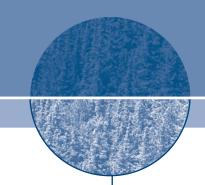
### SPECIAL REPORT



# U.S. Military and Environmental Security in the Gulf Region

#### Introduction

The United States Department of Defense defends the nation's security interests, which, over the past decade, have become more broadly defined. Today, U.S. forces find themselves employed in a wide range of nontraditional activities, including those that may fall in the category of "environmental security." In response, the U.S. military has developed programs to encourage cooperation with other nations' militaries based on environmental security, defined as "an integrated proactive approach that ensures the protection, preservation, and restoration of the environment, including air, land, water, biodiversity, natural resources, and people, from natural and manmade disasters that might contribute to instability and conflict" (Griffard & Butts, 2002).

These environmental security programs directly contribute to the first two pillars of the National Security Strategy of the United States (2002):

- Assure allies and friends of U.S. steadfastness of purpose and capability to fulfill its security commitments; and
- Dissuade potential adversaries from undertaking policies, programs, or operations that threaten U.S. interests or those of U.S. allies and friends.<sup>1</sup>

The cooperative activities that the United States undertakes with militaries around the

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world, both in peaceful pursuits and in response to the entire spectrum of contingencies, helps assure allies and dissuade adversaries.

These activities are particularly important in the Gulf, where, according to Curtis Bowling (2002), the principal assistant deputy under REAR ADMIRAL JOHN F. SIGLER, USN (RET.)



U.S. Army Sgt. Kornelia Rachwal gives a young Pakistani girl a drink of water as they are airlifted from Muzaffarabad to Islamabad, Pakistan, aboard a U.S. Army CH-47 Chinook helicopter on Oct. 19, 2005. Credit: U.S. Air Force Tech. Sgt. Mike Buytas (Courtesy of U.S. Central Command)

secretary of defense for installations and environment, "environmental security of this region is essential to the continued developmental capacity of much of the world" (page 14). Oil spills, water shortages, earthquakes, and desertification are only some of the potential environmental threats to the region's security, but multilateral and regional efforts to address these problems could help build bridges between nations. As Douglas Campbell (2002) of the U.S. Army War College states, environmental security cooperation is "important to U.S. strategy in the region...and offers a valuable venue for regional security cooperation" (page v).

### U.S. Military Operations and Environmental Security

U.S. military operations, both in peace and in war, are conducted by nine four-star combatant commanders in command of joint land, sea, and air forces from all of the services. Five of the commanders are responsible for specific geographic regions, while the others have functional responsibilities.<sup>2</sup> All of these commanders must be attuned to environmental issues, such

as the impact of the environment on their installations and operations (and vice versa). But the geographic combatant commanders have been, over the last decade or so, most involved in environmental security, as their responsibilities require planning, training, and conducting contingency operations ranging from the "low end," such as humanitarian assistance, to the "high end" of combat.

Environmental issues—mainly in the form of natural disasters—often cause low-end contingencies, as U.S. forces are called upon to assist in the relief efforts. While military forces are rarely in charge of providing relief, they contribute organized, disciplined manpower; critical supplies and equipment; transportation; and the command, control, and communications required to coordinate relief activities. Environmental issues can also have a broader impact on security, according to Bowling (2002):

Environmental problems can be exacerbated by natural or man-made events that contribute to regional instability and conflict. Failure to respond to these events in a coordinated, timely, and efficient manner can impact a government's ability to govern and to function.... Environmental degradation from these disasters can also hinder economic development, displace populations, facilitate the growth of undesirable elements, and, potentially, increase proliferation of the threat of weapons of mass destruction. (page 11)

### The Theater Security Cooperation Program

The Secretary of Defense and the geographic combatant commanders increasingly recognize the need to prepare in advance for relief and assistance operations. The Theater Security Cooperation (TSC) program, which grew out of the late 1990s Theater Engagement Plans (TEP), improves focus on national, regional, and global security issues; improves coordination across the commanders' geographic

boundaries; and prioritizes activities according to U.S. interests. As the United States Southern Command (USSOUTHCOM), responsible for Latin America, states succinctly, "USSOUTH-COM conducts Theater Security Cooperation to build military-to-military relationships, develop partner nation security force capabilities and professionalism, and afford U.S. forces with peacetime and contingency access to support training and military operations in order to advance U.S. security interests."3 While the armed forces have always planned and trained for operations across the entire spectrum of possible contingencies, planning for peacetime activities was not as detailed, integrated, or consistent before TSC.

#### U.S. Central Command's Environmental Security Programs in the Gulf

When U.S. Central Command (USCENT-COM)—which is responsible for 27 countries encompassing the Horn of Africa, the Middle East (excluding Israel), Central Asia, and parts of South Asia—first authored its theater engagement plan in 1997-1998, the command—headed by General Anthony Zinni developed an environmental security program as a way to improve cooperation with other militaries.4 Conferences held in 2000 established standing regional environmental security organizations in two of the command's four sub-regions, the Persian Gulf and Central Asia. The Gulf nations focused on water, energy, and potential natural disasters, while the Central Asian countries focused on earthquakes and the environmental legacy of the Soviet era.5

The first conference, "Role of the Armed Forces in Environmental Security," held in Muscat, Oman, in 2000, identified major concerns likely to impact military activities in the Gulf, and issued five recommendations for moving forward. The initial sessions were primarily informational, which prompted U.S. and regional leadership to ask what value follow-on work would add. The planners of

the next conference faced a significant challenge: how to present a compelling case for the initiative *and* develop a process that would have a high probability for producing a successful product.

Following the attacks of September 11, 2001, their job became a little easier, as it became clear that global enemies would use every tactic at their disposal, including innovative targeting, to degrade and ultimately destroy Western regional interests, including friendly regional regimes. While heavily guarded, for example, sources and distribution nodes for water and energy in the Middle East are vulnerable to attack; disrupting them could have dire consequences. Environmental warfare or terrorism could include attacking the vital desalinization plants in the Persian Gulf, or-even worse—using oil or liquefied natural gas (LNG) supertankers as weapons of mass destruction against population centers.

In 2002, the Gulf nations' second conference, "Environmental Security Planning, Prevention, and Disaster Response in the Arabian Gulf Region," hosted by the Qatar Armed Forces in Doha, sought to move from gathering information to producing results. The second meeting had three goals:

- Encourage the countries of the region to assume ownership of the initiative, with the United States moving to a supporting role;
- Identify the major actions required to establish a standing organization; and
- Develop a process to maintain momentum between major meetings and during times when other events and priorities might divert attention from the program.

To facilitate regional ownership of the program, the informational sessions of the conference used fewer U.S. and Western subject matter experts. More importantly, an executive committee—comprising a general from each participating nation—was formed to receive the reports of functional working groups, to oversee progress toward agreed-upon objectives between the major meetings, and to provide



U.S. Navy crew carry an injured, stranded Indonesian woman to a helicopter that will transport her to a nearby medical center (Indian Ocean, Jan. 3, 2005). Credit: Mate Third Class (AW) Gabriel Piper (Courtesy of U.S. Pacific Command)

ongoing progress reports to each country's senior military officer (usually the armed forces' chief of staff).

At the conference, working groups—composed of officers in the ranks of captain through colonel—addressed five functional areas:

- Defining environmental security and setting regional approaches;
- Environmental security intelligence, detection, and information sharing;
- Regional center/command and control;
- Regional training and exercises; and
- Managing health and disease consequences.<sup>7</sup>

The senior military leaders of all of the countries involved were personally invited by the leader of U.S. Central Command (General Tommy Franks at the time) to receive the reports of the working groups and the executive committee at the conference's final session. Each committee summarized its findings and recommendations for the way forward, which included the establishment of a regional interagency coordination center for preventing and responding to natural and manmade disasters.

### From Environmental Security to Disaster Preparedness

After the second conference, USCENTCOM's environmental security initiative was renamed "disaster preparedness" and refocused on manmade disasters. Manmade disasters may result from accidents, or from terrorism or war. Accidents could, for example, include oil spills in the Gulf, refinery explosions, or hazardous material spills in population centers. Terrorists or combatants might attack environmental targets (for example, desalinization plants or refineries) or even use the environment as a weapon (for example, poisoning the food supply). In any terrorism or combat event, the potential for collateral environmental damage is high—and could be exacerbated by the use of chemical, biological, radiological, or nuclear weapons.

Despite the name change, the same process for moving toward regional cooperation remains in place. Hosted by the Bahrain Defense Forces in September 2004, the third major conference, "Gulf Region Disaster Response Preparedness Conference and Medical Workshop" focused on building on the efforts of previous conferences to enhance disaster preparedness and medical surveillance capabilities in the region. "Disaster preparedness is the conduct of civil-military activities to improve host nations' national and regional capabilities to effectively prevent, prepare for, respond to, and/or mitigate the effects of manmade and natural disasters," according to the conference report (Moeller, Sigler, & Griffard, 2004, page 3).

Participating nations laid the groundwork for a permanent organization and headquarters (which may be actual and/or virtual). They agreed that a regional organization will explore ways to prevent disasters and, should prevention fail, coordinate a rapid response. Each nation will dedicate a small standing cadre of personnel to staff the center and augment this group with pre-identified people as required. Once established, the center will likely act as a clearinghouse for long-term environmental sustainability, but it will initially focus on potential regional environmental disasters. A

current database of capabilities and assets that can be brought to bear for a specific contingency is key to this effort. As the conference report concluded:

The improved national coordination and information-sharing capabilities identified by the participants demonstrate a commitment to strengthening regional cooperation and coordination capabilities. With the proposed USCENTCOM five-year program the GCC states, Egypt, and Jordan have a roadmap that increases security and stability through effective national and regional civil-military coordination and "full spectrum" disaster preparedness. (Moeller, Sigler, & Griffard, 2004, page 4)

## Environmental Security and Disaster Response: The Tsunami Example

U.S. forces reacted within minutes to the Indian Ocean tsunami disaster in December 2004, delivering critical supplies to Indonesia, Sri Lanka, and Thailand within 96 hours. Over the next three months some 16,000 U.S. military personnel from the Pacific Command provided assistance with 26 ships, 58 helicopters, and 43 fixed-wing aircraft (U.S. Pacific Command, 2005). They delivered nearly half a million gallons of water, 10 million pounds of food, 3,000 tons of supplies, and significant medical services, including the thousand-bed hospital ship, USNS Mercy. Using both preestablished and ad-hoc arrangements, Pacific Command also coordinated the relief efforts of 19 other nations, which together with the United States contributed 127 ships, 161 helicopters, and 137 fixed-wing aircraft. Finally, and most significantly, the military closely coordinated their efforts with multiple agencies of the U.S. and foreign governments, as well as more than 200 NGOs.

While the scope of the tsunami relief effort was unusual, providing humanitarian assistance and disaster relief are not uncommon tasks for the U.S. military, which experiences a major event every 2-4 years and many minor operations (2005 has been abnormal, with three major disasters and several more approaching major status). Although these may be "lowend" contingencies, successful execution of these missions is both complex and essential to U.S. national security.

The contributions of these relief operations to U.S. security interests cannot be overstated. American national values are on display, offsetting negative perceptions of the "hyperpower" and promoting positive views of the United States and other western nations, which could help reduce global terrorism. For example, the Pew Global Attitudes Project (2005) found that 79 percent of Indonesians have a more favorable view of the United States as a result of the tsunami relief efforts. Further, cooperating with other national militaries can enhance their professional contribution to their societies, improve their ability to operate multilaterally in higher-end contingencies, and could facilitate access to assets that support vital U.S. security interests.

### Environmental Security: A Proven Tool for the Future

Environmental security has already proven to be a useful tool for the U.S. military. The conferences held by U.S. Central Command in Central Asia to address earthquakes and Sovietera environmental legacies fostered increased understanding and cooperation in the region, which were instrumental in persuading Uzbekistan and Kyrgyzstan to allow essential U.S. military bases during Operations Enduring Freedom and Iraqi Liberation. In the Gulf, where "uninterrupted access to and use of critical infrastructure in the Arabian Gulf region are key to the successful prosecution of the Global War on Terror," disaster preparedness initiatives are using regional cooperation to protect this access (Moeller, Sigler, & Griffard, 2004, page 1).

In 2001, General Tommy R. Franks, then commander of U. S. Central Command, told the House Armed Services Committee in a prepared statement:<sup>8</sup>



Oil spills, water shortages, earthquakes, and desertification are only some of the potential environmental threats to the region's security, but multilateral and regional efforts to address these problems could help build bridges between nations.

While environmental factors can easily trigger conflict, cooperation on these issues can promote regional stability and contribute to the ongoing process of conflict resolution. As such, environmental security remains an important element in shaping a future made complex by competition over natural resources. USCENT-COM-sponsored environmental conferences will continue to provide a valuable forum for the region to discuss environmental issues.

Military commands have not typically been charged with examining the causal linkages of environment and conflict, but rather with dealing with the consequences of environmental degradation.9 General Franks like General Zinni before him—recognized the linkage, but saw environmental security as an additional means to achieve better cooperation among regional militaries, other government agencies, and NGOs. Because all agencies, including militaries, view conflict prevention as a far better use of constrained resources than conflict mitigation, mechanisms for facilitating cooperative responses to disasters will likely extend to cooperative programs for preventing environmental problems (or the "root causes"). For the same reasons that militaries are well-equipped to respond to environmental disasters (organization, effective command and control, disciplined manpower, heavy equipment, and transportation) they can—and in the future, I believe, will be used to mitigate existing environmental damage and prevent future degradation.

While environmental security is a valid military mission, it is also less threatening than preparing for combat, for example. Thus, it can be a useful tool for encouraging cooperation with and between "frictional" nations. For example, cooperative regimes govern shared water resources between Israel and Jordan and between India and Pakistan. This cooperation should be an element of campaigns to dissuade threatening policies or behaviors. Finally, broader environmental

security programs could indirectly contribute to the U.S. national security strategy, because U.S. forces may well have to operate where the environment is the greatest challenge—or even the weapon of the enemy's choice.

#### Conclusion

2005 has been a particularly bad year for environmental disasters. Militaries around the world have responded to them alongside other agencies and relief organizations. If some forecasters are correct, this is merely a harbinger of more to come. Those who work routinely on the broad range of issues that fall under the rubric of environmental security know that a large number of environmental issues may lead to conflict or disaster, and they know that the right efforts now could prevent a significant number of those events. Militaries around the world are starting to understand the potential of the prevention side of the equation. The U.S. military's environmental security programs are steps in the right direction.

#### **Notes**

- 1. The other two pillars of the United States' National Security Strategy are: deter aggression against the United States or U.S. allies and friends through the capability and demonstrated will to impose severe penalties for such aggression; and decisively defeat any adversary, should deterrence fail. For the complete strategy, see http://www.state.gov/r/pa/ei/wh/c7889.htm
- 2. The nine combatant commanders are comprised of two generals each from the Army, Air Force, and Marine Corps, plus three Navy admirals. All report directly to the Secretary of Defense.
- 3. See the USSOUTHCOM Theater Security Cooperation mission statement at: http://www.southcom.mil/tscmis/TSCMIS.asp. For more on USSOUTHCOM's environmental security program, see Butts, Sonski, and Reynolds (2005).
- 4. A second cooperative program focused on developing a shared early warning network for the nations of the Gulf Cooperation Council (GCC) plus two others. This simple civil defense system would warn if a ballistic or cruise missile was launched by another nation in the region. Since the intended target is the least likely to detect the incoming missile—neighbor-

ing nations have a better chance of recognizing the missile's profile—a mechanism that can rapidly convey the information across national borders would deliver the warning before it was too late.

- 5. For more on the conferences in Central Asia, see Reynolds and Butts (2002).
- 6. For an excellent executive summary and detailed report on this meeting, please see Butts et al. (2002), which is available at online at http://www.carlisle.army.mil/usacsl/Publications/ESAG1ETOC.htm
- 7. The medical surveillance group was added during the workshop.
- 8. From General Tommy R. Franks' prepared statement, submitted prior to testifying before the House Armed Services Committee, 107th Congress, March 28, 2001. Available online at http://www.house.gov/hasc/openingstatements
- and pressreleases/107th congress/01-03-28 franks.html
- 9. An exception is the U.S. Army Corps of Engineers, which routinely assesses the environmental impact of its projects.

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Flown in from Japan to aid in tsunami relief, U.S. air force crewmembers hand off boxes of water to Thai military officers at Phuket Airport (Thailand, Dec. 31, 2004). Credit: Sgt. Cohen A. Young (Courtesy of U.S. Pacific Command)

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