





## **STRATEGIC ASSISTANCE** Disaster Relief and Asia-Pacific Stability



Published by The National Bureau of Asian Research 1414 NE 42nd Street, Suite 300 Seattle, WA 98105, USA Phone +1 206 632 7370 Fax +1 206 632 7487 E-mail nbr@nbr.org http://www.nbr.org

© 2014 by The National Bureau of Asian Research (NBR) This publication may be reproduced for personal use. Otherwise, its contents may not be reproduced in full without the written permission of NBR. When information from this report is cited or quoted, please cite the author and NBR. The views expressed in this publication are those of the authors and do not necessarily reflect the views of NBR or the institutions that support NBR.

The National Bureau of Asian Research is a nonprofit, nonpartisan research institution dedicated to informing and strengthening policy. NBR conducts advanced research on strategic, political, economic, globalization, health, and energy issues affecting U.S. relations with Asia. Drawing upon an extensive network of the world's leading specialists and leveraging the latest technology, NBR bridges the academic, business, and policy arenas. The institution disseminates its research through briefings, publications, conferences, congressional testimony, and online forums, and by collaborating with leading institutions worldwide.

NBR also provides exceptional internship and fellowship opportunities for the purposes of attracting and training the next generation of Asia specialists. NBR is a tax-exempt, nonprofit corporation under I.R.C. Sec. 501(c)(3), qualified to receive tax-exempt contributions.

Printed in the United States of America.

Front cover photo: Crewmembers of the Japan Maritime Self-Defense Force ship JDS *Kunisaki* display "PP10," the abbreviation for Pacific Partnership 2010, as the vessel and crew transit to Vietnam. The U.S. Navy's Pacific Partnership is the largest humanitarian and disaster response-preparation mission in the Asia-Pacific.

### **STRATEGIC ASSISTANCE** Disaster Relief and Asia-Pacific Stability

This report was produced with support from the Sasakawa Peace Foundation and the Japan Foundation Center for Global Partnership.

# STRATEGIC ASSISTANCE

Disaster Relief and Asia-Pacific Stability

Contents	
日米同盟と災害救援 第一回ワークショップ・レポート(要約)	_1
Introduction	5
Future Vulnerability in South and Southeast Asia	6
Current HA/DR Capabilities of the U.SJapan Alliance	8
Military Capabilities	9
Civilian Government Capabilities	_ 11
Private Sector and NGO Capabilities	_ 12
Improving Coordination	_13
Lessons Learned from Operation Tomodachi	_ 14
Developing a Framework for Strategic Assistance: Challenges and Opportunities	_16
Resilience	_16
Response	_ 18
Recovery	_ 20
Challenges	_ 20
Conclusion: A Way Forward	_22

### 日米同盟と災害救援 第一回ワークショップ・レポート (要約)

「日米同盟と災害救援」プロジェクトは、 全米アジア研究所(NBR)と日本国際交流セ ンター(JCIE)の共同研究として立ち上げら れ、笹川平和財団および国際交流基金日米 センター(CGP)の寛大な支援の下に進めら れている。同プロジェクトの目的は、南アジ ア・東南アジアにおける人道支援・災害救援 (HA/DR)政策に対して日米共通の戦略的ア プローチを模索することにあり、「戦略的 支援」に焦点を当てる。「戦略的支援」と は、HA/DRにおける活動を軍事的側面に限 定せず、政府やNGO、そして民間セクターに よる活動も含めたアプローチ、すなわち「全 社会的アプローチ」を指す。

2013年9月には、NBRとJCIEが2日間に渡る 第一回ワークショップをワシントンDCにて開 催した。日米両国からは合計24名の学者、 実務担当者、専門家が一同に会し、日米両国 のHA/DRに対するアプローチについての現 状分析を行い、戦略環境の変化の中におけ るHA/DRに関する能力向上の必要性を議論 し、日米双方が共有された戦略思考を基に、 いかなる二国間協力や政策調整を高めてい くかについて意見交換を行った。主な議題 としては、(1) 南アジアと東南アジアにおける 人口動態、発展状況、水文気象状況、(2)米 軍および日本の自衛隊のHA/DR能力の現 状、(3) 2004年スマトラ島沖地震と2013年 「トモダチ作戦」から得られた日米協力に おける教訓、(4)「戦略的支援」のための能 力、投資、体制、組織的・政策的変化の必要 性、(5)人道的災害への対応において、日米 両国の政府および市民社会等の「非軍事セ クター」と「軍隊・自衛隊」との連携強化に 関する方法論、であった。なお、第一回ワー クショップ・レポートの主な章の要約は、下記 のとおり。

#### 1. 南アジア・東南アジアの災害脆弱性

アジア太平洋地域は、全世界における自然 災害の大半を占めており(過去30年間の自 然災害において、アジア太平洋は全世界の 62%の死亡率、89%の被災者率を占める) 、この傾向は将来に渡り強まる傾向にある。 主な理由としては、この地域の多くの国家は インフラ整備が遅れていること、海抜の低 い沿岸部において急速な人口増加が見られ ること、災害防止等を進めるために必要な 政府機能が弱いこと等が挙げられる。しかし 2004年スマトラ島沖地震や2013年ハイエ ン台風において見られたとおり、水や食料品 といった必要物資を届けるといった緊急対 応能力は必要であり、初動が遅ければ疫病 の蔓延等の事態悪化にも繋がる。特に、南 アジアや東南アジア地域においては、(1)人 口増加、(2) 経済生産、(3) 気候変動の3つ の要素が事態悪化二繋がる危険な要素であ る。ASEAN等をとおした多国間の協力・調整 枠組みが構築されてきつつはいるものの、災 害救援能力は未熟であることが否めない。

#### 2. 日米同盟におけるHA/DR能力の現在

日米両国のHA/DR能力は、共に高いもの となっている。アメリカは太平洋指令群 (PACOM)がHA/DR活動に積極的に従事 している一方、日本は地理的に支援を行 いやすい場所に位置しており、軍事活動に 対する憲法上の制約もHA/DRの場合は比 較的緩い。しかし、日米同盟においては、 HA/DR活動の位置づけが必ずしも明確に なっておらず、今後はその調整が必要とされ る。特に、(1)軍事、(2)政府、(3)民間セク ター・NGOの3つの分野における調整が重 要である。

軍事能力においては、日本は「ひゅうが」 リ空母やC-1輸送機、アメリカはアジアにお ける米軍展開およびCH-47型へリ、C-130輸 送機といった災害救援に硬化的な軍事アセ ットを保有している。また、政府の活動にお いては、政府援助基金(ODA)をとおした被災 地への財政支援を行っており、災害救援を 行うIICAのDRTやUSAIDのDARTの活動は 成果を挙げている。民間セクター・NGOで は、日本にはジャパン・プラットフォームをと おした官民協力が行われ、2004年インド洋 地震や2010年パキスタン洪水において効果 的な支援を実施した。他方でアメリカのNGO は、ジャパン・ソサエティ等の非営利組織を 筆頭に、2011年東日本大震災(311)に対して 多くの寄付金を集め、東北の復興に役立て ている。民間セクターでも、エクソンモービ ル、UPSといった企業が財政支援やロジの支 援を行い、効果を挙げている。このように日 米両国の個別の災害対応能力は、非常に高 いものとなっている。

#### 3.「トモダチ作戦」からの教訓

311後の6ヶ月間、日米同盟は効果的に機能 していた。アメリカは「トモダチ作戦」におい て、米軍を約24,000人、航空機を189機、軍 艦を24艘動員し、自衛隊と政策決定から作 戦遂行までフルスケールの協力を実施した。 この「トモダチ作戦」では、3つのフェーズ をとおして救援活動を行った。第一フェーズ 「緊急活動」(emergency response)に おいては、米軍が自衛隊や海上保安庁、そ して現地救援者らと協力を行い、緊急物 資の配給や捜索救難活動(SAR)等を行っ た。第二フェーズ「救援」(relief)において は、被災地に対する大量の必要物資の配 給や支援者の派遣を行った。第三フェー ズ「復原」(restoration)においては、自衛 隊と米軍が協力して必須インフラ(critical infrastructure)の再構築に取りかかった。

これらの支援活動における重要な教訓の一 つは、「スピードが命」ということである。災 害時には迅速に対応し、民間支援者をサポ ートし、食料品、水、シェルター、医薬品とい った必要物資を配給するとともに、情報とロ ジスティクスを提供することが被害の悪化を 防ぐ。この上で日米同盟においては、アド・ホックではあるもの両国間の調整が或る程度 はできたと言える。

ただし、課題もある。(1) 情報共有、(2) 役割 分担、(3) 日米間の作戦調整においては改善 の必要があった。特に情報共有は重要であ り、事態を俯瞰するためには軍人間だけでは なく民間人との間の協力が鍵となる。状況認 識の共有ができれば、効果的な災害救援も 行いやすい。その上で、日米両国が持つ災害 救援能力を最大に活かすためには、緊急対 応策(contingency planning)の策定に向け た調整が必要である。多国間の調整も必要 ではあるものの、政治的に困難が伴い時間 もかかる。そのため、二国間における緊急対 応策の事前策定が「トモダチ作戦」からの最 大の教訓であった。

#### 4.「戦略的支援」 枠組み:機会と挑戦

戦略的支援の遂行には、社会全体からの取 組みを必要とする。経済依存が高まり、世界 の経済的エンジンとなりつつあるアジアを 構成する南アジア、東南アジアにおいては、 今後も自然災害が頻繁に起こることが予測 されているため、この災害救援アプローチを 日米同盟に取り込むことは、アジア地域の安 定に貢献することを意味し、両国の戦略的 利益に適っている。同時に、二国間協力のみ ならず地域枠組みを強化することにより、地 域諸国間の信頼醸成にも貢献することが必 要である。

戦略的支援には3つの要素がある。一つ目 は「レジリエンス」(resilience)である。ここ では民間主導により、各地域の能力支援を 行う。目的は、大規模災害に対する脆弱性を 低くすることである。これには、経済支援、 開発援助、官民協力や調整といったものが 含まれる。レジリエンスをより強化するため にも、JICAやUSAIDの間において、調整機能 を高め、作業プロセス(SOP)の共有化をする こと等により、連携を強化していくべきであ ろう。また、状況認識の理解を深めるために は、民間セクターやNGOとの協力も重要とな る。軍事活動においては、継続的な二国間・ 多国間の共同訓練を行うとともに、軍事的能 力支援を行うべきであろう。ここでは、他国 の不信感を煽らないためにも、能力支援が 災害救援に向けたものである点を強調する 必要がある。さらに、アメリカと同様、日本も アジア諸国の軍事基地にアクセスできる枠 組み構築を考える必要もある。

二つ目は「対応」(response)である。地震、 津波といった大規模災害に対する対応能 力のこと指すが、多くの場合、空輸、海上輸 送、ISRといった初動に必要な能力を持つ 組織は軍であり、軍事面での日米両国間の 協力は重要となる。ただし、二国間のみな らず多国間での対応準備・計画は効果的で あるため、災害に係わるリスク分析や評価 についても多国間で共有する必要がある。 日米協力においては、軍隊、政府、民間セク ター、NGOを交えて緊急対応策を立てるべ きである。そのためには平時からの連絡・ 調整を頻繁に行い、連携を強化していく必 要がある。

三つ目は「復元」(recovery)である。これは 長期的な地域復興へと結びつける要素であ り、政府の支援の下、民間セクター、NGOが 主導することとなる。この復元過程において は、今後の地域の「レジリエンス」にも影響 を与えるため、綿密な計画に基づいた社会イ ンフラの構築が必須となる。

課題は、日米両政府が現在、大きな財政的 な制約を受けていることである。しかし、(1) HA/DR活動を、日米同盟の協力アジェンダ に組み込み、現存の活動と結びつけると同 時に、(2)日米両国の政府間プロセスの効率 化を進め、二国間での調整・協力を進めるこ とによって財政上の課題を和らげることはで きるだろう。また、中国等のあるアジア諸国 においては、日米間のHA/DR協力を疑いの 目で見る可能性がある。日米両国は、それら の国々を積極的に多国間HA/DR協力に招待 し、繰り返し交流を行うことにより、信頼醸 成をはかるべきである。

#### 5. 結論:今後の日米協力の展望

日米両国がHA/DR活動に必要な能力を備え ていることは明らかになってはいるものの、 それらを有効に活用する政策調整のコンセ プトが確立していない。そのため、まずは「レ ジリエンス」「対応」「復元」の三つの要素を 両国のHA/DR活動の概念枠組みに組み込む 必要がある。

第二回ワークショップでは、(1) 日米HA/DR 協力には、いかなる計画とメカニズムが必 要であるか、(2) 日本とアメリカが戦略的支 援を強化するためには、具体的に将来どの ような分野で協力し、演習を行っていくべき か、(3) 地域の政治的な懸念事項を考慮し た場合、日米両国は戦略的支援に対してど のようなアプローチを取るか、ということを 議論する。

s Asia emerges as the global economic engine of the 21st century, large-scale disasters will carry profound consequences. Sudden disasters resulting in mass casualties, the widespread destruction of property and essential infrastructure, the prolonged displacement of large populations, and the potential for long-term challenges such as famine and disease outbreak will severely test existing national and international institutions. Such disasters will pose a significant human security challenge and could present a broader threat to regional stability. Faced with such a threat, Japan and the United States—owing to their unique capabilities and shared interests within the region-should elevate humanitarian assistance and disaster relief (HA/DR) operations to be a key component of their combined regional security strategy. To that end, it is imperative that Tokyo and Washington work together to develop and establish a cooperative, joint approach to regional HA/DR.

The Strategic Assistance project is a collaborative research initiative between the National Bureau of Asian Research (NBR) and the Japan Center for International Exchange (JCIE), drawing on the generous support of the Sasakawa Peace Foundation and the Japan Foundation Center for Global Partnership. The project seeks to develop a strategic, joint U.S.-Japan approach to HA/DR operations in South and Southeast Asia that incorporates militaries, government, NGOs, and the private sector into an all-of-society effort-a concept termed "strategic assistance." Given that emerging demographic and climatological trends will over time only intensify the consequences of Asia's vulnerability to natural disasters, this project is designed to develop an effective mechanism through which U.S. and Japanese officials and policy analysts can:

- exchange analyses of recent and forthcoming security, political, economic, demographic, and climatological developments in order to deepen mutual understanding regarding the importance of HA/DR operations in addressing and mitigating the severe impacts of natural disasters and other calamitous events in Asia;
- identify strategies, policies, and posture changes necessary to build and maintain bilateral and multilateral efforts to address the challenges

posed by natural and man-made disasters in Asia, as well as develop the capabilities and organizational structures needed to address the disasters that will inevitably affect Asia in the future; and

• develop a framework for a broader coalition of mutually concerned Asian nations to engage in collective action in advance of and in response to regional disasters.

In the fall of 2013, NBR and JCIE convened a two-day workshop in Washington, D.C., which included the participation of 24 Japanese and American scholars, practitioners, and specialists on HA/DR and related issues. Experts discussed the current approaches in both Washington and Tokyo to HA/DR, assessed the likelihood of an increased regional need for HA/DR capacity because of shifting factors within the regional environment, and explored potential avenues for enhancing bilateral U.S.-Japan collaboration and coordination within a joint strategic framework. The specific topics of discussion included:

 demographic, developmental, and hydrometeorological trends in South and Southeast Asia that are likely to result in substantially increased demand for robust HA/DR capabilities within the region in the medium to long term;

Large-scale disasters will pose a significant human security challenge and could present a broader threat to regional stability. Faced with such a threat, Japan and the United States owing to their unique capabilities and shared interests within the region should elevate HA/DR operations to be a key component of their combined regional security strategy.

- the capabilities currently employed by the U.S. military and Japan Self-Defense Forces (SDF) in conducting HA/DR operations;
- lessons learned from previous U.S.-Japan cooperation on HA/DR, such as during operations following the 2004 Indian Ocean earthquake and tsunami and during Operation Tomodachi following the 3.11 triple disaster that struck northeast Japan;
- the capabilities, investments, posture, and organizational and policy changes that will be necessary to implement the strategic assistance concept in order to meet future regional demand for HA/DR; and
- methods of improving interaction between the military and other elements of U.S. and Japanese government and society tasked with responding to humanitarian disasters.

The workshop concluded by considering a basic framework for strategic assistance aimed at building a joint, bilateral strategy toward regional HA/DR operations.

The following is a brief report of initial findings based on the conference papers presented and the discussions held during the first project workshop. The views expressed herein are not necessarily those of JCIE or NBR, the authors of this report, or the conference participants. They represent, rather, an intermediate phase in the project's attempt to capture the issues and strategies that will eventually become strategic assistance.

## Future Vulnerability in South and Southeast Asia

The Asia-Pacific is already home to the majority of the world's victims of natural disasters (62% of fatalities and 89% of disaster-affected peoples over the past three decades), a trend that is likely to become more pronounced in the future. The rising frequency and destructiveness of major disasters in South and Southeast Asia, in particular, pose serious challenges for the future of regional stability. Poor and underdeveloped national infrastructure, along with rapidly expanding populations increasingly concentrated within low-elevation coastal zones, will The rising frequency and destructiveness of major disasters in South and Southeast Asia, in particular, pose serious challenges for the future of regional stability. Poor and underdeveloped national infrastructure, along with rapidly expanding populations increasingly concentrated within low-elevation coastal zones, will serve to heighten vulnerability to major ocean-borne disasters within this key subregion.

serve to heighten vulnerability to major ocean-borne disasters within this key subregion. Under-resourced or ineffectual governance will likely compound vulnerability by preventing or severely diminishing adequate domestic preparation and response capabilities. Indeed, even in the best of times, many local and national governments find themselves under severe strain to meet the demands of their populations for increasingly scarce resources such as water and energy. In disaster scenarios, these deficiencies are apt to be laid bare and severely intensified. The inability of governments to provide basic goods to their people in times of great emergency will likely compound political and societal instability. Such instability could have broad regional ramifications, especially if multiple countries are affected by the disaster, as was the case in the aftermath of the 2004 Indian Ocean tsunami, or if instability in one country spills over into neighboring states. Major disasters thus pose a significant challenge to the security of South and Southeast Asia.

As was made clear by Typhoon Haiyan, which struck the Philippines in November 2013, the direct, secondary, and residual effects of catastrophic events on human and national security are interwoven and often far-reaching. These effects can significantly compound the severity of the initial disaster and complicate response efforts by multiplying the immediate challenges that must be faced to prevent additional loss of life. Rapid-response capabilities, including the ability to provide basic services such as clean water and food, are thus crucial in stemming the tide of casualties and can help prevent or mitigate secondary effects—such as the outbreak of disease that can multiply the effects of the initial disaster. While numerous factors can increase regional vulnerability to major disasters and the difficulty of providing effective HA/DR responses, the three that pose perhaps the most significant challenges are population growth, economic output, and climate change.

More densely populated areas in South and Southeast Asia may yield higher casualty rates than areas where the population is more diffuse. Southeast Asia, for example, is undergoing a prolonged period of population growth that is likely to increase the human and financial cost of disasters. In addition, the concomitant urbanization that the region is experiencing will have both negative and positive implications. Large population centers present immense logistical challenges, particularly in terms of organizing evacuations and potentially managing significant numbers of displaced persons. Transporting and distributing the necessary quantities of resources to assist large population centers can be highly complicated, particularly if critical infrastructure has been destroyed or is inoperable, making distribution difficult or creating resource bottlenecking. That being said, higher concentrations of people can conversely allow for

Rapid-response capabilities, including the ability to provide basic services such as clean water and food, are crucial in stemming the tide of casualties and can help prevent or mitigate secondary effects—such as the outbreak of disease—that can multiply the effects of the initial disaster. more centralized dissemination of supplies and aid, assuming that critical infrastructure remains intact or can be reconstituted quickly, thus affording the possibility of more rapid and effective relief efforts.

Economic progress is another factor in the region's vulnerability. Although economic development increases the availability of resources to cope with potential disasters, it also tends to increase asset risk, particularly if critical infrastructure is concentrated in highly vulnerable areas, such as low-elevation coastal regions; the potential economic toll of suffering a major disaster; and the cost of reconstruction. Moreover, merely possessing a large pool of resources or maintaining a robust response capacity does not necessarily translate into greater preparedness or resilience; rather, the appropriate and effective application of resources is the crucial factor. However, in disaster scenarios with a multitude of interests and sectors competing for government attention and for response and recovery resources, the effective application of even significant resources is rarely a simple process. Indeed, directing resources to address those needs that are most critical and pressing, while ensuring that relief efforts have as broad a reach as possible, is an essential but fraught task.

Last, climate change has made weather and storm systems increasingly volatile. Normal climate patterns are giving way to bouts of hydro-intensive activity that cause either extreme precipitation events—which previously occurred on average every twenty years but have now become more frequent—or droughts. Just as major storm systems can destroy infrastructure, a prolonged drought in a country dependent on agricultural production, such as Afghanistan or North Korea, can be equally devastating. The unpredictability in the timing, magnitude, and duration of these kinds of disasters adds to the already difficult job of preparation and response.

Geographically, South and Southeast Asia (as well as East Asia) face heightened vulnerability to major disasters, particularly from flooding and storm surges. A significant number of highly populated cities are located in low-elevation coastal zones. For example, over a quarter of the combined population of the Association of Southeast Asian Nations (ASEAN), excluding Cambodia, currently resides in such areas, and approximately 10%–15% While common challenges have spurred some efforts within the region to improve multilateral collaboration and coordination on disaster preparedness and response, especially through ASEAN, a significant gap in capabilities remains. The United States and Japan can play an important role in addressing this gap.

of India's population is similarly vulnerable. More specifically, India, Thailand, Vietnam, Indonesia, and Japan are among the ten countries with the highest coastal-asset exposure, while India, Bangladesh, Vietnam, Thailand, Myanmar, Indonesia, and Japan constitute seven of the world's ten countries with the highest population exposure to potential ocean-borne disasters.<sup>1</sup>

While these common challenges have spurred some efforts within the region to improve multilateral collaboration and coordination on disaster preparedness and response, especially through ASEAN, a significant gap in capabilities remains. The United States and Japan can play an important role in addressing this gap.

### Current HA/DR Capabilities of the U.S.-Japan Alliance

As regional disaster trends intensify, so too will the need for HA/DR operations. To date, the United States, owing to its robust capabilities, has been the country most able to rapidly respond to disasters in the Asia-Pacific. Indeed, HA/DR operations consistently place the greatest demand on U.S. forces in the region. Senior leaders from U.S. Pacific Command (PACOM) have commented that forces in their area of responsibility conduct HA/DR operations on average once every eight weeks.<sup>2</sup>

Japan is also especially well-positioned to play a more significant role in future regional HA/DR operations. In addition to being (unfortunately) well-experienced in these types of operations domestically, Japan's geographic location makes it well-suited to serve as a highly capable first responder to major disasters in the Asia-Pacific. Moreover, Japan's constitutional limitations on the use of military forces make HA/DR a potentially attractive core mission for the SDF.

With demand for HA/DR capabilities in the region likely to increase in the coming years, expanding cooperative operations is already a topic of discussion in the U.S.-Japan alliance. However, despite calls from the U.S.-Japan Security Consultative Committee for the establishment of an HA/DR logistics hub in Japan and for expanded dialogue, HA/DR has yet to become a significant driver of alliance mechanisms, capabilities, and planning.3 Moreover, while being firmly grounded in alliance mechanisms, any initiative to enhance U.S.-Japan cooperation on HA/DR must also branch out to utilize all elements of national power. Although military capabilities are essential to an effective, timely, and robust response to such disasters, there is a danger that HA/DR initiatives can become militarized and thus undermine some of the purposes, benefits, and political support for such a response.<sup>4</sup> Indeed, HA/DR efforts cannot focus solely on military capabilities or diplomatic initiatives but must integrate military capabilities with civilian government initiatives, alongside the essential work

<sup>&</sup>lt;sup>1</sup> David Michel, "Demography, Climate Change, and Disaster Vulnerability in South and Southeast Asia" (remarks delivered at the "Strategic Assistance: Disaster Relief and Asia-Pacific Stability" conference, Washington, D.C., September 2013).

<sup>&</sup>lt;sup>2</sup> See, for example, the prepared remarks by Admiral Robert F. Willard at the Hearing on National Defense Authorization Act for Fiscal Year 2013 and Oversight of Previously Authorized Programs before the Committee on Armed Services, March 1, 2012.

<sup>&</sup>lt;sup>3</sup> U.S. Department of State, "Joint Statement of the U.S.-Japan Security Consultative Committee," Media Note, June 21, 2011, http://www.state.gov/r/ pa/prs/ps/2011/06/166597.htm; and Deogsang Ahn, John Bradford, James Newberry, and Harold Wescott, "The Case for Establishing a Civil-Military Disaster-Relief Hub in Northeast Asia," Asia Policy, no. 14 (2012): 51–78.

<sup>&</sup>lt;sup>4</sup> See William G. Moseley, "Stop the Blanket Militarization of Humanitarian Aid," *Foreign Policy*, July 31, 2009; Pierre Krahenbuhl, "The Militarization of Aid and Its Perils," International Committee of the Red Cross, February 22, 2011; Christian Denckla, "The Militarization of Aid and the QDDR," *Building Markets*, January 3, 2011; Whitney Grespin, "The Militarization of Aid," United Press International, September 27, 2012; Bradford Byrnes, "U.S. Military Support to International Humanitarian Relief Operations Legal/ Fiscal Limits & Constraints," *Liaison* 4, no. 1 (2008); and Charles M. Perry and Marina Travayiakis, "Reforming Military Support for Foreign Disaster Relief and Humanitarian Assistance," *Liaison* 4, no. 1 (2008).

of NGOs and the private sector, to form a cohesive, strategic whole.

The United States and Japan currently maintain individually and collectively—robust capabilities to meet the challenges that major disasters pose to the region. Grouped in broad categories, these encompass a wide range of military, civilian government, and private and NGO resources.

HA/DR efforts cannot focus solely on military capabilities or diplomatic initiatives but must integrate military capabilities with civilian government initiatives, alongside the essential work of NGOs and the private sector, to form a cohesive, strategic whole.

#### Military Capabilities

Throughout its history, the SDF has deployed on numerous HA/DR missions.<sup>5</sup> It possesses a formidable array of forces capable of rapidly responding to major disasters both in Japan's immediate vicinity, as well as farther afield. The Maritime Self-Defense Force possesses multiple strategic sealift assets, most prominently the Hyuga-class helicopter destroyer, as well as a number of smaller amphibious landing and transport vessels. These capabilities are supplemented by a short-range helicopter airlift capability and a more limited strategic airlift capability that primarily relies on C-1 cargo planes from the Air Self-Defense Force. In addition to its rapid-response capabilities, the SDF is equipped to provide medical support, follow-on transport (sealift and limited airlift), and force protection. Emergency roles and response measures are assigned and integrated through joint training exercises among the SDF's various service branches. These capabilities are also incorporated into the broader scope of combined Japan-U.S. military exercises and reinforced through combined deployments, such as the Pacific Partnership series of humanitarian assistance missions sponsored by the U.S. Pacific Fleet.

The United States has demonstrated in past international crises that it can rapidly bring considerable capabilities and resources to bear during HA/DR operations.6 For example, during the 2004 Indian Ocean tsunami, PACOM's establishment of Joint Task Force 536 to direct Operation Unified Assistance exemplified the U.S. military's ability to quickly organize and conduct disaster-relief operations. Through the course of this particular operation, PACOM provided 15,000 personnel and 24 million pounds of relief supplies and established both the Combined Support Force 536 and Combined Coordination Center in U-Tapao, Thailand, to optimize coordination of international relief efforts. In terms of tactical-level support, the U.S. Navy and Marine Corps deployed 4 P-3 Orion patrol aircraft, 19 SH-60 Seahawk helicopters, 24 CH-47 Chinook helicopters, and 2 C-130 Hercules transport aircraft in order to distribute aid and personnel and provide necessary reconnaissance, transportation, and logistical support. From its ships, the U.S. Navy was also able to provide affected areas with road-building supplies, electrical power generation, and, most importantly, up to 100,000 gallons of potable water per day through on-board water purifiers.

The combined potential strength of forward-stationed U.S. military forces in Asia that could immediately contribute to regional HA/DR operations alongside the SDF is substantial. The most prominent of these forward-deployed forces reside in Japan. U.S. Forces Japan (USFJ)—composed of the Seventh Fleet, which is the world's only permanently forward-stationed aircraft carrier strike group; the Fifth Air Force; and the III Marine Expeditionary Force—features a wide range of capabilities and

<sup>&</sup>lt;sup>5</sup> In Northeast Asia, the SDF has conducted HA/DR missions in Russia (2005); in Southeast Asia, it has conducted missions in the Philippines (2013), Indonesia (2005), and Thailand (2004–5); in South Asia, in Pakistan (2005) and India (2001); in the Middle East, in Iraq (2004–6), Iran (2003–4), and Turkey (1999); and in South America, in Haiti (2010) and Honduras (1998). A map of these missions is available from the PBS website at http://www.pbs.org/wnet/wideangle/episodes/japans-about-face/map-japans-self-defense-forces-deployments/1275.

<sup>&</sup>lt;sup>6</sup> HA/DR activities "conducted outside the U.S. and its territories" are referred to by the U.S. Department of Defense under the umbrella term "foreign humanitarian assistance," which includes foreign disaster-response operations. The Department of Defense updated its joint force doctrine governing foreign humanitarian assistance in January 2014. See Joint Chiefs of Staff, *Foreign Humanitarian Assistance*, Joint Publication 3-29 (Washington, D.C., January 2014).

provides the United States with the majority of its forward-deployed heavy-lift capability (air, sea, and amphibious).

The combined potential strength of forward-stationed U.S. military forces in Asia that could immediately contribute to regional HA/DR operations alongside the SDF is substantial.

In addition to the capabilities of USFJ, the United States maintains military access or basing rights in a number of strategic locations throughout East Asia and the Indian Ocean. The first in a series of planned forward deployments for the U.S. Navy's new littoral combat ships (LCS) to Changi Naval Base in Singapore was completed in late 2013. Owing to its ability to accept a wide array of mission modules tailored to specific functions, the LCS is a highly flexible platform that is well positioned to support larger HA/DR operations. Changi Naval Base is a particularly important logistics hub supporting U.S. Navy operations in Southeast Asia and is capable of supporting capital naval vessels, including aircraft carriers. In addition, the United States is currently allowed access to air and naval facilities in the Philippines for maintenance and refueling. Further, Washington has negotiated with Manila to increase rotational military access to the Philippines and stands to benefit significantly from the proposed expansion of naval and air facilities in strategically positioned Subic Bay.

The United States' other ally in Southeast Asia, Thailand, has also provided critical access to enable past HA/DR operations and allows continued low-level U.S. military access to facilities at the U-Tapao airfield, which is capable of accommodating both C-17 and C-130 transport aircraft. The United States has proposed to expand its access to U-Tapao by setting up a regional HA/DR hub to complement USAID's Regional Development Mission for Asia in Bangkok. Although Thailand has long been thought to support such a plan, ongoing domestic political tensions, the Thai public's general aversion to allowing any semblance of permanent foreign military basing, and Thailand's ongoing policy of strategic hedging between the United States and China have stymied progress. Other regional facilities, such as Diego Garcia in the Indian Ocean, further supplement the U.S. forward posture and allow for the prepositioning of significant levels of resources. The resources that the United States has devoted to the Asia-Pacific-and will continue to devote as part of "strategic rebalancing"-are considerable and afford it the capacity to serve as an effective and rapid first responder in the event of a significant regional disaster.

Crucially, the United States and Japan may be thought of as greater than the sum of their parts due to their long-standing alliance, which allows for more regular communication and information sharing as well as for a relatively high degree of interoperability between the military forces of the two nations. Official lines of command and communication are reinforced by informal and personal relationships. These ties serve to support mutual understanding and expectations, particularly with respect to operational roles and responsibilities across a broad range of mission sets. This arrangement has allowed the SDF and the U.S. military to develop a very strong foundation for engagement, through which the allies have acquired crucial operational

The resources that the United States has devoted to the Asia-Pacific and will continue to devote as part of "strategic rebalancing"—are considerable and afford it the capacity to serve as an effective and rapid first responder in the event of a significant regional disaster. experience. Over time, this experience has translated into better coordination between the two forces, even when operations have been carried out on an *ad hoc* or contingency basis. Such cooperation has been essential to developing an effective partnership that is now capable of taking on a greater regional profile by carrying out combined HA/DR operations.

It is essential that a strategic approach to HA/DR incorporates all aspects of national power and is not over-reliant on only the military component.

However, while the U.S. and Japanese militaries afford many unique and robust capabilities and may be particularly crucial in serving in a first-responder or triage capacity, it is important to understand the limits and potential drawbacks of military power in HA/DR operations. It is essential that a strategic approach to HA/DR incorporates all aspects of national power and is not over-reliant on only the military component. Civil government and private and NGO actors play integral leadership roles in HA/DR operations. Indeed, in the United States' system of disaster response, the military responds to requests for assistance by the Department of State and USAID, civilian agencies with the responsibility for leading and coordinating U.S. disaster-response operations abroad.

#### Civilian Government Capabilities

Due to their expansive authority over manpower and resources, national governments play a key role in disaster-response operations. In addition to sanctioning rapid military action to stabilize a situation, governments can provide financial aid, as well as institutional support and expertise, directly through official development assistance (ODA) dispersed by a number of civilian agencies that have immediate access to funds and personnel. Crucially, ODA resources can be quickly mobilized once a request has been made by a victim nation or the government rendering aid assesses that there is an immediate need. This contrasts with assistance that is provided by the private sector and NGOs, where resources typically must first be built up—usually through charitable donations or the redirection of otherwise committed resources—before they can be effectively committed to relief efforts.

The government of Japan coordinates its official nonmilitary relief efforts through the Japan International Cooperation Agency (JICA), which oversees Japan's ODA disbursement. In addition to having the authority to disperse official Japanese government financial aid, JICA maintains disaster relief teams specializing in specific functional areas of relief support, including search and rescue, emergency medicine, and engineering. For example, JICA dispatched thirteen teams—including over 250 specialists in search and rescue, emergency medicine, and engineering—in response to the 2004 Indian Ocean tsunami.

ODA from the United States is issued through USAID. In past relief efforts, U.S. government assistance has been funneled through USAID contributions of direct monetary support, as well as through the deployment of disaster assistance response teams (DART) and locally or regionally based response-management teams. For example, in response to the 2004 Indian Ocean tsunami, USAID provided nearly \$26 million in grant aid (out of \$84 million total U.S. government funds contributed to the effort); sent a large contingent of over 160 specialists to the region, including the deployment of a DART team; and established a response-management team in Washington, D.C., to coordinate relief activities. USAID also helped manage the influx of emergency relief supplies through contracted airlifts and assisted in establishing and coordinating emergency programs focused on providing water, sanitation, health services, and cash-for-work and other livelihood programs in the affected areas. Similarly, in response to the 2010 flooding in Pakistan, USAID dispatched a DART team to the region to, among other things, assist with coordinating air traffic.

In all these cases, civilian government agencies and the military often operated in tandem, each supporting the other according to its particular strengths. The significant rapid-response capabilities available to Japan and the United States make government action (both civilian and military) an essential tool through which to first stabilize the immediate situation and then enable follow-on efforts—composed of a mixture of government, private sector, and NGO aid—to support relief and recovery operations.

#### Private Sector and NGO Capabilities

The private sector and NGOs collectively form a critical third leg in response and recovery efforts. While specialized civilian agencies (potentially with the support of the military) typically contribute the majority of first-response capabilities, private-sector actors working alongside NGOs provide, coordinate, and often manage a significant portion of the all-important long-term aid programs and funding that are required to support recovery in affected areas. The United States and Japan both maintain a large number of private-sector and NGO actors capable of making substantial contributions to disaster relief and recovery efforts.

The ability of international NGOs to engage with affected populations directly at the local level—either through long-standing relationships with local NGOs, government officials, and private citizens or through formal or informal NGO networks—is an important dimension of major relief efforts. Specifically, as a result of their local access and knowledge, local and on-the-ground foreign NGOs can be highly useful in identifying needs and directing the initial flow of aid. Furthermore, given their ability to maintain a longer-term organizational focus, NGOs are essential for coordinating and managing follow-on relief efforts and programs and acting as channels for government and private aid.

Japan possesses a vibrant community of NGOs and private-sector actors that are dedicated to providing support for those affected by major disasters. The Japan Platform is a consortium of Japanese NGOs and private corporations operating with support from the Japanese Ministry of Foreign Affairs (MOFA). The consortium serves as an effective official conduit for coordinating and deploying emergency and humanitarian aid from Japanese NGOs. For example, it coordinated the efforts of fourteen Japanese NGOs as part of the relief and recovery effort following the 2004 Indian Ocean tsunami. The Japan Platform was similarly engaged in NGO recovery operations in the aftermath of the 2010 floods in Pakistan.

U.S. NGOs have likewise been involved in both advocacy and operational efforts aimed at providing relief to areas in Asia that have been affected by major disasters. For example, after the 3.11 triple disaster in Japan, U.S.-Japan cultural organizations in the United States mobilized their communities to donate aid. The Japan Society alone amassed over 23,500 donations totaling more than \$13.5 million, which was then dispersed to 33 organizations working on relief projects in the Tohoku region.

The ability of international NGOs to engage with affected populations directly at the local level—either through long-standing relationships with local NGOs, government officials, and private citizens or through formal or informal NGO networks—is an important dimension of major relief efforts.

The private sector—either acting indirectly through NGOs as a principal donor to on-the-ground relief efforts or engaging in direct action to provide relief to affected areas—plays a vital role in supporting disaster response, relief, and recovery efforts. During the 2010 floods in Pakistan, aid generated by U.S. private-sector donations topped \$25 million, while private-sector aid in response to the 2004 Indian Ocean tsunami surpassed \$700 million. Moreover, while financial contributions are crucial, the private sector is also able to contribute to relief and recovery efforts in more direct ways. A significant portion of private aid following the 2004 tsunami came in the form of specialized equipment, technical expertise, and logistical assistance. UPS, for example, provided significant logistical support, such as airlift capacity, for local and foreign government response efforts. Likewise, Dow Chemical provided water purification equipment, while ExxonMobil supplied significant quantities of fuel.

In many cases, the private sector can offer capabilities that either mirror or augment crucial military capabilities such as heavy airlift, communications, logistics, and intelligence, surveillance, and reconnaissance (ISR)—particularly in the form of satellite imaging and damage assessment.

Partnerships between government and the private sector are becoming increasingly important for effective disaster-response and disaster-recovery efforts. In many cases, the private sector can offer capabilities that either mirror or augment crucial military capabilities such as heavy airlift, communications, logistics, and intelligence, surveillance, and reconnaissance (ISR)-particularly in the form of satellite imaging and damage assessment. For example, Intelsat and Cisco are now partnering with the U.S. Department of Defense to provide high-speed Internet connections and communications in forward areas of operation, including in support of disaster-relief missions. Similarly, the United States and Japan might leverage other existing relationships—such as the partnership that exists between TNT Express, UPS, and Agility, on the one side, and the UN Global Logistics Cluster, on the other-to augment joint U.S.-Japan HA/DR capabilities. Relying more heavily on private-sector capabilities can be a useful way to control costs; more importantly, it can also ameliorate the local political concerns that are often associated with allowing foreign military assistance.

#### Improving Coordination

Regular communication among these various groups of actors is essential, particularly because they may have the same overarching goals but very different approaches or organizational outlooks that otherwise blunt their ability to cooperate effectively. To the extent that these various entities can interact with one another prior to a crisis-for example, through preplanning, exercises, or real-world operations-greater mutual understanding will enable them to work more effectively toward achieving their shared goals. International coordination efforts through organizations such as the UN Office for the Coordination of Humanitarian Affairs and the newly established Asia Pacific Alliance for Disaster Management, as well as through regional and national initiatives such as the ASEAN Agreement on Disaster Management and Emergency Response and the Japan Platform, represent important means of managing, coordinating, and routinizing complicated, and otherwise often ad hoc, relationships. A flexible response system, encompassing a combination of civil government, military, and private-sector and NGO capabilities, is essential for effective disaster response. While no two crises are the same and the capabilities required can vary significantly and be highly context-dependent, the complex and often rapidly evolving nature of major modern disaster events necessitates that each of the various actors described above engage in a concerted fashion so that their collective response is made most effective.

These various capabilities were put to the test in early March 2011, when the fifth-largest earthquake in recorded history (magnitude 9.0) struck 70 kilometers off the northeast coast of Honshu, Japan's largest island. The earthquake triggered a massive tsunami that inundated over 500 square kilometers of the Tohoku region in northern Japan. The devastating effects of the earthquake and tsunami were compounded when cooling systems at the Fukushima Daiichi Nuclear Power Plant suffered a catastrophic

#### NBR & JCIE

failure, resulting in the partial meltdown of several of the plant's reactor cores and the release of substantial amounts of radiation into the surrounding area. The 3.11 triple disaster claimed nearly 16,000 lives, while another 2,643 remain missing. Almost a million buildings in the coastal region were damaged. Local-level government briefly ceased functioning, and hundreds of thousands were evacuated from the region. The economic cost of the disaster to Japan's economy was estimated at over \$200 billion.<sup>7</sup> The joint U.S.-Japan response to this disaster, known as Operation Tomodachi ("friends" in Japanese) offers several lessons that can be learned for future HA/DR planning and operations.

#### Lessons Learned from Operation Tomodachi

During the first six months after the earthquake and tsunami, 100,000 personnel deployed in support of the rescue and relief effort—the largest operational deployment of the SDF in its history. Recognizing the severity and complexity of the unfolding crisis, the United States and Japan quickly activated alliance mechanisms to enable a rapid combined response. Operation Tomodachi involved the U.S. military's mobilization of approximately 24,000 personnel, 189 aircraft, and 24 naval vessels, including the USS *Ronald Reagan* carrier strike group, in support of SDF operations. It represents the "first time that full scale bilateral cooperation was carried out from decision making to the implementation of response under the existing Japan-U.S. security arrangements."<sup>8</sup>

Operation Tomodachi was carried out in three overlapping phases: emergency response, relief, and reconstruction. During the first phase, the U.S. military, in conjunction with the SDF, the Japan Coast Guard, and local emergency and rescue personnel, delivered emergency aid and conducted joint search-and-rescue operations in devastated coastal areas. In the second phase—relief—U.S. forces, again in conjunction with the SDF and local Operation Tomodachi may be particularly instructive for developing a joint framework to enhance U.S.-Japan cooperation and coordination on HA/DR. While the 3.11 triple disaster and the response it generated were unique, there are a number of broad lessons that can be drawn from the combined U.S.-Japan response.

authorities, transported significant amounts of essential follow-on supplies and personnel to the affected areas. In the third phase-restorationcombined U.S.-Japan forces focused on rebuilding critical infrastructure. A prime example of this was the effort to restore the functionality of Sendai Airport in order to open up a crucial artery through which relief personnel and resources could flow into the surrounding area. Operations at Sendai Airport were restored just five days after the disaster, with the first transport carrying aid arriving three days later on March 19. Over the two-month duration of Operation Tomodachi, the U.S. military delivered over 280 tons of food, 7.7 million liters of water, and 45,000 liters of fuel. These efforts undoubtedly saved countless lives and demonstrated the tremendous operational utility of the U.S.-Japan alliance.

Operation Tomodachi may be particularly instructive for developing a joint framework to enhance U.S.-Japan cooperation and coordination on HA/DR. While the 3.11 triple disaster and the response it generated were unique, there are a number of broad lessons that can be drawn from the combined U.S.-Japan response. First, Operation Tomodachi demonstrated the long-standing principle of HA/DR operations that "speed is life." The ability of Japanese and U.S. military forces to rapidly supplement civilian first responders and provide critical resources such as food, water, shelter, and medical care, as well as information and logistical support, was crucial in

<sup>&</sup>lt;sup>7</sup> Ministry of Foreign Affairs (Japan), Japan's Official Development Assistance White Paper 2012: Japan's International Cooperation (Tokyo, March 2013), http://www.mofa.go.jp/policy/oda/page\_000016.html.

<sup>&</sup>lt;sup>8</sup> Akihisa Nagashima, "Genpatsu taisho: Nichi-Bei kyoryoku no butaiura" [Response to the Nuclear Accident: The Behind Scenes of Japan-U.S. Cooperation], VOICE, July 2011.

preventing the further deterioration of an already incomprehensible catastrophe.

Operation Tomodachi also demonstrated the solidarity of the U.S.-Japan alliance in the face of disaster. The combined efforts of U.S. and Japanese military forces throughout the operation served to highlight, and indeed reinforce, the important strides the two allies had made toward improving interoperability and broad-level coordination. Moreover, despite being faced with an unimaginably complex crisis, the allies demonstrated a remarkable degree of flexibility and adaptability in their response-attributes that were absolutely essential in addressing the dynamic nature of this particular disaster. Additionally, U.S. and Japanese military forces gained significant real-world experience in executing combined operations, while also enhancing operational familiarity and trust between the two forces at a person-to-person level from command down to the tactical echelon.

Operational coordination was achieved through the establishment of bilateral coordination centers at Ichigaya, Yokota, and Sendai. While originally intended to facilitate U.S.-Japan combat operations, the bilateral coordination centers were repurposed to support HA/DR operations in response to the 3.11 disaster. Personnel from the SDF, USFJ, the Japan Ministry of Defense, and the Japan Ministry of Land, Infrastructure, Transport and Tourism, along with local government officials, civil aviation control, and private first responders and NGOs, were consolidated in these centers to enhance coordination of the response effort across the various actors involved.

The 3.11 triple disaster was unprecedented both in terms of the sheer scale and scope of the devastation wrought by the earthquake and tsunami and in terms of the complexity and urgency of the rapidly unfolding events at the Fukushima Daiichi Nuclear Power Plant. Because U.S.-Japan contingency planning is focused primarily on combat operations, there had been little in the way of detailed preparation for combined HA/DR operations. While this situation was exacerbated by the severity of the developing crisis, the *ad hoc* nature of the response resulted in a number of challenges related to information sharing, the division of roles and responsibilities, and operational coordination between U.S. forces and the SDF. Indeed, the broad and multifaceted nature of the crisis made it quite difficult for the allies to develop a clear and unified operating picture during the initial phases of the response. Poor communication, inadequate mechanisms for sharing information, and coordination difficulties further hindered the development of a unified operating picture as Operation Tomodachi progressed.

Information sharing, in particular, is absolutely essential when faced with a severe crisis for which there has been little preplanning. Developing both a unified picture of the operational capabilities of the major actors involved-civilian and private as well as military-and methods to assess and disseminate information regarding the situation at hand allows for a more effective division of responsibilities and labor. Further, a shared situational awareness allows for more effective delegation of tasks and responsibilities and for better coordination of forces operating across a wide range of activities. Such coordination was limited in Operation Tomodachi because of unclear lines of communication between forces, information overload, a lack of knowledge in USFJ and the SDF regarding the other's specific HA/DR capabilities and organization, technical issues inhibiting communication, and generally restricted access to classified operational information and materials.

Despite these difficulties, the rapid military response most certainly saved lives and prevented an already horrible catastrophe from worsening further. To address the above issues in future operations, however, the United States and Japan have agreed on the need to further enhance bilateral coordination and contingency planning. Both sides possess significant capabilities that can be brought to bear in support of disaster response and relief efforts. Given the potentially destabilizing effects of major disasters, and the moral imperative to render assistance to those in need, the United States and Japan should seek to increase their ability to respond to major disasters, both domestically and in the region. Combined contingency planning to this end will be crucial.

In addition, to the extent that Tokyo and Washington can engage with other regional actors to prepare for and support regional HA/DR efforts, the tolls of future disasters may be lessened. Many hands make light work, and it is good to have friends who are willing and able to provide their support. However, the presence of multiple actors can also significantly complicate operations and under some circumstances may limit the overall efficacy of HA/DR through confusion or redundancy. Moreover, political difficulties are likely to prevent more comprehensive engagement and preplanning among the region's major powers.

The need for greater bilateral contingency planning is the most important lesson from Operation Tomodachi. The allies must consider how combined response and relief efforts can be made most effective in advance of disasters, rather than relying on ad hoc measures enacted during contingency operations. Preplanning for future contingencies must learn from and seek to alleviate the communication and coordination issues that hampered the effectiveness of Operation Tomodachi. In-country prepositioning and heightened force interoperability-two factors that greatly contributed to the effectiveness of Operation Tomodachi despite the communication and coordination issues-are unlikely to similarly benefit action in regional contingencies. This further highlights the need to engage in serious advanced planning before the next major disaster occurs.

#### Developing a Framework for Strategic Assistance: Challenges and Opportunities

The strategic assistance concept seeks to apply some of the lessons of Operation Tomodachi and other recent HA/DR operations to U.S. and Japanese strategies, plans, and postures for future disaster responses in South and Southeast Asia. Specifically, strategic assistance encompasses a whole-of-society, joint U.S.-Japan approach to HA/DR.

Incorporating strategic assistance into the U.S.-Japan alliance framework serves the overarching strategic interests of both nations and is in keeping with Article IV of the Japan-U.S. Security Treaty. As the probability of disasters increases, especially in South and Southeast Asia, the need for significant HA/DR capabilities within the region will continue to grow. Deepening alliance cooperation and coordination on HA/DR will serve to enhance regional stability by alleviating and containing the effects of the very worst disasters, which is a

Strategic assistance encompasses a whole-of-society, joint U.S.-Japan approach to HA/DR.

particularly important consideration as the region becomes more economically integrated and essential to propelling global prosperity. At the bilateral level, this enhanced shared focus on HA/DR will further strengthen the U.S.-Japan relationship by increasing opportunities for the two nations to gain practical experience working alongside one another across a broad range of functional areas while making a tangible contribution to regional stability. Regionally, strategic assistance will support U.S. and Japanese soft power while also offering both nations the ability to further enhance relations with other regional actors. Finally, having been designed to be a relatively open and inclusive framework, strategic assistance may support greater multilateral engagement and cooperation among other Asian nations in order to address the challenges posed by major disasters, either as a stand-alone initiative or by incorporating strategic assistance into existing regional institutional frameworks such as the East Asia Summit or the ASEAN Defense Ministers Meeting. To that end, it may also serve to alleviate political tension in the region and help build confidence between regional stakeholders that often find themselves at odds with one another politically.

Operationally, the strategic assistance concept can be thought of as comprising three broad, interrelated components: resilience, response, and recovery.

#### Resilience

Resilience is the most crucial component of strategic assistance. It is central to enhancing the ability of vulnerable areas to absorb major incidents with minimal damage and loss of life, while simultaneously enhancing steady-state bilateral (U.S.-Japan) and multilateral (regional recipients of strategic assistance) HA/DR preplanning and coordination efforts prior to the onset of a major disaster event. Civilian-directed activities, inclusive of more robust private-public coordination and cooperation, will be key throughout this steady-state phase of strategic assistance. Civilian-led government engagement will be particularly necessary in terms of capacity building, although in many cases government initiatives are likely to rely on the existing on-the-ground efforts of NGOs and private-sector actors to direct the flow of aid, build critical infrastructure, and benefit from local knowledge and networks. In this way, development assistance supplied by the United States and Japan can decrease regional vulnerabilities to major disasters while simultaneously stimulating local economic growth. This component is different from the other two in that it largely consists of low-level activities that are not carried out in reaction to a specific contingency but rather as part of the proactive, steady-state relationships among the United States, Japan, and potential recipient nations of strategic assistance.

Resilience encompasses a broad range of activities, including improving government-to-government and private-public coordination through advance contingency planning and capacity building both on a bilateral basis between the governments and HA/DR communities in the United States and Japan and on a multilateral basis among various public and private actors from the United States, Japan, and regional recipient nations. Resilience also comprises regular aid and development programs (e.g., economic, infrastructure, and agricultural) that may serve to reduce vulnerability over the long term and build indigenous capacity to mitigate and respond to the effects of significant disasters.

To better prepare for future major disasters, Japan and the United States, in consultation with other regional governments, should develop regular joint regional HA/DR threat assessments that highlight existing and likely future vulnerabilities to major disasters. This will enable the United States and Japan to better identify steady-state initiatives and direct resources—such as ODA, technical assistance and cooperation, or grant aid—in a more coordinated and joint fashion to those areas deemed to be at greatest risk. Developing a shared operating picture with regard to regional threats and vulnerabilities will be crucial to enabling the U.S. and Japanese development agencies—USAID and JICA—to develop and implement joint programmatic efforts that are complementary. This will also enable their respective disaster-response arms—the Office of Foreign Disaster Assistance at USAID and JICA's Disaster Relief Program—to engage in more effective preplanning and coordination. In addition, it will allow for the joint development of standard operating procedures in advance of a major disaster incident in a manner that reflects the allocation of resources based on a shared appraisal and analysis of regional threat probabilities and their associated risk.

Such assessments should also include the regular involvement of the U.S. and Japanese private-sector and NGO HA/DR communities in order to benefit from their unique insights, as well as further coordinate private-public HA/DR activities. By delineating and highlighting specific areas where public- and private-sector capabilities may be best applied, such assessments can advance recommendations to better synergize private-public efforts and reduce redundancy.

In addition to improving governmentto-government and private-public coordination through advance contingency planning, Washington and Tokyo should also seek to expand engagement in multilateral military exercises that include rigorous HA/DR components. Heightening the profile of HA/DR operations as integral parts of existing multilateral military exercises within the regionsuch as Cobra Gold and the Balikatan series-will serve to enhance interoperability among the various participants, while also enabling additional concrete mechanisms through which to begin to engage in broad-level contingency planning for disaster scenarios. Incorporating civilian elements such as the Office of Foreign Disaster Assistance's DART into previously military-centric HA/DR exercises, as well as engaging with NGOs and private-sector members of the HA/DR community to the extent possible, will bolster combined U.S.-Japan capabilities while also providing an additional venue in which civilian actors and their military counterparts can interact and acclimate to one another.

In a very positive first step, the Japanese defense community has recently taken on a more active role in these regional exercises. Regular bilateral and multilateral exercises incorporating HA/DR components must be supplemented by recurring bilateral and multilateral planning sessions focused on HA/DR at the working and leadership levels between Washington, Tokyo, and the potential recipient nations of strategic assistance.

To bolster the self-reliance of regional nations, the United States and Japan must also seek to build national capacity among those countries that are most vulnerable to major disasters.

To bolster the self-reliance of regional nations, the United States and Japan must also seek to build national capacity among those countries that are most vulnerable to major disasters. Capacity-building efforts should be pursued through two separate but complementary avenues: development assistance designed to strengthen domestic infrastructure, disaster preparedness, and indigenous response capacity should be undertaken alongside defense capacity-building initiatives. Development assistance-primarily through financial aid and infrastructure development-is a central element of building greater resilience, particularly because there exists a very strong correlation between national development levels and vulnerability to major disaster events.9 Japan has become increasingly active in providing ODA to South and Southeast Asia in recent years. For example, Tokyo has pledged over \$25 billion to support a number of essential infrastructure development projects across the ASEAN community, including airports, roads, seaports, power-generation stations and supply lines, and communications networks. Although the goal of these projects is broader than just enhancing

<sup>9</sup> For example, 53% of recorded deaths from natural disasters occurred in low-development areas. This is despite the fact that only 11% of people exposed to natural hazards live in countries classified as low human development. See *Reducing Disaster Risk: A Challenge for Development* (New York: UN Development Programme, 2004), 1, http://www.preventionweb. net/files/1096\_rdrenglish.pdf. resilience to major disasters, such development efforts contribute to the overall ability of vulnerable nations to avoid catastrophe when disaster inevitably strikes.

Defense capacity-building is another important element of enhancing national resilience in vulnerable regional states. Military forces can be critical in disaster preparedness and evacuation operations before a disaster strikes. Owing to their unique capabilities, military forces often also make for the most effective first responders. Unfortunately, few regional militaries are currently positioned to engage in such activities in the event of a major disaster. Japan and the United States have recently sought to provide increased defense aid to a number of regional actors, particularly through the sale of major military assets such as coastal patrol craft and helicopters. When contemplating military sales to regional allies and partners, Tokyo and Washington should highlight the importance of purchases that will be applicable across a broad range of defense contingencies, including disaster response.

Sustaining and, where possible, improving allied access to the region will be another crucial element. As was made clear by Operation Tomodachi, the ability to mobilize nearby military and civilian assets to achieve a rapid response is critical to stabilizing the situation in the immediate aftermath of a major, sudden disaster. Improving regional access-in terms of existing rotational deployments of U.S. Navy, Marine, and Air Force assets and detachments; potential rotational deployment of DART and Japan disaster-response teams; and the prepositioning and stockpiling of essential materials and supplies-will significantly support the ability of the United States and Japan to deliver an effective response. The United States is already engaged in increasing its regional presence through negotiating enhanced-access deals in the Philippines, Australia, Thailand, and Singapore. Japan should consider pursuing similar arrangements with these nations to allow for SDF access to key bases and facilities in the event of a major disaster.<sup>10</sup> Japan may also need to consider streamlining the interagency process governing the deployment of SDF components as the current structure is far

<sup>&</sup>lt;sup>10</sup> Such arrangements would likely need to be based on informal agreements that comply with the 1992 Act on Cooperation for United Nations Peacekeeping Operations and Other Operations [Kokusai Rengo heiwa iji katsudo-to ni taisuru kyoryoku ni kansuru horitsu], available at http://www.pko.go.jp/pko\_j/ data/law/pdf/law\_e.pdf.

too cumbersome to allow for the activation and deployment of rapid-reaction forces to out-of-area theaters when time is of the essence. Finally, the United States and Japan should collectively engage Thailand on the proposed establishment of a regional HA/DR hub at the U-Tapao air base.

#### Response

Unlike resilience, the response and recovery components of strategic assistance are primarily driven by sudden, high-impact disaster contingencies, such as major earthquakes, floods, tsunamis, and severe storm systems. The response phase occurs in the immediate hours, days, and weeks after the major disaster incident, with military and government first responders assuming primary responsibility for initial on-the-ground rapid-reaction efforts and national-level response coordination.

The U.S. military and the SDF are uniquely suited to provide robust first-responder capabilities, primarily because of their relative preponderance of strategic airlift, sealift, and ISR capabilities. Additionally, the United States and Japan can effectively supplementor in some extreme cases provide-centralized command and control by organizing a more coherent operational picture and assisting in coordinating on-the-ground response efforts. Such capabilities will require the establishment of clear and efficient lines of communication, including, to the extent possible, open access to operational information across a wide range of actors. As private-sector capabilities come online following a major disaster and a modicum of stability is restored on the ground, military responders can begin to transition a number of their responsibilities—such as communications, logistics, damage assessment, ISR, and transport-to private actors capable of carrying out these essential tasks. This will enable military forces to draw down from their high-tempo operations and ensure that they do not overstay their welcome, while also maintaining a ceiling on expensive operational costs.

Improving the effectiveness of HA/DR operations will require significant bilateral and multilateral response preparation and planning among the United States, Japan, and potential recipient nations well in advance of a major disaster. As elucidated in the resilience component, establishing a joint HA/DR threat assessment and contingency preplanning capability between Tokyo and Washington will be a necessary first step. Following that, the two sides should seek to extend and institutionalize individual preplanning processes with other regional nations, building off of existing bilateral—and, where applicable, trilateral—relationships.

Advance U.S.-Japan planning should incorporate key actors from the government, private sector, and NGO communities, as well as from the military. Although such planning will need to remain flexible given the high degree of variability between disasters, the establishment of turnkey standard operating procedures and capabilities, to the extent that this is possible, would benefit first-responder operations tremendously, particularly with regard to integrated logistics and communications networks.

The U.S. military and the SDF are uniquely suited to provide robust first-responder capabilities, primarily because of their relative preponderance of strategic airlift, sealift, and ISR capabilities.

To better assist with this process, the United States and Japan should consider developing joint, interagency civil-military response-management and disaster-response teams, respectively under the auspices of and led by USAID and JICA, that can coordinate "hour zero" combined U.S.-Japan response efforts. The interagency teams could also be in a position to coordinate the joint U.S.-Japan national response package with the government of the affected nation and/or through international organizing bodies such as the UN Office for the Coordination of Humanitarian Assistance.

Prior to the onset of a major disaster incident, these interagency teams should also regularly engage with their respective domestic HA/DR NGO and private-sector counterparts. Engagement efforts could be geared toward the development of "pre-prepared" NGO/private-sector response packages that (depending on the situation) augment or cover gaps in existing government capabilities or that are applicable in different phases of the response-recovery-resilience strategic assistance construct. The establishment of such response packages would be intimately tied to the disaster risk analysis provided by the joint regional threat assessments that would be conducted and regularly updated during the resilience phase of strategic assistance, and would be organized to reflect their specific capabilities, institutional interests, and areas of operation and knowledge. The interagency teams could convene and provide coordination assistance among the various private actors coalescing to form these response packages. They could also serve as a bridging agent between private-public efforts prior to the onset of a major disaster incident so as to reduce redundancy. Once a major disaster has occurred, the interagency teams could selectively activate and assist in coordinating the deployment of the various NGO/private-sector response packages depending on the situation and assessed need.

By establishing institutional links between the U.S. and Japanese interagency teams, the two sides would be in a position to communicate and coordinate the development and deployment of national response packages in a more complementary and efficient manner, taking advantage of specialization and yielding greater impact.

#### Recovery

The response component of strategic assistance will be highly fluid, quickly transitioning to recovery where possible. Indeed, it is likely that the response and recovery phases will be carried out simultaneously in some circumstances. These two phases are delineated by who is serving as the central actor in conducting on-the-ground operations. In the response and initial stabilization phase, the central actor is likely to be the military, owing to its unique capabilities. As stability is re-established and follow-on actors arrive, response efforts transition to the recovery phase. During this phase, civilian government, NGOs, and the private sector adopt a more central role. In contrast with the response phase, which has a relatively short time horizon, the recovery phase encompasses a broader array of functions over a longer period of time. Indeed, in many ways the recovery phase leads back to the re-engagement of the resilience component, only now at a higher baseline.

Recovery operations should be geared primarily toward restoring the function of critical social infrastructure, assisting in the long-term care of displaced persons, and supporting the re-establishment of core social functions, such as agricultural production and education.

Owing to their unique and specialized array of capabilities, as well as their ability to remain on the ground for prolonged periods, NGOs and private-sector actors play a central role in the recovery phase, supported by civilian government agencies. Recovery operations should be geared primarily toward restoring the function of critical social infrastructure, assisting in the long-term care of displaced persons, and supporting the re-establishment of core social functions, such as agricultural production and education. Financial assistance from foreign governments in the weeks and months following a disaster is crucial to supporting these on-the-ground efforts. Long-term recovery operations are the first step in rebuilding and subsequently enhancing resilience in the affected nation or nations.

#### Challenges

There are, however, a number of immediate issues that may challenge the development of the strategic assistance concept. First and foremost is the need to recognize the very real fiscal constraints faced by both the United States and Japan, which are likely to limit the overall level of near-term investment in defense. In particular, platforms that may be ideally suited for conducting HA/DR operations-for example, large amphibious vessels such as the mobile landing platform-afloat forward staging base (MLP-AFSB)may be shelved as funding tightens. Moreover, lightened operations and maintenance budgets limit the capacity of the military services to maintain a robust forward presence and high operational tempo. With financial realities impacting readiness and potentially curtailing the scope of operational exercises, HA/DR planning and exercises may be seen as surplus to requirements. Further complicating matters, despite the general popularity of HA/DR operations, it is unclear whether domestic political constituencies in either Japan or the United States will be willing to support a more strategic approach to regional HA/DR operations. Strategic assistance, although offering far better returns over time than the current ad hoc approach, would require a greater initial investment.

While these budgetary and associated political issues are quite problematic, maintaining or building HA/DR components into existing exercises, while also heightening the overall emphasis on real-world operations, may not necessarily be prohibitive based on expense. In many ways, this approach may serve to optimize the allocation of resources. Indeed, by placing additional strategic emphasis on HA/DR operations, the U.S. and Japanese militaries may be able to gain crucial real-world experience that is readily translatable into warfighting scenarios and contingencies, while also addressing a potentially significant threat to regional stability. "Training by doing" would allow for more effective and efficient use of resources and thus could serve as a force multiplier.

As Operation Tomodachi demonstrated, HA/DR operations require fungible skillsets that are in many cases applicable to training and preparing for wartime scenarios. Many of the capabilities and functional capacities necessary for mounting effective HA/DR operations—rapid response, civilian evacuation operations, population control, casualty treatment, communications, ISR, and logistics and supply-chain management, to name several areas would also apply across a wide range of conflict scenarios. HA/DR operations may provide military forces with a singular opportunity to engage in the real-world exercise of multiple competencies that are critical to warfighting without engaging in combat. By expanding the opportunities of the military to engage in realistic, high-end operations, the United States and Japan stand to make absolute gains in terms of the capacity, competence, experience, and interoperability of their military forces.

HA/DR operations may provide military forces with a singular opportunity to engage in the real-world exercise of multiple competencies that are critical to warfighting without engaging in combat.

From a bureaucratic standpoint, developing an efficient and effective interagency process in both the United States and Japan that can then engage in complementary consultation and action on a bilateral basis to steer the development and ultimately implementation of a joint U.S.-Japan approach to HA/DR will be highly difficult. This effort faces a separate hurdle when attempting to incorporate private-sector elements, many of which have their own missions and agendas and often have radically different, and at times opposing, institutional approaches to HA/DR. The key will be specialization and selecting components that complement and enhance the whole and afford unity of focus, at least at a general level. Developing greater understanding among the various sectors about each actor's organizational structure, ethos, and capabilities will be central to success in this endeavor.

Strategic assistance would allow both countries to engage with regional actors in a way that provides an essential public good while highlighting the importance of the United States and Japan to maintaining regional stability.

If the United States and Japan are to place greater emphasis on HA/DR operations within South and Southeast Asia, they must also consider national political dynamics and reactions to what would be a more active regional presence. In particular, a number of vulnerable countries within the region will likely be reluctant to accept direct military assistance from either the United States or Japan. In such scenarios, military assistance may be much more effective if it is "felt but not seen." Beijing is also likely to view increased U.S.-Japan activity in the region with trepidation, and potentially even with hostility, and might consider such operations to be at least indirectly aimed at containing China. The United States and Japan could find it difficult to fully engage with potential recipient states seeking to walk a narrow line between Beijing and Washington. Moreover, the emerging strategic competition between the United States and China could begin to have an impact on HA/DR operations as the two sides engage in "assistance competition." While the emergence of such a competition would be beneficial in terms of the overall level of resources devoted to any one disaster, it might also diminish the effectiveness of response efforts and contribute to heightened inefficiency by complicating the operational picture, increasing redundancy, and injecting an unnecessary political element into relief operations. Regardless, encouraging China to take on a greater regional profile with regard to HA/DR and potentially inviting it to take part in a subsequent multilateral iteration of strategic assistance will be important considerations for U.S. and Japanese policymakers moving forward.

Despite such regional political sensitivities, U.S.-Japan combined HA/DR operations within South and Southeast Asia could significantly bolster the soft power of both countries, while also demonstrating the positive role of the alliance in sustaining regional stability. In addition to enhancing perceptions of the United States and Japan as positive regional actors, a joint approach to HA/DR may strengthen existing regional frameworks and institutions and improve the overall capacity of the region to overcome major disasters, while also strengthening political, private, and military networks. Such engagement could also have beneficial second-order effects, particularly by easing existing tensions through regular interaction and creating a greater sense of regional community.

#### Conclusion: A Way Forward

South and Southeast Asia are likely to face an increasingly frequent occurrence of severe disasters as the 21st century progresses. Demographic and development trends, coupled with growing resource scarcity, are likely to only exacerbate regional vulnerability. From a moral standpoint, those nations that are most capable of providing swift comfort cannot stand idly by. From a strategic standpoint, as Asia continues to emerge as the major force propelling global economic growth and prosperity, potential threats to regional stability must be addressed.

Owing to the two countries' unique combined capabilities, the U.S.-Japan alliance is an ideal platform to deliver enhanced HA/DR operations within Asia. Developing a strategic, joint approach to HA/DR will be difficult. It will require sustained support from political and military leaders, particularly as resources are constrained and domestic politics remain fragmented. Yet the need is apparent, and the challenges are real. Moreover, placing greater emphasis on HA/DR provides the United States and Japan with the opportunity to deepen their own bilateral relationship, enhance interoperability, and gain added real-world experience. At the same time, strategic assistance would allow both countries to engage with regional actors in a way that provides an essential public good while highlighting the importance of the United States and Japan to maintaining regional stability.

To engage in a more strategic, joint approach to HA/DR operations in Asia, the United States and Japan must first incorporate the three components of resilience, response, and recovery into a more comprehensive approach to HA/DR. By combining steady-state assistance aimed at building resilience with emergency response in the event of a major disaster, the United States and Japan can more effectively use available resources while diminishing regional vulnerability. Bilateral planning and coordination between the allies will be crucial to their ability to both provide coordinated steady-state assistance and carry out response and recovery operations once a major disaster has occurred.

As the Strategic Assistance project moves forward, several areas of examination remain:

- What plans and mechanisms need to be established for the United States and Japan to coordinate a joint, whole-of-society approach to HA/DR? Critical issues include transitioning from the initial military-led response phase aimed at stabilization and the prevention of further loss of life to the recovery and reconstruction phases led by NGOs and private-sector actors. The latter are much better suited to address the specific long-term needs of reconstruction. Crucially, these follow-on actors are able to maintain a long-term presence in order to assist with recovery because they do not carry the stigma and political concerns often associated with military forces. By encouraging greater government and military cooperation and coordination with the private sector and NGOs, mobilization and response times could be drastically reduced. NGOs and the private sector thus must be incorporated into the strategic approach to HA/DR and involved in preplanning efforts. Yet how can this be done?
- What posture, training, and exercises should the United States and Japan develop to enable strategic assistance in the future? The prepositioning of capabilities and materiel, as well as the development of regular bilateral and multilateral whole-of-society training and exercises, has the potential to greatly enhance the ability of

the United States, Japan, and their partners to conduct HA/DR across all of its phases. Yet what should that posture look like? How can societies train and exercise effectively?

• How can a joint U.S.-Japan approach to strategic assistance be tailored to social and political sensitivities in the region? Political sensitivities to foreign military assistance among the region's most vulnerable nations must be recognized and incorporated into any strategic approach to HA/DR operations. When operating in a political climate that is sensitive to foreign military involvement, HA/DR assistance must, to the extent possible, be felt but not seen. Regional fears over foreign military assistance can potentially be further mitigated by engaging in advance with potential recipient nations, incorporating them into bilateral U.S.-Japan response and recovery planning to the extent possible, and working through regional political frameworks and institutions such as ASEAN. Yet such sensitivities could limit the effectiveness of an HA/DR response, potentially resulting in the greater loss of life and destruction of property. Contingency planning must therefore take into account likely domestic political considerations in potential recipient nations and seek to build a realistic response capability that will be both politically acceptable and effective. Resilience efforts should also consider initiatives to make foreign disaster assistance more politically palpable. Moving forward, it will be crucial to gain and incorporate regional perspectives into the strategic assistance concept.

Ultimately, placing greater emphasis on regional HA/DR operations makes sound strategic and geopolitical sense for both Japan and the United States. A joint U.S.-Japan approach to HA/DR stands to become an essential component of regional stability and security. Implementing such an approach will require significant effort from both Tokyo and Washington. If successful, however, strategic assistance stands to benefit the Asia-Pacific region immensely by providing stability in the face of serious nontraditional challenges.



Seattle and Washington, D.C.

1414 NE 42ND STREET, SUITE 300 SEATTLE, WASHINGTON 98105 USA PHONE 206-632-7370, FAX 206-632-7487

1301 PENNSYLVANIA AVENUE NW, SUITE 305 WASHINGTON, D.C. 20004 USA PHONE 202-347-9767, FAX 202-347-9766

NBR@NBR.ORG, WWW.NBR.ORG