About the Strauss Center

The Robert S. Strauss Center for International Security and Law at The University of Texas at Austin is a nonpartisan research center that engages the best minds in academia, government, and the private sector to develop unique, policy-relevant solutions to complex global challenges.

About the CCAPS Program

The Climate Change and African Political Stability (CCAPS) program conducts research in three core areas, seeking to investigate where and how climate change poses threats to stability in Africa, identify strategies to support accountable and effective governance in Africa, and evaluate the effectiveness of international aid to help African societies adapt to climate change. The CCAPS program is a collaborative research program among the University of Texas at Austin, the College of William and Mary, Trinity College Dublin, the University of Denver, and the University of North Texas.

The CCAPS program is funded by the U.S. Department of Defense’s Minerva Initiative, a university-based, social science research program focused on areas of strategic importance to national security policy. Through quantitative analysis, GIS mapping, case studies, and field interviews, the program seeks to produce research that provides practical guidance for policy makers and enriches the body of scholarly literature in this field. The CCAPS team seeks to engage Africa policy communities in the United States, Africa, and elsewhere as a critical part of its research.

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Background

This course module is intended to provide background and discussion materials for consideration of how partner nations’ institutional capacity for disaster preparedness may be relevant to the U.S. military. There are three primary questions to consider:

(1) What is “institutional capacity” in the context of natural disasters and how can it be identified?

(2) How can preparedness be fostered at the national level?

(3) What are the implications of varying institutional capacities for the U.S. military?

**Institutional capacity**

What is institutional capacity? Capacity is understood, most simply, to be “the ability of people, organizations, and society as a whole to manage their affairs successfully.” In the context of a national government, this implies the ability “to perform functions, solve problems, as well as set and achieve a country’s development goals in an effective, participatory, and sustainable manner.” Institutional capacity, then, refers to organizations or countries having institutions in place with both the resources and authority to facilitate these outcomes.

With regard to natural disasters, understanding the nature of institutional capacity requires more specific attention to the demands that natural hazards place on countries. At the 2005 World Conference for Disaster Reduction, participants agreed to a framework that set priorities for action. These priorities provide a basis for specifying the required components of institutional capacity with regard to disaster preparedness and risk reduction. As shown in Table 1, the Hyogo Framework outlines both goals and examples of proposed activities and outcomes. This can be used to evaluate the degree to which a country has developed the capacity to reduce the risk of disasters and prepare for natural hazards.

Icebreaker Questions

(1) What are the major threats from natural hazards in developing countries?

(2) Generally speaking, what roles can the military play in disaster response?

(3) Can the military also play a role in disaster preparedness? If so, in what way(s)?

Fostering Preparedness

Research on natural disasters has highlighted a range of potential factors that may influence the likelihood of national governments to invest in disaster preparedness. CCAPS researchers investigated these arguments in the context of disaster preparedness in Africa and came to the following conclusions: the two clearest predictors of investment in preparedness activities are economic strength and perceived risk of natural threats. In other words, those countries that are richer and those that anticipate significant threats from natural disasters in the future are more likely to invest in preparedness than their poorer and perceived safer peers.

However, these factors explain little when there is limited electoral incentive to invest in disaster management or minimal bureaucratic capacity to implement preparedness programs. Electoral conditions and political development affect whether governments have the incentive to invest in preparedness activities and the institutional capability to do so. In addition, domestic civil society and external actors often offer important support to governments, and it is the explicit focus by these non-state actors on both preparedness and response that seems to limit the risk that international funding for disaster preparedness would reduce domestic spending. Efforts by external actors are also most successful when implemented in partnership with a committed domestic government.

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Based on these findings, there are a number of general conclusions that are relevant for external actors interested in supporting disaster preparedness efforts in a given country. First, general development aid—such as that which helps to increase GDP per capita and to build an effective bureaucracy—is likely to provide indirect support for disaster preparedness. Second, specific development programs—such as jobs programs and infrastructure development—can be implemented in ways that take disaster risk into account, such as through sustainable livelihoods programs and the use of building procedures that explicitly address natural hazards. Third, disaster-specific assistance can be targeted in ways that encourage informed preparedness—such as weather information systems that predict and provide early warning of hazards, education and training programs that foster local preparedness, and aid that is conditional on the implementation of other risk reduction programs.

This last recommendation is also relevant to the specific kinds of disaster-related support and assistance provided by military organizations. Historically, the military has typically supported disaster response efforts through mobilization of medical assets, heavy lifting capabilities, and security operations. In addition, external military forces, such as those from U.S. Africa Command, have supported preparedness efforts with training programs for the military in other countries and assistance with emergency planning efforts. To the extent that these programs can be implemented in partnership with enthusiastic local governments and structured to emphasize preparedness, they are likely to be more successful in reducing the threat of natural hazards and the demand for external response support in the future.

<table>
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<tr>
<th>Priority</th>
<th>Examples of Activities and Proposed Outcomes</th>
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| 1. Ensure that disaster risk reduction (DRR) is a national and a local priority with a strong institutional basis for implementation | - Institutional mechanisms (national platforms) with designated responsibilities  
- DRR part of development policies and planning  
- Assessment of human resources and capacities  
- Foster political commitment  
- Community participation |
| 2. Identify, assess, and monitor risks and enhance early warning | - Risk assessments and maps  
- Indicators on DRR and vulnerability  
- Early warning; people-centered information systems  
- Scientific and technological development including data sharing, space-based earth observations, climate modeling, and forecasting |
| 3. Use knowledge, innovation, and education to build a culture of safety and resilience at all levels | - Information sharing and cooperation  
- Networks across disciplines and regions  
- Use of standard terminology  
- Inclusion of DRR in school curricula  
- Training on DRR for communities and local authorities  
- Public awareness and media |
| 4. Reduce the underlying risk factors | - Sustainable ecosystems and environmental management  
- DRR strategies integrated with climate change adaptation  
- Food security for resilience  
- Protection of critical public facilities  
- Recovery schemes and social safety nets  
- Public private partnerships  
- Land use planning and building codes  
- Rural development plans and DRR |
| 5. Strengthen disaster preparedness for effective response at all levels | - Policy, technical, and institutional disaster management capacities  
- Dialogue and coordination between disaster managers and development sectors  
- Regional approaches to disaster response with risk reduction focus  
- Preparedness and contingency plans  
- Emergency funds |
Exploration Questions

(1) What do you know about the current role of the U.S. military in responding to natural disasters outside the U.S.?

(2) What do you know about the role of the U.S. military in helping other countries to prepare for natural disasters, such as AFRICOM's Disaster Planning and Preparedness Program?

(3) Have you participated in a disaster-related mission while in the military? What was your experience and what recommendations would you make for future missions based on that experience?

(4) How do these efforts complement other development-oriented programs of the U.S. government, such as those conducted by USAID?

(5) How can the U.S. military best work with other U.S. and international agencies in promoting disaster preparedness in other countries?

(6) What are the implications for the U.S. government, and the military in particular, when developing countries fail to prepare for natural hazards?

Scenario 1 - Disaster Preparedness in Kenya

Kenya's national government has expressed a general interest in development assistance. While the country is one of the richest in Africa, it has struggled to implement some development programs within the institutions of the government. In general, the Kenyan bureaucracy has less capacity than many of its peer countries to implement policies, and the government relies on non-state actors for many development activities.

The government has yet to approve a national disaster management policy and sub-national government coordination is lacking. The National Disaster Operations Center is tasked with coordinating all disaster-related government efforts, but is minimally staffed and often not incorporated into response activities of external actors. The majority of the progress made to date on the goals of the Hyogo Framework has been due to efforts of international and non-governmental organizations.

Kenya faces two major types of natural hazards, fast-onset flooding from rainstorms and slow-onset drought conditions that can lead to food insecurity. Preparedness for these threats at local levels is paramount to reducing the risk of disasters, but nascent training and response programs in rural areas have received little financial or administrative support from the central government. Impending threats from weather-related hazards in densely populated urban areas have received even less governmental attention.

(1) Is this an area for U.S. assistance? Is it an area for assistance from the U.S. military?

(2) If so, in what ways might the U.S. support national and local capacity building?

(3) Should the U.S. expect to provide similar or ongoing assistance in the future?
Scenario 2 - Disaster Response in Mozambique

Mozambique is hit by a cyclone near the capital region of Maputo, on par with the massive storm of 1999, at the same time the central regions of the country experience an influx of water due to heavy rains in Zambia and Malawi. Several major highways are impassable, disrupting the flow of supplies into remote areas. The sewage system in Maputo is overburdened, leading to flooding of the central business district and an increased threat of disease throughout the capital.

Local disaster preparedness groups in rural areas respond well and provide support to cut-off regions, but their supplies are limited. In the capital, no similar groups exist and signs of looting and other forms of lawlessness begin to emerge. In addition, the national disaster agency itself is in a flooded location and communications with satellite offices are unstable.

International organizations on the ground provide basic support in the form of first aid supplies and basic necessities. The Mozambique government attempts to provide evacuation services in both the capital and remote areas, but does not have the capacity to respond in all areas at once. Due to only limited flooding in Maputo in the past, there are no actors on the ground explicitly focused on repairing the sewage system, leading to continued difficulties in the capital.

(1) Is this an area for U.S. assistance?

(2) If so, how and where can the U.S. augment existing national capacities?

(3) Should the U.S. be willing to provide similar assistance in the future?

U.S. Government and International Organization Resources


### Academic Resources


### CCAPS Resources


