, when building defense capabilities, as a basic concept, it is considered that military capabilities should play the central role and other non-military capabilities should be covered by other elements. However, as previously described, in the increasingly uncertain future security environment,

the nature of effective defense capabilities will become even more diverse; therefore, building military capabilities based on traditional concepts will not be sufficient to handle the situations that emerge.

Then, what should a new concept be like?

Here, assume a case where an effective defense capability of 10 is required. Assume 8 out of the 10 will be fulfilled by military capabilities and the remaining 2 will be compensated by other elements (the capabilities of the private sector or cooperation from other countries).

By nature, the level of required defense capabilities can only be predicted to a certain extent under uncertain circumstances. Therefore, the range is predicted as 8 to 12 in the above case. However, if military forces are reduced due to financial circumstances, the capabilities that military forces can provide could be reduced to 6 or less. Now, according to the traditional concept, the capability gap of 2 will be fulfilled by other elements to make up the minimum requirement of 8. However, if the total capability requirement is 12, there is no way but to reluctantly accept a capability gap of 4. The traditional concept characterizes the occurrence of such insufficiency as a risk. On the other hand, the new concept focuses on the effort to compensate such insufficiency. This article pursues the latter.

In terms of the direction for promoting such efforts, this article proposes the formation of networks and the improvement of systematic infrastructure that enables these networks to function effectively. For example, consider a case where the capabilities consist of 6 from a unilateral military force, 4 provided by the military forces of allied or friendly nations, and 2 provided by private sectors. Under the traditional concept, under this scenario the effective capability is a maximum of 12. However, when effective and functional networks are formed and individual capabilities are combined, the resulting defense capabilities can be expected to be more than the simple sum of these capabilities. The aim of this is to respond effectively and flexibly even when a capability of more than 12 is required.

When building military capabilities, it is necessary not only to focus on the effective allocation of domestic defense resources, but also to consider the network configurations and connections between allies, friendly nations or other potential partners, as well as taking account of the improvement of systematic infrastructure that enables the networks to function effectively. In addition,

military organizations should be formed with consideration for connections to networks. In such cases, it will be necessary to change the traditional way of thinking that gives priority to the robustness of military organizations when forming an organization from the perspective of stressing existential deterrence. In other words, the kind of military organization required under uncertain circumstances is an organization that can flexibly provide effective military capabilities, where requirements vary depending on situations during the course of actual operations; and its organizational form should be selected based on the ability to provide flexible operations.

In addition to being operationally flexible, military organizations themselves will be required to have a self-transformation capability. In order to meet the requirements of the future security environment, the organization needs to be a place where the personnel engaged in the operation of the military organization can accurately understand the implications of the uncertainty in the security environment, analyze the functions required for military capabilities, develop more effective organizational form that focuses on networking and practical operations, and make efforts to realize such organizations.

To summarize the above, the strategic management of a military organization can be understood as an activity to establish a system that further develops more dynamic capabilities and assets, and to coordinate relationships with allied and friendly nations in order to adapt to the uncertain security environment.[1] The following are four principles for promoting such efforts:

1. Invest the limited resources selectively and in a focused manner in order to strengthen the foundation of the defense capabilities.
2. Promote multi-layered security cooperation and capacity-building with allied and friendly nations in order to improve the stability of the international environment and deterrence capabilities.
3. Reform organizations in accordance with the operational results.
4. Establish a system within an organization to promote such reforms.

The next section discusses the concrete measures based on the above four

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[1]   This discussion is based on the following assumptions. It is (1) affordable under the current financial situation, (2) possible as a policy, (3) sufficiently accountable for the public, and (4) flexible enough to be reviewed in accordance with situational changes.

approaches.

Studies on Concrete Measures

Issue 1: How to invest the limited resources selectively and in a focused manner in order to strengthen the foundation of defense capabilities

(1) How to assess current military capabilities and those required in the future
First of all, when assessing current military capabilities, an approximate evaluation method involving exercises and simulations is currently used. Current military capabilities can be assessed more accurately by combining the above assessment and the evaluation of the actual operations (missions).

Next, in order to estimate the military capabilities that will be required in the future, it is effective to enhance net assessment. Net assessment can be performed by conducting multilayered analysis and summarizing the results. The global strategy environment is assessed at the top layer to predict the overall trend. At the intermediate layers, mission-level environments are assessed, focusing on the international environment surrounding one's own nation. And at the bottom layer, environments of each battle phase are assessed. Needless to say, assessments at each level are interrelated, and cannot be reviewed individually.

It is important to involve experts from related sectors for conducting analysis and assessment at each level. For example, for the assessment of the strategy environment, it will be necessary to involve not only experts on diplomatic and military issues, but also experts in international finance, the energy sector or financial administration. Furthermore, it will be meaningful to include the viewpoints of international organizations, NGOs and private companies related to the above sectors in the assessment of the mission environments.

(2) How to respond to the risk associated with selection and focus
In order for military organizations to respond to every situation, it would be safest to maintain all the necessary assets at all times; however, this is not possible under the current financial circumstances. Therefore, it is necessary to estimate the risk associated with selection and focus, and establish a cooperative system that can provide effective military capabilities in any situation.

To do this, it is important to categorize the characteristics of the risk, and estimate the level and timing of the military capabilities that should be provided. Needless to say, military capabilities are the main elements for deterrence and response. Therefore, the focus of networking should be placed on the maintenance/improvement of the level of military capabilities.

On the other hand, in terms of the military capabilities for limiting the impact of large-scale disasters on the security environment, there should be a system that can determine the level, timing, and duration of the deployment of military capabilities in accordance with the characteristics of the impact caused by the disaster. For example, if tremendous damage was caused and maximum military capabilities are required for the initial response, it is necessary to utilize the framework of the multi-layered security cooperation system as much as possible. Contrarily, in cases where the scale of damage is also small and the required military capabilities in the initial response are small but whether the recovery is successful or not could have a significant impact on the security environment, the functions required for military capabilities will be to provide long-term and effective support for the reconstruction efforts led by local governments and private sector organizations. In such cases, the key point is to make sure that appropriate networks are built between military and private sectors in order to maximize the potential capabilities that can be provided by local governments or private sector organizations. It is important to establish a system in which appropriate cooperation can be selected in a timely manner in accordance with the characteristics of each situation and one that can be operated flexibly.

On the other hand, there are some capabilities of military organizations that should be maintained for a longer period of time. However, these capabilities cannot be assumed deductively without actual experience. The capabilities to be maintained for a longer period of time can only be derived from practical operations such as previous wars and conflicts, individual battle scenes, or international peacekeeping activities. For example, it is not possible to support all field activities for maintaining security/supporting post-conflict reconstruction through state-of-the-art weapons only. In other words, the capabilities and assets that have proven useful and effective from previous experience should not be abandoned.

Issue 2: How to promote multi-layered security cooperation and capacity-building with allied and friendly nations

(1) Recognizing military capabilities in cooperation with allies/multilateral cooperation

It is effective to mutually recognize the capabilities of allied/friendly nations or cooperative nations through joint exercises and training. For example, each party can understand the capabilities or assets (aerial transportation, ocean transportation, medical treatment, communication, etc.) that they and others can provide through table-top exercises/field training exercises in simulated humanitarian assistance/disaster relief (HA/DR) operations. Such an approach will improve military transparency through the promotion of multilateral security cooperation, as well as by providing opportunities to improve the capabilities of the related nations. It is also effective to share the standard procedures and important points of operations through practical operations such as international peacekeeping activities and counter-terrorism. As indicated above, it is necessary to consider pooling and sharing capabilities.

In addition, in terms of the assessment of the military capabilities required in the future, it is effective to conduct a multilateral net assessment between related nations to share a common recognition of the future strategy environment. Furthermore, when planning joint research, development, and acquisition of defense systems, it is effective to take account of improving the overall capacities of allied, friendly, and cooperating nations.

(2) Responding to the changes in the environment

There may be a case where the environment has changed so drastically that the cooperative framework with allied or friendly nations is not sufficient to respond to emerging situations. In order to prepare for such circumstances, it is important to make steady efforts to build cooperative relationships with countries other than allied and friendly nations, or with local institutions. A precondition to building such cooperative relationships is to accurately understand the defense measures of the relevant nations and local institutions. Specifically, it is important to analyze the security interests of the relevant nations and local institutions, and understand which defense capabilities – deterrence and response, stability of the local environment, or stability of the global environment

– have more priority for the relevant nations and local institutions. Then, it is effective to consistently build up results based on this basic understanding, starting from the areas where cooperation can be facilitated. In this sense, it is important to create a framework for dialogue or exchange that is based on the viewpoint of confidence-building measures and to promote cooperative relationships through the actual cooperation.

(3) Gap between organizational cultures and correction efforts

Similar to the fact that every business organization has its own organizational culture, each military organization also has its own organizational culture. There have been many cases where multilateral joint operations did not always achieve desirable results due to the differences between organizational cultures. That being said, the process in which an organization culture is formed is complicated, and it depends on not only nationality or regional characteristics, but also historical background, such as previous successes or failures, and experience with previous partners; therefore, it is difficult to share the same organizational culture in a short space of time. In addition, it is impossible to resolve and equalize the differences between organizational cultures.

For this reason, in order to strengthen multi-layered security cooperation frameworks, the most important point is to understand/respect each other's organizational culture and then establish a system that can minimize the negative impact which may be caused by differences between organizational cultures. Specifically, it is necessary to build a system that facilitates networking based on accomplishment of missions, on the assumption that there are differences in organizational cultures. For example, when holding a meeting for coordinating the operation of troops, if some participants do not have the authority to make a decision on the matter, the cost of coordination will be unnecessarily increased. Even if the ranks or titles of the participants are the same, if they have different authorities, the coordination will not be able to achieve results. In many cases, such situations are caused by differences in organizational culture. On the other hand, if all participating countries send personnel who have the authority required for making a decision on the immediate operation of troops, the coordination will become efficient. As indicated above, since opportunities for multilateral coordination are expected to increase in the future, it is important to develop a system in which participants are selected based on their authority in

accordance with the decision-making level required for the meeting.

Issue 3: How to reform an organization so that it fits the environment

The structure of an organization should be selected from the viewpoint of the most effective and efficient operation of military capabilities. In reality, however, the problem is the assessment of efficiency itself.[2]

The key to solving this problem lies in the concept of efficiency criterion used in business administration and economics. In this concept, when someone proposes a better form than the current one, and if all participants agree with it, that proposal will be tentatively regarded as efficient. When this concept is applied to a military organization, the criterion will be so-called "military effectiveness." By nature, it is extremely difficult to assess military effectiveness in peacetime. However, anyone who is involved in the operation of military organizations probably has some idea of organizational reform based on their own experience and knowledge. In this concept, when said individual idea is evaluated across the organization, and if the idea has been recognized as a superior one, that idea is regarded as the method to improve the effectiveness of the military organization.

The clues to improve military effectiveness are in the previously described exercises and simulations, multilateral security cooperation, and lessons learned from evaluations from the practical operations. In order to take advantage of such opportunity, it is important to systematically develop human resources who have a proactive mindset, as well as to establish an office for constantly reviewing the role of the organization and discussing ideas for improvement across the organization.

Issue 4: How to build a system for achieving self-transformation

To summarize the previous discussions, it can be said that organizations should overcome the differences between the military and private sector, and constantly review the results of their actions in a rational and critical manner to guarantee

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[2]   In a world where transaction costs such as coordination costs do not exist, the form of organization is independent from efficiency. However, in the real world, efficient forms can vary depending on various factors. In other words, no one form of organization is guaranteed to be effective in the real world.

the ability to carry out required functions. To achieve this, in addition to developing and recruiting the human resources required for the organization, there should be opportunities in which open discussions can take place within the organizations.

However, this does not mean that they only need to incorporate the opinions of external sources. In order for an organization to evolve requires personnel who have experience of totally committing to the management of the current organization, who understand the actual situation of the management objectively, and who have the ability to plan and realize a better strategy or form of organization. In particular, personnel who have experienced unexpected situations and learned lessons from and adapted to that experience, regardless of whether it was a success or failure, will be valuable for a military organization to maintain self-reforming capabilities. If there are no personnel who actually have such experience, it is necessary to provide opportunities for them to have approximate experiences through various case studies in human resource development efforts. In addition, most importantly, an organization should provide opportunities in which its personnel can demonstrate their abilities.

If an organization can recruit such personnel and share the actual experience of achieving results as a whole, the organizational culture can be dramatically changed. Moreover, the process of self-transformation itself will eventually become a vital part of the culture of the organization. This point is of paramount importance. If each nation imbeds the self-transformation process into its own organizational culture, it will become a common organizational culture for all nations, and as a result a multilateral security system will be facilitated.

Conclusion

In the future, in terms of promoting multilateral cooperation in the Asia-Pacific region, the following tasks remain, which should be discussed in this meeting.

First, since each nation recognizes information differently and has different interests, nations have differing policy priorities. How is it possible to build a system that makes such difficult mutual coordination seamless?

Secondly, how should military capabilities and the assets of allied and friendly nations be combined with domestic military capabilities (defense capabilities)? Which method, the integration method which defines detailed

roles and responsibilities, or the architecture method which uses a more general combination, should be used as a base? The basic design of the previously described systematic infrastructure depends on this point.

Thirdly, how to overcome the limit of sharing military capabilities and assets is easy for peripheral areas, but this tends to become more difficult as it gets closer to core areas.

Reforming the way an organization functions of its own volition in a constantly changing environment is not a task only for military organizations. An organization that constantly seeks measures to adapt to an environment will be able to withstand any changes in the environment. In this sense, it can be said that this is a common "strategic management" issue.