

THE U.S. ASIA-PACIFIC REBALANCE, NATIONAL SECURITY AND CLIMATE CHANGE

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ADDRESSING CLIMATE CHANGE AND ENHANCING ENVIRONMENTAL SECURITY IN THE ASIA-PACIFIC REGION

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“Climate change ... creates both a need and an opportunity for nations to work together, which the Department will seize through a range of initiatives.”

– U.S. Department of Defense Quadrennial Defense Review (QDR) 2014¹

Climate change is solidly on the U.S. national security agenda in 2015. In the Asia-Pacific region, Admiral Samuel J. Locklear III, Commander, U.S. Pacific Command, identified climate change as a pressing long-term threat, and characterized it as a driver for regional cooperation to better respond to natural disasters.² In a major policy address in Jakarta, in February 2014, Secretary of State John Kerry stated that, “This year... I will engage in a series of discussions on the urgency of addressing climate change – particularly on the national security implications and the economic opportunities.”³ In November 2014, President Obama and China’s President Xi Jinping agreed to work together to promote an agreement on greenhouse gas mitigation at the Paris Conference of the Parties of the United Nations Framework Convention on Climate Change.⁴

Climate-related global change presents a transnational, regional challenge to governments, international organizations and NGOs across the Asia-Pacific region. It also represents an opportunity to develop new knowledge and new approaches to manage the complex issues of climate change and security. As the U.S. works to operationalize its top-level policy of rebalance to the Asia-Pacific, it must consider and integrate these issues into its plans and activities at the regional level.

Other global trends that characterize the Asia-Pacific region -- including population growth,

urbanization, economic development, air and water pollution, the growth of the middle class and associated increases in resource demands -- interact complexly with the effects of global warming to threaten environmental security. Climate change is a global phenomenon, but its impacts are experienced locally and tend to differentiate along geographical rather than political boundaries. The Asia-Pacific region is recognized as highly vulnerable to the projected impacts of climate change. For example, the United Nations Environmental Program (UNEP) states that, "Asia-Pacific is one of the most vulnerable regions to climate change and impacts are likely to become more intense in the future."⁵ According to Maplecroft's Climate Change Vulnerability Index, all five of the world's cities that are at extreme risk from climate change are in Asia – Dhaka, Mumbai, Kolkata, Manila and Bangkok.⁶

Vulnerable geographic areas in the Asia-Pacific region include:

- the glaciated and snowy highlands of China and Central Asia that comprise the water tower of the continent,
- downstream nations in South and Southeast Asia that depend on predictable and accessible surface water from the great rivers originating there,
- desert and drylands vulnerable to drought and desertification,
- vast areas dependent on predictable monsoon rains for agricultural sustainability,
- coastal regions, especially sea level megacities exposed to both flood and storm, and
- low-lying island nations and coral reefs, vulnerable to sea level rise, tropical storms and acidification of the oceans due to increased carbon loading of the atmosphere.

These shared geographic vulnerabilities to climate change suggest opportunities for regional collaboration to share knowledge and best practices for climate adaptation and security cooperation that may not coincide with geopolitical boundaries and existing regional security organizations.

Security preparedness and response, whether to national or transnational threats, is understood to be the responsibility of sovereign nations. This was recognized by the U.S. Department of Defense in the 2010 QDR, which first articulated the strategic security implications of climate change: "...climate change could have significant geopolitical impacts around the world, contributing to poverty, environmental degradation, and the further weakening of fragile governments."⁷ The report went on to recommend proactive engagement with vulnerable nations where the military may be the only institution with a capacity to respond to major natural disasters. Clearly, managing the impacts of climate change will require new modes of regional security collaboration.

We can draw three conclusions from this brief discussion: (1) Climate-related global change is a direct and substantial, if slow-motion, threat to many nations in the Asia-Pacific region; (2) It is in the mutual interests of vulnerable nations in the Asia-Pacific and the United States to work together to understand, prepare for and address the national and regional security issues associated with climate change; and (3) Bilateral initiatives are not enough. These transnational

issues can be fruitfully addressed through multilateral initiatives based on geographic vulnerability as well as cooperation through existing regional organizations with a geopolitical base. This is the environmental security context within which the U.S. government must manage its rebalance toward the Asia-Pacific.

Because many Asia-Pacific nations are more directly threatened by climate change than is the United States, the U.S. must be responsive to those national interests and priorities in its engagement with the region. As part of its rebalance to the Asia-Pacific, the U.S. can bring important assets to bear on the management of climate-related global change. Because the U.S. has an advanced science and technology base, it can provide leadership in knowledge creation to address climate-related issues. Drawing upon its domestic experience in interagency and whole-of-society participation in governance, the U.S. can help envision new paths for regional security sector development to address the complex and emerging problems of climate-related global change.⁸ Because the U.S. Pacific Command has the planning and operational expertise to assist its allies and partners across the region, the U.S. can play a leading role in facilitating security sector development and cooperation to address these problems at the operational level. A rebalance to the Asia-Pacific can build upon these capabilities.

What are the opportunities and challenges for U.S. activities to address climate change and improve security governance in the Asia-Pacific region? First, there is an underlying need for knowledge creation and dissemination among security practitioners regarding the nature and extent of the threat and its complexity. Secondly, there is a need for international and interagency networks to craft collaborative, adaptive strategies that can support vulnerable nations in reducing the threat. Both of these needs in turn imply a third – the need for education and training of security professionals and their civil sector counterparts to address these issues collaboratively.

The need for more useable knowledge about climate change is a general one, not limited to decision making in the security sector. According to a recent analytical review, “Actionable Knowledge for Environmental Decision Making”, new approaches are needed to “surmount the usability gap” between scientists and decision makers.⁹ Specific to the security sector, in a 2011 report, the U.S. Defense Science Board emphasized the need for a DoD climate information system database and the need for DoD to adopt a whole-of-government approach to climate change issues. The report made specific recommendations for the role of regional combatant commands (COCOMs), including PACOM. Among them, COCOMs should:

- develop information on countries and areas within the region that are at greatest risk, the nature and scope of climate impacts, and ways to address them;
- raise awareness of climate issues with partner nations and their militaries;
- take an interagency approach to addressing topics related to climate change ;
- include these topics in theater campaign plans; and
- work to enhance host nation capabilities to plan and respond to natural disasters consequent to climate change.¹⁰



Marines listen to Admiral Samuel J. Locklear, commander of the U.S. Pacific Command, speak aboard Marine Corps Air Station Miramar, Calif. Locklear answered questions about current affairs as well as the future for the Marine Corps presence in the East. DVIDSHUB / LANCE CPL. CALEB HOOVER

Greenhouse gas (GHG) mitigation to reduce the carbon load in the atmosphere is key to slowing the rate of global warming and avoiding the worst consequences of climate change. But governance for mitigation is exercised primarily at the global level through the United Nations Framework Convention on Climate Change (UNFCCC) and its annual conferences of the parties, most recently held in Lima, Peru in December 2014. The principal roles in mitigation for security agencies at the regional level are to set a good example by reducing their own emissions and to provide technical support to partner nations seeking to do the same. In the Asia-Pacific region, PACOM policy is to engage partners across the region to increase energy efficiency and the use of renewable resources in close cooperation with allies and partners and with other U.S. government agencies.¹¹

Perhaps the greatest need and the greatest opportunities for regional collaboration are in the creation of adaptive strategies to prepare for the impacts of climate change. However successful or unsuccessful the world may be at carbon mitigation, scientists project that global warming will continue to increase under any feasible scenario, at a rate based on the level of future GHG emissions.¹² According to the latest assessment report of the Intergovernmental Panel on Climate Change (IPCC), climate change has already had an impact on environmental security. Most

notably in the Asia-Pacific region, changing patterns of precipitation and melting of snow and ice are affecting the quality and quantity of water resources. The region is also experiencing climate-related weather extremes leading to droughts, floods, cyclones and wildfires.¹³ The report, issued in March 2014, forecasts security risks for the remainder of the 21st century, including human migration, and climate-related threats to “...the critical infrastructure and territorial integrity of many states...”¹⁴ It also identifies for policy makers a specific set of international and cross-sectoral adaptation issues and prospects by region that can help to reduce the risk.¹⁵

In a 2012 strategy research project for the U.S. Army War College, Colonel James D. Golden argued that a reactive posture to climate-related impacts is not an appropriate strategy for PACOM. He recommended “...a shift in strategic focus for USPACOM towards adaptive strategies to deal with climate change, and thus to avoid a reactive posture to the accelerants of instability caused by climate change that threaten regional security.”¹⁶ This proactive approach, he concluded, would require the development of a cooperative coalition of as many PACOM nations as possible, working together to develop new knowledge through vulnerability analyses, and forging a strategic narrative focused on the gravity of the threat. He called for a commitment by PACOM, working with other agencies and NGOs to “...aggressively pursue adaptive strategies with all states seeking to lessen the impacts of climate change events.”¹⁷

The Defense Science Board report, the IPCC report, and the Army War College strategic research paper agree that there is a fundamental need for more knowledge of specific national vulnerabilities to climate change in the region. They further agree that international and interagency collaboration are essential to a strategic regional approach for an effective response to climate change. In the Asia-Pacific region USPACOM is engaged in a variety of activities to develop and implement such an approach. Much of PACOM planning occurs under the rubric of environmental security (ENVSEC), which is incorporated into the Theater Campaign Order and individual country engagement plans. An All Hazards Working Group is currently working on ENVSEC considerations for incorporation into the Theater Campaign Plan. Disaster response and training are ongoing PACOM missions. Since 2011, PACOM has sponsored annual environmental security conferences around the region. Most recently, the President of Kirabati has asked PACOM for engineering expertise to analyze the potential impacts of climate change on that island nation.¹⁸ In 2013, PACOM staff joined with Oahu-based officers from the National Oceanic and Atmospheric Administration, the Department of the Interior, the East-West Center, and the Asia-Pacific Center for Security Studies to establish a working group on Climate, Environment and Security in the Asia-Pacific Region, which meets regularly to exchange information and coordinate activities related to security and climate change.

Of special note is the role played by the Asia-Pacific Center for Security Studies (APCSS), one of five regional centers reporting to the respective Geographic Combatant Commander and resourced through the Defense Security Cooperation Agency (DSCA). The mission of the centers is to “... build partner capacity by addressing regional and global security issues with strategic level military

and civilian leaders through courses, seminars, workshops, research and dynamic outreach in an educational environment.”¹⁹ The Under Secretary of Defense for Policy has established priorities for the centers that are pertinent to the intersection of American rebalance to the Asia-Pacific and the security impacts of climate change: to contribute to the rebalance, to work to develop enduring partnerships, to build approaches that engage the whole of government, and to assist in identifying future trends that will shape the security environment.²⁰ APCSS is specifically directed to build common perspectives on regional challenges including climate change.²¹

The APCSS College of Security Studies (CSS) implements the center’s mission through a combination of education, outreach and research programs. The APCSS education program comprises six in-residence, executive education courses for mid-career and senior security professionals from across the region. Each year about 800 fellows attend these courses to learn and to share knowledge of comprehensive regional security issues, including both traditional and transnational security challenges. Fellows come from every nation in the Asia-Pacific region (including the U.S.), except DPRK. About half are military officers and about half from civil sector agencies including foreign affairs, police, and economic development. Key elements of the curriculum include panels, exercises, and seminar discussions which foster collaborative, international and interagency problem solving. Environmental security and climate change have been a core topic of these courses for more than five years. An underlying theme has been the complexity of climate-related security issues at the food-water-energy nexus, and the need for regional security sector development and inter-agency and cross-sectoral collaboration to better manage the impacts of climate-related global change. On returning home, the APCSS Alumni Office and national alumni associations provide support to continuing interaction among fellows across the region, including an on-line portal, “or community of interest” for fellows interested in climate change and environmental security.

The APCSS outreach program has sponsored an ongoing set of regional workshops on topics related to environmental security and climate change. Recent workshops include, “The Environment & Security in the Pacific Islands Region” (Honolulu, 2012), “Charting the Water Futures of South Asia” (Boston, 2013, with Harvard Kennedy School and the Near East South Asia Center), and “Effective Security Governance to Address the Impacts of Climate Related Global Change” (Lanzhou, 2013, with the Chinese Academy of Sciences). Each of these workshops brings together about 40 senior security practitioners and subject matter experts from across the region to share knowledge and perspectives and to chart a way ahead for collaboration to better manage the issues at hand. CSS faculty members are also active in research and publication in areas related to environmental security and climate-related global change.

Through these programs, over the last five years, APCSS and PACOM have undertaken operations that implement high level, U.S. and DoD policies concerning climate change and security within the parallel policy context of rebalance. The approach is one of building international and interagency networks to exchange knowledge and to craft collaborative adaptive strategies to meet

the emerging challenges of climate change. As this slow-motion crisis continues to unfold, regional awareness will continue to grow across the security sector and beyond. As scientific knowledge of the nature and impacts of the phenomenon increases, the security community will increasingly need to tap into that knowledge base and even to steer research to better address security concerns. Nations will continue to work together in disaster response and humanitarian assistance operations. They will increasingly need to address extreme weather impacts and issues of human health and migration that may arise from climate-related global change. As part of the rebalance, the United States and PACOM must play a facilitative leadership role in these activities.

The opportunity exists now for proactive education and network building for adaptive management of the problems of climate-related global change – problems that the IPCC predicts will grow for the foreseeable future. Security policies at the national level now provide the basis for those activities, with support at the highest levels of the administration. Security priorities of vulnerable nations in the Asia-Pacific region reinforce the need for U.S. attention to those policies as part of its strategic rebalance to the Asia-Pacific. PACOM has worked to articulate the need and to implement those policies at the COCOM level. APCSS is providing an experienced and trusted platform for knowledge creation and dissemination, for networking, and for education of security practitioners across the region. The challenge ahead, for the U.S. and its partners, is to adaptively learn and improve our efforts to educate, connect and empower security professionals in the Asia-Pacific region to collaborate in the management of the security impacts of climate related global change.

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Notes

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- 15 Ibid., SPM.2, Table 1, 27-30.
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- 21 Ibid., 6.