

Engineers Build Capacity in Stability Operations

By Colonel Jeffrey R. Eckstein

It has been more than a year since the United States Army published Field Manual (FM) 3-07, *Stability Operations*.¹ Army engineers continue to conduct operations in Iraq and Afghanistan, as well as support geographic combatant commands. For most units, nothing has changed. Commanders still must balance the demands for clearance of routes, construction of combat outposts, protection of the force, execution of projects for the Commander's Emergency Response Program (CERP), training of host-nation security forces or local officials, and support for brigade combat teams (BCTs).

The United States Army Corps of Engineers (USACE) element in Iraq—the Gulf Region District—actively executed projects, and commanders balanced similar activities, but the district also supported capacity-development activities. This experience in the 21st century has taught us that we must do more than simply complete construction projects and execute missions in support of maneuver units. Success in the new environment requires the United States to build capacity in partner nations, and the Engineer Regiment is an indispensable component of capacity building. In keeping with the regimental motto of *Essayons*, this article examines the role of United States Army engineers in capacity building and recommends a framework to integrate it into engineer mission planning.

Stability Tasks

FM 3-07 provides the primary stability tasks, enumerating the specific areas that engineer units support. The three core stability tasks are as follows:

Establish Civil Security

Many engineer missions and projects directly support the Army, the maneuver BCTs, and the joint force, including performing route clearance, constructing combat outposts, and ensuring force protection.

Establish Civil Control

Engineer activities involve undertaking or supporting the completion of specific projects for the host nation, such as building or repairing police stations, training areas, and courthouses.

Restore Essential Services

The Army seeks to provide needed services to the host nation, including delivery of food, water, electricity, and medical service. Engineers support Army units that are assigned these missions.

Other Stability Tasks

Two other stability tasks—support to governance and support to economic and infrastructure development—are not part of the core mission-essential task list, but engineers may be required to provide assistance as requested by other agencies.

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Building Capacity

A review of stability operations in FM 3-34, *Engineer Operations*, reveals a corresponding list of missions and tasks for stability operations. In reference to capacity building, the manual states that “support for infrastructure development may be extended to assist the [host nation] in developing capability and capacity.”² However, it does not discuss in detail how engineers support capacity or capability development. It focuses on performing assessments of infrastructure features and gaining an understanding of their current situation within the host nation. The manual lists typical missions or projects that engineers may undertake or support, some of which include immediate repairs of infrastructure to support the host nation.³

FM 3-34 is the only Army manual to directly address engineer involvement in capacity building, and this is under the heading of infrastructure development. Engineer experiences in Iraq and Afghanistan have involved such

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elements of capacity building. These efforts include a Multinational Corps–Iraq engineer staff liaison team with the Republic of Iraq Ministry of Oil, USACE subject matter expert support to the Baiji Oil Refinery, and numerous CERP projects focused on improving local services. Yet, these efforts fall short of what is required for success in the 21st century.

FM 3-07 offers a pivotal insight as to the importance of capacity building, stating that “through stability operations, military forces help set the conditions that enable the other elements of national power to succeed in achieving broad goals of conflict transformation.”⁴ A key aspect of setting the conditions for success—second only to security—is building host-nation capacity from the ground up. Capacity building is the area in which engineers can accomplish their traditional tasks and significantly contribute to setting conditions for successful conflict transformation.

Engineers need a stability operations framework to shift the traditional focus from completing standard projects to a broader strategic perspective of improving host-nation capacity. With such focus, the way engineers execute a project may prove more important to long-term stability than the actual project. Recognizing this, USACE recently published Engineer Regulation 5-1-16, *Capacity Development–International*,⁵ requiring all its international projects and programs to incorporate capacity development.

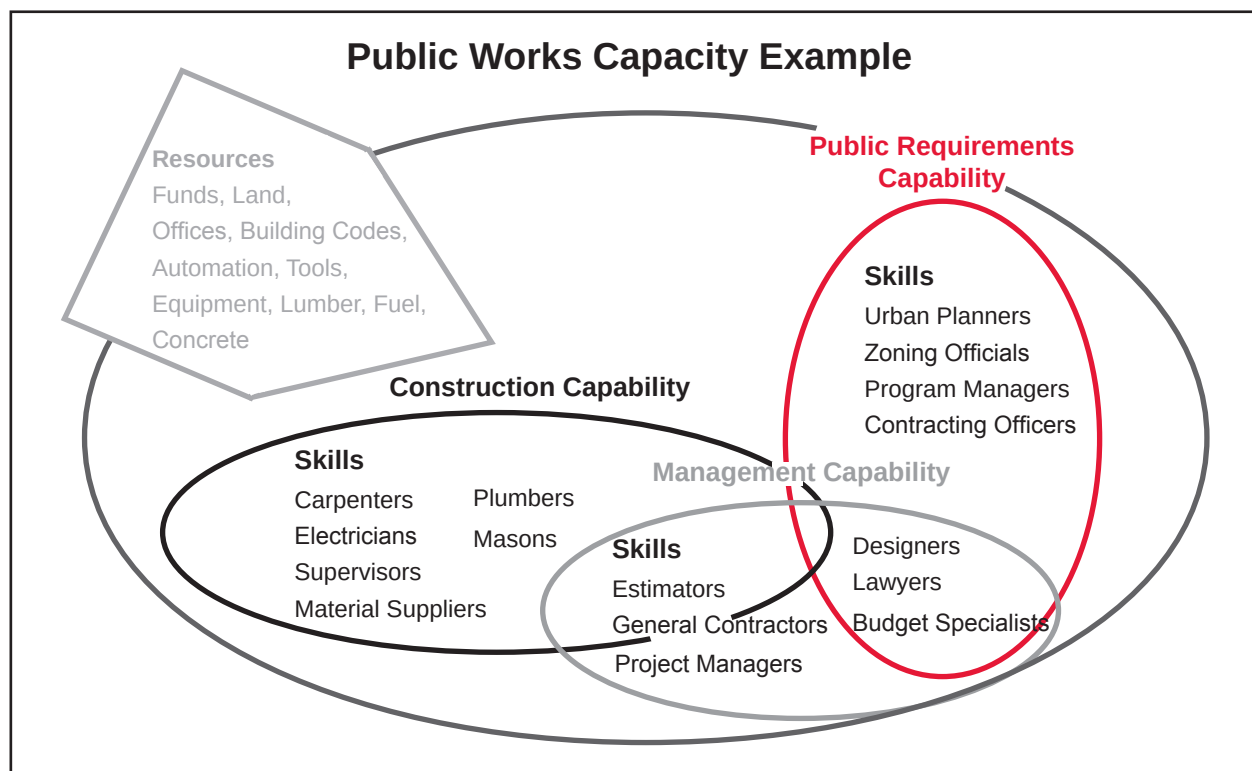
A similar approach for tactical and operational units employed in stability operations is critical. Any framework to assist with analyzing and integrating capacity building in engineer operations must include understanding the relationships among skills, capabilities, and capacity. FM 3-07 provides a definition for capacity building in its glossary:

*The process of creating an environment that fosters host-nation institutional development, community participation, human resources development, and strengthening managerial systems.*⁶ From this definition, it is clear that capacity includes institutions, communities, human resources, and management systems.

Creating Capability

The Army does not define capability, but Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, defines it as “the ability to execute a specified course of action.”⁷ That definition is not useful in the context of capacity building. A better definition of capability is *the collective employment of resources and skills to achieve a desired outcome*. Resources may include raw materials, funds, offices, building codes, people, automation, and tools. Skills are a person’s knowledge or physical ability to execute specific tasks. Understanding the skills needed to create capability and appropriate capabilities to build capacity is the key to capacity building. Capacity cannot be developed directly from skills. To apply a multiechelon approach, one must understand the relationships among resources, skills, capabilities, and capacity.

The figure below is a simplified depiction of the elements of public works capacity in a local government. Available resources, coupled with skills, create the capability. The grouping of several capabilities builds capacity. Here, resources and construction skills create construction capability. The public requirement, construction, and management capabilities build the public works capacity. Skills may not be unique to a capability, and capabilities are not



necessarily unique to capacities, but the figure does not depict this possibility.

For engineers, the need for a host nation to possess public works capacity creates new challenges. Instead of delivering a project or executing a mission in support of a maneuver unit, the engineers must focus resources on improving host-nation skills, capabilities, and capacity. The engineer headquarters must enable capacity building during project execution. An example that illustrates the relationships among skills, capabilities, and capacity may be useful. Suppose that an engineer unit receives the mission to construct a police station. The unit can use its resources, funding, and personnel to execute the mission by purchasing materials for troop construction, or it can attempt to obtain a construction contract. However, while considering a construction contract, the unit determines that there is no host-nation contractor available for, or capable of, executing a construction contract. This lack of civil capacity means the unit must complete the construction mission with its own personnel, but it also presents an opportunity to build host-nation capacity.

Rather than directly executing the project, the unit can seek unemployed local nationals and train them as carpenters, masons, electricians, and plumbers. After a training period, the unit can use the trainees, through on-the-job training, to execute the project. Army engineers provide the drawings, materials, supervision, and coordination with host-nation officials for the actual construction of the police station. Multiple iterations of such activities could result in developing a pool of skilled host-nation workers.

If skilled workers already exist but host-nation construction companies do not, the engineer unit can serve as a general contractor. The unit can build construction capability by hiring the skilled workers and training native personnel as superintendents and quality control managers—thereby teaching future contractors who can bring local skilled workers together for new projects. Potentially, by working with the local government, the unit could train and mentor a local agency in contracting for supplies, workers, and project development and implementation. Such practices lead to building or increasing capability within the host nation. Cumulatively, they can lead to increased capacity within the host-nation government and society.

Responsible government agencies require training or mentoring to develop programs that identify and prioritize requirements for public works such as police stations. Key agency responsibilities include acquiring funding, determining which projects to execute, and managing project execution. When key government agencies can do this in conjunction with sufficient construction and management capabilities, the host nation has increased its capacity. Increasing capacity is a very difficult task to undertake. It is outside the bounds of what an engineer unit would normally attempt, but capacity building is still within the realm of project managers. Field grade leaders can easily identify the requirements and interrelated actions. As a minimum, engineer leaders can conduct the initial assessment and make a proposal for increasing capacity. The point is

that engineers can increase skills, capabilities, and capacity while identifying gaps for the host nation and contribute even more significantly to conflict transformation.

The intent of the example on page 19 is to show the relationships among skills, capabilities, and capacity. During my 15 months in Iraq, many people talked of increasing the capacity of the Iraqi security forces, ministries, or provincial governments. What was often missing was a discussion of whether the particular Iraqi elements had the skills and capabilities required to increase their capacity. We usually provided resources and mentoring in the belief that we would build capacity, but too often we missed the mark. If we understand how resources, skills, capabilities, and capacity are related, we can effectively work to improve skills and capabilities, use resources, and build host-nation capacity. Instead of simply executing projects, engineers could be an important participant in the capacity-building process and add significant value to stability operations. This is equally true for theater engagement.

Summary

Again this year in *Cobra Gold*, the United States Army Pacific's annual engagement exercise with Thailand, planners will determine the best project to build based on U.S. training objectives and the needs of the host nation. Rather than looking back over the past 20 years at 20 successful projects, we might better apply a capacity-building framework that focuses on the relationships between resources, skills, capabilities, and capacity building. Then perhaps, 20 years in the future, instead of looking back at deteriorating projects, we could look back at the number of trained, skilled workers; new construction businesses; and innumerable projects planned and coordinated by the regional government and built through host-nation capacity. Such successes would contribute to achieving the U.S. objectives of a stable and vibrant modern nation-state. Such an achievement would be equally viable in Iraq and Afghanistan. 

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Endnotes

¹FM 3-07, *Stability Operations*, 6 October 2008.

²FM 3-34, *Engineer Operations*, 2 April 2009, para. 5-34, p. 5-9.

³FM 3-34, para. 5-34, p. 5-9.

⁴FM 3-07, para. 2-6, p. 2-2.

⁵Engineer Regulation 5-1-16, *Capacity Development—International*, 30 June 2009.

⁶FM 3-07, p. Glossary-3.

⁷Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, 12 April 2001, p. 74.