

The ROC Armed Forces and Civil Society in Natural Disaster Relief Operations—A Deepening Cooperation and the Establishment of Sound Disaster Relief System

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ABSTRACT: The primary purpose of the design and build of military forces is to deal with traditional security threats, especially the military invasion from other country. Nowadays, such thinking is not enough for facing current non-traditional challenges caused by climate changes, such as volcanic eruptions, earthquakes, tsunamis, as well as floods and landslides. Owing to the rapid deployment and effectiveness of military organization in case of crisis-whether manmade or natural, so any government of the world is increasingly relying on military forces than ever before. Taiwan is threatened by a number of natural disasters, including earthquakes, typhoons and landslides. Based on the concept of “active disaster relief,” the ROC Armed Forces has adopted the approach of “preparing for disasters in advance, deploying troops with an eye to disaster preparedness, and ensuring readiness for rescue operations,” in order to achieve quick response to emergencies and immediately provide relief to distressed civilians. Disaster relief is a complex and multidimensional work, so the military alone could not handle well all the needs and problems from society. In order to respond the natural disaster threats effectively to ROC national security. This paper aims to analyze the cooperation between ROC Armed Forces and civil society with expects to deepen such relation and to build a sound disaster relief system for saving lives.

KEYWORDS: Military Operations Other Than War, Natural Disaster Relief, ROC Armed Forces, Civil-Military Coordination

1. Introduction

The military’s role in providing humanitarian assistance and protection to civilians in crises is not new. Military forces have regularly been involved in crisis responses anywhere in the world. But, there are so many debates among military professionals about the military forces should or not take the responsibilities of disaster relief and emergency response. In theory, military assistance is only to be sought as a last resort, when there is no other way to fill an identified need.¹ For some

military leaders providing relief is a distraction from their primary mission to defend the security of their country. For other military leaders providing humanitarian support is an appropriate task that advances overall policy goals. Increasingly many military personnel understand that they will be deployed in complex crises, especially in natural or

Crisis: Global and Local Civil-Military Disaster Relief Coordination in the United States and Japan,” *An IFPA Project Interim Report* (A Project Interim Report and Summary of a Bilateral Workshop Organized by The Institute for Foreign Policy Analysis and Osaka School of International Public Policy, Osaka University), April 2007, p. 7.

¹ James L. Schoff and Marina Travayiakis, “In Times of

man-made disasters. As General Sir Rupert Smith notes modern conflict is characterized as “war amongst the people,”² so do the natural disaster relief task, perhaps we can call such mission as “military operations amongst the people.” In natural disaster relief environment, working with the local population and civil society becomes part of the military mission, militaries have to interact closely with civilians and civilian agencies. Militaries may see humanitarian actors as sources of information or intelligence.

Generally speaking, military forces are well-organized, well-equipped, trained, mobile, and available in any time. In many countries, there is a well-established tradition in using military forces to support civil authorities, including a broad range of homeland security and civil support tasks,³ owing to the military’s specific capabilities, particularly long-range air transport, logistics and engineering—which enable them to contribute significantly to humanitarian responses, in particular by delivering aid, evacuating victims and helping to rebuild infrastructure. They can also provide security and camps for refugees, or execute humanitarian convoys.⁴ As we know, climate change may act as an accelerant of instability or conflict, placing a great burden to respond on civilian institutions and militaries around the world. Extreme weather events may lead to increased demands for military support to civil authorities for

humanitarian assistance or disaster response. In some nations, the military is the only institution with the capacity to respond to a large-scale natural disaster.⁵ So there is a trend to use military forces in natural disaster relief operations everywhere in the world.

When militaries involve in natural disaster relief operations, they have to work together with other governmental agencies, civilian organizations, and local authorities. In order to respond effectively to natural disaster, the interagency coordination with above units would be critical important. After the Typhoon Morakot, the ROC Armed Forces have been asked to respond to natural disaster actively. If the government wants to build a complete and sound disaster relief system, it is not enough just revised related laws or asked the militaries to take more responsibility, even to act positively. In foreign countries, there were so many lesson learned about coordination problems across different units when undertaking relief operations, which would serve as good examples for the ROC government in avoiding potential problems or making the same mistakes during disaster relief operations.

2. The Complexity of Natural Disaster Relief and Missions for ROC Armed Forces

Global climate change can be an irregular, asymmetric challenge or a traditional, symmetric challenge. Global warming can also “act as a threat multiplier for instability in some of the volatile regions of the world.”⁶ Climate change may lead to great natural disasters, just as the executive director of the UN’s environment agency, Klaus Töpfer, had

² Smith, Rupert. *The Utility of Force: The Art of War in the Modern World* (New York, Alfred A. Knopf, 2007), p. 6.

³ John L. Clarke, “Soldiering on the Homefront: European Militaries Take a Flexible View in Responding to Natural and Man-made Disasters,” *per Concordiam-Journal of European Security and Defense Issues*, Vol. 1, Issue 4 (2010), p. 19.

⁴ Andrew Cottey, Ted Bikin-Kita, “The Military and Humanitarianism: Emerging Patterns of Intervention and Engagement,” in Victoria Wheeler and Adele Harmer eds., *Resetting the Rules of Engagement Trends and Issues in Military-Humanitarian Relations* (London: The Humanitarian Policy Group, Overseas Development Institute, 2006), p. 22.

⁵ Department of Defense, *Quadrennial Defense Review Report* (Washington, DC: Department of Defense, February 2010), p. 85.

⁶ John T. Ackerman, “Climate Change, National Security, and the Quadrennial Defense Review: Avoiding the Perfect Storm,” *Strategic Studies Quarterly*, Vol. 2, No. 1 (Spring 2008), p. 57.

pointed out in 2005, and took the case of Europe as an example. European Parliament outlined some types of climate-related natural disasters, which include: heat waves; storms, such as windstorms and hurricanes; high levels of precipitation, and associated flooding; and lack of precipitation, and associated drought.⁷

According to the International Disaster Database, between 1980-1989 and 1999-2009, the number of disaster events reported globally increased from 1,690 to 3,886. Over the whole period of 1980-2009, 45% of these were in Asia and the Pacific. Asia-Pacific has been the region that suffered the largest number of disasters over these years.⁸ The World Bank (WB) identifies East and South Asia as being at the greatest risk of loss from the multiple hazards, such as droughts, floods, cyclones, and landslides that climate change may bring. The Asian Development Bank indicates that the Asia and the Pacific is one of the global regions projected to be most impacted by climate change.⁹ This region will suffer major social and economic turmoil if climate change is ignored.¹⁰ Taiwan is particularly vulnerable to natural risks, with 73% of the land and population exposed to three or more natural risks, including typhoons, floods, mudslides,

rising coastal or delta sea levels and earthquakes.¹¹

As one of the world's foremost natural disaster hotspots, Taiwan faces serious security challenges with both potential man-made and natural disasters all presenting dangers to life and prosperity. There are common features between man-made and natural disaster contingencies; these include a large impact zone with limited access, advantages of early warning, imperative of protecting strategic assets, and coordination of rescue and relief efforts — that will require detailed planning, surveillance and warning, effective and survivable communications systems, and rapid emergency response capabilities.¹² During the opening ceremony of ARF Disaster Relief Exercise, Indonesian Vice President Boediono expressed his own opinion, said that “natural disaster relief is a complex and multidimensional work, it not only touches on cooperation and coordination, but it also deals with logistics, resource mobilization, command and control, the deployment of disaster forces, the actual operation itself, as well as information and the media.”¹³

The ROC government took a number of steps to enhance Taiwan's bureaucratic capacity for responding to natural disasters after Typhoon Morakot. First, a revision to the ‘Disaster Prevention and Rescue Act’ raised the status of the ‘Disaster Protection and Prevention Commission’ to a direct reporting office under the Executive Yuan. The revisions also granted legal authority for the mobilization of military disaster response teams. In April 2010, the ROC government conducted the largest ever disaster response exercise in

⁷ Ya-Wen Betty Chiu et al., “The Implications of Climate Change on Food Security in the Asia-Pacific Region,” in Lina Mahy ed., *Climate Change: Food and Nutrition Security Implications*, United Nations System SCN News, No. 38 (United Kingdom: Lavenham Press, 2010), pp. 26-27.

⁸ United Nations International Strategy for Disaster Reduction (UNISDR), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), *The Asia-Pacific Disaster Report 2010- Protecting Development Gains: Reducing Disaster Vulnerability and Building Resilience in Asia and the Pacific* (Bangkok: Information and Communications Technology and Disaster Risk Reduction, 2010), p. 12

⁹ Asian Development Bank (ADB), *Addressing Climate Change and Migration in Asia and the Pacific* (Mandaluyong, Philippines: Asian Development Bank, 2012), p. 12.

¹⁰ Ya-Wen Betty Chiu et al., op. cit., p. 27.

¹¹ Ibid.

¹² Mark A. Stokes, Tiffany Ma, “Taiwan, the People's Liberation Army, and the Struggle with Nature,” The Project 2049 Institute, Arlington, Virginia, May 23, 2011, p. 2.

¹³ Forum Staff, “Coordinating Disaster Relief: Exercise in Indonesia Leads the Way,” *Asia Pacific Defense Forum*, Vol. 36, Issue 3 (2011), p. 19.

conjunction with the Han Kuang military exercise,¹⁴ with the aim to testify the training efforts and the appropriateness of the revised act.

Global climate change will likely cause an increasing number of natural disasters such as cyclones, hurricanes, and similar events; all with accompanying human suffering. Often in these situations, military forces will be utilized because they are the most readily available, well-resourced, capable, and large organized units which can alleviate immediate suffering and provide assistance needed.¹⁵ To carry out disaster prevention and relief and combat training operations, the ROC Armed Forces has cooperated with the competent authority in drafting amendments to related laws and regulations, deployed personnel and equipment in coordination with disaster prevention requirements, and modified the disaster prevention and relief resource system to establish integrated disaster relief resources. Other measures adopted to effectively strengthen disaster relief and protection capacity include war gaming, professional disaster relief training, reviewing current facilities, utilizing medical resources to help community residents, reviewing the utilization of military reservists for disaster relief, and continuing to carry out disaster prevention and relief preparations.¹⁶ In disaster relief operations, the primary tasks of the armed forces are: to evacuate population from affected area, to save lives from landslide areas, to resettle disaster victims. The secondary missions are as follows: to clean up puddles of water, environment cleaning up and

disinfection...etc.

3. Guidelines and Principles for the Militaries Responding to Natural Disaster Relief

A number of factors have underpinned the growing engagement of military actors in humanitarian spheres. These include post-Cold War realignment; military downsizing and a search for new roles as ‘forces for good’ or ‘humanitarian warriors’; and perceived shortcomings in deployable civilian capabilities.¹⁷ For above reasons, armed forces have been increasingly deployed in a variety of crises and conflict situations with major humanitarian dimensions. Armed forces are involved in a wide variety of different tasks in contemporary crises and conflict situations, as well as traditionally non-military roles.¹⁸

No one would deny that national militaries can provide critical support when responding to a large-scale natural disaster, whether it is the ability to organize quickly on the scene or to provide unrivaled logistical capabilities.¹⁹ In consideration of military’s specific capabilities, governments regularly use their armed forces to respond to domestic natural disasters in conjunction with civil authorities. For example, the US military assets were deployed to New Orleans after Hurricane Katrina in August 2005, Pakistani troops have helped in the response to the earthquake there in October 2005 and the military in Bangladesh is regularly called on to respond to the effects of flooding. Military forces also engage in international responses to disaster, and some countries are looking to enhance their military’s

¹⁴ Mark A. Stokes, Tiffany Ma, op. cit., p. 12.

¹⁵ John Bessler, “Defining Criteria for Handover to Civilian Officials in Relief Operations,” in Harry R. Yarger ed., *Short of General War: Perspectives on the Use of Military Power in the 21st Century* (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, April 2010), p. 75.

¹⁶ National Defense Report Editing Committee, Ministry of National Defense, *2011 ROC National Defense Report* (Taipei: Ministry of National Defense, 2011), p. 221.

¹⁷ Victoria Wheeler and Adele Harmer, “Resetting the rules of engagement: trends and issues in military-humanitarian relations,” in Victoria Wheeler and Adele Harmer eds., *Resetting the Rules of Engagement Trends and Issues in Military-Humanitarian Relations* (London: The Humanitarian Policy Group, Overseas Development Institute, 2006), p. 7.

¹⁸ Andrew Cottey, Ted Bikin-Kita, op. cit., p. 21.

¹⁹ James L. Schoff and Marina Travayiakis, op. cit., p. 7.

capabilities in this area.²⁰ So do the ROC government.

The principles for the ROC militaries responding to natural disaster relief was under President Ma's Guidance, the ROC Armed Forces has abided by the policy "disaster relief is akin to fighting a battle," "prepare for disasters in advance, deploy troops with an eye to disaster preparedness, and ensure readiness for rescue operations" and "emphasize disaster prevention over disaster relief, and prioritize disaster avoidance over disaster prevention," and revised action standards for disaster preparations and operations. Each armed force has orders to actively coordinate and communicate with local governments, to make disaster prevention and relief preparations, and immediately engage in disaster relief whenever the need arises, so as to protect the lives and assets of the people.²¹

The amendment to the "Disaster Prevention and Protection Act" on August 4th, 2010 added in Article 34 that the ROC Armed Forces may actively assist with disaster prevention and relief, and that it may call military reservists to assist with disaster prevention and relief operations. Based on this Act, the ROC Armed Forces established or revised the "Regulations on the ROC Armed Forces' Assistance in Disaster Prevention and Relief," "Regulations of the Ministry of National Defense Emergency Operations Center" and "Regulations on the ROC Armed Forces' Combat Readiness and Contingency Plan," listing disaster prevention and relief as a main mission, and creating a solid legal foundation

²⁰ Victoria Wheeler and Adele Harmer, "Resetting the rules of engagement: trends and issues in military-humanitarian relations," in Victoria Wheeler and Adele Harmer eds., *Resetting the Rules of Engagement Trends and Issues in Military-Humanitarian Relations* (London: The Humanitarian Policy Group, Overseas Development Institute, 2006), p. 7.

²¹ National Defense Report Editing Committee, Ministry of National Defense, *2011 ROC National Defense Report* (Taipei: Ministry of National Defense, 2011), p. 221.

for the ROC Armed Forces to actively engage in disaster relief.²²

After Typhoon Morakot devastated parts of Taiwan, the ROC government relief teams went into the mountains to carry out emergency rescue operations. Members of the special armed forces combed through disaster areas, transporting victims and relief supplies in helicopters and military personnel carriers.²³ Besides, in order to help the disaster victims securing a better quality of life, government officials coordinated with the Ministry of Defense and the Veteran Affairs commission to utilize military barracks and veterans' homes as transitory disaster shelters.²⁴ In the future, the ROC Armed Forces will continue to strengthen the intensity and extensiveness of disaster relief related war gaming and live exercises, so as to prove the appropriateness and feasibility of its disaster contingency plans, operation procedures and action standards. Besides adding disaster relief as a part of the "joint search and rescue" and "Wan-An" exercises, war gaming of each theater of operations and flow training of major exercises, disaster relief exercises at the national level are held in cooperation with the competent authority between March and June each year. Each theater of operations (defense command) integrates the armed forces in live exercises for different disasters, including flood, landslide, earthquake, nuclear accidents or air and maritime disasters, as well as the promotion of "national disaster prevention education." These endeavors aim to establish good communication channels between departments, local governments and the public, and effectively integrate disaster relief capabilities.²⁵

²² Ibid., pp. 221-222.

²³ Government Information Office ed., *Love without Measure—A Tribute to NGO Efforts after Typhoon Morakot* (Taipei: Government Information Office, August 2011), p. 21.

²⁴ Ibid., p. 23.

²⁵ National Defense Report Editing Committee, Ministry

Based on the valuable experiences acquired from major disaster relief missions executed in recent years, and after referring to the U.S. Federal Emergency Management Agency's "Urban Search and Rescue Field Operations Guide" and U.S. Army's "Military Operations Other Than War (MOOTW)," the ROC Armed Forces completed the Regulations on Combat Information Center Operations, Combat Readiness Regulations and "Contingency Response Regulations for the ROC Armed Forces during Regular Military Preparation Periods." In addition, 33 doctrines including the "Regulations of the ROC Armed Forces' Assistance in Disaster Prevention and Relief" were developed using the complex disaster relief experience of the Japan Self-Defense Forces, and are used as a basis for disaster relief, exercises, education and lectures. The doctrines are verified via joint operations in various exercises, which also serve as a basis for making additions and revisions, in hopes of establishing doctrines for the prevention and relief of different types and levels of disasters, and effectively enhancing joint disaster prevention capabilities.²⁶

4. The importance of Civil-Military Coordination

The succession of large-scale natural disasters that have occurred or have been undertaken globally in the last several years has focused attention on the potential value of deploying national military assets in support of disaster relief and recovery efforts, as well as on the challenges that international disaster relief agencies and nongovernmental organizations (NGOs) face when working closely with dispatched military units. In the United States, this has led to a serious discussion in government circles about possible

ways to adjust the military structure and training regimen in order to enhance its effectiveness in certain complex or catastrophic cases, including the development of a dedicated response capability and the enhancement of joint planning or training with nonmilitary groups.²⁷

The military alone can not handle all the disaster relief operations effectively. So, increasingly, military, humanitarian and other civilian actors find themselves working together to respond to disasters and complex emergencies. These situations pose challenges for all parties concerned. The relationship between armed forces and humanitarianism is complex and problematic. The primary functional purpose of armed forces is the application of physical, ultimately deadly, violence. Militaries may to some extent therefore be seen as the antithesis of the humanitarian concern for human well-being or humane behavior.²⁸ Besides, recent foreign experience demonstrates that many organizational, legal, and cultural obstacles can impede cooperation among the many actors who respond to a crisis and prevent the full realization of this importance of civil-military coordination. The challenges are numerous and include command and control issues, information sharing, and field coordination.²⁹

The UN uses the term CMCoord–Civil–military coordination. This emphasizes the civilian lead in assistance and reconstruction, and military roles in support of that. It highlights the need for militaries to understand humanitarian principles, but acknowledges tensions between political directives and humanitarian assistance. CMCoord is supposed to help resolve these tensions.³⁰ The essential dialogue and interaction

of National Defense, op. cit., pp. 225-226.

²⁶ Ibid., p. 240.

²⁷ James L. Schoff and Marina Travayiakis, op. cit., p. 1.

²⁸ Andrew Cottey, Ted Bikin-Kita, op. cit., p. 21.

²⁹ James L. Schoff and Marina Travayiakis, op. cit. p. 2.

³⁰ UN Office for the Coordination of Humanitarian Affairs and the Humanitarian Aid Department of the

between civilian and military actors in humanitarian emergencies that is necessary to protect and promote humanitarian principles, avoid competition, minimize inconsistency, and when appropriate pursue common goals. Basic strategies range from coexistence to cooperation. Coordination is a shared responsibility facilitated by liaison and common training.³¹ Some scholars had pointed out that larger-scale disasters require a multilateral, multinational, and intergovernmental response across the full spectrum of operations. In such circumstances, the key to success may rest as much in the ability to coordinate effectively and develop a sensible division of labor with other contributing nations and organizations as it does in improving the overall response capabilities of the nation.³² We can clearly confirm that it is vital important for militaries to coordinate with civilians while conducting disaster relief operations together.

Coordinating the civilian and military components of international humanitarian assistance/disaster relief activities is not necessarily a new effort, and it has always been a difficult challenge. The increased frequency and large scale of these combined operations, together with their potential positive impact are focusing renewed attention on ways to improve. Even when they are undertaking roughly the same mission, the NGO and military communities have very different cultures and priorities, they operate under different codes of conduct (or rules of engagement) and with different organizational philosophies.³³

For avoiding coordination problems between

military and civil society, the U.S. Joint Chiefs of Staff produced its first manual on interagency coordination for joint operations in 1996. The purpose of that document was to establish doctrine and guidance for commanders who increasingly found themselves involved in “military operations other than war”. By the time the document was updated in 2006, it expanded beyond interagency coordination to include coordination with intergovernmental organizations and nongovernmental organizations. At about the same time, the US Department of Defense approved a new directive in December 2005 that elevates stability operations to a core military mission that “should be given priority comparable to combat operations. The directive instructs the Pentagon to “be prepared to work closely with relevant U.S. departments and agencies, foreign governments and security forces, global and regional international organizations, U.S. and foreign NGOs, and private-sector individuals and for-profit companies.” Many of these capabilities and procedures will be applicable in support of large-scale disaster relief operations, not only overseas, but also domestically.³⁴

The civilian spectrum with whom the military must interface is varied and challenging. Not only do commanders have to interface with the locally distressed civilians, but also with informal neighborhood leaders and elected or paid officials from all levels—local, regional, state, and national. The military also often interacts with personnel representing governmental and nongovernmental relief organizations who may have been in the region for years prior to the military’s arrival, or whose lead elements often deploy nearly as rapidly as the military does. The civilian view of the disaster, what needs to be done, what the civilians expect the military to provide, and even how the

European Commission, *Civil Military Coordination Officer Field Handbook, Version E 1.0* (Brussels: United Nations, 2008), p. 16.

³¹ Ibid.

³² Charles M. Perry, Marina Travayiakis, Bobby Andersen, Yaron Eisenberg, *The Right Mix: Disaster Diplomacy, National Security, and International Cooperation* (Washington, DC: The Institute for Foreign Policy Analysis, January 2009), p. 102.

³³ James L. Schoff and Marina Travayiakis, op. cit., p. 5.

³⁴ Ibid., pp. 8-9.

crisis and emerging tasks will be defined, may be different from the military's view, and this difference must be resolved in the earliest days of the response. Coordinating and cooperating with these different groups may prove to be one of the military's greatest challenges, and yet they may well prove to be among the greatest enablers, depending on the nature of the crisis and how the military engages them. Because it is the civilians to whom the military will eventually leave the recovery and reconstruction tasks for completion, it is essential they are contacted at the earliest opportunity.³⁵

5. Challenges Ahead in Taiwan's Disaster Relief Operations and How to Solve the Potential Problems

The interaction between the military and civilian actors in nontraditional missions, including humanitarian aid providers, has grown. This raises difficult questions about the relationship between the two sectors. While there are obvious arguments for cooperation, the differing priorities and cultures of different groups can cause tensions, the division of labor between them is often contested and close cooperation with the military can call into question aid providers' claims to neutrality.³⁶ The increasingly packed field of crisis response has created new challenges for the military-humanitarian relationship.³⁷

In large-scale disaster relief operations, NGOs recognize the contributions made by military forces, but, as one NGO executive put it, they would generally prefer that these militaries restrict their

role to providing infrastructure or logistical support and otherwise "leave the relief work to the professionals." The soldiers, however, who are usually not specifically trained for these operations, tend to try to fill what they see as a leadership vacuum and seek to stop NGO resources and capabilities into their overall operation.³⁸

The succession of large-scale natural disasters that have occurred or have been undertaken globally in the last several years has focused attention on the potential value of deploying national military assets in support of disaster relief and recovery efforts, as well as on the challenges that international disaster relief agencies and nongovernmental organizations face when working closely with dispatched military units.³⁹ In most humanitarian emergencies (complex and natural) the UN agencies and the members of the international humanitarian community responding to the disaster will encounter armed actors. Now, more than ever before, there are likely to be multiple types of forces, including foreign, international or multinational forces. When such actors are present there are significant coordination challenges in the realms of security, medical evacuation, logistics, transport, communications, information management, and others.⁴⁰

Obviously, the best-laid plans can end up being quite useless if they are not executed properly, and so it is with humanitarian/disaster relief operations. Moreover, given the number and diversity of civil and military organizations that could be involved (many of which may have limited experience working together and quite different modes of operation), the task of organizing the participants in

³⁵ John Bessler, "Defining Criteria for Handover to Civilian Officials in Relief Operations," in Harry R. Yarger ed., *Short of General War: Perspectives on the Use of Military Power in the 21st Century* (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, April 2010), p. 76.

³⁶ Andrew Cottey, Ted Bikin-Kita, op. cit., p. 21.

³⁷ Victoria Wheeler and Adele Harmer, op. cit., p. 7.

³⁸ James L. Schoff and Marina Travayiakis, op. cit., p. 6.

³⁹ Ibid., p. 1.

⁴⁰ UN Office for the Coordination of Humanitarian Affairs and the Humanitarian Aid Department of the European Commission, *Civil Military Coordination Officer Field Handbook, Version E 1.0* (Brussels: United Nations, 2008), p. 7.

an international operation into a single, coordinated campaign is likely to be challenging in the extreme. The fact that the traditional humanitarian community and the military bring to the table different skills and experiences, and often quite divergent perspectives on how best to respond to crises, simply makes the challenge of collaboration that much more difficult.⁴¹

To sum up, once an operation is underway, military personnel, many of whom may have little (if any) training specifically geared to humanitarian/disaster relief operations, may be inclined to fill what they see as leadership vacuums by integrating NGO resources and capabilities into a “more orderly” military effort. In that event, however, the seemingly routine issues of military contracting and cross-servicing, lines of command and communication, bureaucratic approvals, liability, and rules governing classified information can frequently frustrate otherwise productive collaboration.⁴²

In order to effectively defend Taiwan’s security, no matter traditional or nontraditional, A Report made by American Enterprise Institute and the Project 2049 Institute suggested that Taiwan should partner with both civil responders and foreign militaries. The ability to cooperate effectively with civil responders is necessary for dealing effectively with local and regional emergencies, such as natural disasters and pandemics.⁴³ So it is very important for the ROC military not only to develop the capacity to cooperate with ad hoc coalitions during war, but also to develop the capacity for cooperation in humanitarian operations. This

capability will serve to increase Taiwan’s diplomatic standing in the region. Moreover, any cooperative experience in good citizenship activities can be put to use during time of war.⁴⁴

In the disaster relief realm in particular, an appropriate division of labor must be defined and maintained between military and non-military responders, and greater efforts must be made to familiarize the military and civilian disaster response communities with one another’s quite divergent operational cultures.⁴⁵ Wheeler and Harmer indicate that civil–military relations is just as ‘the essential dialogue and interaction between civilian and military actors in humanitarian emergencies that is necessary to protect and promote humanitarian principles, avoid competition, minimize inconsistency, and when appropriate, pursue common goals’.⁴⁶

In “*Civil Military Coordination Officer Field Handbook*” published by United Nations, reveal some principles in executing humanitarian operations. In these operations the use of military assets must retain its civilian nature and character. While military assets will remain under military control, the operation as a whole must remain under the overall authority and control of the responsible humanitarian organization. This does not infer any civilian command and control status over military assets.⁴⁷ Further more, military assets should be requested only where there is no comparable civilian alternative and only the use of military assets can meet a critical humanitarian need. The military asset must therefore be unique in capability

⁴¹ Charles M. Perry, Marina Travayiakis, Bobby Andersen, Yaron Eisenberg, *op. cit.*, p. 72.

⁴² *Ibid.*, p. 82.

⁴³ Dan Blumenthal, Michael Mazza, Gary J. Schmitt, Randall Schriver, Mark Stokes, “Deter, Defend, Repel, and Partner: A Defense Strategy for Taiwan,” A Report of the Taiwan Policy Working Group, A Project of the American Enterprise Institute and the Project 2049 Institute, July 2009, p. 6.

⁴⁴ *Ibid.*, p. 14.

⁴⁵ Charles M. Perry, Marina Travayiakis, Bobby Andersen, Yaron Eisenberg, *op. cit.*, p. 3.

⁴⁶ Victoria Wheeler and Adele Harmer, *op. cit.*, p. p. 13.

⁴⁷ UN Office for the Coordination of Humanitarian Affairs and the Humanitarian Aid Department of the European Commission, *Civil Military Coordination Officer Field Handbook, Version E 1.0* (Brussels: United Nations, 2008), p. 21.

and availability.⁴⁸ These principles also can be applied in Taiwan's disaster relief efforts for reducing potential problems.

Perry et al suggest that developing relationships with non-military partners through training exercises and by means of conference and workshop dialogues helps to build partnership capacity, increases familiarity with one another's capabilities, and promotes effective civil-military cooperation during disaster response efforts. Participation should also be encouraged from the business sector, which has much to offer, but remains minimally involved in government-led training and exercise programs. Indeed, wider business involvement could lead to the pre-disaster negotiation of contractual and other arrangements with private sector entities for transport, logistics, information management, and other disaster response support.⁴⁹

6. Conclusion

For Taiwan and the majority of the world, the increasing use of military force for natural disaster relief task is a normal phenomenon and become more and more frequent. Military organizations are well-organized, well-equipped, trained, mobile, and available in any time. So the military force is a good instrument in responding to natural disasters. Although the military force do has a great advantage in conducting disaster relief operations, but, the military alone can not fulfill such mission effectively. Military force has to work together and cooperate with civilian units in order to complete the relief task assigned by the government. Thus would put some challenges for military force and civil society, especially the coordination problems. These problems include leadership, command and

control, division of labor, organizational culture, professional skill, information management, and resource allocation...etc. For the establishment of a sound disaster relief system and to avoid encountering the potential hazards above mentioned. Taiwan's military force and civil society should:

- Define and maintain an appropriate division of labor;
- The mutual familiarization of each other's culture;
- Using the military assets as the last resort;
- To hold conference and workshop dialogues;
- To develop relationships through training exercises;
- To develop doctrine for conducting disaster relief operations jointly.

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⁴⁸ Ibid.

⁴⁹ Charles M. Perry, Marina Travayiakis, Bobby Andersen, Yaron Eisenberg, op. cit., pp. 76-77.

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