LIAISON

Lessons from
Typhoon Haiyan

The Importance of
Partnerships
in Humanitarian
Disaster Response

Disaster
Preparedness:
Partnerships to
Promote Resilience

*Connecting
the
dots*

WASH

UN

AID

*Partnerships for
a stronger community*

20th
*Anniversary
Issue*

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The Director's Letter
Col. Joseph Martin, USAF

Welcome to the most recent edition of Liaison magazine. It is a great honor to lead the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM-HA), and I am proud to present this edition of our magazine to the disaster management community. As a Department of Defense organization, CFE-DMHA is uniquely postured to provide the conduit between the disaster management communities within the military, U.S. and international government agencies, and the range of nongovernmental organizations. We take that responsibility seriously, and this magazine is one of those vessels.

Since arriving CFE-DMHA in May of 2014, I have gained a much broader appreciation for the interaction of the world community in both disaster preparedness and response. This magazine provides a forum by which the world's practitioners can share their experiences and research to provide to the greater good. It is often heard that we have a lot of lessons observed, but not a lot of lessons learned. Perhaps something in this issue will resolve an issue for you. Or better yet, perhaps your experience can help others not to repeat the same experience you had. Share… learn…improve.

Under the contextual heading of "Connecting the Dots…Partnerships for a stronger community," this issue pulls in the experiences of on-the-ground practitioners in the Indian Ocean Tsunami, the Great East Japan Earthquake, and Super Typhoon Haiyan. It blends key articles on creating organizations, partnership improvement, and even the use of technologies, with the single goal of saving lives and alleviating suffering. You, the practitioner, have the opportunity to incorporate these lessons now, before the next disaster occurs.

The next issue of the Liaison is already under development and will focus on challenges in civil-military coordination. Through your experience, research and lessons learned, that edition promises to bring to the disaster management community an in-depth look at how these two communities have evolved and continue to improve in our coordinated activities, in support of our common goals. It is not too late to contribute to that issue, or to provide suggestions for future versions.

Please visit our website at www.cfe-dmha.org to learn more about our mission and partnership oppurtunities.

Aloha,

LIAISON

LIAISON provides an open forum for stimulating discussion, exchange of ideas and lessons learned – both academic and pragmatic– and invites active participation from its readers. If you would like to address issues relevant to the disaster management and humanitarian assistance community, or share a comment or thought on articles from past issues, please submit them to editor@cfe-dmha.org. Please specify which article, author and issue to which you are referring. LIAISON reserves the right to edit letters to the editor for clarity, language and accuracy.

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LIAISON welcomes article submissions

LIAISON is a journal of civil-military disaster management and humanitarian relief collaborations and aims to engage and inform readers on the most current research, collaborations and lessons learned available. If you are interested in submitting an article for consideration, please email your story idea to editor@cfe-dmha.org.

- **Format.** All submissions should be emailed to the editor as an unformatted Microsoft Word file. Footnotes are the preferred method of citation, if applicable, and please attach any images within the document as separate files as well.

- **Provide original research or reporting.** LIAISON prefers original submissions, but if your article or paper is being considered for publication elsewhere, please note that with the submission. Previously published articles or papers will be considered if they are relevant to the issue topic.

- **Clarity and scope.** Please avoid technical acronyms and language. The majority of LIAISON readers are from Asia-Pacific nations and articles should be addressed to an international audience. Articles should also be applicable to partners in organizations or nations beyond that of the author. The aim is for successful cases to aid other partners of the DMHA community.

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- **Supporting imagery.** Original imagery supporting any and all articles is welcome. Please ensure the images are high-resolution and can be credited to the photographer without license infringement. Images should be attached to the submission separately, not embedded within the Microsoft Word document.

- **Biography and photo.** When submitting an article, please include a short biography and high-resolution photo of yourself for the contributors' section.

CONTRIBUTORS
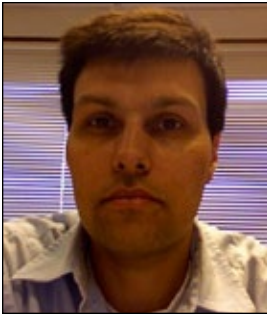
Vincenzo Bollettino, Ph.D., is executive director of the Harvard Humanitarian Initiative. He has 20 years of professional and academic experience in international politics, humanitarian action, civil-military engagement in emergencies, and the security of humanitarian aid workers. He has spent the past 14 years at Harvard University in administration, teaching, and research. Current research focuses on civil-military engagement during humanitarian emergencies, the security of humanitarian aid workers, and on the professionalization of the humanitarian aid field. He has managed training and policy development initiatives related to international humanitarian law, responsibility to protect, and peace-building operations, and has designed security reporting systems and program evaluations for field security measures in complex emergencies. He currently serves on the boards of Enhancing Learning and Research for Humanitarian Assistance, Action Against Hunger, and the International Solutions Group.

Christopher Hoffman is an emergency and post-crisis specialist for the International Organization for Migration Regional Office for Asia and the Pacific in Bangkok. He has concentrated his work with IOM on dealing directly with those affected by conflict and natural disasters, and in his current position provides support to 28 IOM missions, spread out over 53 countries and territories. Chris' past work has been split between East Africa, Asia and the Pacific. Currently, he provides technical assistance and advice within the region and ensures that the main overarching themes related to migration are mainstreamed into humanitarian projects, guidelines, guidance and policy mostly related to preparedness, response and recovery to and from displacement due to conflict and natural disasters. Hoffman has coordinated large scale emergency response programs in more than 15 countries spanning over the last 10 years.

Greg Ireton has worked in the post-disaster community and government nexus in Victoria, Australia for more than fifteen years. Working for both not-for-profit organizations and government, he has been involved in most of the significant disasters in Victoria over this period of time as well as providing advice to other jurisdictions as they have undertaken significant recovery programs. He has worked extensively within the state government and has had responsibility for a wide range of post-disaster recovery programs. He is now focusing on expanding knowledge in post-disaster recovery with the University sector (most notably as an Honorary Research Fellow with the University of Melbourne) as well as pursuing a particular interest in the role of philanthropy in supporting communities.

Associate Professor Lisa Gibbs is deputy director of the Jack Brockhoff Child Health and Well-being Program in the School of Population and Global Health at the University of Melbourne, Australia. She leads a range of complex community-based child and family health studies exploring sociocultural and environmental influences on health and well-being. For the past five years she has had a particular focus on leading a disaster recovery research program. These studies cover a range of topics including bushfire preparedness, issues for children in disaster contexts, resilience, and individual and community level disaster impacts on mental health, social networks and well-being.

Saya Kiba is a researcher at the Graduate School of International Cooperation Studies, Kobe University. She studied in Kobe University (Ph.D. in Political Science) and the Third World Studies Center, University of the Philippines. Her major fields of interest are Southeast Asian studies, civil-military relations, international cooperation studies, and social movements. She has worked in the embassies of Japan in the Philippines and Thailand, and the House of Representatives of Japan. Her recent works includes "Regional Cooperation on Civil-Military Coordination in Disaster Response – Crisis or Opportunity?" (Jennifer Santiago Oreta ed., Security Sector Reform: Modern Defense Force Philippine, Ateneo de Manila University Department of Political Science) and "Civil-Military Cooperation in Japan's Peace Support Operations – JSDF in search of NGO partners in South Sudan", (Japanese Studies Journal, Vol. 31, No.2, Institute of Asian Studies, Thammasat University).

Sudhir Kumar is a disaster risk reduction specialist for the United Nations Development Programme in the Philippines. He has more than 13 years of disaster risk management experience and has worked with Asian Disaster Preparedness Center, Bangkok for five years, handling a number of projects ranging from mainstreaming disaster risk management to community-based disaster risk management. In Nepal, he spent two years involved in technical assistance and capacity building to ministries at the national and district level on risk resilient development planning. He also worked with UNDP, India for three years and was involved in drafting disaster risk management related policy documents and capacity building, and has worked with the Government of Gujarat, India in the post-Gujarat earthquake R&R Program. He worked in Afghanistan with UNDP and GIZ to prepare disaster planning guidelines and capacity building. His areas of interest include recovery, knowledge management and mainstreaming.

John Richardson is the national coordinator of Emergency Preparedness for the Australian Red Cross. He has worked in emergency management for 17 years, for both the Red Cross and state government in Victoria, Australia. In addition to his contribution to emergency management policy and practice in Australia, he represented Australia at the United Nations International Recovery Platform meeting in Kobe, Japan, and was part of the Australian Government Forward Assessment Team sent to Washington in the aftermath of Hurricane Katrina.

Evan Koepke is the operations planning associate for Team Rubicon, a veterans-based international disaster response organization that seeks to bridge the gap between disasters and relief, as well as veterans and civilians. Formerly a student of Urban and Environmental Planning at the University of Virginia, Evan learned emergency management and response through the world of remote rescue and wilderness medicine. He presently oversees Team Rubicon's domestic and international response planning while guiding volunteer leaders in their execution of the planning function.

Capt. Takuya Shimodaira, Ph.D., is the first Japan Maritime Self-Defense Force liaison officer assigned as an international fellow in the International Programs Department at the Naval War College. He graduated from the National Defense Academy in 1989 and was commissioned as a surface warfare officer, subsequently serving on-board a number of destroyers, including commanding JS Ishikari (DE226). He took part in 2010's Rim of the Pacific Exercise when the JMSDF joined the multilateral exercise for the first time, and served as chief of staff of Escort Flotilla 1 during Operation Tomodachi. He earned a master's degree in area studies (East Asia: China) from the University of Tsukuba and doctorate in political science from the Kokushikan University in Tokyo. His research interests include non-traditional security.
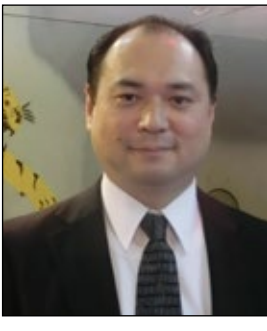
Atsushi Yasutomi is a researcher at the Research Institute for Peace and Security (RIPS) in Tokyo. He received a doctorate from the University of Leuven, Belgium in 2006. His recent works include "JSDF-NGO Cooperation: Issues and Challenges in JSDF's 'All-Japan' International Cooperation Policy" (Kobe University, July 2013, co-authored, original in Japanese), "Challenges in civil-military cooperation in Japan's Peace Support Operations: Cases in South Sudan and the Philippines" (Kobe University, July 2014, co-authored, original in Japanese), and "Civil-Military Cooperation in Japan's Peace Support Operations – JSDF in search of NGO partners in South Sudan," (Japanese Studies Journal, Vol. 31, No.2, Institute of Asian Studies, Thammasat University, 2014, co-authored). He was a committee member of the Hyogo Earthquake Memorial 21st Century Research Institute Research Bureau, Kobe, 2013-2014.

JMSDF & NGOs

A Review of the Great East Japan Earthquake

*By Capt. Takuya Shimodaira, Ph.D.,
Japan Maritime Self-Defense Force
& U.S. Naval War College Liaison Officer*

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Japan Maritime Self-Defense Force

American President Barack Obama declared during the 2014 State of the Union address a continued focus on the Asia-Pacific – to support allies, shape a future of greater security and prosperity, and extend a hand to those devastated by disaster.[1]

That dedication to those impacted by disaster was seen in the Philippines after Typhoon Haiyan (Yolanda), one of the world's strongest storms, struck the nation in 2013 and wreaked unprecedented havoc. The United States responded by conducting Operation Damayan,[2] which included dispatching the USS George Washington (CVN-73) Carrier Strike Group to conduct initial relief operations.

In Japan's largest international disaster relief mission to date, the country joined the typhoon response efforts by sending JS Ise (DDH-182), JS Osumi (LST-4001) and JS Towada (AOE-422), including helicopters, as key naval platforms.

The unity of effort between Japan and the United States to aid the Filipino people brought back memories of Operation Tomodachi, which deepened the U.S.-Japan alliance after 2011's Great East Japan Earthquake (GEJE). It was the biggest disaster to strike Japan since the end of World War II. The response to GEJE showed the utility of integrating a diverse coalition, of which the U.S.-Japan alliance was the main pillar. As the English translation of tomodachi means "close friends who trust each other," Japan and the United States must work together as strong allies and friends to help shape a peaceful future that maintains security and prosperity in the Asia-Pacific region. But, what kind of role should the Japan Maritime Self-Defense Force (JMSDF) adopt to shoulder assertive responsibility to achieve that future?

In the Asia-Pacific region, multilateral cooperation in dealing with frequent major natural disasters is indispensable. One of the most important security operations JMSDF can do now is humanitarian assistance and disaster relief (HADR), of which the initial phase is critical to saving lives. A significant way JMSDF can contribute is by establishing trustful relationships among the nations of the Asia-Pacific region in order to share its knowledge and capabilities in a non-threatening manner.

One of the most important lessons learned from the GEJE is the importance of smooth coordination with local authorities to judge the immediate needs in an appropriate and timely manner.[3] This article provides a possible solution – by combining civil and military strengths in a multinational environment, one or more organizations should be able to provide a solution to any gap that remains.

This paper is written from firsthand experience; the author joined Operation Tomodachi on board the state-of-the-art JS Hyuga (DDH-181) Helicopter Destroyer as chief of staff of JMSDF Escort Flotilla 1 and was responsible for coordinating Japan-U.S. joint operations in the affected areas. These observations and recommendations are based on successes and areas of difficulty during the response to the GEJE.

NGO's after the GEJE

The damage resulting from the GEJE was at a level beyond all imagination and was extremely difficult for government agencies to manage. In such a situation, the knowledge and experience that nongovernmental organizations (NGOs) have acquired through their participation in past emergency humanitarian assistance activities served as a driving force for providing prompt and effective assistance.

Japan Platform (JPF), an international humanitarian assistance organization founded jointly by NGOs, the government of Japan, and the business community, primarily provides financial support to Japanese NGOs so that they can embark on emergency assistance activities quickly in response to disasters overseas.

JPF, to which 34 NGOs are affiliated, functioned well in response to the GEJE. It was the first domestic operation in which JPF was engaged to provide relief for a large-scale disaster, without sufficient funds or an operating base. In less than three hours after the earthquake, JPF notified its member NGOs and private corporations of the launch of its relief activities. The first member NGO headed for Tohoku within five hours and the first donation arrived at JPF within six hours of the earthquake striking. JPF received donations at an unexpected speed, exceeding 2 billion yen (US$19 million) in one month. In total, JPF received donations of roughly 7 billion yen ($68 million) from approximately 3,000 corporations and 40,000 individuals in the year following the GEJE, and spent 80 percent of the donations toward relief activities via its member NGOs.

Civic Force, a leading domestic disaster relief NGO, also reacted rapidly by sending helicopters to the disaster-affected areas for situational awareness. Thereafter, these organizations jointly undertook a great many of the disaster relief tasks, such as distributing supplies, preparing meals, and managing disaster relief volunteer centers.[4] Civic Force has since developed an emergency response system in collaboration with the government sector, the business sector, and other NGOs and nonprofit organizations, so that it can save "more lives in less time" in the event of another disaster. Its principle is that all parties involved in this system will provide personnel, goods, funds, and services, through coordination and cooperation. Specifically, it aims to coordinate a variety of experienced NGOs (personnel) with water, food, clothing, and daily necessities (goods), and provide rescue services with helicopters, logistics support with trucks, medical experts, and trailers and containers for housing (services).

Founder Kensuke Onishi said that Civic Force could be used as a main resource to gather emergency supplies instead of JMSDF, because Civic Force has the knowledge, experience and platform to gather information, manpower, funds and resources in an organized manner. Also, Civic Force has contracted with business communities, nearly 1,000 corporations in Japan to provide goods, clothes and shelters to disaster survivors.[5]

JMSDF's Resilient Power

On June 4, 2011, then Defense Minister Kitazawa expressed his gratitude for assistance from the numerous Asia Security Summit (Shangri-La Dialogue) countries that aided Japan after the GEJE, and proposed to hold a meeting for discussion on the cooperation among defense authorities for unprecedented issues like nuclear incidents.[6] This is a promising area where Japan is able to play a more proactive role in the Asia-Pacific region. The necessity for multilateral cooperation is increasing as urgent responses are required in the region. JMSDF should offer its capability to help maintain peace and stability in the region as a responsible power, especially in peacetime.

Despite physical constraints on JMSDF's capability, cooperation with the civil sector can remediate unpredictable situations after a huge natural disaster. Any delay of response resulting in the shortage of supplies increases the anxiety among the general public due to a delay in accurate and trustworthy information. Therefore, it is necessary for JMSDF to maximize its capability to cooperate with the civil sector, which has expansive capabilities. JMSDF should cooperate with the civil sector to subjectively grasp the actual needs of the people and distribute appropriate support and accurate information as soon as possible. The following JMSDF resilient powers will contribute to that civil-military cooperation:

(1) Provide Sea Bases

The primary asset the JMSDF provides when carrying out HADR operations with the U.S. Navy and NGOs are offshore platforms or sea bases.[7] In the chaotic aftermath of a large-scale disaster, in which the local government has lost its functions, onshore infrastructure has been destroyed, and access to the disaster areas has been restricted, an approach from the sea is highly effective. The experience of the GEJE has proved that having a sea base is effective in securing access to islands, peninsulas and other areas isolated from inland areas due to flooding or debris. This access allows JMSDF the ability to initially focus on saving lives. More specifically, the JS Hyuga (DDH 181) Helicopter Destroyer can travel while carrying with it the whole infrastructure necessary for daily life, which is the most important function at the time of a disaster. This equipment will be extremely effective in the initial phase of HADR because it can serve as the command and control center for coordinating all the entities involved in the operation. It can also serve as an air base capability from which not only Self-Defense Force (SDF) helicopters, but also helicopters from the police and fire departments, and NGOs can be operated in a centralized manner.[8]

(2) Share Information

At the time of a large-scale disaster, the havoc can cause the setup of a coordinating section to take too much time. This could have a negative impact on the initial response that must be addressed urgently. Therefore, a secondary role of the JMSDF is to share information with other entities through the use of its command and control capability. It is very important for the JMSDF to make full use of the U.S. Navy and NGOs' quick initial actions, which are achieved due to their diversified knowledge and experiences, and thereby capture accurate information on disaster victims. As a result, it is critically important for the JMSDF to put all of its power into initial actions and to conduct fact-finding opera-

Japanese military and nongovernmental organization personnel work together to get relief aid to people in need following the March 11, 2011 Great East Japan Earthquake.

Japan Maritime Self-Defense Force

1 Barack Obama, *The State of the Union Address*, 28 January 2014.
2 Thomas Lum and Rhoda Margesson, "Typhoon Haiyan (Yolanda): U.S. and International Response to Philippines Disaster," *Congressional Research Service Report*, February 10, 2014, p.8.
3 Available at www.mod.go.jp/j/approach/defense/saigai/tohokuoki/.

4 Available at www.civic-force.org/.

5 Interviewed with Kensuke Onishi at United Nations University on May 13, 2014.
6 Toshimi Kitazawa Minister of Defense, Japan Speech, The 10th IISS Asia Security Summit The Shangri-La Dialogue Second Plenary Session, June 4, 2011.
7 For the effectiveness of a sea base at the time of a large-scale disaster, see Takuya Shimodaira, "USJ Cooperative Operation in the Great East Japan Earthquake: New Aspect of USJ Alliance," *JMSDF Staff College Review* Vol.1 No.2 (December 2011), pp. 50-70.
8 Takuya Shimodaira, "Hyūga-gata Goeikan wo Fukumu Butai Unyō Konseputo" (Concept for Operating Forces including a Hyūga Class Helicopter Destroyer), *Hato*, Vol. 210 (September 2010), pp. 63-67.

Japan Maritime Self-Defense Force doctor Yoshikazu Miyauchi provides care during a Pacific Partnership mission in Vietnam. Pacific Partnership is a multilateral naval exercise that unifies the efforts of partner nation militaries, host nation civilian agencies, and nongovernmental organizations to strengthen the collective ability of the international community to operate as a team in delivering foreign humanitarian aid in times of natural disaster or crisis.

tions as soon as possible. This can be achieved by sending liaison personnel to the entities acting quickly at their own behest, and the JMSDF can act to disseminate that information to all response organizations.

(3) JMSDF fusion with gemba (on-site) power and chiiki (community) power

When the JMSDF fulfills its operational capabilities to the maximum extent by taking advantage of its naval characteristics – quick response times, flexibility, self-sufficiency, and maneuverability – such capabilities will be able to bring about truly effective power if they are combined with the capabilities of non-military personnel who are working in disaster relief operations. Such power can be called gemba power. While enhancing this gemba power, at the same time it is important to bolster the power that is latent within the community involved in the disaster, that is, chiiki power. Today, more and more attention is being paid to such chiiki power, which can be a driving force for pushing forward the voluntary participation of citizens in government initiatives, as well as collaborative actions between government agencies and citizen groups.

NGOs are expected to combine the gemba power and the chiiki power, while remaining neutral with regard to the military when engaged in providing humanitarian assistance. However, considering the situation in real-world terms, having a relationship with the military is an issue that no NGOs can avoid. NGOs have the advantage of speed in initial actions, and in their vast experience. Therefore, they can contribute to disaster relief by sending trained staff (e.g. medical staff and architects), developing relief plans, and offering helicopters and ships to transport relief supplies, and fill other gaps that cannot be provided by the military. Lastly, when the military leaves as response operations transition to recovery operations, NGOs can maintain the chiiki and gemba power momentum to further help survivors.

(4) Lead Exercises

The final point that should be noted is the usefulness of the military and its ability to promote preparedness in peacetime. While the usefulness of military forces is expanding to cover a wider range of activities – from its original role of war-fighting to maintaining international stability – HADR is not an issue that can be solved solely by military forces. It is impossible to respond to disasters through military assets alone and therefore is critical for the military to cooperate with civil organizations. However, the larger the disaster, the more diverse the actors involved in the response, and the more difficult it becomes to build civil-military lines of communication. For this reason, it is all the more necessary to ensure strong communication exists among international military forces in peacetime through a system for centralizing multinational initiatives, such as the Multinational Planning Augmentation Team (MPAT), and

multinational exercises.[9] The United Nations, international organizations, NGOs and other related organizations should work together to this end.

The GEJE revealed the effectiveness of military-military coordination in HADR. Therefore, it is necessary to engage in joint military exercises not only for conflict scenarios, but also for non-combat military operations like HADR response operations.[10] The cooperation should include the SDF, U.S. forces and the military services of other countries, and local governments and NGOs.

JMSDF's New Challenge

The damage caused by the GEJE was unprecedented, but when looking outside the country, we can see that emergencies of the same magnitude are happening in many places around the world. At the same time, after experiencing the GEJE, international Japanese NGOs that have focused on helping people in developing countries are now directing their attention to domestic needs. Thus, NGO activities have become more multidirectional. The foundation of Japan Platform has led to the formation of a framework for providing emergency assistance through united efforts where NGOs, business communities, and the government of Japan work in close cooperation, and make the most of the respective sectors' characteristics and resources – a "power to connect" unique to the NGO community.

While JPF was originally founded as an international platform, it has also functioned well in domestic operations. Meanwhile, Civic Force, which is a domestic NGO platform, is also preparing for international disaster relief operations by developing a partnership with the JMSDF to make the most of the "power of partnership," which it had experienced in response to the GEJE.[11]

9 Available at www.mpat.org/. The United States Army Pacific (USARPAC) has developed the Standing Operating Procedures (SOP) to facilitate multinational cooperation.
10 Takuya Shimodaira, "The Japan Maritime Self-Defense Force in the Age of Multilateral Cooperation," *Naval War College Review*, Vol. 67, No. 2, Spring 2014, pp. 52-68.
11 A report dated June 12, 2012, entitled "Cooperation with

The JMSDF should give serious consideration to building a partnership with such a framework, and strengthening its solidarity with NGOs that play an important role in emergency assistance, and that have the "power to connect" and the "power of partnership," so as to gain a public understanding and trust for the JMSDF.

Way Ahead

Japan's Association of Southeast Asian Nations (ASEAN) Regional Forum membership and its leadership in HADR operations will contribute to maintaining Japan's friendly relations with ASEAN and China, and provide opportunities for Japan to talk with many nations, including North Korea. Therefore, Japan may find a way to lead the region in security and stability.

When an unprecedentedly large-scale disaster occurs, a response should be made through the united efforts of the whole country, not disjointed support from the individual sectors. If a disaster that is more devastating than the GEJE ever happens, assistance would be needed at an unprecedented scale. The basic principle of HADR is to "provide the necessary assistance to those who need it,"[12] and, obviously, this cannot be achieved solely by the JMS-DF, and

it is not a task that is imposed solely on the JMSDF. In the future, NGOs and private corporations, which have unlimited potential, are expected to introduce new possibilities in the field of HADR, and among them, NGOs, for their diversity, will play a significant role in connecting organizations involved in HADR operations.

The relationship among the JMSDF, the U.S. Navy and NGOs in HADR are beneficial in the sense that when they overcome a gap between the civil sector and the military sector by working together, they can cause the fusion of the gemba (on-site) power displayed by the JMSDF and the chiiki (community) power hidden in the disaster area. It is essential for civil and military organizations to share their roles cohesively to ascertain the changing needs accurately and to bring to bear the maximum effect of the united efforts of the whole-of-government efficiently.

The primary task that the JMSDF is expected to perform is to display the gemba power that it has cultivated over decades of experience, which primarily lies in offshore platforms. For the future, it is necessary to pursue building frameworks wherein, when a large-scale disaster takes place in an area within the

Asia-Pacific region, private corporations, NGOs, and government agencies of the countries and territories concerned collaborate with one another beyond their organizational boundaries to share and use their resources with the aim of providing assistance more quickly and effectively.

Also, the key to increasing the effectiveness of military-military and civil-military coordination in HADR is for joint training and exercises to take place that prepare organizations for coordination and cooperation in real-world events. NGOs must be included in these exercises in order to maximize their capabilities in disaster situations, and familiarize the separate entities with each other's procedures for disasters. That way, when a disaster strikes, civil-military operations can occur smoothly.

In recent decades, and from the 2004 Indian Ocean Tsunami in particular, much progress has been made in disaster response. However, the points listed above show that there is much room for improvement, and manners in which JMSDF can lead the way toward greater improvement both from within the nation and between multinational militaries and nongovernmental organizations.

the JMSDF—To learn about the structure of search-and-rescue amphibian plane, US-2," available at www.civic-force.org/activity/activity-899.php/.
12 Kensuke Onishi, *NGO, Jōzai Senjō* (NGO, Always Prepare Yourself As If You Are on a Battlefield), (Tokyo, Tokuma Shoten, 2006), p.243.

The International Organization for Migration has been present in Haiti since 1994, but worked to address and mitigate the effects the 2010 earthquake had on the most vulnerable sections of the population.

Partnerships and Planning in Migration Crisis

By Christopher Hoffman,
Emergency and Post-Crisis Specialist,
International Organization for Migration

One thing is for certain after a disaster or during a crisis – people move. Today, the movement of people, and their migration to areas of safety, is one of the most significant drivers for both vulnerability and protection. While discussed on the fringes or in context, mobility has not featured prominently in the current overarching policy frameworks addressing disaster risk reduction and disaster risk management. While the United Nations' "Guiding Principles for Internal Displacement" is still utilized today as the foremost document on the rights of the displaced, there is yet a clear movement forward to address and foster mobility. Today more than ever, organizations, governments and civil society must holistically accept and address both the risk aversion and enhanced risk driven by mobility through proper planning for future movements and adequate response to existing movements.

The International Organization for Migration (IOM), an intergovernmental body with more than 155 member states, is the global lead agency on migration and migrants issues. Over the past 60 years, IOM has evolved into a "fit for purpose" agency that assists governments in their response to humanitarian crises, as well as in post crisis and transition contexts. IOM is on the cutting edge of displacement tracking and information management, bridging the gap between development and humanitarian initiatives—which is unique. Utilizing its wide-ranging project portfolio, IOM has been able to foster linkages that encourage the stabilization of communities affected, or have the potential to be affected by both conflict and natural disasters. Fostering resilient communities to mitigate the effects of destabilizing events by concentrating on mobility and its direct relationship to cohesion and preparedness is at the core of the organization's approach in fragile and developing nations.

Conflicts, political instability, disasters and environmental changes often produce 'migration crises:' massive population movements generating acute vulnerabilities for the affected population and long-term migration management challenges that can also jeopardize hard-won development gains. According to the Internal Displacement Monitoring Centre, between 2008 and 2012, 144 million people were forced from their homes in 125 countries by violent natural events such as earthquakes and floods.

Durable solutions

Over the last four years, IOM has been addressing the mobility implications of disasters with more than 250 projects completed, US$700 million invested and 23 million people assisted worldwide. The organization's experience shows that mobility-based solutions exist to reduce the impact of disasters.

The urgency of working with practitioners and policy-makers to tackle the root causes of vulnerability becomes more obvious with each disaster. Ensuring proper understanding of the linkages between mobility and disasters will help in taking the next step toward building safer and more resilient societies.

Owing to its cross-cutting mandate to help ensure the orderly and humane management of migration, IOM has been looking beyond the emergency phase to promote "durable solutions" in response to displacement induced by natural disasters. This includes facilitating sustainable return or, if the latter is not possible, supporting the local integration or relocation of the affected displaced populations. In the past

decade, IOM recognized the specificity of activities aimed at stabilizing communities after a crisis, as these types of activities not only help to alleviate the impact of hazards, but also to address some of the root causes of populations' exposure to risk, including systemic factors influencing vulnerability. Limited rural livelihoods, poor urban and local governance, ecosystem decline, gender inequality and limited access to education,

The IOM coordinates with military personnel to distribute food aid in Haiti after the devastating 2010 earthquake.

credit and financial systems are among the major structural factors contributing to vulnerability.

Addressing the issues of mobility in the context of disasters is of paramount importance when preparing for disasters, saving lives during responses, and ensuring a proper and sustainable recovery. IOM utilizes its existing expertise and globally formed partnerships to solidify this approach to the benefit of beneficiaries and its member states.

Partnerships

One major factor that ensures positive humanitarian response in

both conflict and natural disasters is partnerships. The ability for agencies, governments, civil society and beneficiaries to work together towards the common goal of saving lives is consummate to the success of any response activity. While noble in thought, practice can be a different story. IOM is unique as an international organization in that it is considered as a fully operational agency. With member states as the driving

force of IOM's response, the organization has been placed in a different category from most other agencies of the same level and response pedigree. Upon receiving operational funds from donors, IOM is able to immediately react to the needs of beneficiaries. Working together with their member states, civil society, the beneficiaries, and importantly their global partners, IOM responds faster and with a higher degree of impact than most.

The Global Cluster System, as established by the Inter-Agency Standing Committee (IASC) in 2006, agreed to place IOM as the cluster

lead for camp coordination and camp management (CCCM) in natural disasters. This responsibility entails coordinating activities and partners who work in camp-like situations in the heart of a disaster to ensure continuity of service delivery as well as cohesive response activities until durable solutions for the displaced communities can be reached.

IOM's role in the cluster approach does not end with CCCM leadership, but has extended significantly in the areas of emergency shelter, protection and health services. IOM and the International Federation of the Red Cross and Red Crescent Societies (IFRC) have an extensive relationship, sharing the load of shelter responses in many countries throughout the world. In protection, IOM works together with Save the Children International (SCI) and other partners to address the needs of highly vulnerable groups affected by a disaster. As seen in figures today, more and more children are fleeing conflict areas and are being displaced by disasters; these children are in need of highly skilled and targeted assistance that such partnerships provide. Together with partners at AmeriCares, Scuola Superiore Sant'Anna, Harvard University and International Medical Corps (IMC), IOM health teams assist in a myriad of ways during a response to address the psycho-social needs of vulnerable populations, provide health monitoring and testing as well as emergency medical referral services in a crisis.

Crucial to formulating and carrying out a response is to clearly understand the totality of the population that is displaced. Working together with colleagues at the Norwegian Refugee Council's Internal Displacement Monitoring Center (IDMC), IOM collects data on internally displaced populations (IDP) throughout the world. Organizations dealing with humanitarian responses utilize this data to plan for response and disaster risk reduction activities, in addition to providing a strong advocacy framework to support an end to displacement where possible. The IDMC-IOM partnership extends to populations that are not traditionally considered IDPs, including jointly monitoring mixed migration flows in the Horn of Africa to the Middle East and migrant population movements to Europe from North Africa.

Governments

Notwithstanding the IOM's already existing direct relationships with their member states, the most important and clear partner in the field is with governments. A direct request by the host government must be made in each country in which IOM responds. Working together with ministries and departments, IOM implements its activities safeguarding the sovereignty of the governments while directly supporting the human rights of the beneficiaries. As an inter-governmental organization, IOM works within and through the relevant government entities to ensure positive and effective response activities are moved forward.

Also, since the very inception of the organization, an integral part of IOM's work has been in coordination with military partners. In many cases militaries are first responders at the national level and at the international level provide key roles in providing timely and efficient logistical and security support in times of need. As an example, IOM and the North Atlantic Treaty Organization (NATO) have signed a Memorandum of Understanding to: 1) exchange information with respect to policies, activities and concepts, as appropriate, 2) allow participation of IOM in NATO planning and training exercises, as well as associated conferences related to the humanitarian relief phases, 3) exchange information on lessons learnt, including training and cultural orientation, in support of better planning and implementation of activities that promote community stabilization, 4) promote NATO–IOM liaison officers in order to establish common areas of interest relevant to strategic and operational planning, and to provide secondments to enhance civil-military cooperation initiatives.

Over the years, the NATO-IOM relationship has provided numerous actions and collaborative assistance in times of peace and conflict. IOM has direct relationships with NATO disaster response teams in Italy and Turkey, the Euro-Atlantic Disaster Response Coordination Centre (EADRCC), and has played a key role in implementing the NATO Partnership for Peace Trust Fund in countries such as Afghanistan, Bosnia and Herzegovina, Serbia and Montenegro. IOM works with other force commands while implementing disarmament, demobilization and reintegration (DDR) and security sector reform (SSR) activities around the world. IOM coordinates its activities with defense forces throughout the world including with Japan during the Indian Ocean Tsunami of 2004, in Haiti during the massive earthquake of 2010, and in Tunisia during the Libya Crisis of 2011.

IOM also has direct relationships with Civil Defense and Protection Forces throughout the world. Most notable is IOM's work with European Civil Protection in natural disasters and through the development of the Civil Protection Corps in Kosovo. The organization works very closely with the Department of Peacekeeping Operations (DPKO) at the United Nations to assist in planning and specific operational details related to humanitarian assistance in certain contexts such as Timor-Leste, Haiti and the Democratic Republic of Congo.

The Migration Crisis Operational Framework (MCOF)

To link expertise and partnerships, IOM has developed the Migration Crisis Operational Framework (MCOF) to be used as a tool during all phases of the disaster management cycle. It is based on the understanding that states bear the primary responsibility to protect and assist crisis-affected persons residing on their territory in a manner consistent with international humanitarian and human rights law.

The Operational Framework allows IOM to improve and systematize the way in which the organization supports its member states and partners to better respond to the assistance and protection needs of crisis-affected populations.[1]

This MCOF lays the groundwork for programmatic development and strategic planning to address current and foreseen needs in any given country through the "migration lens." IOM has made every effort to look inward to find the specific added value areas during a migration crisis so it can functionally operate and be able to provide the best guidance to assist its member states and beneficiaries to mitigate against, respond to and recover from potential events. It is now up to the governments themselves to begin addressing the root causes of potential migration crises. By expanding their approach to encompass rural to urban migration drivers, migration to areas of risk and assisting those already in high-risk areas, national governments are taking the first step in enhancing the positive and mitigating the negative aspects of mobility which will in turn allow them to better respond to sudden onset migration movements when and if they arise.

The MCOF approach identifies potential crises, their triggers and the potential effects that those crises will bring, coupled with targeted programmatic approaches to address the needs that arise. In tandem with this process, the MCOF identifies direct linkages with partner agencies, systems and clusters to ensure a comprehensive approach to migration management in crisis is attained. IOM has concentrated the MCOF document on 15 sectors of direct assistance shown in Figure 1.

Developed on a country-by-country basis, the MCOP process first identifies the potential crisis, identifies the IOM capacity to prepare, respond and mitigate that crisis, and seeks to address potential gaps

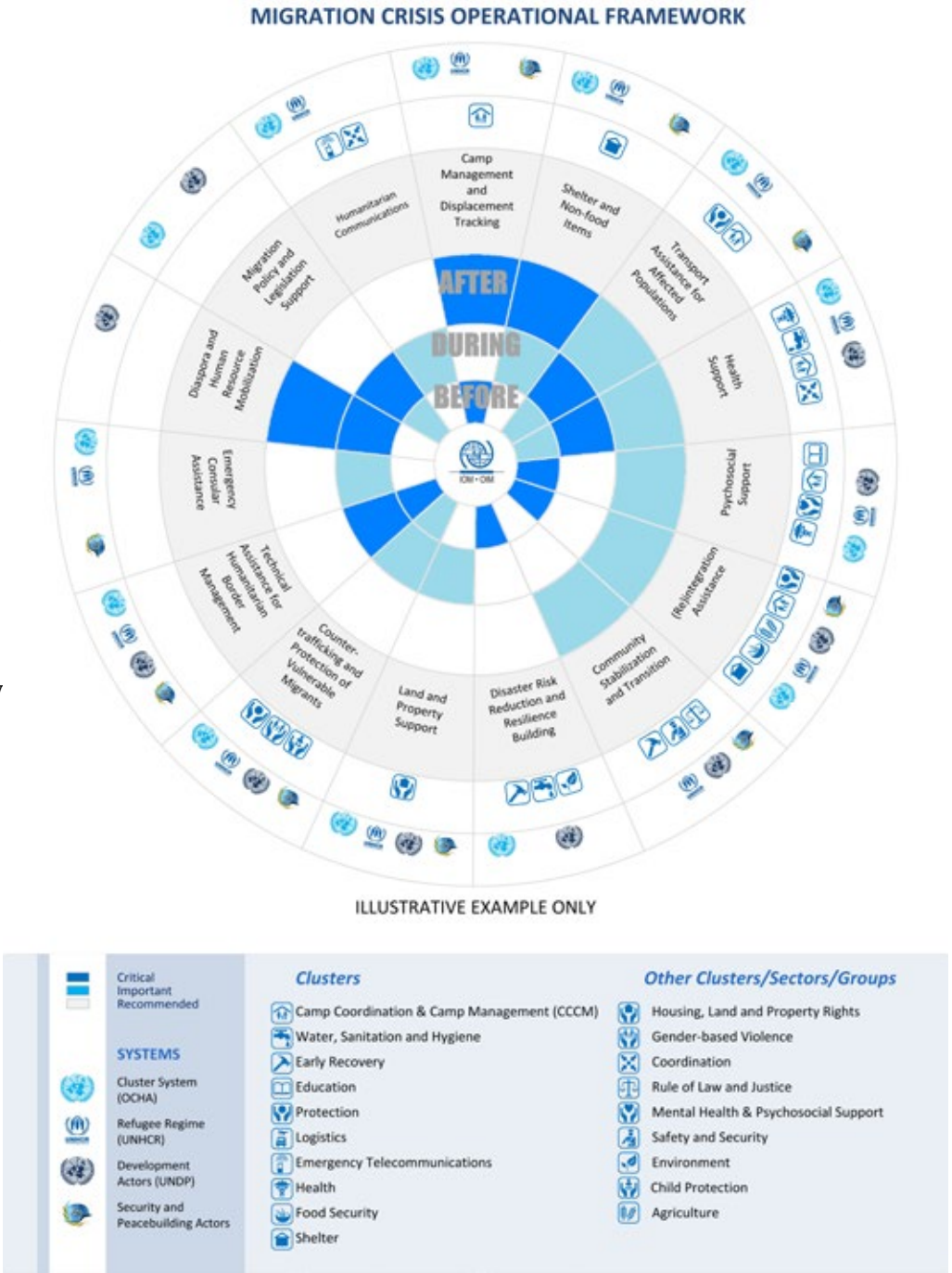MIGRATION CRISIS OPERATIONAL FRAMEWORK

ILLUSTRATIVE EXAMPLE ONLY

Figure 1: MCOF with linkages to partners

1 MC/2355 IOM Migration Crisis Operational Framework. International Organization for Migration. 101st Council. November 12, 2012. Geneva, Switzerland.

through programmatic development or partnerships with the governments and entities that may have mandates and the ability to assist.

By leveraging its internal capacity and tying it to key partnership areas, the MCOF on a country or ground-level provides the most all-inclusive views of potential migration crisis and measures of mitigation than any other framework or strategic document today. While the Strategic Response Frameworks, the U.N. Development Assistance Framework and other country-level planning tools address humanitarian and development needs, none fully address the needs of migrants and potential crisis—the MCOF does. If applied correctly, the MCOF will allow governments to view their current development issues and potential migration crisis through the "migration lens," providing a stark view of the realities, but also promote a positive planning approach to addressing the needs and enhancing the benefits of mobile populations.

The existing appeals and development processes are comprehensive for multi-agency and multi-donor audiences with a broad beneficiary basis. The MCOF and other iterations that take on singular agency planning levels can be the next step in holistic agency response planning. United Nations Children's Fund (UNICEF) may take a MCOF-style tool and utilize it for planning the effects of natural disasters on national education systems. The World Food Program may use a similar tool to plan the effects of slow onset droughts on food security in a given country together with its regular contingency planning. The potential for this all-encompassing planning tool is high and should be assessed based on its utility and functionality by the U.N. and partner NGO agencies.

The IOM has taken a bold step to develop a migration crisis preparedness tool that includes systems, clusters, partners and governments into the planning process in all stages of the disaster management cycle. As a tool, the MCOF strategically maps out the needs, the response and the stabilization efforts needed to address ongoing or perceived threats to normality in the migration context.

What makes the MCOF effective in addressing the needs of migrants or mobile populations caught in crisis is the collaborative effort for which it demands. As crises intensify and as partners increase, ensuring that everyone is working together will save more lives and reduce risks, allowing populations to be more resilient and return to safety faster than ever before.

The views expressed in this article are the author's own and do not necessarily reflect the views of the International Organization for Migration (IOM).

Team Rubicon arrives in the Philippines within days of Typhoon Haiyan, Nov. 12, 2013.

Photo by Kirk Jackson/Team Rubicon

Taking Team Rubicon Global:

Creating an International Veteran Service Organization for Disaster Response

By William McNulty, Cofounder and Managing Director, Team Rubicon Global

We weren't looking for it, but after the January 2010 earthquake, Team Rubicon stumbled into a simple, but powerful model in the rubble-strewn streets of Haiti: as military veterans, we realized that disaster zones are eerily similar to combat zones, and through that similarity we could help in ways other disaster response groups could not.

Working on the streets of Port-au-Prince, we were confronted by limited resources, unstable populations, and unfamiliar sights, sounds and smells. We also realized that the skills and experiences we acquired in the military were helpful in the chaotic post-disaster environment. We brought to bear the decisive leadership, teamwork, risk mitigation, and emergency medicine capabilities learned for war in our efforts to save lives and ease suffering. The final piece of the model fell into place at the end of our 20-hour working days sitting together over a cobbled-together meal, sipping warm beer. The comfort

of working alongside those who had your back, the odd satisfaction of backbreaking labor in service of something larger than ourselves - this was the camaraderie many of us had missed since leaving the service. This environment, for all its challenges, was therapeutic.

Stumbling Upon a Model

Our discovered model seemed to work like this: veterans, it turned out, are good in disasters; and disasters, surprisingly, are good for veterans. In helping others, we were finding ways to help ourselves: with the challenges of reintegration after our military service; with the demons some of us carried from our combat experiences; and with the question of what a life of service looked like without carrying a weapon.

Since its inception, Team Rubicon has pursued that dual mission of assisting military veterans as they transition back into civilian life and improving disaster response. We accomplish this by fielding nimble, well-trained teams composed of veterans and civilian medical professionals in the aftermath of natural disasters. The opportunity to continue to serve others cushions some of the challenges of post-service reintegration for many veterans. In turn, disaster response employs the skills they learned in the military to benefit victims in their greatest time of need. The twin challenges of veteran reintegration and emergency humanitarian response are combined to form a virtuous circle in the Team Rubicon model.

Along the way, we were also creating a sea change in the business of disaster response. The established lines starkly dividing the humanitarian relief world from the military world didn't apply to us; or at least we didn't acknowledge them. Unintentionally, we were breaking down those institutional barriers as we worked to render aid.

Eventually, we named our model and our mission. We called it Team Rubicon. "Team" represented the small unit concepts that we learned in the military and practiced in disaster zones; "Rubicon" acknowledges our personal point of no return, a small river that separated the Dominican Republic and Haiti on our first mission. That name, and the idea behind it, resonated with a generation of American Iraq and Afghanistan veterans over 2.5 million strong. Today, more than 70 missions and 17,000 registered volunteers later, Team Rubicon USA has reimagined the way to respond to natural disasters and helped thousands of veterans find new direction after taking off their uniforms.

Scaling to Serve Our Coalition Partners

With a worldwide need for disaster response, it became time to expand our model and our mission. Two trends are driving Team Rubicon toward global expansion: we are seeing a dramatic increase in the frequency and severity of natural disasters around the world, and at the same time, dozens of countries around the world are experiencing large numbers of military veterans reintegrating into civilian society as nations withdraw from the conflicts in Iraq and Afghanistan. Team Rubicon Global (TRG) - a first-of-its-kind international veteran service organization - offers an innovative and unique opportunity to apply the skills of veterans to humanitarian needs on a global scale.

Fifty nations contributed personnel to the conflicts in Iraq and Afghanistan. Tens of thousands of veterans are returning home to countries around the world. At Team Rubicon, we have been hearing from those international veterans as they arrive as supplemental volunteers on our disaster deployments, and they communicate their desire to form their own autonomous country-specific Team Rubicons. In 2015, we are responding by forming TRG, a force multiplier for the international disaster relief community.

To do this, we sought out a dispassionate but expert partner to help us think about Team Rubicon's international growth. We teamed with the world-renowned design firm IDEO to study the issues and envision TRG. The IDEO team examined various models of international expansion, studied cultural issues of various target markets, and perhaps most importantly, reached out to foreign veterans to understand their needs and desires. These veterans told us that they were not interested in becoming part of an American franchise, but they were interested in being part of a global coalition. As an Australian colleague put it, "the ability for the affiliate organisations to maintain their sovereignty as much as possible is crucial to the spirit, motivation and allegiance to that organisation." Our British colleague added, "As a powerful reintegration tool for British veterans, the concept of 'For UK veterans, By UK veterans', must prevail to reap maximum reward." And so all of us, international veterans and the veterans of Team Rubicon USA alike, were motivated to form a coalition of equals. That is reflected in the network structure we have developed.

What does the TRG model look like?

The newly minted TRG is a non-profit that launches, incubates, and advises individual country-specific Team Rubicon organizations around the world. In these countries, veterans will build their own organization reflecting their own culture and needs. They will operate under the same Team Rubicon mission, brand and guiding principles, while also benefiting from the relationships and tools Team Rubicon USA has developed along the way.

This is not a hierarchical network. These Team Rubicon country organizations are not subsidiaries of the American hub. They are independent members of a network who chart their own course and plan their own disaster response operations, all the while abiding by a shared mission and operating standards. In addition to launching new Team Rubicons, TRG will manage the relationships with governments, multinational institutions, and aid agencies that allow the Team Rubicon network to respond to disasters. A lean organization with a multinational board of directors, TRG serves as the global glue that holds the network together, and enables responders to do good deeds without the hassle of political red tape.

As new Team Rubicon country organizations (TRx for short) stand up, the Team Rubicon Global network expands. In the first year, we will welcome aboard Team Rubicon UK, Team Rubicon Norway, and Team Rubicon Australia. In each year that follows, two to three more TRx organizations will join the network. By year five, we expect to have 12 Team Rubicon organizations around the world. These new Team Rubicons will focus on the traditional areas of influence of their countries. For instance, Australia will specialize in Southeast Asia, Norway in sub-Saharan Africa, and the United Kingdom in the Commonwealth countries. Each Team Rubicon will become the expert at responding to natural disasters in the area of the world in which they have historically maintained a comparative advantage.

We have learned a lot along the way to reach the point of taking Team Rubicon global. We have learned that our coalition partners - the veterans of Australia, Norway, the Philippines, Turkey, United Kingdom, and many others - are experiencing similar reintegration challenges and have the same desire to continue to serve when they take off the uniform. We have learned that over the last 30 years, the frequency and severity of natural disasters have increased and that these present opportunities to continue to serve. We have learned that the skills veterans have gained from their service can help save lives during disasters. Moreover, we have learned that service through disasters is both cathartic for the veteran and creates efficiencies during the response. All this leads to the natural evolution of stronger individuals, and a stronger response community worldwide.

Locals wait patiently as members of Team Rubicon prepare to distribute much-needed food in the wake of Typhoon Haiyan.

RedR Australia deployee Ken Collis discusses the urgent need to expand the Doro Refugee Camp in South Sudan with Awat, a senior chief for the Maban County community, in the summer of 2012.

The Importance of PaRtnerships in Humanitarian Disaster Response

By Alan Johnson & Hannah Twine, RedR Australia

The members on RedR Australia's register are trained and prepared to relocate their lives within a matter of days. When a disaster strikes, international partners in need send job requests, and the organization works to fill them with register members when and where it can – meaning different offices, cultural contexts and continents on the spur of the moment.

Completed training courses: check! Medical tests: check! Pack luggage: check! Visa and pre-departure briefing: check, check!

With a 50-pound suitcase in tow, deployees set up a home amongst disaster – in places they may not have heard of the week before. A satellite phone may be their only way to reach the outside world as they navigate their way through new positions with United Nations agencies and nongovernmental organizations (NGOs), master appropriate cultural greetings, and learn how to access their bank accounts while being in the midst of an emergency. While most people measure their journeys by the number of flights and the few hundred miles travelled, RedR deployees and partners measure their journeys in the hundreds of cultural differences, thousands of tasks that come under 'relief-efforts' and in the innumerable relationships formed in the commitment to rebuild in times of crisis, all to support aid organizations and other humanitarian actors around the world by developing skills and providing expertise.

The prevalence of these crises has dramatically risen over the last two decades. In the last five years alone, we have seen the Syrian Civil War, the 2010 earthquake in Haiti, Typhoon Haiyan in the Philippines, conflict and displacement in western and central African nations, and floods in the Pacific. These recent large-scale disasters have caused unprecedented demand for organizations and highly trained personnel to impart response efforts. With global population growth, the trend towards urbanization, the emerging effects of climate change and a plethora of geopolitical tensions around the world, it can be expected that this demand will only continue to escalate.

RedR Australia is one such actor that exists to prepare and provide personnel to respond to humanitarian emergencies. Partnership is essential to our status as the only Standby Partner of the United Nations (U.N.) in the Southern Hemisphere and Asia-Pacific. (A Standby Partner is an organization or entity that has signed an agreement with an U.N. agency and maintains a roster of emergency surge capacity personnel. These personnel can be deployed upon request to enhance U.N. responses to humanitarian crises.[1]) RedR currently delivers humanitarian training and provides surge capacity to seven United Nations agencies, the International Organization for Migration (IOM) and many multilateral organizations with shared values. In 2013, Julien Temple, manager of Humanitarian Partnerships for the United Nations Children's Fund (UNICEF) in Geneva, recognized that RedR,

Louise Robinson (standing center), a senior associate trainer for RedR Australia, discusses the types of organizations that participate in the international humanitarian system during the Center for Excellence in Disaster Management and Humanitarian Assistance's annual Health Emergencies in Large Populations (H.E.L.P.) course at the Hale Koa Hotel in Honolulu, July 21, 2014.

"provided the second largest contribution of standby support to UNICEF; 23 percent of total support provided [as of June 2013]." This highlights the importance of partnerships in our mission: "save lives, alleviate suffering, and maintain human dignity during, and where possible before, international emergencies."[2]

When emergencies occur, it is vital that organizations, personnel and relevant stakeholders are prepared to respond quickly and effectively. RedR is a leader in emergency response programs due to its ability to select, train and deploy experts in a range of fields in a short period of time.

Our Standby Register is comprised of more than 270 people with expertise ranging from logistics and engineering, to child protection and nutrition, and are able to deploy at a moment's notice.

RedR has been involved in supporting the deployment of personnel to assist with the establishment of the Azraq and Za'atari refugee camps as a part of the Syrian refugee response in Jordan. Andrew Harper, UNHCR Representative to Jordan, states that, "when we're having a major emergency… having the ability to engage additional staff on short-term arrangements is critical. RedR Australia was one of the first ones to send deployees, which actually helped us to survive the first few months. Having a standby arrangement with an organization like RedR is not only important, it's critical for our overall well-being and to make sure the operation is effective."

1 United Nations Children's Fund, 'Standby Arrangements: guidelines on external staff in emergencies'.

2 Australian Agency for International Development/RedR Australia Mid-Term Review, 2012.

Due to the scale and urgency of the work in a crisis, the majority of coordination and training for rapid deployment must be in place well before any hint of unrest or crisis. It is necessary that frameworks be established without the pressures,

means that MAF can have some surety that it is fulfilling its duty of care to ensure that our staff are prepared for the challenges they face in their work."

Another challenge of effective disaster relief is securing local knowl-

new technologies) may be shared, reducing duplication and potentially lowering the net cost required to deliver programs. Ultimately, in the humanitarian sector, the greatest 'cost' is the risk of the loss of human life; the primary goal of all organiza-

Large Populations (H.E.L.P.) course, and provided two instructors for the Center's summer 2014 course. In addition, in early 2013, CFE-DMHA provided a trainer to participate in RedR's Essentials of Humanitarian Practice (EHP) course. These exchanges alone have already engendered the sharing of ideas, knowledge and processes, as well as paving the way for future benefits.

RedR and CFE-DMHA's respective offices are located in Australia and Hawaii and are therefore essentially positioned on either side of the Pacific. This provides the benefit of coverage and response capacity across a region predominantly comprised of developing countries that are prone to natural disasters. Furthermore, partnerships between organizations originating from and operating within different cultural climates allow for a more comprehensive understanding of cross-cultural communications, ethical considerations and local and regional dynamics. These factors can be incorporated into respective courses to create curriculum that is valuable to participants from different backgrounds, equipping them to work in a variety of contexts with a variety of colleagues and populations.

RedR and CFE-DMHA offer inter-

active, 'real-life' experiential scenarios to complement theory in their courses, which strengthen preparedness, resilience and an appreciation for the risks and challenges that may be present within the disaster context. They both have the responsibility to ensure the well-being of all constituents. The two organizations are also conscious of their obligation to ensure their courses equip attendees with a wide-range of 'fit for purpose' skills they may require, and strengthen their physical and mental capacity and resilience so they can take on challenging roles.

On top of the mutual strengths that have been discussed, RedR and the CFE-DMHA have individual strengths and assets to bring to the collaboration. The CFE-DMHA is focused on civil-military courses (those relating to building the relationship between civilian and the military organizations), while RedR's attention has traditionally been on capability development related to water, sanitation and hygiene (WASH) with an engineering perspective, logistics in emergencies, and security and communications in the field. These areas of knowledge are much needed in times of rebuilding during humanitarian disasters and are therefore complementary in their diversity, un-

derscoring a further positive aspect of partnerships.

International humanitarian disasters test the capacity and preparedness of those responsible for delivering responses, and those committed to responding to and rebuilding after humanitarian disasters will never exhaust the channels through which they can contribute. As deployees set up their homes in the midst of emergencies, they must work with their partners as they rebuild the homes of others – and use their training that is stronger as a result of organizational alliances. RedR CEO Kirsten Sayers states that, "through collaboration with complementary partners with similar values, goals and operating principles, RedR seeks to ensure that we are as efficient, effective and prepared as possible when disaster strikes."

"Having a standby arrangement with an organization like RedR is not only important, it's critical for our overall well-being and to make sure that the operation is effective."

ANDREW HARPER, UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES REPRESENTATIVE TO JORDAN

distractions and panic that come with crises. This allows for the immediate focus following disaster to be directed towards relaying responses, personnel and equipment, guided by existing structures. Partnership can facilitate contingency planning through identifying strengths, gaps and overlaps in frameworks. One of RedR's partners, the Mission Aviation Fellowship (MAF) is a faith-based NGO that provides vital aviation and associated logistics services to developing regions, ensuring that their partners can deliver their programs in the humanitarian, health, education, development and capacity-building spheres. They have also provided valuable assistance to recent disaster relief efforts in the Philippines, Haiti, Bangladesh, and for the Somalian refugee crisis in Kenya. Executive Officer Vaughan Woodward states that, "working with RedR in the U.K., Kenya and Australia, our staff undergo a variety of training courses that include Security Management Training, Hazardous Environment Awareness Training and Personal and Travel Security Training. Working with a worldwide professional organization like RedR enables MAF to have assurance that our staff training and preparation has been delivered to a syllabus recognized and accepted worldwide. It also

edge and channels. This is often in relation to logistics management and the ability to either be self-contained as an agency or to navigate through, organize or leverage local actors. Although most of RedR's partners act on the global level, many have local offices in some regions, such as UNICEF, the ICRC, the World Food Program (WFP) and World Vision. They can provide RedR with accurate information and more easily identify the needs in specific locations. Furthermore, due to the range of sectors in humanitarian action (water, shelter, healthcare, logistics, etc.), it is rarely possible for a single organization to have comprehensive knowledge on such issues and therefore partnerships with organizations that have diverse skillsets within different environments can assist the efforts of all involved.

In addition to knowledge sharing, partnerships can also provide avenues for cost sharing, saving and effectiveness. In the humanitarian sector there are always channels for funding to be expended and no shortage of causes in need of assistance. RedR has the responsibility to be accountable to its donors, partners and affected populations in line with their objectives. Through collaboration in training programs, existing knowledge and resources (including

tions should be to work together to minimize, or eliminate preventable deaths.

In disaster-affected environments there can be high-levels of media and public attention present. The media can play either a positive or adverse role. Through partnerships, organizations are better equipped to identify gaps or overlaps within the sector and conduct needs assessments to ensure that best practices are in place. Better coordination between partners may also facilitate more confidence in proactively engaging media attention in ways that can complement the objectives of projects. Partnering with other credible and progressive organizations can help RedR maintain its status as a leader in the sector.

Over the last several months, RedR and the U.S. Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DMHA) have commenced a program of collaboration. The foundation of this collaboration is a shared focus on offering training and education for preparation in disaster response and community resilience. The partnership entails an agreement around mutual values and roles and has so far provided for the exchange of trainers to attend respective core courses. In 2013, a RedR trainer attended CFE-DMHA's Health Emergencies in

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Visit redr.org.au to learn about:
- Joining the register
- Training with RedR
- Subscribing to the newsletter

Sarah Forbes, special assistant to the representative of UNICEF in South Sudan, poses with students at a UNICEF supported program site.

Stefan Stefansson/UNICEF

Interview with Retired Marine Corps Lt. Gen. Robert Blackman, U.S. Combined Support Force commander, Indian Ocean Tsunami

LIAISON Staff

Retired Marine Corps Lt. Gen. Robert Blackman served as the United States Combined Support Force (CSF-536) commander to the 2004 Indian Ocean Tsunami, in which nearly 230,000 people were killed in 14 countries. Within days of the tragedy, more than 15,000 U.S. service members were in Southeast Asia assisting relief and recovery efforts under Operation Unified Assistance, the name given the post-tsunami relief efforts focused on Indonesia, Sri Lanka and Thailand. In addition, a command center housing liaison officers from Australia, Britain, Japan, Singapore, and Thailand was set up along with a civil-military coordination cell which served as a base for United Nations' Office for the Coordination of Humanitarian Affairs (UNOCHA) and U.S. Agency for International Development (USAID) Disaster Assistance Response Team representatives. In all, Blackman oversaw the coordination of approximately 11 countries and delivered or coordinated delivery of more than 24 million pounds of U.S. Pacific Command relief supplies and equipment into the region by February 14, when CSF-536 ceased operations.

LIAISON: What was the situation in which you were tasked to go to Indonesia?

Lt. Gen. Robert Blackman: In the Indian Ocean basin on the twenty-sixth of December 2004, there was an enormous earthquake – underwater earthquake – that created a tsunami that did horrific damage certainly in, on the eastern side of the basin, in Indonesia, Thailand, as well as India, Sri Lanka. There were actually people that were killed on the beaches in Somalia, so it had an affect across the Indian Ocean basin.

L: What was the situation like when you arrived? Were there other militaries or organizations already present?

LGB: There were a few. We responded very quickly. We actually provided the first relief operations before the end of the year. I arrived at our headquarters in Utapao [Air Base], Thailand on New Years Eve of 2004. The headquarters was largely up and running. There were militaries already involved; essentially the closest neighbors – Singapore and Australia – but a number of other countries militaries responded very quickly. We were able to provide the foundation for probably a third of those militaries, about 11 countries, to work together to deconflict the efforts, coordinate the efforts. The Republic of Korea sent a ship, and certainly capability associated with that. Japan, the United Kingdom, Spain, Germany, France, all participated with us and we were able to coordinate the efforts of 11 countries. We believe there were 33 different militaries that were involved, including those from the host nations.

L: What was your role as the CSF commander?

LGB: I was the commander of the combined support force. Our responsibilities included humanitarian assistance and disaster relief in Indonesia, Thailand, Sri Lanka and the Maldives.

L: How did you coordinated with the host government to aid their response efforts?

LGB: We did that directly with, for example, in Indonesia, the Indonesian Army took the lead at the direction of the government of Indonesia. So, we coordinated directly with the Indonesian army commander in Indonesia, in Aceh province of Northern Sumatra, and then we coordinated at the government level through the ambassadors.

L: What partnerships, or coordination between organizations, did you experience that increased the efficiency of the response?

LGB: The lead U.S. agency for any humanitarian assistance and disaster relief operation is USAID and their Office for the Coordination for Humanitarian (Affairs), so we certainly coordinated with them, they were the lead U.S. government agency, and in essence we were working for them to an extent. The U.N. was certainly there in force, all the key U.N. organizations - World Health, World Food Program, UNICEF, etcetera - so we closely coordinated with the U.N., USAID, and host nations.

L: You gave a lot of credit to international relief agencies during the recovery phase, was there civil-military coordination during the response?

LGB: Well I think, again, you have to give credit to the host nations. They are certainly always in the lead in their own country. But, I think the coordination and the relationships with the U.N. organizations

> **"I think that we were successful. Not only in bringing food, water, medical care, etcetera, to some people that who had suffered an absolutely horrific tragedy, I think collectively we brought hope to those people, which was perhaps the most important thing we did."**

and USAID were excellent. It really was a team effort; the U.S. brought extraordinary capability to provide food water, medical care, but it was certainly a team effort.

L: In your opinion, what was the most significant lesson learned during the response? Did past operations like Sea Angel help during your response?

LGB: We studied very quickly in the limited time we had for planning. We did go back and study Sea Angel. I think that the lesson learned is, or the couple of lessons learned: one, it's a muddy boots affair. You've got to be there. The headquarters has got to be in the middle of it, it's a face-to-face, arms length requirement to delivery food, water. Helicopter crews have got to land in villages and bring relief. It's really a muddy boots requirement. The other thing is, you have to move quickly at every level. The United States has to make fast decisions to provide relief, the combatant commander has got to move quickly, the designated headquarters has got to move quickly, down to the last lance corporal has got to move rapidly, because ultimately you're trying to stop the loss of life and as quickly as possible mitigate human suffering and you've got to be moving. You can't be afforded the luxury of long planning sessions, you've got to plan, deploy and execute concurrently, very quickly.

L: From a partnership-building perspective, what do you think was the highlight of the tsunami response? Anything that surprised you?

LGB: I think the highlight was our ability to work together, to overcome some long-standings misunderstandings about the U.N., about the capabilities that they bring. I think the idea that the U.S. military capabilities, as extraordinary as they might be, are working for a small U.S. government agency in USAID [was a surprise to partner nations], but clearly all the countries that participated with us in our combined coordination center – as I said, Singapore, Australia, Korea, Japan, European nations – I think that the fact that everyone came with a similar mission and we were able to determine what was going to make them successful in the eyes of their government, their military, and piece that together, I think that was really the key to any success we might have had; and I think that we were successful. Not only in bringing food, water, medical care, etcetera, to some people that who had suffered an absolutely horrific tragedy, I think collectively we brought hope to those people, which was perhaps the most impor-

(Above) U.S. Marine Corps Lt. Gen. Robert Blackman, commander, Combined Support Force - 536, greets Gen. Boonsrang Niumpradith, chief of joint staff Royal Thai Supreme Command, during Operation Unified Assistance at Utapao Air Base, Thailand on Jan. 12, 2005. More than 15,000 U.S. military personnel are providing humanitarian assistance in Southwest Asia after a 9.0-magnitude earthquake triggered devastating tsunamis that killed nearly 250,000 people in the region on Dec. 26, 2004.
(Right) Lt. Gen. Blackman speaks with media during a press conference after an official visit to the USNS Mercy Jan. 31, 2005.

tant thing we did.

L: What do you think has been learned in the 10 years since the tsunami? Have you seen those lessons incorporated into disaster response?

LGB: Absolutely. I think the joint capability, resident in the (Joint Planning and Assistance Team), is certainly a lesson that has not only been observed, but learned. It's something that has been put into place to support future operations, and hopefully our after actions reports that have been filed with the Marine Corps and the joint lessons learned [center] will be of value to any headquarters that has a response mission.

Interview conducted by Lance Cpl. Jasmine Richey, Marine Corps Base Quantico Combat Camera, July 29, 2014.
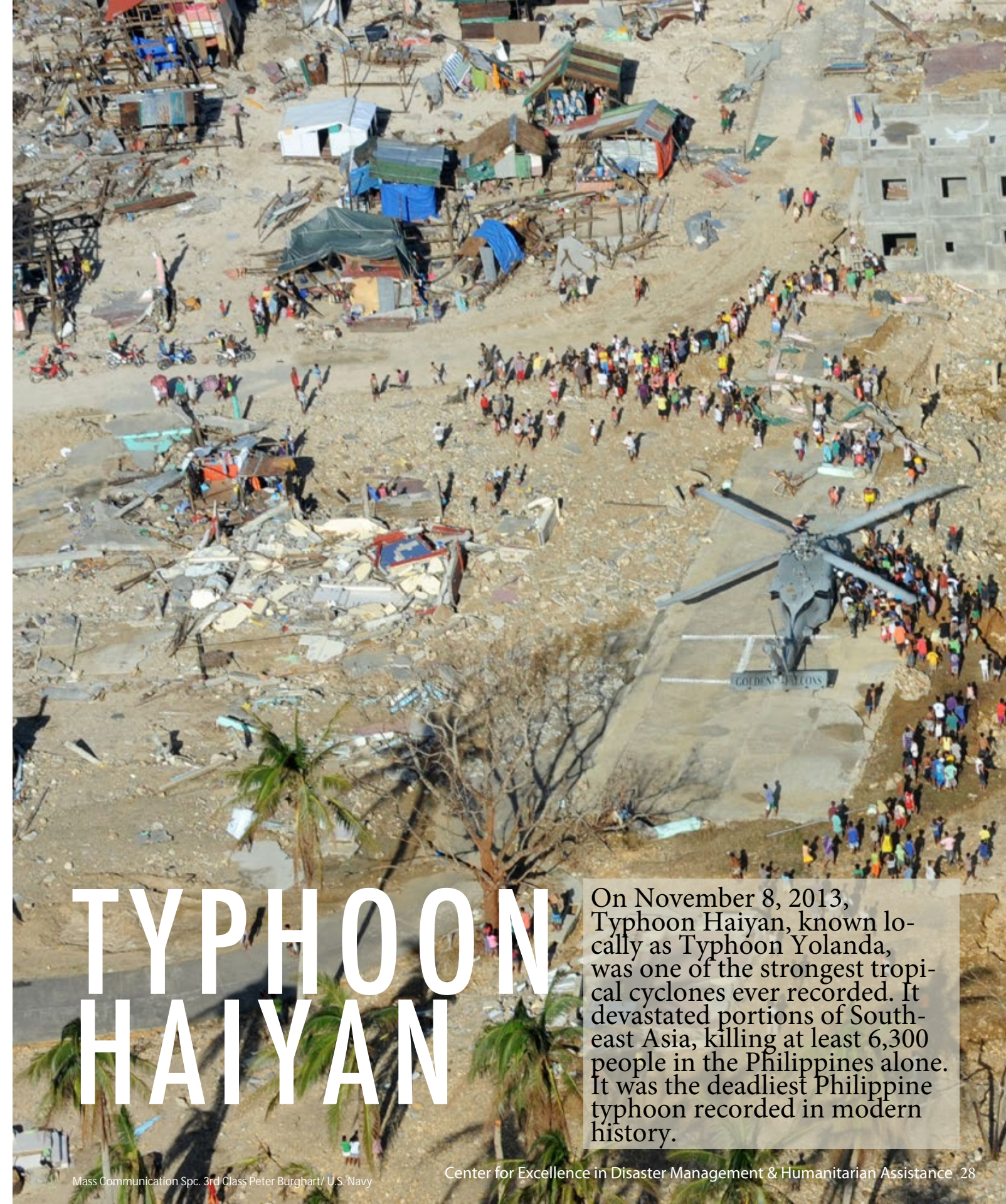
TYPHOON HAIYAN

On November 8, 2013, Typhoon Haiyan, known locally as Typhoon Yolanda, was one of the strongest tropical cyclones ever recorded. It devastated portions of Southeast Asia, killing at least 6,300 people in the Philippines alone. It was the deadliest Philippine typhoon recorded in modern history.

Beyond Build Back Better

Typhoon Haiyan (Yolanda) Recovery in the Philippines

By Sudhir Kumar, Disaster Risk Reduction Specialist,
United Nations Development Programme

The Philippines is highly vulnerable to disasters due to a number of factors that include location, geographic landscape, skewed development and increases in population in hazard-exposed areas. The country is composed of 7,107 islands, making it one of the largest archipelagos in the world, and is located along the Pacific Ocean's Ring of Fire, making it vulnerable to earthquakes, tsunamis and volcanic hazards – of its 220 volcanoes, 22 are classified as active. It lies along the Western Pacific Basin, a generator of climatic conditions such as monsoons, thunderstorms, inter-tropical convergence zones, typhoons and El Niño making it vulnerable to sea level rise from climatic conditions. Every year, an average of 20 tropical cyclones cross the Philip-

pine area of responsibility, and on average, four disasters hit the country per year. The National Disaster Risk Reduction and Management Council of the Philippines has recorded 36,019 deaths caused by natural disasters from 1980 to 2006. These disasters strain the national budget

Figure 1. Map of 100km Storm Track of Typhoon Haiyan (Yolanda)

and it is estimated that on average, typhoons contribute to an annual 0.5 percent decline in gross domestic product.[1]

A category 5 typhoon named Haiyan (known as Yolanda in the Philippines) hit the Philippines on November 8, 2013, and led to a swath of destruction across the central part of the country (Figure 1). It is one of the strongest typhoons ever recorded with winds reaching upwards of 315 kilometers per hour and massive storm surges up to six meters high in coastal areas; rain fell at rates of up to 30 millimeters per hour.

The storm affected 6.1 million people, displaced 4.1 million, and led to the deaths of at least 6,155 people and left 1,785 people missing. The islands of Leyte and Samar were hardest hit and 90 percent of the infrastructure of Tacloban City, the largest urban center of Leyte, was destroyed. A total of

1,192,091 houses were reported damaged, of which 593,785 were reported to have incurred more than a 50 percent loss.[2]

Typhoon Haiyan affected nine out of the country's 17 administrative regions, covering 12,122 barangays in 44 provinces, 591 municipalities and 57 cities. The affected areas were some of the poorest provinces of the country. As per 2012 data, the average household income in the severely affected provinces was only 75 percent of the national average.[3]

The Philippines government, along with development partners, undertook a massive response and relief exercise and currently long-term recovery and reconstruction (R&R) is underway. This ongoing recovery and reconstruction offers an unprecedented opportunity to go beyond 'build back better' by considering the following:

Strengthening local-level governance

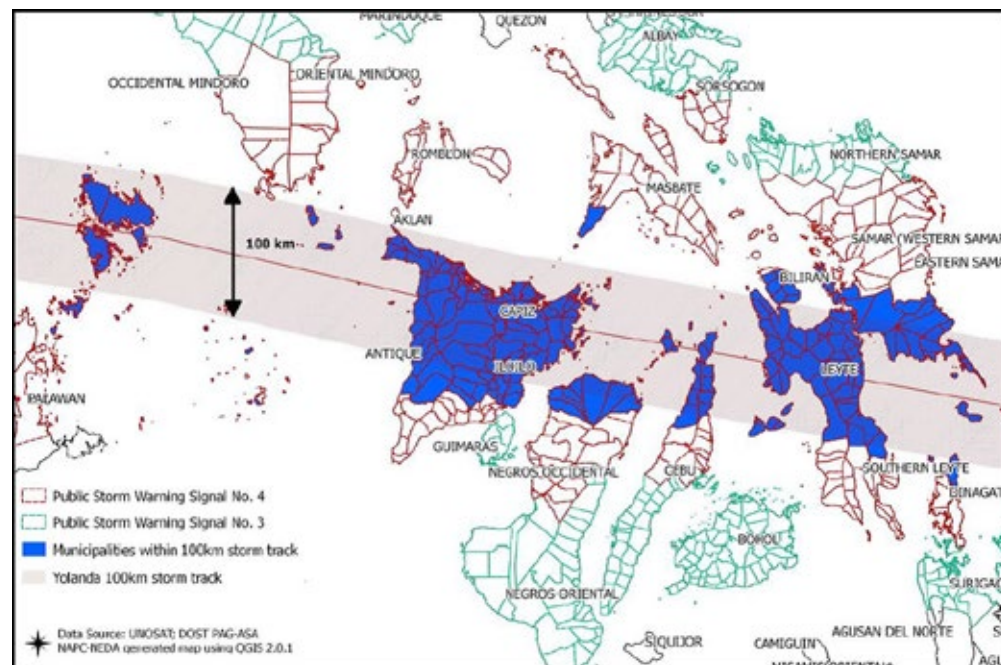In the Philippines, basic services including health, social welfare, agriculture and environmental sectors have been devolved to local government units (LGUs) after the enactment of the Local Government Code in 1991. However, most of the LGUs are still largely dependent on financial transfers from the Internal Revenue Allotment (IRA). The clarification of roles and responsibilities across tiers of government has not progressed much, which leads to vague and inefficient assignments (Figure 2). The vague assignments lead to unfunded mandates, and non-delivery or duplication of service delivery by several levels of administration.[4]

The LGUs will lead the implemen-

tation of the Typhoon Haiyan recovery and reconstruction program, which will involve project management, financial management, quality assurance and control, and coordination with national-level agencies and development partners. The national government and development partners will be providing technical assistance to LGUs to support the implementation of programs and projects. It offers a window of opportunity to build capacity of the LGUs and strengthen governance for delivery of basic services. The enhanced capacity and expertise of the LGUs will be useful in post-Haiyan developmental

Figure 2: Administrative divisions in the Philippines

interventions and day-to-day functions of the LGUs.

Climate smart recovery and reconstruction

Several reports and studies have indicated that the intensity and frequency of hydro-meteorological disasters is likely to increase in the future. The impact of Typhoon Haiyan highlighted the issue of climate change and disaster linkages at various forums.

The recovery and reconstruction (R&R) offers a window of opportunity to integrate disaster risk reduction features into sectoral recovery including housing, infrastructure and livelihoods. In the past, some of the

R&R programs integrated disaster risk reduction. The R&R program implemented in the aftermath of the Gujarat, India earthquake of 2001 integrated risk reduction features as one of the objectives was to "build, retrofit, repair and strengthen houses for the people, and public buildings affected by the earthquake through application of earthquake-resistant technology."[5] The Indonesia R&R implemented in the aftermath of the Indian Ocean Tsunami of 2004 embraced the 'build back better' principle. The 'build back better' principle, in terms of physical facilities, aims to achieve a result that was superior in quantity and quality than what existed before the disaster. For example, it equipped the housing estates with sanitation facilities and established guidelines for disaster-resilient housing.[6]

For recovery and reconstruction, the Government of Philippines also adopted the 'build back better' mindset. The R&R also offers an opportunity to consider climate change adaptation and mitigation measures, though this issue is at an early stage. The Government of the Philippines has identified climate change in Haiyan recovery and reconstruction

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1 NEDA (2008), Mainstreaming Disaster Risk Reduction in Subnational Development and Land Use/ Physical Planning in

the Philippines, National Economic and Development Authority, UNDP and ECHO, pp 19-20.

2 NEDA (2013), Reconstruction Assistance on Yolanda, National Economic and Development Authority, pp 1-4.
3 NEDA (2013).
4 ADB (2011), Public Sector Management Subsector Assessment (Summary): Decentralization and Local Governance, Asian Development Bank.

5 GSDMA (2001), Gujarat State Disaster Management Authority, Gujarat Earthquake Reconstruction and Rehabilitation Policy.
6 BRR (2009), the Executing Agency for Rehabilitation and Reconstruction of Aceh-Nias, Ten Management Lessons for Host Governments Coordinating Post-disaster Reconstruction.

strategy and mentioned that the rebuilt communities should withstand the 'new normal.' It is important to implement these strategies, which is challenging but has manifold benefits in the end. Upon completion, this climate smart recovery and reconstruction will offer a number of lessons for future recovery.

Transition from response/relief to early recovery/recovery and reconstruction

In order to respond to Typhoon Haiyan humanitarian needs, the Inter-Agency Standing Committee (IASC) system-wide Level 3 emergency response was activated. It is important to note that Haiyan was the first large-scale natural disaster to strike since the IASC Transformative Agenda was adopted, and the first time a Level 3 emergency was declared.

The humanitarian response aims for provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the affected people. When the basic subsistence needs are met, the humanitarian response shifts to long-term recovery and reconstruction. The R&R directs the restoration and improvement where appropriate, toward facilities, livelihood and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors, in accordance with the principles of 'build back better.'

The Government of the Philippines focuses on long-term, sustainable efforts to reduce vulnerabilities and strengthen capacities to cope with future hazard events. In order to manage and coordinate the overall recovery, the Office of the Presidential Assistant for Rehabilitation and Recovery (OPARR) was established, which constituted the following five clusters for recovery and reconstruc-

tion.[7]

The cluster approach by the government to manage recovery is an interesting approach for coordination and transition. In the past, most of the R&R programs have been implemented by either the R&R agency created or designated for recovery or existing line agencies. The cluster approach along with OPARR is a new model as cluster approach creates opportunity for improved coordination, which is vital in recovery and reconstruction. Since OPARR acts as focal point for recovery and reconstruction, liaison between organizations becomes easier. It is expected to

Sr. No.	Cluster	Lead
1	Infrastructure	Department of Public Works and Highway (DPWH)
2	Livelihood	Department of Trade and Industries (DTI)
3	Resettlement	Housing and Urban and Development Coordinating Council (HUDCC)
4	Social Services	Department of Social Welfare and Development (DSWD)
5	Support	National Economic and Development Authority and Department of Budget and Management

(OPARR, 2014)[7]

provide valuable insights on transition from humanitarian response to early recovery, and to recovery and reconstruction.

Institutional set up for recovery and reconstruction

The planning and implementation of a recovery and reconstruction program, especially in the aftermath of a large-scale disaster, requires a dedicated institution, which may be a new or an existing institution with a specific mandate. In the aftermath of the 2004 Indian Ocean Tsunami, India set up a Project Management Unit (PMU) under the existing government mechanism – the Revenue Administration, Disaster Management and Mitigation De-

partment, Government of Tamil Nadu – to implement the recovery program. In Sri Lanka, the government formed a new agency named the Reconstruction and Development Agency (RADA) with the vision to create a single government agency to focus on reconstruction and development issues across all sectors and stakeholders in affected areas. In Indonesia, BRR (agency of rehabilitation and reconstruction for Aceh and Nias) was established for four years to complete the recovery, and closed again once recovery was considered complete.[8]

The Government of the Philippines has set up the Office of the Presidential Assistant for Rehabilitation and Recovery (OPARR) to manage and coordinate the Haiyan recovery.[9] The OPARR has opened offices at the national and regional levels and is in process of reaching the sub-regional level.

It is important to note that the Philippines has a well laid out institutional arrangement for disaster risk management from national to local levels. It has the National Disaster Risk Reduction and Management Council, an interagency body, chaired by the Secretary of the Department of National Defense and the Administrator of the Office of Civil Defense (OCD) as executive

director. At provincial, city, and municipal levels, it has Provincial, City, and Municipal Disaster Risk Reduction and Management Councils (DRRMC) respectively. The regional director of the OCD is chairperson of the DRRMC at the regional level. The functions of the OCD includes recovery and reconstruction: "develop and ensure the implementation of national standards in carrying out disaster risk reduction programs including preparedness, mitigation, prevention, response and rehabilitation works, from data collection and analysis, planning, implementation, monitoring and evaluation."[10]

The OPARR have been constituted and tasked with the Haiyan recovery and reconstruction, though the Office of the Civil Defense exists at national, as well as regional, levels with the overall mandate of disaster risk reduction and management including recovery.

The Haiyan R&R program will provide insights and learning on the strategic role of new agencies for recovery in a context where a dedicated disaster risk management agency exists. It will also provide valuable lessons on the coordination arrangement among the provincial government, newly formed recovery agency and existing DRM agency on recovery and reconstruction. For example, in Pakistan, the Earthquake Recovery and Rehabilitation Agency was constituted to manage recovery in the aftermath of 2005 Kashmir Earthquake and is now a permanent institution. Pakistan also constituted the National Disaster Management Authority, which is the nodal agency for DRM including recovery and reconstruction.

Reducing exposure

Disasters offer an opportunity to mitigate risk and the 'build back better' principle plays an important role. A reduction in exposure

of people and assets to hazards has been attempted in the past but it is a challenging issue as reduction in exposure can call for relocation of large portions of the population. For example, in Sri Lanka, the government announced in the immediate aftermath of the tsunami of 2004 that it would enforce a no-build coastal buffer zone of 200 meters in the north and east coasts of the country and 100 meters elsewhere. Later, the government decreased the buffer zone to 35 meters.[11] The objective of reducing exposure through a buffer zone approach in recovery and reconstruction is challenging as relocation in general has been challenging. In R&R, it is more challenging, as there is pressure to complete the recovery in limited time.

The Philippines, which has a long coastline with high exposure to a number of hazards, had an opportunity to reduce risk through reduction in exposure. In November 2013, soon after the typhoon, President Benigno Aquino III enacted a no-build zone of 40 meters from the shoreline and a number of municipalities passed local government ordinances related to it.[12] Later, the government downgraded the no-build zone to a no-dwell zone, which meant relocation of communities would be the last resort if other risk reduction measures were not sufficient to reduce the risks in no-dwell zones. The government called for a higher resolution and scale of risk maps so that risk reduction measures are taken as per local risk. The government and UNDP, Philippines are working to develop and make available risk maps of a higher scale (1:10,000) to the public domain. This is an important intervention and will go a long-way in reducing exposure in Typhoon Haiyan-affected recovery and reconstruction program areas.

In conclusion, it can be said that the Typhoon Haiyan recovery and reconstruction is challenging and expected to offer a number of lessons upon its completion, ranging from the institutional arrangement to the approach, and from the reduction of exposure to the governance. Strengthening of local governance using recovery and reconstruction is an important dimension and future recovery can integrate elements of governance, if required. The institutional arrangements set up for recovery and reconstruction in the past broadly falls under two categories: new agencies for R&R (like the Gujarat State Disaster Management Authority in India after the 2001 earthquake and BRR in Indonesia after the 2004 tsunami), or R&R through existing agencies (like in Thailand and India in the aftermath of the 2004 tsunami). The Haiyan R&R is under implementation through a new institutional arrangement, which has potential to offer a new model. The issue of relocation in R&R has been difficult to manage. The risk-based, no-dwell approach along with mass awareness on risk at the community level is still evolving and undergoing change. If the no-dwell concept is implemented in letter and spirit in the Philippines, it will provide new lessons. These lessons will provide guidance to future recovery managers and policymakers.

7 OPARR (2014), Yolanda Rehabilitation and Recovery Efforts, Office of the Presidential Assistant for Rehabilitation and Recovery.

8 Springer Japan (2014), Institutional arrangements for managing large-scale recovery: Key lessons from 2004 Tsunami, Sudhir Kumar, Rajib Shaw (ed.) Recovery from the Indian Ocean Tsunami: A Ten-Year Journey.
9 NEDA (2013).

10 RA (2010), Republic of the Philippines, Republic Act No. 10121.

11 BRCF (2012), Sri Lanka Tsunami 2004-Lessons Learned, Belgian Red Cross Flanders.
12 CwC (2014), Communications with Communities, Report Number 13, 24 February-1 April 2014.

Japan Air Self-Defense Force and U.S. Marine Corps personnel load high-energy biscuits into a Japanese C-130H Super Hercules, Nov. 22, 2013 at Villamor Air Base during Operation Damayan.

Staff Sgt. Joseph DiGirolamo/ U.S. Marine Corps

Institutionalizing interagency coordination for disaster relief

Lessons from the JSDF's civil-military cooperation in the Philippines

By Atsushi Yasutomi,
Reseacher, Research Institute
for Peace and Security,
& Saya Kiba,
Research Associate,
Kobe University

As one of the world's strongest storms ever, Typhoon Haiyan caused tremendous damage in various parts of the Philippines in November 2013, and led the Government of Japan to provide the nation with US$56 million in financial assistance and a medical support team from the Japan International Cooperation Agency (JICA). In addition to the JICA team, the Government of Japan dispatched a 1,180-strong Japan Self-Defense Force (JSDF) team to Cebu and Leyte Islands, under the name Operation Sankay (meaning "friend" in the Visayan language). For nearly a month, the team had the task of providing transportation for service staff and relief goods, pest control, and medical assistance such as vaccinations and health consultations by means of a mobile clinic.

Lacking officers with experience in coordination within the international humanitarian community, the JSDF's medical assistance operation received assistance from the Embassy of Japan in coordinating with civilian actors on the ground, including international organizations, and national and local authorities.

The Japanese experience in the Philippines has demonstrated that Japan's current approach to civil-military cooperation in disaster relief lacks institutionalized coordination amongst the civil and military actors both at the strategic and tactical levels. This article explains such challenges from the perspectives of a conceptual mismatch between the strategic and tactical levels, preoperational information gathering, and human resources.

1) Conceptual mismatch between the strategic and tactical levels on civil-military cooperation

The Japanese strategy towards civil-military cooperation in peace support operations and disaster relief activities has been expressed in documents released since 2002. The latest documents include the Advisory Group Medium-term Report on future Peacekeeping Operations (PKO), suggesting the JSDF should pursue civil assistance activities in peacekeeping operations by utilizing Japanese Official Development Assistance (ODA) in collaboration with civilian organizations, including nongovernmental organizations (NGOs), by applying the whole-of-government approach, or the "All-Japan" policy.[1] Most recently, Japan's 2013 National Security Strategy (NSS) also stipulates that Japanese PKO should implement effective coordination with ODA projects and with NGOs.[2]

While these strategic documents address Japan's fundamental direction towards civil-military cooperation, few, if any, provide tactical guidelines on practicing the strategies in actual missions, i.e. how the JSDF and potential civilian collaborators should implement such civil-military cooperation. Thus, the interpretations on implementation of civil-military cooperation can vary between the capital and field level, raising the risk of making the interpretation highly case- and person-dependent.

The Japanese cases in the Philippines present various witnesses suggesting inconsistencies and confusion over the strategies that were created in Tokyo on one hand, and interpreted by the foreign offices and the JSDF officers at the tactical level in the Philippines on the other. It is particularly noteworthy that all the tactical decisions – over whether and with whom civil-military cooperation should be carried out, on what areas the cooperation should cover, and what sort of coordination should be managed in the field – were left to a handful of field staff working in the disaster area. This demonstrates a grave structural deficiency in strategy interpretation at the tactical level, rendering the strategy futile and making the tactics arbitrary.

An officer from the Central Readiness Force (CRF) of the JSDF in charge of civil-military coopera-

1 Advisory Group Medium-term report on future PKO (PKO no arikata ni kansuru kondankai Chuukan Torimatome). Retrieved on 1 November 2013, from http://www.pko.go.jp/PKO_J/info/pdf/20110704.pdf.
2 Cabinet Office of Japan, National Security Strategy, 17 December 2013. http://japan.kantei.go.jp/96_abe/documents/2013/__icsFiles/afieldfile/2013/12/17/NSS.pdf.

tion in Operation Sankay explains that there is a shared understanding within the JSDF that the All-Japan approach is essential for their disaster relief and international peace support operations. For this reason, there has been constant psychological pressure from Tokyo on the JSDF staff operating in the field to seek out and realize any civil-military cooperation projects possible, and thus, they actively searched for such opportunities. Simultaneously, this civil-military cooperation officer confirms that realizing the All-Japan approach should not take priority over responding to the local emergency relief needs. Indeed, there were more pressing needs on which to coordinate with the local authorities and the U.N. agencies in Tacloban than seeking opportunities for cooperation with other Japanese actors.[3]

An expert in JICA's Economic Infrastructure Department, who has field experience in Mindanao in the Philippines, states that the Ministry of Defense (MoD) and JSDF need to

present clear objectives for utilizing ODA for future civil-military cooperation. According to the expert, the MoD and JSDF may typically assume that an ideal combination between the use of ODA and the JSDF's disaster relief activities could be such that the JSDF would enter into a difficult area where the security situation is so unstable so that civilian agencies have no access; after the JSDF has withdrawn, civilian agencies like JICA would continue with development and reconstruction activities using ODA. Such sequencing could be possible at least in theory, he adds. For him, civil-military cooperation cannot be realized without detailed discussions as to what constitutes benefits for both the civilian actors and the JSDF in such a difficult real-life circumstance.

A diplomat at the Japanese Embassy's Provisional Office in Tacloban (see the subsequent section) reveals that, except for the protection of Japanese nationals in the disaster areas, there were no explicit task orders received from the Ministry of Foreign Affairs (MoFA) in Tokyo

requesting him and his colleagues to provide official support to the JSDF engaged in Tacloban. He particularly emphasizes that there was a serious lack of cohesion between the MoFA and MoD over public announcements on the JSDF's medical services to be implemented in Tacloban. The JSDF was periodically giving press releases to the Japanese press, but more importantly, were not giving them to the media in the Philippines. It was essential for the JSDF to publicize its pest control activities (aerosol application) and mobile clinic (see subsequent section) both to give advance notice allowing access to the medical services to as many community members as possible, and to keep track of such activities for future medical reference. Despite this, there was no unified policy as to how the two ministries in Tokyo should divide their roles vis-à-vis public announcement. At the tactical-level, the Provisional Office first sent the advance announcement to the embassy in Manila, which is better connected to the local networks, so that the announcement could then

reach Filipino and other media. This important linkage was not formulated by the authorities in Tokyo but came about purely on an ad-hoc and personal initiative basis.

The above-mentioned JSDF officer in charge of civil-military cooperation stresses the urgent need for a system that allows coordination amongst the MoD, the MoFA, and JICA to share their field experiences and lessons learnt from the missions in South Sudan and the Philippines. While the Civil-Military Cooperation (CIMIC) section of the CRF does have a knowledge pool, being a small part of such a large MoD system, it faces difficulties in maintaining exchanges and discussions with other civilian institutions including the MoFA and JICA outside of the field operations. Worse still, there is no equivalent CIMIC section within the MoD proper to discuss civil-military cooperation directly with these civilian institutions.

2) Capability for pre-operation information gathering

The efforts by the Embassy's Provisional Office in Tacloban were the sine qua non determining factors in realizing tasks such as bridging between the local authorities, liaising with the JSDF in cluster meetings at the On-site Operations Coordination Centre (OSOCC – a coordinating body in Tacloban for civilian humanitarian agencies), conducting local studies on local medical demands, and providing the JSDF with community information and language support.

The diplomat at the Embassy's Provisional Office mentioned above raises two points for improvement on the JSDF's coordination with the civilian actors back in Tokyo as well as in the field. The first is that the JSDF was unable to send an engineering unit with heavy equipment despite the fact that JSDF had clear advance information of a need for such equipment. He learnt from his

post-operation study that the mayors of the local authorities, and members of state agencies (particularly the Ministry of Social Welfare and Development), and international agencies had been in need of assistance in shelter building and agricultural reconstruction. In addition, the expectation from the Armed Forces of the Philippines (AFP) was high that the JSDF would play a major role in the mass transportation of relief goods that remained undistinguished, while forklift and other heavy vehicle operators could clear away rubble. The second is that the JSDF had first commenced operations in the north of Cebu Island, and only later did it redirect itself to Leyte Island where the damage was much worse.

The diplomat at the Provisional Office explains that these tactical challenges could have been avoided if the MoFA had arrived in the damaged areas at an earlier stage to allow them to conduct more detailed studies of local needs, so that such information could be delivered to the JSDF more promptly and accurately.

A JSDF officer seconded to the Southeast Asia Division, MoFA, similarly opines that the JSDF and MoD should build up a system in which information-gathering capabilities are constantly strengthened though peacetime exercises. The Act Concerning the Dispatch of Japan Disaster Relief Team requires permission from the Foreign Minister before a JSDF foreign disaster relief team can be dispatched. However, it is technically possible to create at least a provisional legal framework to allow JSDF and MoD staff to travel to disaster areas to study whether or not a JSDF dispatch is truly necessary before sending Japanese troops. If their study concludes that the disaster damage was not such that JSDF should be sent, then such an advance reconnaissance trip would not be a waste. Rather, more JSDF staff (and defense attachés) capable of such post-disaster needs evaluation

should be stationed at all times in the Japanese embassies in disaster-prone countries so that they can instantly relay emergency demands as analyzed from the JSDF's perspective in case major disasters hit their stationing countries.

3) Capability of human resources in interagency coordination for civil-military cooperation

The aforementioned JSDF CIMIC officer reveals that ordinary JSDF officers are usually not able to assume a coordination function, as it requires expert knowledge and experience of development assistance and disaster relief. For officers without such attributes, coordination with U.N. agents and local and national authorities is far beyond their capabilities. For example, they are not familiar with U.N. cluster systems and the "Oslo Guidelines", nor are they aware that the military's approach and mind-set are not always compatible with those of the civilian actors. Their capabilities can be strengthened through peacetime capacity-building of JSDF officers in the above-mentioned areas. Those who are sent on disaster relief and peacekeeping operations need at least a basic understanding of Japanese foreign assistance and international cooperation, this CIMIC officer continues. According to this CIMIC officer, the embassies are not always in a position to provide the JSDF with support. The JSDF officers on disaster missions must not and cannot entirely depend on the embassy's assistance. For this reason, the JSDF needs to empower troops with established knowledge and experience in international scenarios.

Col. Makoto Kasamatsu, an expert officer in charge of international security cooperation at the MoD, points out in his article that past participations in the Multinational Cooperation Program in the Asia-Pacific (MCAP) played a significant role in promoting multinational cooperation amongst

Japan Ground Self-Defense Force soldiers wait to board a U.S. Marine Corps MV-22B Osprey tiltrotor aircraft at Tacloban Air Base, Philippines, Nov. 14, 2013, during Operation Damayan.

Cpl. Codey Underwood/ U.S. Marine Corps

civilian and military actors in the Philippines.[4] MCAP is a multinational military tabletop exercise program hosted by the Government of Japan, and participated in by militaries of Asia-Pacific countries. Recent MCAP exercises have focused on disaster relief. When military officers from the United States, the United Kingdom, and Canada, who had participated in MCAP, met each other again in the military-to-military Multinational Coordination Centre (MNCC) in the Philippines, their communication there went smoothly and effectively, utilizing the network and personal trust built during the MCAP exercises.[5] This example can be one of such peacetime training opportunities where the JSDF can elevate its knowledge and expertise on disaster relief and international coordination.

Some key lessons have become apparent through various instances of civil-military cooperation between the JSDF and civilian agencies in Japan. The examples raised above point to the lack of an institutionalized commitment to interagency coordination for disaster relief. While there is a solid strategy for civil-military cooperation for disaster relief and peace support missions, the interpretation framework is not yet in place to allow such strategy to be realized in the field in concrete form.

It is noteworthy that such lessons are indeed not all new but have been repeatedly highlighted in theoretical studies of interagency coordination for disaster relief and peace support operations. For instance, Nilsson, Hull, Derblom and Egnell warn of

4 The Asagumo Shimbun, 2 January 2014. [original in Japanese]
5 Makoto Kasamatsu, "Operation Tomodachi has evolved into a multinational framework," *Diplomacy, Ministry of Foreign Affairs of Japan, Vol. 24, March 2014*, p. 73. [original in Japanese]

a "strategic deficit" – strategic plans designed in the capital often being too vague and abstract to be translated to a tactical level, and too few concrete directions being given for creating effective mechanisms for civil-military cooperation.[6] Olson and Gregorian, who studied interagency and civil-military coordination in the peace support operations in Afghanistan and Liberia, are similarly alarmed at the existence of such a strategy-theatre gap from the civil-military cooperation perspective. They emphasize the need for a common implementation framework for all the relevant civilian and military actors to identify, inter alia, their areas of responsibility, short-term and long-term objectives, and timeframe of their interventions.[7] The JSDF's experience in the Philippines can be another classic example for tho+se making theoretical studies of interagency and civil-military co-

6 Claes Nilsson, Cecilia Hull, Markus Derblom, and Robert Egnell, *Contextualising the Comprehensive Approach: the elements of a Comprehensive Intervention, FOI, Swedish Defence Research Agency, 2008*, p. 53.
7 Lara Olson and Hrach Gregorian, "Interagency and civil-military coordination: lessons from a survey of Afghanistan and Liberia" *Journal of Military and Strategic Studies, Vol. 10, No. 1*, 2007

operation. It is crucial to go back to these studies anew and review what the observers in the recent histories have learnt and shared in order to improve interagency coordination for future disaster relief operations.

While the whole-of-government strategy has become one of Japan's major approaches to civil-military cooperation in disaster relief activities, the JSDF's experience in the Philippines demonstrates that concrete measures are still needed to translate such strategy to the tactical level. Practical steps are necessary to realize institutionalized interagency coordination to prevent the risk of a mission becoming stalled and perhaps even harming, rather than assisting, the intended beneficiaries.
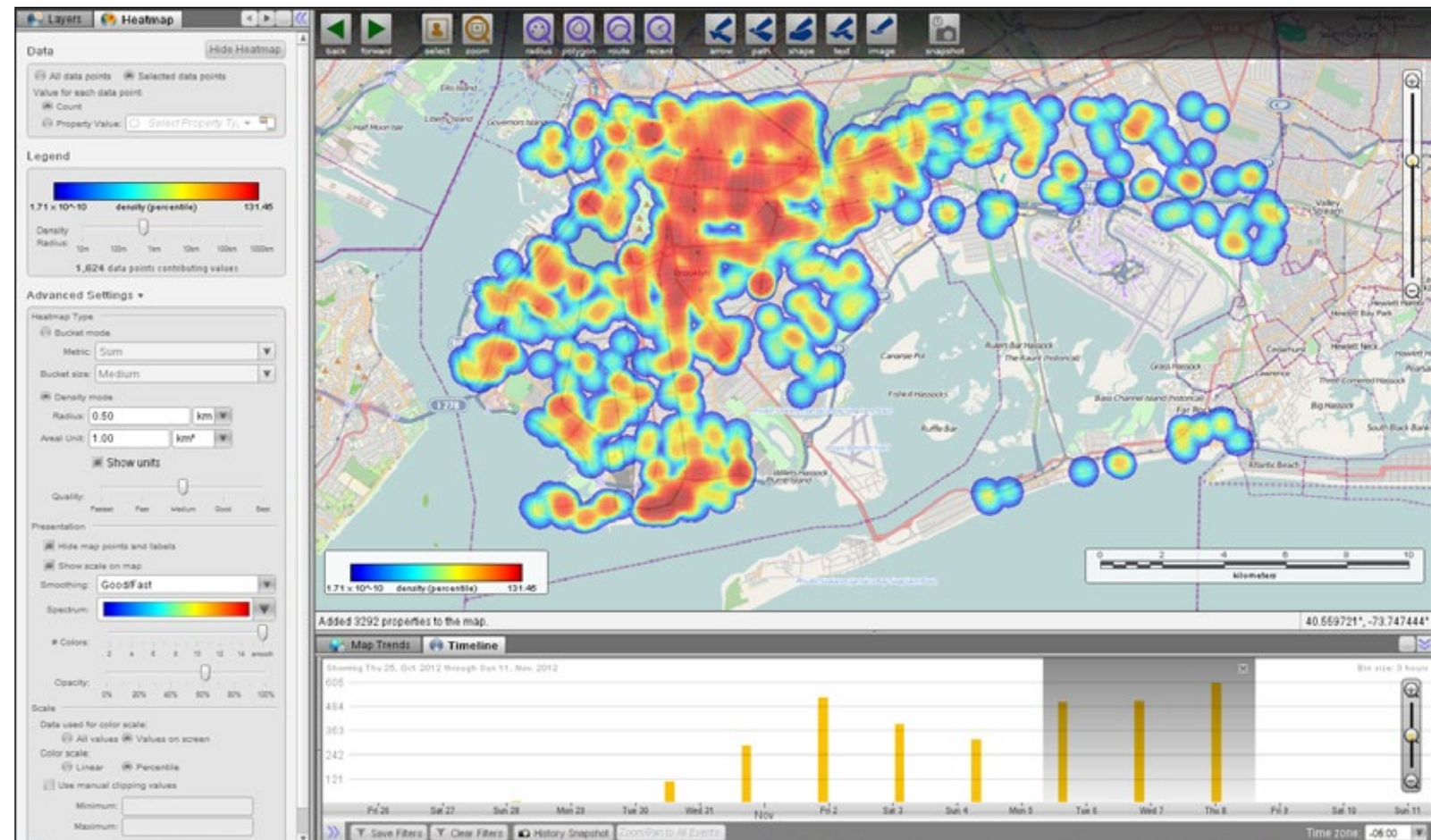
The Japan International Cooperation Agency (JICA) dispatched a Japan disaster relief medical team to the heavily affected city of Tacloban, on the island of Leyte, Nov. 15, 2013, after Typhoon Haiyan struck the Philippines.

Japan International Cooperation Agency

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THE SEEING STONE

Understanding Disasters and Coordinating Relief Using Palantir

By Evan Koepke, Operations Planning Associate, Team Rubicon

Team Rubicon is an American nongovernment organization whose mission is to unite the skills and experiences of military veterans with first responders to rapidly deploy emergency disaster response teams around the world.

In early November 2012, Jake Wood, co-founder and President of Team Rubicon (TR), was immersed in the massive response effort surrounding Hurricane Sandy's landfall in New York and New Jersey. TR's group of military veteran and first responder volunteers faced the largest and most complex incident in the organization's history. The challenge of understanding the disaster's impact, defining local needs, and assigning resources to fulfill them was daunting. It required a small leadership team to juggle collection and management of hundreds, if not thousands, of damage assessments, work orders, and aid requests.

In the midst of helping manage the response, Jake, a former Marine and scout-sniper, received a call from Brian Fishman, head of Palantir Technology's Philanthropy Department. The two had met a month earlier during a speaking engagement in San Diego. Jake's

Palantir's software can quickly be downloaded onto hand-held devices, and used to send critical information back to operational managers.

All photos courtesy of Team Rubicon

explanation of Team Rubicon's mission and methods captured Brian's imagination. During subsequent discussions filled with technical explanations, Team Rubicon's leaders found it difficult to fully comprehend what Palantir had to offer. Over the phone, in the midst of the Hurricane Sandy response, Brian reiterated his bottom line: "We can help solve your problems… trust me." In a leap of faith, Jake agreed to deploy Brian so he could finally demonstrate what that solution meant. Less than 24-hours later, Fishman landed in New York with a small team of Palantir engineers. Jake received a call from the New York team leader, a hardened combat veteran: "Who are these geeks?"

"Trust me – they know what they're doing," was Jake's reply.

In the weeks following that conversation, Palantir proved its system and people to be as rugged and mission-ready as the Team Rubicon members with which they collaborated. Palantir's software engineers lived, worked, and lost sleep beside TR's veterans and first responders. In a tremendous effort, Palantir's engineers rewrote whole components of source-code to meet the demands of disaster

response operations. They additionally customized tools and trained users to meet the demanding workload. The resulting solution significantly decreased administrative work, increased accountability, and accelerated relief efforts. The system allowed Team Rubicon to establish a common operating picture of disaster damage and recovery that rivaled any in the disaster space. Lastly, it leveraged highly sophisticated technology in a manner that was accessible and understandable to the average technology user. These achievements made the Hurricane Sandy response a poignant success for both organizations.

To this day, Team Rubicon and Palantir Technologies continue to develop and refine Palantir's use in disaster response and relief. This article will describe in detail how Palantir works, how Team Rubicon applies the system to disaster relief,

and few of the prospects for future development.

Palantir is significantly different from traditional information management solutions found in disaster relief. Products frequently attempt to provide total solutions for data storage, processing, and use. The result is an inflexible and proprietary information architecture with rigid relationships, formats, sources and functionalities. Such inflexibility can be crippling in an environment where change is the norm, adaptability is key and needs vary significantly between users. In contrast, Palantir approaches the problem by acting as an information fusion hub that dynamically integrates and connects all data sources

at a user's disposal. The software then facilitates in-depth data exploration and analysis through integrated map, graph and table-based tools. The result is a powerful and versatile approach that enables unprecedented access to knowledge.

Team Rubicon utilizes several variants of Palantir software for its operations. For overall information management and analytics, Palantir Gotham is the base platform. This software works on most commercial Windows or Apple computers. For mobile data collection and work management, Palantir Mobile and Palantir Mimosa platforms are used. These provide streamlined versions of Palantir that work on commercial smart phones, tablets, and specific satellite-based devices (such as GPS

systems). This hardware is more intuitive to the average user than most proprietary solutions – making the overall system more accessible.

Palantir serves as a rapidly deployable web-based data integration solution that ties disparate data sources together rather than uprooting existing infrastructure. All that is necessary is access to the Palantir server and quick software download. Users can subsequently upload and link existing internal and external databases to the server without making significant modifications to data structure or format. The result can essentially place the world at one's fingertips. Palantir accepts a wide variety of structured and unstructured data from both proprietary and open-source origins including audio-

visual files, geospatial data, tabular spreadsheets, whole documents, and even live social media data. These materials can be rapidly processed and tagged for identification, organization, and synthesis within the Palantir system. The ease with which this occurs allows the analyst/user to focus on the problem and finding the right questions with which to leverage the data.

All this data can be accessed and examined through Palantir's powerful search and discovery function. The tagging that occurs during processing not only makes individual objects searchable, but also allows comparison of related attributes up to four degrees of separation. These enhanced searches make it possible for previously unknown connections

Using the same mobile devices that collect assessment data, responders create geo-tagged work orders with supporting images and video.

flag it for investigation. The analyst could then set up a persistent search to monitor the situation and highlight when similar requests appear in real-time. This active synthesis of data delivers near real-time information/intelligence in support of operations that can be acted upon in short order.

This kind of knowledge, and the data used to create it, is a highly valuable commodity that must be managed and protected. Palantir classifies, timestamps, attributes, and tracks developments so that users can easily discover information, identify potential collaborators, and monitor developments. At the same time, information and data are secured through dynamic access control and sophisticated security protocols that have successfully met military and law enforcement requirements.

Though this rapid creation of information from data is powerful, it means nothing if the resulting knowledge cannot be shared. Internally, Palantir facilitates communication and collaboration between users within the system through internal messaging and the ability to rapidly upload work. Version control allows administrators to undo mistakes and allows analysts to review the development of knowledge. Externally, work can be exported in open-source formats that are easily digestible for external systems (ex: .xml, .jpg, .kml). Additionally,

to become prominent. Persistent searches can be set to alert the user when defined patterns occur. For example, searching an address may produce three separate aid requests from three separate names. However, Palantir may highlight that

the names share the same contact information and link to additional names and requests. Examination of these requests may reveal a timing or geographic pattern. Such enhanced searches help the analyst understand the potentially fraudulent event and

the system supports development of briefings by exporting efforts and results into standard formats such as PowerPoint. This capability can also be leveraged to auto-populate forms.

In late April 2014, Team Rubicon deployed a reconnaissance team to Louisville, Mississippi to assess tornado damage, ascertain response and recovery needs, and build relationships with local emergency management. Though the team's members were not from Louisville, they had a better understanding of the situation than most outsiders. In the days and hours preceding arrival, Team Rubicon staff and volunteers were leveraging Palantir to chart the disaster space. They integrated census data, tornado tracks, facilities, road closures, and more, seamlessly into the Palantir system. These personnel mapped the network of agencies, organizations, and key personnel who were responding to the emergency. This contextual map of the disaster zone's physical and social landmarks empowered the team to work more efficiently in their operating environment. As a result, the team knew exactly where to go, who to talk to, and the information gaps to fill. Better yet, as the team began to interact with the local community and establish relationships, they were able to communicate discoveries and developments quickly and efficiently to the support team. These injects were uploaded to maintain a real-time rendering of TR's situational awareness and understanding. The refinement of this mosaic became an organic component of the response when trained specialists and Palantir-equipped computers arrived on-site. Team Rubicon's ability to quickly build and refine an image of ground truth through Palantir added speed, transparency, and efficiency to the entire organization's response efforts.

Understanding ground truth is notably critical during the assessment phase of any disaster response.

Rapid and thorough damage assessment provides the understanding of situation and need that underpins the application of critical, and often expensive, resources. Generating this form of situational awareness is Team Rubicon's flagship application of Palantir and core services it provides. In the time since Hurricane Sandy, TR's method has evolved into a two-stage process that fuses aerial imagery analysis by remote support personnel (when available) with an on-site assessment by TR volunteers. Pre- and post-impact imagery is analyzed to establish a rough estimate of the disaster's physical effects. Field personnel follow up with door-to-door assessments collected with Palantir enabled mobile phones or GPS devices. The results are uploaded in real-time to the Palantir architecture to improve the common operating picture. A recent example of this occurred after a massive tornado cut through the midwestern town of Washington, Illinois. Within a day of the tornado strike, Team Rubicon's analysts constructed an aerial assessment map of a rough, but complete, picture of the town's situation. The map became the focal point for coordination of initial relief by local emergency management. Over the following weeks, Team Rubicon conducted a thorough assessment of the impacted area and defined the level of damage to each structure, whether or not the owner wanted help, and the kind of support they needed. This data was shared with local emergency managers on a recurring basis and was easily integrated into their geographic information systems. Provision of these services helped local emergency managers bridge the gap between initial response and recovery while coordinating successful multi-agency operations.

Executing these impact assessments and sharing the results in more remote environments can be a daunting challenge to technology-based assessment solutions. Palantir

Technologies, Team Rubicon, and Direct Relief partnered during their joint Typhoon Haiyan response to provide an innovative, integrated, solution. First, Palantir set up a remote secure server close to the operational area. This provided rapid data access and decreased loading and processing times. Second, the three organizations collaborated to deploy VSAT and BGAN communications systems to field bases to provide remote connectivity. Palantir augmented these with a series of computers loaded with a remote, Palantir Gotham based, software package known as Palantir Forward. This software allowed users to save critical data onto their hard drives from the server when connectivity existed, conduct data integration and analysis without connectivity, and then upload the results to the server when connection was regained. These computers allowed field leaders to utilize the full power of Palantir while operating remotely, and rapidly share the results upon returning to base. The last piece came in the form of Palantir Mimosa driven DeLorme InReach devices. These devices allowed assessment teams to collect geocoded impact and need assessments. This data could either be uploaded directly to the server via satellite or be manually uploaded to a Palantir Forward computer. This comprehensive solution allowed Team Rubicon and Direct Relief to use the full power of Palantir in an environment that lacked fully functional communications infrastructure.

Team Rubicon's method for disaster mapping and damage assessment is transforming to integrate risk and resilience analysis as well as impact assessment. By systematically integrating targeted analytical processes and leveraging specialized environmental, historical, and demographic data, TR can project who will be most affected, highlight at-risk populations, and prioritize resource allocation accordingly. On the other hand,

this capability also allows Team Rubicon to apply critical insight to the application of its resources. An EF-2 tornado strike on the outskirts of a small Midwestern town in May 2014 seemed to be a promising response until land-use data indicated that the impacted structures consisted of high-value, insured, seasonal vacation homes. An on-site recon by local Team Rubicon members confirmed the discovery. As a result, Team Rubicon was able to focus its energy and resources on three continuing responses that would otherwise have been detracted from. As can be seen, these capabilities help Team Rubicon ensure that its limited resources are applied to people and places where they will make the greatest impact.

Analysis may be the more traditional use of Palantir in the civilian world, but Team Rubicon has taken its application a step further by using it to coordinate disaster response operations.

Palantir is the primary system TR uses to collect, organize, assign, execute, and evaluate individual assistance requests and work orders. Using the same mobile devices that collect assessment data, responders create geo-tagged work orders with supporting images and video. Incident management personnel analyze these reports, prioritize the work orders, and organize teams to fulfill them. Strike teams equipped with Palantir mobile devices are assigned tasks before they deploy and receive updates remotely through Palantir. When work is complete, or ends for the day, team leaders submit reports to describe the work completed, provide supporting imagery, and note additional needs. These work records are connected to the damage assessments and work orders through common attributes such as address, homeowner name, and so forth. Geographic and temporal visualization of these reports helps incident managers assess the effectiveness of tactics and the completion of objectives. On several occasions this capability has allowed Team Rubicon to serve as the hub for work order collection, distribution, and tracking for a jurisdiction.

For the coordination of operations, Palantir equipped cell phones and satellite devices provide live tracking of personnel, and communications between field and incident management personnel. This has been effectively implemented both domestically and internationally to ensure safety, continual accountability and situational awareness of field elements. During TR's response to Typhoon Haiyan, TR-Headquarters in Los Angeles effectively maintained 24/7 tracking of Palantir equipped units throughout the Philippines. Domestic responses have merged this capability with the real-time tasking function to efficiently and effectively utilize specialized units and equipment.

Lastly, Palantir helps Team Rubicon to produce thorough field reports and transfer operational data in easily accessible formats. Reports are generated using preset templates, allowing TR leaders to thoroughly brief officials and partners with the most up-to-date information. Such deliverables also serve as executive summaries for the large datasets that are handed over to partners and officials during service transition and demobilization. This aids recovery by ensuring continuity of operations. They can also help affected localities by capturing, organizing, and displaying information required to apply for higher governmental assistance, reimbursement, or grants. Within Team Rubicon, the documentation ultimately supports after-action reviews and external communications. These help Team Rubicon improve its methods and illustrate its successes.

As cooperation between Team Rubicon and Palantir deepens, exploration of the platform's mission coordination applications expands. In the realm of incident management, there is an ongoing effort to effectively integrate Incident Command System (ICS) documentation. This effort is linked with a parallel concept for housing all incident management data collection, display, and documentation within the platform. In another vein, ideas for leveraging Palantir for persistent tasks such as supply chain management, inventory monitoring, and operational situational awareness are being evaluated. It is expected that more innovative applications will emerge as Team Rubicon deploys and trains with the platform in different contexts.

Team Rubicon regularly contends with the difficulties inherent to maintaining a consistent and accurate awareness of response activities throughout the organization. Palantir aids in this effort by tying together data sources and succinctly displaying information. However, until recently, the ability to directly handle knowledge generated in Palantir was limited to individuals permitted access to the program, with appropriate authorizations, and wielding a fair amount of specialized training. The problem was solved during Team Rubicon's November 2013 response to Typhoon Haiyan in the Philippines. Palantir Technologies expedited their release of a new web-based platform called Raven. This portal allows authorized users to remotely access their organization's available data layers and imagery, conduct rudimentary analysis, and communicate with other users. Palantir topped this achievement by connecting the databases and outputs of multiple cooperating agencies. The result was a shared common operating picture that streamlined interagency communication, refined the collective's situational awareness, and expanded each organizations analytical resources. Inter-organizational collaboration of such scale and ease in disaster relief is rare and the implications are immense. Raven will be a critical component of Team Rubicon's future Palantir use.

The final form of Palantir's application in disaster relief remains a work-in-progress. However, it has been clearly demonstrated that the system proficiently supports a wide variety of day-to-day and response functions. As an information management tool, the system provides a framework for responders to understand their environment, communicate that understanding, and establish a shared common operating picture. The dynamic and real-time nature of the system also allows it to serve as a coordination tool for field operations. These combined features can help organizations more effectively provide targeted, timely, and cost-effective relief services.

As time goes on, Team Rubicon and Palantir Technologies will pioneer new applications of the platform to support operational readiness and programmatic support. This includes integrating new information sources, such as unmanned aerial vehicles and social media, as well as providing innovative problem solutions, such as visualizing membership growth and analyzing the accessibility of mental health services. Both are feeling the effects of such innovations. The demand for Palantir is expanding among disaster relief organizations and the requests for and acceptance of Team Rubicon's services is increasing.

Team Rubicon will always have a pencil and paper handy for when the power goes out. It will always need a bag of tricks made of duct tape and bailing wire for overcoming the challenges disasters generate. However, it is hard to imagine a Team Rubicon deployment without the support of Palantir's capabilities. This is because, by reducing the 'fog of relief,' facilitating good decision-making, and reducing administrative workloads, Palantir helps Team Rubicon's leaders focus on supporting their followers and the communities they serve.

MIND THE GAP:
Civil-Military Communications

Liaison Staff

I n the valley of Kathmandu, Nepal, a simulated emergency telecommunications cluster meeting takes place in a conference room in the Hotel Yak and Yeti. Mount Everest looms in the background as a reminder that the region is prone to dramatic tectonic changes and earthquakes.

The cluster meeting is a part of Exercise Pacific Endeavor (PE), an annual Multinational Communications Interoperability Program event hosted by U.S. Pacific Command and the Nepalese Army. According to the exercise's executive report, PE 2014 brought together more than 250 military and civilian attendees from 21 Asia-Pacific nations to advance "communications and cyber interoperability by strengthening partnerships, advancing joint operations, modernizing skills and capabilities, sharing information, and establishing new areas of cooperation."

"Hundreds of responders from the Asia-Pacific come together to practice in a time of calm in order to better respond in time of crisis," said Joyce Blanchard, a disaster management and humanitarian assistance advisor from the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DMHA). "Civil-military exercises such as Pacific Endeavor provide an opportu-

nity for civilian disaster response stakeholders to come together with regional military communicators to practice interoperability and work through interconnectivity issues now rather than in the midst of a disaster."

One of the civilian disaster response stakeholders is Humanity Road, a nongovernmental organization that provides disaster preparedness and response information to the global mobile public before, during, and after a disaster. Humanity Road hits the ground running with a core mission of closing the disaster communications gap through process improvement, collaboration, and partnerships. It simulates a broad social media response from the disaster-affected populace, who, according to the scenario, has just suffered a massive earthquake that caused a large number of casualties and crippled the country's infrastructure.

"Humanity Road volunteers bring our experience into the exercise to create realistic and challenging simulated content for the training," said Cat Graham, vice president of Humanity Road. "We inject real-world examples and challenges to provide a more robust training opportunity and share lessons learned."

The organization's disaster response missions around the globe have developed lessons learned since its incep-

tion in 2010. For example, Humanity Road volunteers injected hundreds of need signals and reports into the exercise scenario to direct responders to areas most in need, just as they experienced after Typhoon Haiyan devastated the Philippines in 2013.

"This exercise gave us the opportunity to explore spontaneous collaborations," said Graham. "Establishing common operational datasets for transportability of key disaster information is important to speed up recovery and mitigate loss. This exercise will help improve processes for sharing data among many response organizations."

All civilian stakeholders participating in the exercise, from NGOs to industry, to academics, used the opportunity to exchange their organizational roles and responsibilities during a disaster with the militaries from the region. The dialog between the civilian and military participants increases mutual understanding, trust, and strengthens relationships that can lead to increased collaboration in real-world calamities.

"The U.S. military of today has a better understanding of where and how they fit into foreign disaster response, particularly as a support to the host government and humanitarian community," said Blanchard. "This in part can be contributed to multinational civil-military exercises occurring throughout the region."

The mock emergency telecommunications cluster (ETC) meeting was a good example of increased understanding and collaboration among participants: representatives from the Philippine Army, Nepal Army, U.S. Pacific Command, UNOCHA, World Food Program (WFP), CISCO,

Humanity Road, and CFE-DMHA, all contributed. A WFP information technology officer leads the meeting just as they would in a real-world disaster, yet the civil-military environment enables military personnel to learn about the ETC, ask questions and discuss roles, responsibilities and processes.

Clarity and understanding of the process can be invaluable in a real-world disaster environment. While military resources can provide hospital ships, airlifts, medicine and clean drinking water to communities in post-disaster areas, coordination of efforts between the suppliers of relief aid, the personnel moving the aid,

Department of Defense

Cat Graham, vice president of Humanity Road, discusses disaster risk reduction steps being taken in Nepal and the challenges of delivering aid with Santosh Gyawali, an AID development program specialist for USAID Nepal, during Pacific Endeavor 2014 in Kathmandu.

and those in need can quickly end in chaos when communications are impacted. Humanity Road strives to bridge such communication gaps by utilizing social media and other open source environments to mitigate the breaks in clarity, and on occasion, the information overload. This helps direct military planners and other response efforts to assess disaster response activities.

"What (Pacific Endeavor) is

achieving is transformational," said Graham. "[This exercise] recognizes the value in whole-community engagement for disaster response and planning; and their core focus is communications interoperability."

The information collected and analyzed by Humanity Road during the exercise was received and used by the U.S. military [via the All Partners Access Network (APAN) portal], UNOCHA, AmeriCares and other traditional relief organizations to assist in rapid assessments for disaster response activities.

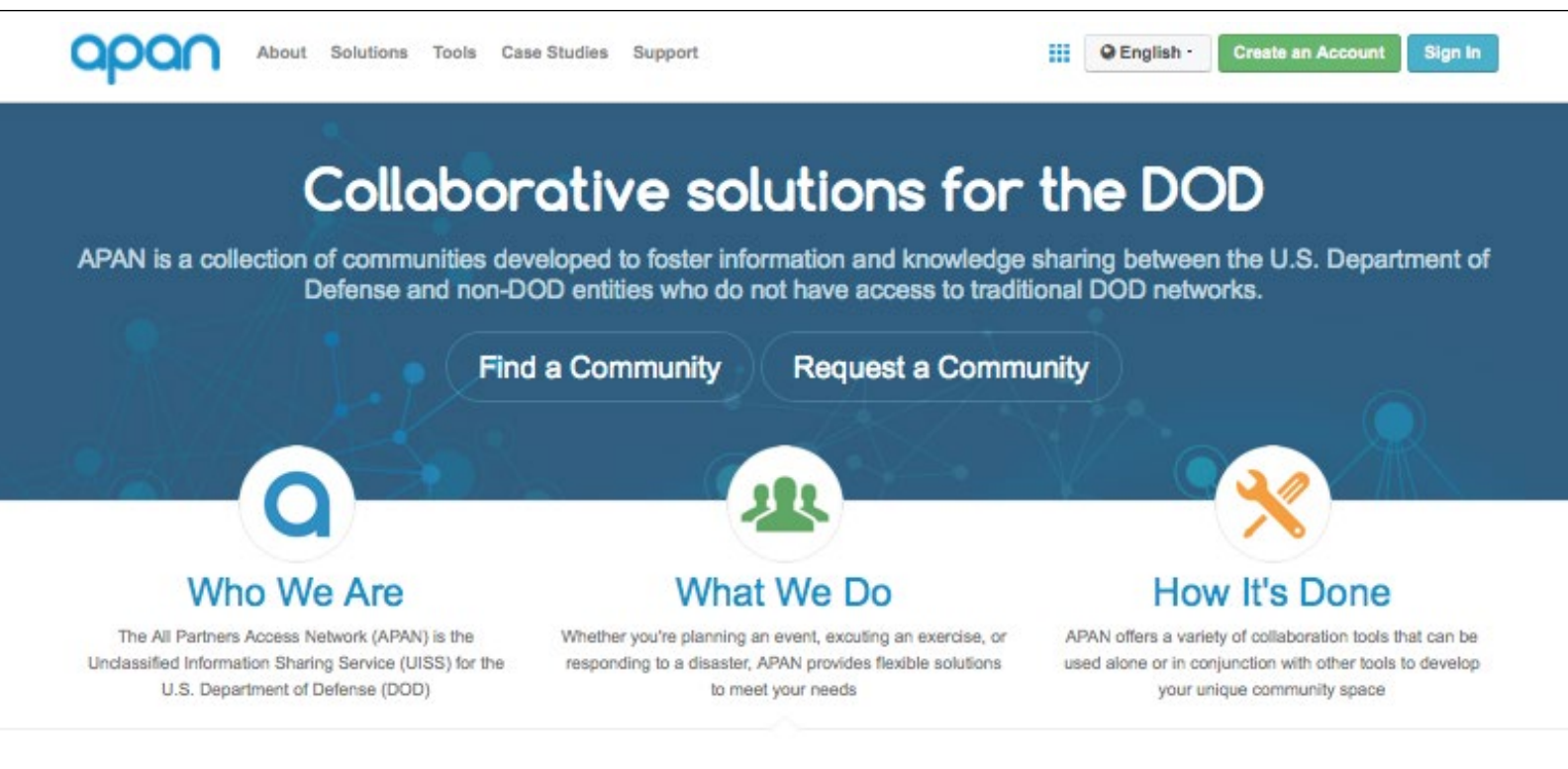"Nothing has come close to facilitating transparency across the military and aid response organizations like this exercise," said Graham. "And, it afforded a view into areas of coverage and areas needing additional relief effort."

Collaborative solutions for the DOD

APAN is a collection of communities developed to foster information and knowledge sharing between the U.S. Department of Defense and non-DOD entities who do not have access to traditional DOD networks.

Find a Community   **Request a Community**

Who We Are
The All Partners Access Network (APAN) is the Unclassified Information Sharing Service (UISS) for the U.S. Department of Defense (DOD)

What We Do
Whether you're planning an event, executing an exercise, or responding to a disaster, APAN provides flexible solutions to meet your needs

How It's Done
APAN offers a variety of collaboration tools that can be used alone or in conjunction with other tools to develop your unique community space

apan: How the DOD gets social

By Lara Coutinho, APAN Engagement Specialist

The All Partners Access Network (APAN) provides the U.S. military, partner nations, other agencies, and nongovernmental organizations a flexible, easy to use online platform for responding to disasters, executing multinational exercises, and organizing conferences using a "non-dot-mil" web service. When the U.S. military responds to a natural disaster involving multiple organizations and nations, the success of the mission depends on the free-flow of information around a network of responders. APAN, the baseline platform for the Department of Defense (DOD), is used worldwide to share unclassified information without traditional military restrictions.

The U.S. DOD increasingly understands that the need to quickly share information with multinational partners and NGOs during a crisis greatly outweighs the need to retain traditional restrictive information sharing practices with the caveat "need-to-know." During a humanitarian crisis event, lives are saved when information is shared freely with speed. APAN provides responders with online collaborative tools to efficiently distribute unclassified information across international boundaries.

"APAN is actively used to support major humanitarian crisis response efforts and has had great success with past relief missions," said Jerry Giles, APAN technical director. "In 2010, Southern Command coordinated government and NGO efforts responding to the earthquake in Haiti; in 2011, U.S. Forces Japan used APAN to coordinate U.S. and Japanese humanitarian efforts after the earthquake and tsunami; in 2013, APAN was used to assist responders and foster information sharing when Typhoon Haiyan hit the Philippines. The list goes on."

Go Social: Email is Old School!

Email and phone communication limits sharing to pairs of individuals or small groups. Results are difficult to track, document and distribute. Tracking communication in one location is easy on APAN. Conversations can take place between individuals and groups regardless of geography. Results of those conversations can be categorized and saved for future reference. A question on an APAN forum can be answered once; other users can see it immediately or refer to it later. During Operation Unified Response in Haiti, a user posted a request for a brain scan machine to be sent to a location in Haiti. Several other users saw that post and responded with offers to provide resources. This APAN group allowed people to coordinate procurement of the machine and transportation from Florida to Haiti with ease. The ability for multiple individuals to communicate across the globe allows for effective and efficient mission success stories.

How it's done...

There are three players in online communities: community owners, community users and APAN. By request, APAN creates the online community for any group of people needing to share information with the U.S. DOD, its partner nations, and other agencies. These online communities are controlled, customized, and managed by the requestor, or owner. Users join communities by invitation, or users can request access themselves. Any person worldwide with an email account and Internet access can get an APAN account. Community owners serve as gatekeepers for their own community and vet the users. APAN provides technical security for the website, customer engagement, knowledge management guidance and consultation, in addition to a 24-hour help desk.

Numerous tools can be installed easily by the community owner such as blogs, forums, wikis, media galleries, calendars, lists, maps, conference rooms, chat rooms, email alerts, and language translation tools. APAN Customer Engagement Specialists provide best practices for designing

An APAN knowledge manager supports the Rim of the Pacific Exercise in 2012, the world's largest maritime warfare exercise. Knowledge managers travel to disaster response events and exercises worldwide to provide in-person support.

All Partners Access Network

communities and determining what tools may assist the overall objective of the group.

APAN is managed by the Defense Information Systems Agency (DISA) Multinational Information Sharing (MNIS) Unclassified Information Sharing Service (UISS) Project. The APAN Applications Service Provider (ASP) is headquartered in Pearl Harbor, Hawaii, and additional staff is located on the East Coast of the United States.

Disaster Response Information Sharing: Lessons Learned

APAN has extensive experience in information sharing and has collected lessons learned from training and real-world humanitarian assistance and disaster response (HADR) operations for more than 15 years. These lessons were valuable when Typhoon Hagupit approached the Philippines in December 2014. The U.S. Pacific Command's (USPACOM) knowledge management office worked with APAN to create a community for the possible Hagupit humanitarian crisis response operation. Based on lessons learned from Typhoon Haiyan, APAN assisted USPACOM in drafting a knowledge management plan for disaster support that proved USPACOM was ready for international collaboration.

Before a crisis hits – Exercise HADR Response Procedures

Over 200 communities on APAN support international training exercises, and APAN team members often travel to locations worldwide to assist. Large training events like Rim of the Pacific (RIMPAC) and Pacific Endeavor (PE) involve NGOs and approximately 20 partner nations.

For the past three years, Humanity Road, a digital response organization that helps with rapid assessments, has used APAN to share information in both disaster exercises like RIMPAC and PE and real-world events includ-

ing typhoons Haiyan and Hagupit.

"The APAN portal provides an effective collaborative space for military and civilian disaster response organizations," said Cat Graham, who spearheads operations for Humanity Road. "We use this platform to communicate with multinational partners. It's a single coordination space that helps us quickly coordinate and communicate with multinational response teams in a digitally secure environment. This is something we never had before. It's a fast and effective sharing portal."

The United Nations also worked side-by-side with APAN during RIMPAC 2014 using an RSS feed to post information from UNOCHA's Virtual On-Site Operations Coordination Center (VOSOCC) website to APAN. Partnerships started at RIMPAC continue to work on shared procedures for future use.

The annual Africa Endeavor exercise has used APAN since 2011. Approximately 40 countries and three economic organizations participate in bilingual crisis response exercises using English and French. Nearly 1,000 members of the community share pictures and files. Extensive tagging enables quick searches by keyword or language. APAN's web page and file translation functions supplement the interpreters on staff and expand participants' ability to overcome language barriers.

Can APAN make a difference?

APAN has best practices for designing communities for different purposes. Quick setup, easy customization and APAN team support enables community owners to make a difference with the least amount of effort. During Typhoon Haiyan, APAN averaged 3,000 collaborating users daily. APAN's multiple forums were used to respond to requests for information or assistance. Keyword tags were used to help track conversations. During the Haiti earthquake response, these social

collaboration tools helped hospital staff alert responders that 160 beds were empty resulting in coordinated transportation efforts. A few days after posting on APAN, the hospital was filled with patients. After the Japanese earthquake and resulting tsunami in 2011, military families discovered that their normal paths for getting information about returning back to the U.S. were swamped. U.S. Forces, Japan used APAN to disseminate information quickly to families regarding transportation and options.

APAN empowers partner nations to engage in group discussions. During Typhoon Haiyan, the Armed Forces of the Philippines developed many military-to-military partnerships with assisting countries using APAN as collaboration space. While supporting the Ebola response efforts in Africa, APAN has enabled eight separate NGOs and the governments of Guinea, Liberia, and Sierra Leone to create partnerships for information sharing. The connections made here and maintained on APAN will enable more than 700 users of the Ebola Response Network community to maintain future communication.

In all, new methods of sharing information online can help save lives, reduce risk, build trust and increase efficiency. APAN enables all this as well as helps users overcome language barriers, use online maps, chat and conference worldwide, and customize their communication tools at no cost to them. APAN allows us to do more with less and will continue to improve global communications for years to come.

Justin Ide/ Harvard University

Harvard Humanitarian Initiative faculty, fellows, and students serve as partners to many humanitarian agencies, international institutions, and educational organizations.

Humanitarian Partnerships

By Vincenzo Bollettino, Executive Director, Harvard Humanitarian Initiative

There has never been a more apt time to seriously examine the opportunities humanitarian partnerships hold for addressing today's most severe crises, whether related to conflict, natural disaster, or complex emergencies. Presently, the international humanitarian system is ill equipped to cope with the breadth, scope, severity, and duration of today's major crises, whether they are in Syria, Sudan, Central African Republic, Iraq or West Africa, to name only some of the most severe. With more than 50 million refugees worldwide, we can reasonably expect even greater numbers of refugees in the near future as a result of protracted crises that threaten to devastate societies for decades to come, and population growth in areas vulnerable to natural disaster during a period of shifting global climate patterns.

To meet the needs of today's disaster-affected populations, the international community must find new and better ways of accessing at-risk populations, mitigating the continued risks they face, and helping them to recover following conflicts and natural disasters. This cannot be expected to happen in a vacuum among

international humanitarian actors alone. Partnerships between humanitarian organizations and other actors are the key to successfully meeting the needs of disaster-affected populations, now and for years to come. Developing networks with the private sector (particularly with respect to leadership and management training); with international militaries (around high-tempo, heavy-lift logistics, and distribution of immediate lifesaving food, shelter, and water for difficult to reach populations); with the informal sector including voluntary groups (around information technology, communications, social media); and with academia (for population-based research, capacity building, program evaluation, and data collection and analysis), will all be essential to meeting expanding humanitarian needs with limited resources.

All of these types of partnerships and the informal networks among individuals within these different organizations will be the source of innovation and learning that are needed to meet new humanitarian needs. A multidisciplinary, multi-sector response that is the product of collaboration and partnership is needed to meet the

Harvard Humanitarian Initiative

After the devastating 2011 earthquake and tsunami in Japan, the Harvard Humanitarian Initiative continued a long history of engagement with Japanese colleagues in the areas of emergency health and disaster systems development. In addition to sending a relief team to the disaster site, HHI's ongoing Program on Humanitarian Effectiveness works to develop emergency medical education and leadership and hospital-based disaster response.

challenges to delivering humanitarian assistance in an era of ascendant non-state actors and complex natural and technical disasters. This article focuses on the anticipated benefits of partnership among humanitarian organizations and academia, highlighting some of the barriers to closer collaboration and offering some thoughts about how to overcome these challenges. A brief review of the contemporary international aid system and the international political system in which humanitarian organizations operate will provide context for why broader partnerships are needed.

Despite their key role in the delivery of aid in major disasters, international humanitarian organizations remain a very small part of overall disaster assistance following emergencies. Disaster-affected states themselves are ultimately responsible for, and drivers of, relief and recovery efforts. There are times though when states acting alone lack the means to address the needs of their own disaster-affected populations. The international humanitarian aid system provides an essential role in the delivery of humanitarian aid in contexts where states are either unwilling or unable to meet the immediate humanitarian needs of their citizens following a disaster. The international humanitarian system, consisting of U.N. operational agencies, a large number of international nongovernmental organizations, along with thousands of national NGOs, comprises the heart of the traditional humanitarian system. These agencies run their own programs (in both emergency and non-emergency settings) and coordinate their activities through what is known as the cluster system.

Even when acting in concert, and even under the best of circumstances (i.e. where humanitarian access is viable, and those in need can be reached safely), the international humanitarian community does not have the capacity to meet the needs of today's disaster-impacted populations. This is due in part to limited numbers of adequately trained and skilled staff, limited funds for international relief efforts, and too few people stretched too far to be able to manage responses adequately. Closer partnerships between humanitarian organizations and academia can improve the capacity of humanitarian aid agencies by providing essential core technical and research skills needed to better assess population needs and evaluate the impact of humanitarian programming; creating data collection and analysis tools that improve efficiency and accuracy of assessments; providing multi-disciplinary fora to convene humanitarian and other actors to resolve common humanitarian challenges; and building a professional cadre of highly trained, skilled humanitarians of the future.

Protracted crises globally pose challenges for humanitarian agencies as many societies go in and out of crisis, frequently undermining development gains and requiring outside assistance to regain a footing. In many parts of the world, the increased frequency and intensity of natural disasters, coupled with population flows into risk-prone environments, means that we will likely continue to see large numbers of people impacted by disasters in the years to come, particularly in Southeast Asia.

To successfully meet these and future challenges, the international humanitarian system will need to be flexible and dynamic enough to operate in a new world, all without abandoning the core humanitarian principles – humanity, neutrality, impartiality and independence – that are the defining ethos of what it means to be a humanitarian. This is a tall order and not one met by increasing resources alone.

Humanitarian agencies, whether international NGOs or U.N. agencies, have a long tradition of collaborating with a variety of actors, including universities, private corporations, legions of individual consultants, and militaries. These partners serve different functions, ranging from indirectly providing aid to people in need, to evaluating the impact of international humanitarian programs, to training humanitarian aid workers.

Humanitarian partnerships are more important now than at any time since the proliferation of humanitarian action following the end of the Cold War. Beyond the sheer number of large-scale emergencies, humanitarian agencies are facing an increasingly complex political environment (in which they are constrained in a number of ways that challenge their core principles – especially in cases where there is great pressure to adhere to donor states political and security agendas) and challenges posed by a proliferation of non-state actors actively engaged in hostilities. These actors not only pose a direct threat by targeting humanitarian aid workers,[1] but in many contexts (e.g. Somalia, Syria, Iraq) they make it difficult, and sometimes impossible, to access people in need.

One possibility to address these challenges lies in academic partnerships. Academic institutions are increasingly important partners for humanitarian agencies. Their research capacity, research methods, and expertise with different training and educational pedagogies make them ideally suited to evaluating the effectiveness of humanitarian enterprise broadly and of humanitarian programs more specifically. In addition, academic institutions are proficient at developing curriculum and training programs designed to improve the capacity of humanitarian agencies, and develop the skillsets humanitarian actors of the future will need in order to address today's disasters, characterized as they are by increasingly complex operations and politics.

Many of the research methods and tools employed by academics in their research enable strong empirical analysis of the effective-

1 Stoddard, Abby, Adele Harmer, and Kathleen Ryou, "Aid Worker Security Report 2014," Humanitarian Outcomes.

ness of humanitarian programs and are equally vital to providing critical information about population needs and community-based perceptions. Paper-based systems for collecting data and manual coding post-collection made rapid acquisition and analysis of data ill-suited to meeting the needs of humanitarian organizations. New technologies now enable faster data collection in digital form, reducing not only the time needed to collect and code data, but also reducing error and increasing the reliability of the data. These technologies provide further benefits in reducing the cost of data collection and (when combined with appropriate training in research methods), bolstering the research and evaluation capacity of humanitarian organizations. In short, we have arrived at the point where data and evidence-driven policies are a real option. In today's environment, there is little excuse for not employing rigorous research and evaluation methods in the humanitarian sector.

Despite some of the clear benefits to be realized by close collaboration among humanitarian agencies and academic institutions (e.g. development of curriculum and training geared toward professionalizing the humanitarian field, common testbed for new ideas and tools, field-informed and operationally relevant research, and the enhancement of research methods and assessment tools – to name a few) significant obstacles create disincentives to realizing the full potential of closer collaboration.

Among the most important obstacles include a predisposition on behalf of humanitarian agencies to view academics as consultants (universities do not do work for hire), misconceptions about core tenets of the academic freedom to publish results, and misunderstandings about the administrative costs of doing business with universities. Others have already covered many of these issues, but they continue to

persist and create barriers to effective collaboration.

Universities can be strong partners for humanitarian agencies, especially when both sides come to the table with a longer-term plan in mind, clear research questions that require solid research design, data collection, and appropriate analytic methods to clarify how inferences made from data are related to the impact of humanitarian programs on the communities being served. University partners are too often sought as a means of providing a badge of legitimacy on a donor-driven requirement for a program evaluation component, which more often than not, is tacked on after the fact rather than designed as an integral program component from the start. This leaves the pro-

spective evaluator in the unenviable position of having to make do with what data are available post-hoc in the absence of data that were systematically collected (as the result of a thoughtful research design) at key points in the delivery of the aid program.

There are clear benefits to be realized by advancing existing partnerships between academic and humanitarian aid organizations and developing new relationships between academic, private, international and national militaries, and voluntary groups. The challenges posed by today's disasters require a multi-sector, multi-disciplinary approach that draws on the expertise of professionals with a myriad of

technical and management skills, and an enhanced understanding of the operational, political, economic, and cultural contexts in which humanitarian actors deliver aid. We owe it to disaster-affected populations, as well as to the people that have devoted their lives to serving them, to provide the very best education, training, tools, and resources to advance humanitarian practice.

United Nations High Commissioner for Refugees relief items are unloaded onto the tarmac at Tacloban. HHI Executive Director Vincenzo Bollettino visited Tacloban, Philippines in the wake of Typhoon Haiyan to assess civil-military coordination in response to the disaster.

Vincenzo Bollettino/ HHI

Recommendations

Universities:

❯ Provide an overhead structure that accounts for the unique aspects of contracting with agencies engaged in humanitarian work. Much of this research requires few university resources and is work conducted off campus. There are also strong ethical considerations for supporting research in this domain.

❯ Continue providing humanitarian professionals with access to executive education programs and tailor degree programs to accommodate a mixture of on and off site participation (through online courses for example).

❯ Create contract mechanisms that expedite the review of research proposals for support research that is likely to have important results for the delivery of humanitarian assistance.

Humanitarian Aid Organizations:

❯ For short-term, rapid turnaround assessments, hire consultants; do not try to partner with a university.

❯ Create longer-term relationships with university partners and consider the full panoply of opportunities this entails, from convening workshops on important challenges for humanitarian action, to designing and executing population-based studies that inform humanitarian program design, to developing curriculum tailored to meet the needs of a technically complex humanitarian system.

❯ For research projects and larger evaluation studies, be sure to include a university partner at the design/proposal phase, before the proposal is submitted to a donor.

Disaster preparedness:
Partnerships to promote resilience

By Greg Ireton,
*Disaster Recovery Consultant and former State Government Principal Advisor,
Emergency Management Associate Professor Lisa Gibbs,
Deputy Director, Jack Brockhoff Child Health &
Well-being Program,
Melbourne School of Population and Global Health,
University of Melbourne,
& John Richardson,
National Coordinator-Emergency Preparedness,
Emergency Services,
Australian Red Cross*

Resilience is clearly the 'buzz' word in disaster preparedness and recovery. But what does it really mean? Do we need to do anything about it? If so, how? This article explores the term 'resilience' in the context of disasters, cautions against the simplistic notion that individuals and communities are either resilient or vulnerable, and advocates for partnership approaches to promote resilience that capitalize on multiple fields of expertise and experience. Disaster and public health researchers have a unique contribution to make in supporting government-agency-community-academic partnerships in the co-generation of knowledge and action to support disaster resilience.

Wildfires ravage the Australian outback in 2012.

Paul Williams/ Flickr

Understanding resilience

The past decade has seen a shift away from a focus on risks and vulnerabilities towards recognition of the capacity in people and communities and the potential to reduce risks by building on strengths. This is influencing emergency preparedness, recovery and humanitarian action internationally and was brought to prominence through the "Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters".[1] However, despite the widespread uptake of the concept of resilience, it is a contested term with divergent views on definition and application across research, government and agencies.[2,3,4,5,6,7,8,9]

Resilience essentially refers to the capacity to adapt to major disruption. It has been varyingly described in simplistic terms such as 'bouncing back' to the status quo pre-disruption, or 'bouncing forward' to a new way of operating, to more multi-dimensional definitions that encompass a number of elements such as capacity to access and utilize resources. Resilience operates at different levels including the individual, the household or family unit, neighborhood, organization, and the community-level or within community groupings. Whilst an individual may not be considered resilient because of potential vulnerabilities, they may be resilient as part of a supportive and capable family unit, social or community context, or as a result of broader political and economic influences. Bronfenbrenner's socioecological model of resilience demonstrates these micro, meso and macro influences on individual resilience over time.[10,11]

Resilient individuals and communities should not be seen, in any way, as immune to the distress and impacts of a disaster. Instead resilience refers to the capacity of individuals and communities to adapt to and reduce the distress and dysfunction caused by the impact. The concept of capacity and ability as key components is used by most authors within the definition and approach to resilience.[12]

While there are varying representations of resilience as either a process or an outcome, it is generally recognized that resilience is not a static state of being, but instead a result of an individual's adaptive capacities, that is, their capacity to adapt to different circumstances. The individual's resilience is twofold: do they possess capacity (e.g. well-being, community connections), and what is the dynamic state of these capacities, e.g., a person who might be considered to have good financial capacity may lose their job. The term "adaptive capacities" is used to capture this combination. Recognizing resilience as a dynamic process is critical as circumstances change.

For the purposes of this article, the definition of resilience used by the Red Cross' emergencies program will be used:

The ability of individuals, communities, or organizations, exposed to disasters and crises and underlying vulnerabilities to:
- *anticipate,*
- *reduce the impact of,*
- *cope with,*
- *adapt to,*
- *and recover from*

the effects of adversity without compromising their long-term prospects.[13]

Ability, as used in this definition, includes both capacity and capability based on different human, psychological, social, financial, physical, natural or political assets. Each of the described actions, i.e. anticipate, cope, adapt and recover, draw on different sets of competencies, knowledge and relationships.

The approach to resilience outlined here acknowledges that there is always a capacity amongst people and communities. This capacity should be strengthened at both individual and community level as well as addressing underlying vulnerabilities.[14]

Experience has shown that groups that are sometimes prominent on lists of the 'vulnerable' can be great sources of strength and resilience within communities. Older adults may have experienced many disasters or adversity in the past, migrants may bring a range of experiences from both developed and developing countries, and indigenous populations (such as the Aboriginal and Torres Strait Islander people in Australia) may have a good traditional understanding of weather and hazards. It is a regular occurrence at community meetings post-disaster for one or two individuals, often the elderly members of the community, to be able to detail what this community did to recover from the impact of a previous disaster in the years

1 International Strategy for Disaster Reduction: Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters. In. www.unisdr.org/wcdr; 2005.
2 Davis R, Cook, D., & Cohen, L.: A community resilience approach to reducing ethnic and racial disparities in health. American Journal of Public Health 2005, 95(12):2168-2173.
3 Norris F, Stevens S: Community resilience and the principles of mass trauma intervention. *Psychiatry-Interpersonal and Biological Processes* 2007, 70(4):320-328.
4 Price-Robertson R, Knight K: Natural Disasters and Community Resilience CFCA Paper no. 3. Australian Institute of Family Studies 2012.
5 Cox RS, Perry KME: Like a Fish Out of Water: Reconsidering Disaster Recovery and the Role of Place and Social Capital in Community Disaster Resilience. American Journal of Community Psychology 2011, 48(3-4):395-411.
6 Bonanno GA: Loss, trauma, and human resilience - Have we underestimated the human capacity to thrive after extremely aversive events? American Psychologist 2004, 59:20-28.
7 Norris FH, Stevens SP, Pfefferbaum B, Wyche KF, Pfefferbaum RL: Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. American journal of community psychology 2008, 41(1-2):127-150.
8 Steiner A, Markantoni M: Unpacking community resilience through Capacity for Change. Community Development Journal 2013, Advance Access.
9 Zautra A, Hall J, Murray K: Community Development and Community Resilience: An Integrative Approach. Community Development Journal 2008, 39(3):130-147.

10 Bronfenbrenner U: The Ecology of Human Development: Experiments by Nature and Design. United States of America: Harvard University Press; 1979.
11 Bronfenbrenner U: Making Human beings human: Bioecological perspectives on human development.: Thousand Oaks: Sage Publications; 2005.
12 Mayunga J: Understanding and Applying the Concept of Community Disaster Resilience: A capacity-based approach. . In: A draft working paper prepared for the summer academy for social vulnerability and resilience building, 22 - 28 July 2007. Munich, Germany; 2007.

13 International Federation of Red Cross and Red Crescent: The Road to resilience: IFRC discussion paper on resilience. In.; 2012.
14 Ibid.

before many other locals were born. This demonstrates that simplistic notions of resilience are not helpful. Instead, it is important to recognize that people and communities will be resilient with respect to some circumstances and potentially vulnerable with respect to others, and that this will shift over time and context. A strengths-based approach to resilience adopts a positive starting point that recognizes and utilizes existing strengths and seeks to build these further, while also identifying potential vulnerabilities and providing necessary supports.[15] Norris and colleagues suggest five actions to enhance community resilience in reference to a disaster response: 1) addressing social inequities and vulnerabilities and buffering economic resources; 2) the participation of the community in the assessment and generation of problem lists and solutions; 3) the capacity of the extant support services to respond with efficacy to a crisis; 4) the establishment of buffers for existing social supports, in part to facilitate and enhance information exchange following a crisis; and 5) the establishment of trusted and flexible communication networks to enhance community response to future unknown insults.[16]

Building resilience

It is vital that approaches to developing resilience are included as part of disaster preparedness, and are robust enough to function effectively during the response and recovery. This preparation provides the opportunity to build trusting relationships between and amongst community members, agencies and government.

Disaster response and recovery commonly involves a convergence

upon community by government, nongovernmental organizations, and volunteers, as well as the typical plethora of well-meaning donations. This approach can reinforce feelings of dependency amongst the disaster affected and destroy opportunities to fully utilize inherent resilience. Therefore, it is important to establish partnership approaches within community, agencies, and government, but Olshanshky and colleagues, in their report on lessons from the Los Angeles 1994 and Kobe 1995 earthquakes,[17] warn: "It is difficult to invent participatory processes in the intensity of a post-disaster situation."

Equally, adopting a resilience or shared responsibility approach to disaster management does not mean a divestment of responsibility by government and agencies, because individuals or communities are perceived to be resilient.[18] The shift in agency activity should be away from direct intervention towards facilitation and capacity building in individuals and local agencies that is aimed at unlocking latent resilience. Maintaining the centrality of community in a disaster resilience approach requires the development of capacity and strategies at all levels to achieve meaningful engagement and collaboration between government, agencies, community representatives and community members.

Vallance warns that much of the research highlighting the benefits of community engagement assumes both a willingness and capability of both authorities and communities to engage effectively.[19] Vallance goes on to state that her research indicates that this willingness and capability can take time. Resistance was clear at both levels following the February

2011 Christchurch Earthquake in New Zealand.

Similar challenges were evident following the 2009 bushfires in Australia in terms of gaining support for a partnership approach and ensuring that appropriate skills were present both amongst those assisting communities to recover as well as within communities themselves.[20] The need to invest time initially in developing a shared understanding of community participation was identified by both community leaders and agencies.[21,22] It was also noted that there needed to be allowance for the respective roles of community and agencies to change over time at different stages of recovery.

The other challenge of truly engaging with community can be how to define 'community'. It can be defined by geography, a community of interest, or a community as defined by the impact of the disaster, and often these communities will have ill-defined boundaries and competing interest groups within them. This also makes it difficult to determine who represents the community, requiring transparent processes to invite participation and share information.

The role of research in resilience approaches

Community-based participatory research (CBPR) is a well-established approach in which the community is recognized for having expertise about the community context. Community representatives are active partners in the research, contributing to decision-making and knowledge exchange at all stages in the process.[23]

Other stakeholders such as service providers and government are often engaged as partners in the research as well. This approach can be usefully applied in the promotion of resilience in disaster preparedness and recovery. Involving researchers in the process provides the opportunity for decision-making to be guided by the existing evidence base and also for the partners to co-generate new knowledge about local issues.

The CBPR Conceptual Model (see below) developed by Wallerstein and colleagues provides a useful tool for developing a partnership approach to resilience as part of disaster preparedness activities. They suggest that there are four linked domains of CBPR: Contexts; Group Dynamics and Equitable Partnerships; Intervention and Research; and Outcomes. They provide suggested items to record in each of these domains as a stimulus for discussion among partners about the unique features of a given partnership. This agreed record then becomes the basis of the shared approach, the means of monitoring progress, and a way of representing final status.
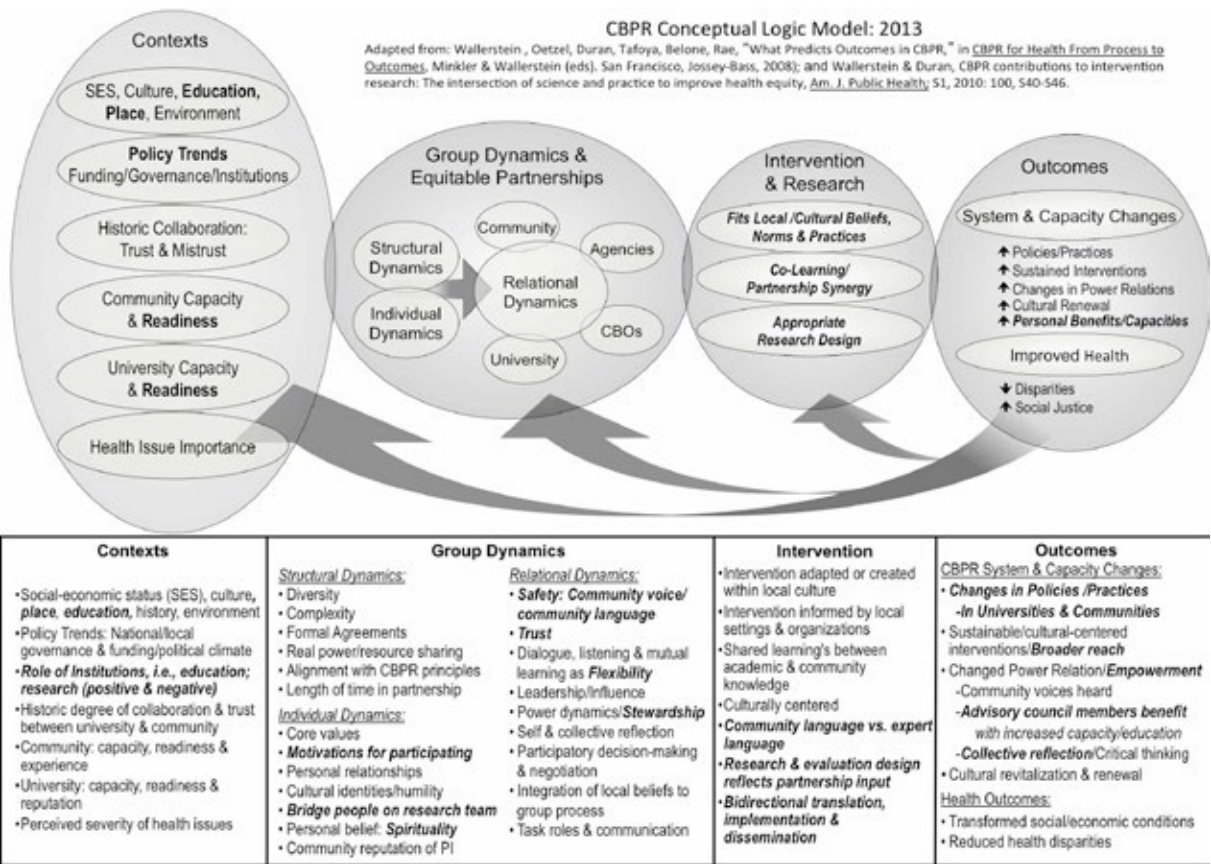
Beyond Bushfires is a five-year study led by the University of Melbourne in partnership with a range of stakeholders including

community, government, emergency, and service agencies.[24] This study is exploring the interplay between individual and community-level recovery from the impacts of the Victorian 2009 bushfires on mental health, social connectedness and well-being (www.beyondbushfires.org.au). In doing so it is identifying a wide-range of risk and protective factors that impact on resilience and recovery. Community participatory research methods have provided the opportunity for community, service providers and government to shape the study, be part of the learning process, contribute to interpretation of findings, and ensure the findings can inform key questions about community, policy and service provision. Participation in research decision-making is achieved through

24 Gibbs L, Waters E, Bryant R, Pattison P, Lusher D, Harms L, Richardson J, MacDougall C, Block K, Snowdon E et al: Beyond Bushfires: Community, Resilience and Recovery - A longitudinal mixed method study of the medium to long term impacts of bushfires on mental health and social connectedness. BMC Public Health 2013, 13:1036.

a variety of mechanisms including partner meetings, regular community visits, email communication, social media, information networks, phone calls and seminars.

Building resilience as part of disaster preparedness is a critical means of promoting positive outcomes in response and recovery. While the definition of the term resilience is contested, there is no debate that it provides a strengths-based approach to disaster preparedness that recognizes the capacity of individuals and communities, and the potential to reduce risks by building on strengths and creating supportive environments. This is best achieved through a community-based partnership approach that draws on existing knowledge and expertise through the contributions of community, government, agencies and researchers to generate new local knowledge and action.

CBPR Conceptual Logic Model: 2013

15 Richardson JF: Beyond Vulnerability: Developing Disaster Resilience Capacities to target preparedness activities. In: Australian and New Zealand Disaster and Emergency Management Conference. Gold Coast, 5-7 May 2014; 2014.
16 Olshansky R, Johnson L, Topping K: Rebuilding communities following disaster: Lessons from Kobe and Los Angeles. Built Environment 2006, 32(4):354-375.

17 McLennan BJ, Handmer J: Reframing responsibility-sharing for bushfire risk management in Australia after Black Saturday. Environmental Hazards 2012, 11(1):1-15.
18 Vallance S: Early Disaster Recovery: A guide for communities. Australasian Journal of Disaster and Trauma Studies 2011, 2011-2:19-25.
19 Webber R, Jones K: Implementing 'community development' in a post-disaster situation. Community Development Journal 2013, 48(2):248-263.

20 Anon: Lessons Learned by Communities Recovery Committees of the 2009 Victorian Bushfires - Advice for Government. In. http://www.strathewen.vic.au/strathewen-community-groups/strathewen-community-renewal-association/reports-to-members/ Accessed 1 Oct 2014; May 2011.
21 Israel B, Schulz A, Parker E, Becker A: Review of Community-Based Research: Assessing Partnership Approaches to Improve Public Health. Annual Review of Public Health 1998, 19:173-202.
22 Ibid.
23 Israel B, Schulz A, Parker E, Becker A: Review of Community-Based Research: Assessing Partnership Approaches to Improve Public Health. Annual Review of Public Health 1998, 19:173-202.

Center for Excellence in Disaster Management & Humanitarian Assistance celebrates 20 years

Liaison Staff

In 1989, the U.S. military was an impressive sight to behold – more than two million service members, armed with the latest and greatest advances in modern warfare, stood ready to defend the nation against any foe. President Ronald Reagan had infused the military with enough funds to dominate the landscape, and America's largest adversary, the Soviet Union, struggled to maintain a comparable level of weaponry, doctrine and training. And then, without warning, "The Wall" came down, and the adversary quickly crumbled.

In the years following the end of the Cold War, many government organizations were searching for a new purpose. The United States military, having spent decades looking toward the Iron Curtain, was no exception. As debate over the objective of a noncombat military took place, a new mission emerged on its own.

In the early 1990s, natural disasters and humanitarian crises in Iraq, Bosnia, Herzegovina, Somalia and Bangladesh gave the military a renewed sense of purpose, yet coordination between the military and civilian-sector humanitarian relief remained unorganized and disjointed. This gap was uncovered and in 1994 the United States Congress established the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DMHA) as a way to build partnerships and collaborations between the military and civilian DMHA organizations.

"It was really Operation Provide Comfort in '92 that put in my mind: 'we really need to set up a center where all these strange bedfellows – the U.N., NGOS, the military – have a place to really focus on policy, advocacy, how we were going to work together,'" says Dr. Frederick "Skip" Burkle, the Center's first director (1994 – 2000).

A U.S. Navy Reserve captain,

Burkle straddled the two worlds – 30-plus years in the military, and even more time in academia teaching and responding to humanitarian crises around the world. It was through that dual life experience that Burkle saw a need for better communication between the two response groups.

Burkle proposed the idea to start a civil-military coordination center to Hawaii Senator Daniel K. Inouye. Sen. Inouye, a military veteran and Medal of Honor recipient, spent decades in the House of Representatives and Senate working to build a stronger, more prepared Hawaii and Pacific community. Through his dedication to a more comprehensive disaster preparedness and response environment, legislation to create CFE-DMHA was drafted by his office and advocated for tirelessly in Congress until it passed in 1994.

The Center found a home at Tripler Army Medical Center on Oahu where it began the work of partnering with the United Nations, universities, the Center for Disease Control, and a variety of civilian nongovernmental organizations to realize a more connected civil-military DMHA community.

Now, for twenty years CFE-DMHA has reached beyond the borders of its Hawaii-based location into the far corners of the disaster management, preparedness and humanitarian communities to better prepare and inform those most at risk. As written in its congressional mandate, the Center focuses on education, research, and training "in civil-military operations, particularly operations that require international disaster management and humanitarian assistance and operations that require coordination between the Department of Defense and other agencies."

Functioning as the coordinating authority for U.S. Pacific Command, the Center is not operational in the

traditional sense – the Center does not deliver water or food to disaster victims, it does not help rebuild after a typhoon destroys a city; CFE-DMHA isn't a headline stealer, or a star maker – instead, the employees work behind the scenes, before the disaster strikes, to preemptively help responding organizations be more effective through best practices, lessons learned and educational programs.

"The only proper way to respond to a disaster is to be prepared for one," said Col. Joseph Martin, director of CFE-DMHA since May 2014. "That's why this organization is so unique: we help coordinate exercises and educational programs that build capacities and capabilities in our partner nations before a disaster strikes."

On the forefront of CFE-DMHA's efforts to build capabilities in Asia-Pacific nations, stands an effort to improve civil-military coordination during disaster response.

CFE-DMHA addresses issues that no single agency or organization can address on its own, and builds the groundwork of cooperation between the civilian (where many issues are addressed) and the military (who are requested to assist), said Martin.

"The intent is to get the military in and out as quickly as possible," he said. "And let the nongovernmental organizations and the humanitarian community do what they do best – help people and communities rebuild – but, to smoothly coordinate that transition, there has to be communication and interoperability."

Though the military is often the first to arrive post-disaster, according to the "Oslo Guidelines", an internationally respected report by the United Nations Office for the Coordination of Humanitarian Affairs, the military is a means of "last resort," only acting as "a tool complementing existing relief mechanisms in order to provide specific support to specific requirements, in response to

(Left) Mara Langevin, a disaster management and humanitarian assistance advisor for CFE-DMHA, gives a lecture on U.S. military education and training in humanitarian assistance and disaster response (HADR) during the U.S. Army Pacific's annual Disaster Management Exchange (DME) with the Chinese People's Liberation Army (PLA) in China Jan. 13. Langevin joined a team of U.S. military and civilian HADR experts coordinating with their PLA counterparts to promote best practices in disaster response. (Right) Col. Joseph Martin, director of CFE-DMHA, welcomes Ambassador-Designate to Bangladesh Marcia Bernicat, currently the deputy assistant secretary of the Bureau of Human Resources at the U.S. Department of State, to CFE-DMHA's headquarters building on Ford Island, Hawaii Jan. 21.

the acknowledged 'humanitarian gap' between the disaster needs that the relief community is being asked to satisfy and the resources available to meet them."

However, the military represents a cornucopia of assets: transportation (land, air and sea); fuel; communications; medical personnel and supplies; commodities including food, building supplies and materials; tools and equipment; manpower; technical assistance (especially logistics and communications) and facilities.

"Learning how to cooperate for [humanitarian assistance and disaster response] is… the future of the security environment in the Asia-Pacific," said Adm. Samuel Locklear, commander of U.S. Pacific Command.

This means that the moment an affected state's government requests international assistance, military forces from around the world rush to help. Humanitarian groups already operating in the host nation traditionally have warehouses of supplies pre-stationed to distribute to those in need. The Center helps prepare the two sides for coordination to get the aid where it needs to go.

That preparation is done in many ways:

Education & Training

Equally important to the Center's aim to improve civil-military coordination during disaster response lies its efforts to better prepare for disasters through education, both for civilian humanitarians and U.S. military personnel. CFE-DMHA instructs approximately eight Humanitarian Assistance Response Training (HART) courses a year for U.S. military service members around the Asia-Pacific. The HART course focuses on civil-military relations, including interacting with agencies of the affected state and humanitarian organizations during response operations.

Additionally, for personnel unable to attend a course in person, the HART course has been made available through the Department of Defense's Joint Knowledge Online (JKO) training portal.

"The Center holds a comparative advantage in disaster management education over other education and training environments in the Department of Defense," said Martin. "The return on investment for the HART, and HART Online, make it an invaluable tool in educating those most likely involved an a disaster response."

The Center also facilitates a Health

Emergencies in Large Populations (H.E.L.P.) course in collaboration with the International Committee of the Red Cross and in partnership with the University of Hawaii.

Brought to the Center in 1998 by Dr. Burkle, the H.E.L.P. course provides international participants with a two-week, comprehensive understanding of the major public health issues to be addressed among populations affected by natural disasters, complex emergencies and internal displacement.

"My agenda at that time was to get the U.S., not just the government, but the military, knowing more about… international humanitarian law, the Geneva conventions, and how we work in the core competencies when you're out there with the NGOS and the other players," said Burkle.

The H.E.L.P. course utilizes instructors from NGOs such as RedR – Australia and subject matter experts from academic institutions, governmental organizations such as the World Health Organization, and military commands to provide perspectives from the different actors supporting humanitarian response and allow participants to build relationships prior to a devastating event.

"Along with John Hopkins [University], we were the first to have the

H.E.L.P. course in the United States and are the only DOD organization to teach it," said Burkle.

Plans & Analysis

The CFE-DMHA planners work in concert with service components and U.S. Pacific Command staff to incorporate DMHA initiatives into their two to five year operations planning.

"We provide inputs to key strategic planning groups to ensure DMHA is considered in every aspect of the overall PACOM mission," said Mike Sashin, Plans and Analysis Branch chief.

Additionally, the staff coordinates with personnel from the Office of Defense Cooperation, State Department country teams and U.S. Agency for International Development in order to ensure civil-military cooperation within partner nations in the Asia-Pacific.

Once the planners stage an event, the engagements branch takes over.

Engagements

Through a team of DMHA advisors, CFE-DMHA participates and facilitates exercises, workshops and seminars around the Asia-Pacific. From Pacific Partnership, which brings together up to 12 nation's navies, to Exercise Cobra Gold in Thailand, the Center's advisors provide subject matter expertise to build partner capacity and coordinate civilian and NGO participation in the events.

The organization also helps test partner nation's disaster management plans. In 2011, advisors travelled to Fiji with experts from the Pacific Tsunami Warning Center to test the National Disaster Management Office's tsunami response plan. Using simulated computer models of what a tsunami in Fiji would look like, the country was able to incorporate lessons from the simulation to make their preparation for a tsunami stronger.

Bob Goodwin/ APCSS

Mike Sashin, CFE-DMHA Plans and Analysis Branch chief, gives a lecture at the Asia-Pacific Center for Security Studies.

Information Sharing & Research

For decades, research papers, reports and after action analysis have been performed by response organizations around the world, but no repository existed to compile the information in one location. Enter the Center's Virtual Information Resource Center (VIRC) built to house disaster response lessons learned and best practices from throughout the community.

The research team also builds Disaster Management Reference Handbooks that provide a baseline of information regarding countries most prone to disasters. Maintaining an operational perspective, the handbooks provide a general understanding of a nation's disaster management capability and vulnerability for use for response groups traveling to relief sites for a clearer picture of where they are going (geography, history, climate, etc.) and whom they will be helping when they get there (community).

Additionally, the researchers partner with academic institutions and partner organizations on research

projects and proposals to expand research from the classroom to the field and provide comprehensive analysis on civil-military coordination in disaster environments.

In 2013, the Center partnered with Harvard Humanitarian Initiative during the response of Typhoon Haiyan's destructive path through the Philippines, and the Center continues to work with the University of Hawaii at Manoa, Columbia University, and countless organizations such as the Pacific Disaster Center and National Disaster Preparedness Training Center.

Overall, a lot has changed in twenty years, and a lot has stayed the same for the organization. The mission of CFE-DMHA remains, "to better equip… "and as we move out of a period of severe disaster recovery with joint efforts to recuperate from disasters worldwide, the Center is poised to continue its work to aid Asia-Pacific DMHA partnerships and planning for a future that is more connected and better prepared.

Twenty Years:
A Timeline

100s of courses, 1000s of engagements. Continuing down the road to excellence in disaster management.

Liaison Staff

1994

Through the guidance and dedication of Senator Daniel K. Inouye and Dr. Frederick "Skip" Burkle, Jr., CFE-DMHA was written into U.S. Code Title 10 and opened in October 1994 at Tripler Army Medical Center.

1996

The Combined Humanitarian Assistance Response Training (CHART) course is created to provide disaster response personnel with instruction on civilian-military relations in disaster environments, including interacting with agencies of the affected state and humanitarian agencies.

June 1999

First issue of Liaison Magazine is released.

Humanitarians are introduced to Meals Ready to Eat (MREs).

1998

After years of coordination, CFE-DMHA director Dr. Skip Burkle is authorized by the International Committee of the Red Cross to facilitate the Health Emergencies in Large Populations (H.E.L.P.) course. The Center remains the only U.S. Department of Defense organization authorized to instruct the course.

1999

CFE-DMHA helps facilitate security workshop with the international NGO World Vision and U.S. Marine Forces Pacific, the first collaborative training effort between World Vision and the U.S. military.

Late 1999

The first handbook, known as the 'CFE Primer on East Timor', is given to President Bill Clinton on the tarmac at Hickam Air Force Base.

2000

The Center, in coordination with United Nations Department of Peacekeeping Operations, led a series of peacekeeping workshops, which contributed to the creation of the Department of State Global Peace Operations Initiative in 2005.

2001

CFE-DMHA becomes a direct reporting unit to U.S. Pacific Command (USPACOM), streamlining efforts for increased civil-military coordination in the Asia-Pacific, while continuing to receive program direction and policy guidance from the Assistant Secretary of Defense for Special Operations/Low-Intensity Conflict (ASD/SOLIC).

2002

The Center is tasked to help develop and execute USPACOM's HIV/AIDS initiative through presidential funding for AIDS research.

2004-5

Director Gerard "Pete" Bradford III served as the Joint Interagency Coordination Group commander during USPACOM's disaster response operations after the devastating Indian Ocean Tsunami. Additionally, staff played a significant supporting role to USPACOM in the planning and execution of Operation Unified Assistance.

2005

CFE-DMHA staff seconded as Civil-Military Coordination (CMCOORD) officer in response to South Asia earthquake in Pakistan.
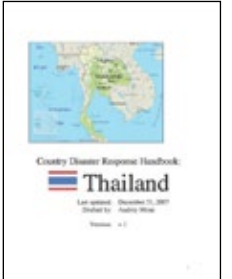
2006

Staff provides support to USPACOM response personnel after Leyte mudslide in the Philippines.

2007

The first Disaster Management Response Handbooks are released – Vietnam and Thailand.

2013

The Center entered into letters of understanding with Columbia University's National Center for Disaster Preparedness, the Harvard Humanitarian Initiative, Asia-Pacific Center for Security Studies, Pacific Disaster Center, and the University of Hawaii.

August 2013

Established the Virtual Information Resource Center (VIRC) aimed at carefully collecting, organizing and sharing disaster management literature and operationally useful documents, reports and reference material including best practices, lessons observed, disaster management handbooks, after action reports and capacity assessments with the global disaster management and humanitarian response community.

June 2013

After nearly 19 years at Tripler Army Medical Center on Fort Shafter, CFE-DMHA finds a new home in historic building 76 on Ford Island in the heart of Pearl Harbor.

March 2011

Jim Welsh, Dr. Amy Stormer and Tom Dolan travel to Japan in support of Operation Tomodachi following the Great East Japan Earthquake and Tsunami.

October 2010

The CHART course transitions to the HART course, which continues to provide U.S. military service members with civil-military coordination training worldwide.

John Miller, lead HART instructor, facilitates approximately eight classes annually.

2009

CFE-DMHA helps facilitate security workshop with the international NGO World Vision and U.S. Marine Forces Pacific, the first collaborative training effort between World Vision and the U.S. military.

2007

Inaugural Pandemic Influenza workshops and symposiums launched in collaboration with the U.S. Centers for Disease Control and the United Nations World Health Organization (WHO).

November 2013

Staff members fly to the Philippines after Typhoon Haiyan ravishes the country to support civil-military coordination during international disaster response efforts.

March 2014

The Center launched its new website: www.cfe-dmha.org

May 2014

Col. Joseph Martin takes over as director of CFE-DMHA. Martin joins the team from USPACOM where he most recently served as director for Pacific Outreach Directorate.
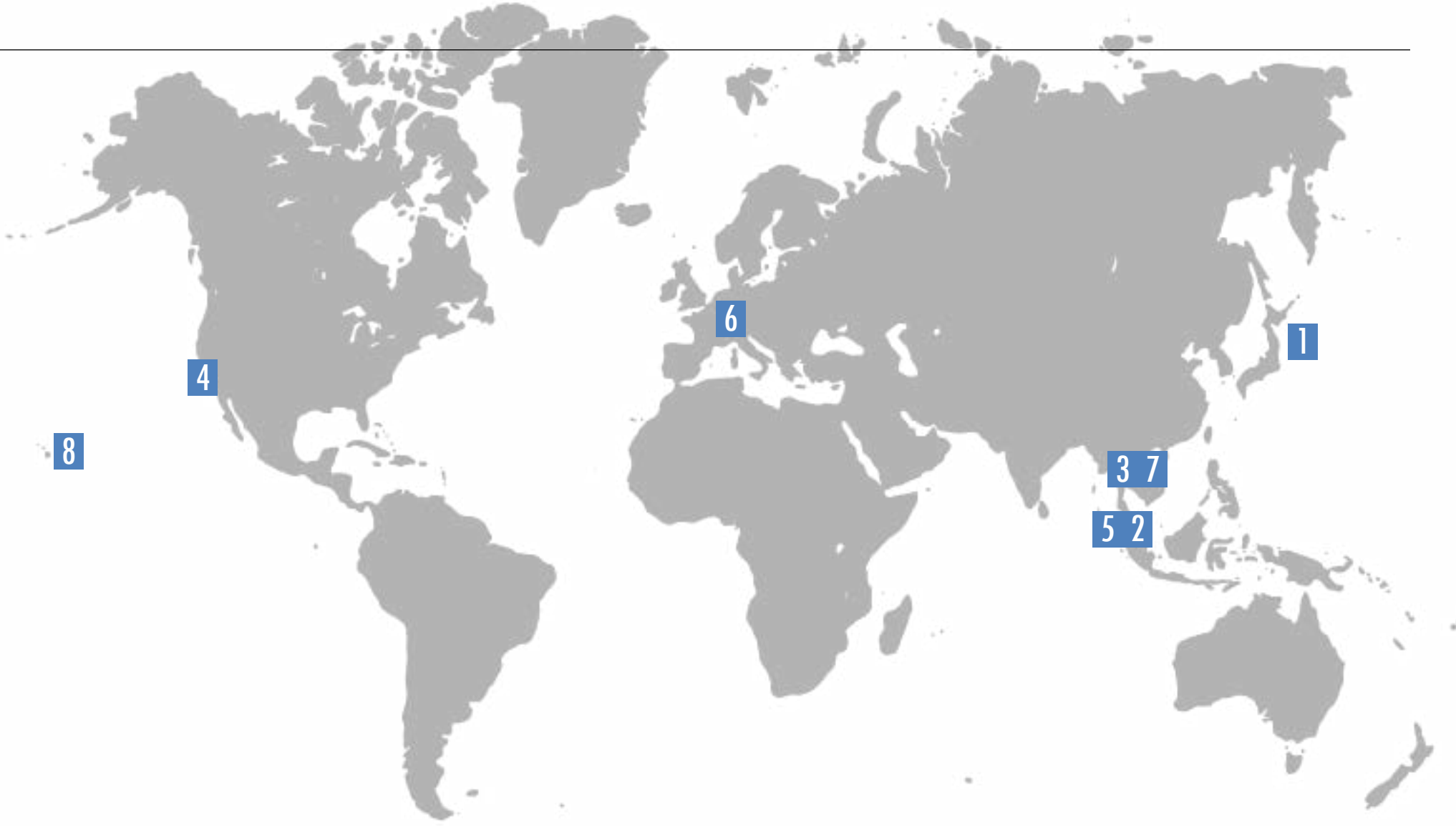
January 2015

The Center's Disaster Management Primer, DMHA 101, launches online.

2015

The road to excellence continues...

CALENDAR OF EVENTS

1 United Nations Office for Disaster Risk Reduction
Third World Conference on Disaster Risk Reduction
March 14 – 18, 2015
Sendai, Japan

2 United Nations Office for the Coordination of Humanitarian Affairs
Civil-Military Coordination Course
March 22 – 27
Kula Lumpur, Malaysia

3 Asian Disaster Preparedness Center
Second International Training Course on Managing Risk in the Face of Climate Change
March 23 – April 3
Bangkok, Thailand

4 Center for Excellence in Disaster Management & Humanitarian Assistance
Humanitarian Assistance Response Training (HART) Course
April 7 - 10
San Diego, California, USA

5 Association of Southeast Asian Nations
ASEAN Regional Forum Disaster Relief Exercise (ARF DiREX) 2015
May 24 – 28
Kedah, Malaysia

6 ICLEI - Local Governments for Sustainability & World Mayors Council on Climate Change Secretariat
Resilient cities 2015: Sixth global forum on urban resilience and adaptation
June 8 – 10
Germany

7 Asian Disaster Preparedness Center
24th Regional Training Course on Community Based Disaster Risk Reduction in a Changing Climate
July 13 – 24
Bangkok, Thailand

8 International Federation of the Red Cross and Red Crescent Societies & CFE-DMHA
Health Emergencies in Large Populations (H.E.L.P.) Course
Summer
Pearl Harbor, Hawaii, USA