

Letter No. 4 to AFRICOM

Sustainable Resources and Security in the African Context: Opportunities for Conflict and Cooperation

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On average, the continent of Africa is exemplified by large populations, economies supported by subsistence farming, and forced migration due to natural cycles. The renewable resources of land and water are crucial to livelihoods and the creative economic energy of a people. Nonrenewable resources of the continent such as minerals, metals, and some fossil fuels are in abundance, providing economic and political clout for individual states and economic opportunity for the region if they are legitimately and appropriately utilized. Transnational migration of people or animals and the interstate rivalry for minerals can create physical and political detritus that puts at risk the security of a region. For members of US Africa Command (AFRICOM) to operate

effectively with other elements of US national power, multinational security forces, and regional security organizations, they must understand the inseparable natural, cultural, and political environments of Africa. A holistic understanding of the environment will provide no shortage of joint and coalition opportunities for AFRICOM to build capacity in Africa.

Many effective agreements and their attendant institutions related to sustainable resource management are currently in force or in development across Africa by Africans. Individual nations, ethnic groups, and regional nongovernmental organizations (NGO) already have working transnational relationships that monitor, control, or preserve African states' own interests and their common natural resources, such as transfrontier conserva-

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tion areas. Since resource exploitation can be for the common good of a region or can produce fractious engagements between states or nonstate actors, AFRICOM should engage to add value to existing arrangements and provide innovative energy for new cooperative agreements through its unique, broad-based organizational structure. Specifically, the US Air Force's Seventeenth Air Force should be instrumental to AFRICOM as a conduit, bringing to bear all the possibilities of air, space, and cyberspace to merge in collaboration with other elements of national power through policies and strategies that promote knowledge sharing, data flow, and cross-cultural military engagement in support of a sustainable resource environment.

Sustainable Resource Security and the Air Force Mission in Africa Command

Although it may not be immediately apparent how the mission of Seventeenth Air Force aligns with the goals of AFRICOM or how exploring the new horizon of environmental security serves the interests of the United States as defined in the past, there are good reasons to engage the dialogue in these areas, given the realities of Africa and the world in the twenty-first century. AFRICOM's position as an organization within the US Department of Defense and its unique command relationship with the US Department of State can assist in building the capacity of Africans to maintain peaceful, sustained natural and political environments within the core missions of the command's US Air Force component—Seventeenth Air Force. Efforts within each of the core missions of the US Air Force—air, space, and cyberspace—could assist African nations in creating and monitoring agree-

ments, mitigating conflicts, and preventing armed struggles over resources. Moreover, Seventeenth Air Force could conduct such efforts in a manner that increases the capacity of Africans to create a sustainable future.

As a way of understanding Seventeenth Air Force's potential in helping Africans secure their resources and the peaceful relationships related to those resources, it may be helpful to make a distinction first between the conventional idea of sustained security and the concept of environmental sustainability. Important differences exist between the conventional military use of the word *sustained* and the term *sustainability* in the context of the wise and appropriate use of resources over time—that which also supports stable social relationships. Ultimately, sustainability also refers to the capacity of individuals, Africans in this case, not only to survive but also to govern their own affairs and resources, as well as recognize and support sustainable governance practices and regimes—those that ensure the long-term viability of resources and positive, peaceful relationships that in turn support economic and social health.

For example, in the military context, *sustained* usually refers to maintaining military logistics, supply, unity of effort, and long-term military operations.¹ In the context of AFRICOM, sustaining the force to complete the mission is important, but the mission must be considered not only in administrative terms but also in terms of its unique focus. Thus one should also consider the nuances of the word *stability*. In military terms, stability refers to a steady state.² Stability is generally a trigger event or point in time used by decision makers as a metric with which to draw down forces, reduce peacekeeping efforts, change strategy, or begin planning for the next phase.³ But stability is

not the same as sustainability. For example, the conventional intervention formula calls for first keeping a sustained presence of US forces and then reducing those forces while training indigenous forces to maintain the status quo of equal and opposite power in a conflict. However, this scenario does not often result in creation of the longer-term sociopolitical and environmental *conditions* for sustainable security. It therefore does not necessarily protect US national interests in the long term.

This conventional view of stability is organized by the existence of conflict rather than more visionary scenarios. Therefore individual Africans are not often engaged in developing those networks of relationships, knowledge, and agreement that would both create and sustain a “normal” peaceful environment over time and across multiple generations. Rather, they are often trained to sustain only a military equilibrium within the parameters of a specific conflict. This strategy does not necessarily address the underlying conditions of conflict (in this case, the sustainability of resources) or make efforts to create alternative conditions—those that would allow the population to stabilize over time around more positive attractors than an uneasy peace. Again the concept of sustainability suggests that we must look beyond the conflict itself to those conditions that will reduce the potential for violence and the disruption of economic and social relationships from which true stability emerges.

Indeed, US Air Force doctrine and future force-acquisition documents have addressed the need for building more partnership capacity within the context of irregular warfare as a core mission function.⁴ These changes indicate a greater

emphasis on engagement and a longer view of security, stability, and, ultimately, a sustainable security strategy. AFRICOM’s unique interagency focus and Seventeenth Air Force’s new engagement focus can go a long way toward migrating current military stability operations into an integrated, “whole-of-government” strategy that will reduce resource conflict and prevent conflict, leading to sustainable security in Africa.

This broader concept of sustainable security may yet seem implausible within the military framework, or it may seem that it produces a kind of “mission creep” into areas that rightfully belong to the US interagency process among the US Agency for International Development and NGOs. However, the days seem to have passed when agencies of any government can act on their individual missions alone without seeing the bigger set of relationships to which they are all party. In this, the unique command structure of AFRICOM could effectively blend the national military strategy with an actionable national security strategy through the whole-of-government approach, engaging the different forms of national power including diplomatic, informational, military, economic, and cultural—and we would add here, environmental.

AFRICOM could incorporate military stability operations that manage the tenuous balance of equal and opposite forces into a longer-range view of sustainable security that is more human-centric, symbiotic, and collaborative, not merely with a whole-of-government approach but with citizens, to produce a self-sustaining future in Africa.⁵ That is to say that preventing wars is as important as winning them.⁶

Sustainability and Security of Natural Resources

Security can be threatened by population change, human migrations, globalization of economies or policies, external factors, and resource or energy access. Both the existence and outcome of all these threats are influenced by the degradation of resources—both renewable and nonrenewable—and, depending upon how these conditions are addressed nationally and internationally, resources can tip the balance toward either conflict or cooperation.

The broad definition of resources used here reflects the complexity of the African continent and the presence and importance of multiple aspects of the environment in the day-to-day relationships of the African population. The definition includes the energy resources of fossil fuels and hydroelectric power for global and local energy needs; the geologic strata with resources that hold untold minerals for our modern quality of life; and, most importantly, the renewable and restorable resources of arable land and productive fishing waters that yield life-giving food commodities. The ultimate resource, the source of life itself—potable water—is used here to illustrate both the problems and potential of environmental security in Africa.

Subsistence Farming and Resource Conflict and Cooperation

Recent examples of resource conflict and cooperation across the geographic and historic expanse of Africa illustrate the potential of a new approach to sustainable security implicit in the AFRICOM mission related to capacity building and engagement of African citizens through a whole-of-government approach. In the Niger Delta, for example, oil takes center stage

and generally feeds conflict by creating or exasperating economic disparities through the environmental destruction of arable land and productive fisheries or the displacement of populations. The Democratic Republic of the Congo (DRC) exemplifies how government policies in relation to a renewable, limitless, and clean resource of water such as the Congo River can cause resource conflict by forcing displacement of populations in order to build new hydroelectric-generation facilities. Also, the DRC hosts some of the richest geological caches of minerals that are in high demand in today's technology. This resource conflict of minerals has slowed the peace process following the DRC's long and bloody civil war in the eastern half of the country. Indigenous and foreign militias continue to battle over control of mines or mineral deposits to support their various belligerent actions against the population and the environment.

Each of these energy or mineral-resource conflicts ultimately destroys or limits access to the important resources of arable land and productive fisheries that provide life-sustaining food and life-giving potable water.⁷ Water is as important or perhaps more so than minerals or oil because it supports not only life but also culture and established patterns of relationship and meaning that grow up around bodies of water.

For example, a majority of Africans are dependent on subsistence farming, a form of agriculture that predominantly supports the individual, family, or clan directly from a simple diet produced on arable land or fish harvested from productive waterways (fig. 1). By definition, subsistence farming means minimum production of food necessary for survival. Subsistence agriculture, however, is only one end of the potential spectrum of environmental dependency in Africa. There is a range of productive capacity from subsis-

tence to the production of excess commodities that can be marketed or bartered. But, for a majority of Africans, agriculture is production for pure survival. Conflict over resources has effects that extend beyond the particular conflict, which may result in the degradation of those resources and may limit access to arable land or fish habitats. The needs of survival then foster further conflict—or, as often, make starving or displaced populations vulnerable to oppression and manipulation.

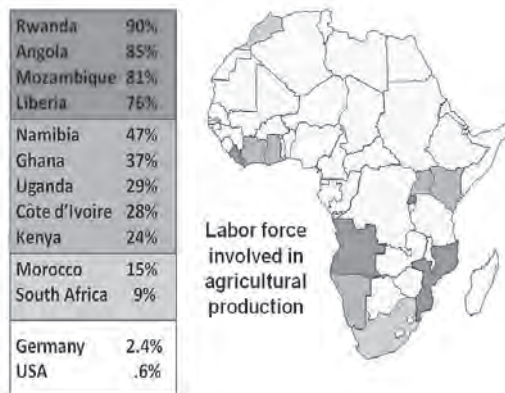


Figure 1. Subsistence agriculture in Africa. (Data from US Central Intelligence Agency, *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/index.html> [accessed 24 February 2010].)

Traditional commercial or family farms, not subsistence farmers, generally produce commodities or a variety of products beyond what is needed to support life. The products or renewable resources generated by the farmer are bartered for other products or sold for hard currency and thus provide a monetary income for the farmer and a diverse economy for the region. Although subsistence farming is becoming increasingly unsustainable with the depletion of

arable lands, this commodity farming still holds potential for stabilizing populations and their relationships. But it is dependent on mature policies and practices related to the safeguarding and sustainable use of common resources.

A variety of conditions in Africa keep populations dependent on subsistence agriculture. These include forced population migration caused by environmental degradation resulting from natural causes, shortsighted government policy, or military action that reduces production. The result is the same, however—emergence of a marginal security environment for sustainable livelihood. The presence of environmental and resource degradation produces shorter time horizons for planning, storing, or exchanging the fruits of a population's labor. Poor policy also prevents ownership of the arable land or water access needed to generate a commodity. In many cases, public policy in Africa encourages large government or commercial resource-extraction operations to damage the surrounding environments with impunity and to reduce the resources of arable land and productive fisheries. An unenlightened security environment may also contribute to dependence on subsistence agriculture by permitting or creating ungoverned spaces where militias or even legitimate government security or police forces confiscate or damage the crops or limit access to land and water.

Of course, all subsistence agriculture is not caused by policy and human disorder. Weather is as much a cause of subsistence agriculture in Africa due to a lack of access to, or interpretation of, commonly available weather data. AFRICOM and Seventeenth Air Force can certainly assist Africans in the latter sustainment issues with data harvesting and distribution, along with the training necessary to interpret the geological and meteorological

data available. AFRICOM and the Department of State, its companion command functionary, also can reduce resource conflict by supporting good governance and resource-extraction policy through training, education, and knowledge sharing that support sustainable resource practices.

The Complex Nature of Resource Conflict: Water and Oil

There are ample instances of conflict related to water in Africa. For example, the Niger Delta region of Africa hosts one of the largest battles over energy resources on the continent. Even though the Sudan and Darfur may generate more notoriety and the conflict over oil in Angola is expected to continue into the future, Nigeria demonstrates the complexity and interrelated nature of resource conflict in the African continent.

Conflicts over fossil fuel resources dominate the news from Nigeria, but again such conflict produces collateral effects. NGOs closely track the damage and sources of damage from the oil conflict.⁸ Some NGOs cite multinational companies as the villain, but others cite the government, and still others cite the national military establishment as the *casus belli* of any Nigerian conflict.⁹ Resource conflict “Nigeria style” offers a good example of how complex the outcomes of conflict are when there is massive destruction of human life and/or the environment, as well as poor governance, an unprofessional military, and spillover strife from a number of other African frays that either contribute to resource conflict or are fueled, perpetuated, or augmented by the resource of oil. For example, environmental degradation that promotes injustice is enabled by the state that benefits from sup-

porting multinationals and their unsustainable practices.¹⁰

By emphasizing resource sustainability as the issue rather than aligning itself with one side of the conflict or another, AFRICOM can do much to bring focus to and improve the conditions which lie at the foundation of many conflicts that are never purely about the commodity of the resource, but also about the sociopolitical relationships it supports. Ultimately, for example, the damage done in the name of oil or mineral extraction and its associated strife negatively affect the ability of individuals to farm, fish, or provide simple subsistence for their families. This extends the conflict from one over an economic commodity like oil to the production of life-sustaining commodities from arable land and productive waterways. According to Amnesty International, for example, oil conflict in the Niger Delta has damaged agricultural production, beyond subsistence, of yams, cassavas, cocoa, pumpkins, and various fruits. Fisheries, inland and shellfish beds, spawning grounds, and other living waterways have equally been destroyed or damaged beyond productive use.¹¹ Amnesty International also argues that the African Charter and international law bind the signatory countries to actions that protect and improve food sources.

AFRICOM, then, should not only consider the conflict over oil in Nigeria but also look at the “other end” of the conflict as a starting point for building the capacity of the population to govern in a more sustainable manner. Working to establish, monitor, and maintain regional agreements and international law that protect food sources will at least protect subsistence farming and potentially will then translate into excess food production, providing the fuel of trade and commerce for a sustainable security in the region. In

the DRC, there are also many nonrenewable mineral resources to spur conflict that have encouraged the development of mining codes and regulation of multinationals who supported rebel groups in order to manipulate mineral rights.¹²

More than Oil: The Congo River

Directly linked to this conflict over minerals in the DRC is the Congo River, which flows some 2,900 miles and drains approximately 1.3 million square miles of central Africa. From the capital of Kinshasa, the Congo River drops 280 meters to the Atlantic Ocean some 350 kilometers downstream.¹³ The conflict in this case is not over a potable water resource for survival, which is in ample supply, but over the hydroelectric power generated near the mouth of the river—used primarily for extracting minerals in the east and for providing energy for certain sectors of the population in the west.

For example, the energy generated from the Congo River at the Inga Dam complex southwest of Kinshasa, although poorly maintained and poorly regulated, is a renewable, sustainable resource and relatively friendly to the environment. The electrical energy available and needed for the government-owned mines to extract nonrenewable mineral resources in the eastern DRC comes primarily from this complex, which consists of two dams with multiple turbines for power generation. The majority of the turbines for these dams are inoperative at any given time due to inadequate preventive maintenance and infrastructure, lack of funding, poor training, or government inaction. A power grid extends from this degraded hydroelectric complex to supply the state-owned mining industry that spans a country half the size of the United States. At the same time, only six percent

of the country's population (those living in Kinshasa) can access electrical power.

To complicate matters, the World Energy Council is proposing a third dam to bring the energy output of the Inga Dam system up to 39 billion kilowatts, including distribution systems as far north as Europe.¹⁴ Just the proposal itself has already threatened thousands of the indigenous population. In 2006, for example, nearly 8,000 people were ordered to move from their land to make way for this anticipated expansion of electrical capacity. With no recourse or even an offer of remuneration, these people have remained in place in an act of civil disobedience. Ironically, because of inadequate governance and inconsistent rule of law within the DRC, they are momentarily secure. However, the threat of involuntary displacement and population migration remains, therefore increasing the need for subsistence agriculture.

Poor governance and inadequate policy, along with the demand for resources in the east of the DRC, have been especially myopic. Viewing the Congo River, for example, as merely a conflicted commodity negates the opportunity to foster a thriving artery of commerce, trade, and cooperation, thus planting and indeed nurturing the seeds of environmental degradation leading to social instability. Further, these poor policies and governance practices are creating a cascading effect as environmental degradation and misuse, putting more pressure on already struggling subsistence farmers. For example, the hydroelectric power required for large governmental and commercial extraction industries leaves little for cooking, heating, or other productive uses. As a result, subsistence farmers have turned, once again, to charcoal manufacturing to generate currency and purchase

foods grown less and less frequently at the local level.¹⁵

Water: A Reason to Cooperate

Finally, water is certainly the most important resource for sustaining life, intimately woven into the daily habits and interactions of families and their communities. It is also a common resource that provokes the dialogue necessary for building positive relationships and governance capacity. That is, the resources of arable land, productive fisheries, and water are at least as much a source of agreement, cooperation, and treaty as they are a source of conflict. In part, this suggests that while looking to “fix” problems within the African sociopolitical landscape, AFRICOM may also want to look at what is already working as a starting point for how to engage the Africans.

For example, although many people believe that the next great battle will be over water rather than oil, the fact remains that more cooperation than conflict is fostered through water competition and its resolution between nations. Historically the most notorious conflicts over water occur within the borders of one country among multiple users. However, transnational water conflicts have been resolved with less violence while also building longer-term relationships and capacity for future agreement among partners. According to a study of worldwide water events in the last 50 years, for example, more than 70 percent were acts of cooperation.¹⁶

Africa, for instance, is already cooperating internationally about water. In an important example, Angola, Namibia, and Botswana have joined to protect the waters of the Okavango Delta and its environs in order to provide a sustainable livelihood for their joint populations through the Permanent Okavango River Basin Water Commission (OKACOM).

This tristate agreement has roots in regional and international environmental accords.

For Angola, OKACOM makes that country responsible for protecting the primary supply of clean water for the catchment area of the Okavango basin (fig. 2). South-eastern Angola receives ample rain from the northern equatorial region, which fills hundreds of tributaries that flow south to the Okavango River and east to the Okavango Delta.¹⁷ Angola’s geography supplies much of the water for the Okavango Delta, but Namibia’s desert climate contributes little. Before OKACOM, Namibia built aqueduct and underground networks of water collection and distribution to draw from the river and supply potable water to its growing population. Through OKACOM and other agreements, that country is committed to restrict use of the water from the Okavango River.

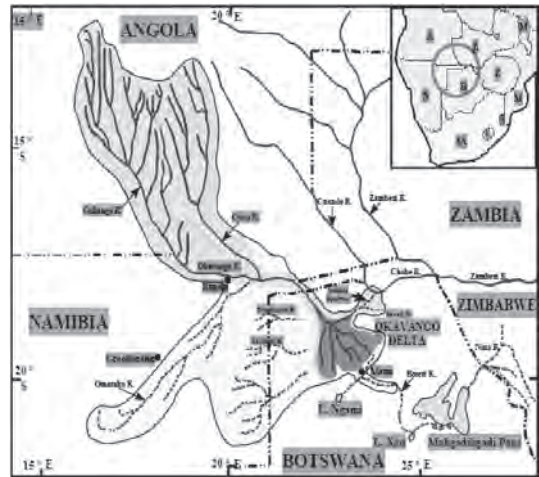


Figure 2. Okavango catchment. (From Melba Crawford, Amy Neuenschwander, and Susan Ringrose, “Investigations in the Okavango Delta Using EO-1 Data,” in Goddard Space Flight Center, *Earth Observing-1: Preliminary Technology and Science Validation Report, 2*, http://eo1.gsfc.nasa.gov/new/validationReport/Tech%20ology/Documents/Tech.Val.Report/Science_Summary_Crawford.pdf.)

The agreement protects Botswana's right to use the resource of the Okavango Delta. The largest inland river delta in the world, the Okavango and its attendant biodiversity provide a significant portion of Botswana's national economy. Botswana brought the Okavango Delta to the attention of the global community by recognizing its vast economic value for tourism and biodiversity. For Botswana the protection of the water source from Angola and the guarantees of self-regulated use of the Okavango River by Namibia hold in the balance Botswana's future and economy, representing an essential national interest for the sovereignty of the state. For each of these self-disciplined nations, OKACOM represents cooperation over the most important natural resource for human security. The national security risk for Botswana, because of its dependence on the goodwill compliance with OKACOM by Angola and Namibia, can be addressed by increasing the capacity of these countries to protect the agreement and to continue to engage each other in civic dialogue. This discussion was already initiated by agreeing to the OKACOM accord and by providing information and opportunities to extend the beneficial effects of this agreement.

In this sense, OKACOM provides a possible framework for how the other regions can be managed in order to produce a sustainable livelihood for those who share water as a resource, therefore reducing the future conditions of conflict and instability in the region. These kinds of pre-existing agreements may be positive touchstones for any AFRICOM effort to produce environmental security in the region. Again, the emerging relationships related to the already existing agreement are more important than any potential conflict because they provide a more generative platform for the continued devel-

opment of beneficial relationships and resource sharing into the future. It is perhaps particularly important for AFRICOM to pay attention to these regional developments and, as opportunities arise at the request of our partners, help preserve and nourish these first steps in the prevention of war.

Further, the frictions involved in resource harvesting, mining, or distribution present similar opportunities for cooperation and stability through internal policies of a stable state government or transnational agreements amongst states such as the noteworthy efforts of the Peace Parks Foundation or the transinternational agreements such as the Kimberley Process, which regulates the sale of "blood diamonds."¹⁸

Recommendations

Recognizing that the military can be an exemplar (and that, because water and other natural resources are the lifeline of Africans, stabilizing agreements may emerge from complex sources of meaning, relationships, and points of dialogue), we make the following recommendations to US AFRICOM and Seventeenth Air Force:

Develop capacity-building skills among those who interact and train Africans by recognizing that the AFRICOM mission reflects a significant shift in the conventional model for engagement of individuals.

We therefore suggest that training of military personnel in capacity building be taken seriously as a component of the operation. Elements of capacity building include the following:

1. Learning to listen to and engage Africans not only about what they want but what they know.
2. Learning to recognize local resources and local problem-solving potential; learning how to activate local knowl-

edge about resources that may have been lost or marginalized by colonization, conflict, or displacement; and therefore developing a pragmatic approach to problem solving rather than merely a bureaucratic one.

3. Developing sensitivity for how one action can have multiple effects. Capacity building does not always need a program as much as it needs an individual aware of the opportunity to teach, engage, or provide an example that increases another's capacity for self-governance.
4. Recognizing and appreciating the cultural and historical context within which resources and their sociopolitical relationships exist.
5. Developing a pragmatic approach to engaging the possibilities and limitations of the dual legal systems in Africa—those based on cultural and traditional law of ethnic groups and clans at the local and regional level and those more Western models operating in the more formal state government.

Develop an Environmental Training and Capacity Building Exercise (ENVIROCAP) that provides an ongoing exchange of experience, training, information, technology, monitoring systems, and resource-sustainability practices.

This exercise would also actively support a fuller understanding of the cultural meanings of environmental resources and practices, those which help support stable social relationships. This could be similar to current initiatives such as the Medical Civic Action or Veterinarian Civic Action programs.¹⁹ ENVIROCAP will provide a vehicle for sustaining the effort over time, rather than merely treating these opportunities for training and engagement as

one-time or short-term phenomena. Instead, it will focus on building long-term, interactive relationships with Africans.

Develop sustainable technology transfer.

AFRICOM should share appropriate, sustainable technologies and training on their use, maintenance, and repair, using current innovations that are workable and maintainable in a local, rather than only national, context. We recommend that AFRICOM assist regional organizations and countries in identifying and developing sustainable practices around resource extraction, use, and renewal through various monitoring technologies—those that also provide opportunities for building citizen capacity for good governance by providing transparent, accessible, and usable data. For example, Seventeenth Air Force personnel could train in their core missions of air, space, and cyberspace while also working with African states or regional organizations on (1) maintenance and interpretation of fundamental weather prediction and dissemination; (2) cartographic and multispectral data interpretation and collection from open sources; and (3) use of the open-source Internet to transparently analyze and process environmental data while assisting in the training and development of secure cyber conduits.

Such systems should ensure that public resources can be transparently monitored and provide accurate, usable data, including information about cultural understanding, and should ensure that resources are available for the widest possible dissemination. These actions should generate a robust dialogue on sustainable resource governance and practices.

Conclusion

By understanding the meaning of the dialogue, AFRICOM, through the pioneering efforts of its interagency processes, can respond to African states' requests for security assistance with a transparent and objective—yet culturally palatable—framework. Translating and merging traditional legal systems of the local culture with the formal legal systems of organized states and regional security organs can avoid clashes of culture, history, and resource stewardship while reactivating local knowledge that has been marginalized or lost in conflict or colonization. AFRICOM can prove instrumental in the seamless integra-

tion of environmental data creation and knowledge sharing through regionally and globally recognized systems and legal frameworks that will not conflict with traditional resource usage. Transparent knowledge exchange assists Africans in reducing conflict and activating their knowledge of resource management and economy. With each military-to-military engagement, AFRICOM must be inextricably connected to the interagency processes and coordinated with all elements of national power to assist Africans in identifying and translating resource-management practices, within their cultural context, to reduce conflict and maintain the peace. □

Notes

1. Joint Publication (JP) 3.0, *Joint Operations*, 17 September 2006 (incorporating change 1, 13 February 2008), III-30 to III-36, http://www.dtic.mil/doctrine/new_pubs/jp3_0.pdf.

2. See *ibid.*, V-5 to V-6, for the following description of stability operations:

Joint force planning and operations conducted prior to commencement of hostilities should establish a sound foundation for operations in the “stabilize” and “enable civil authority” phases. [Joint force commanders] should anticipate and address how to fill the power vacuum created when sustained combat operations wind down. Accomplishing this task should ease the transition to operations in the “stabilize” phase and shorten the path to the national strategic end state and handover to another authority.

Considerations include:

(a) Limiting the damage to key infrastructure and services.

(b) Establishing the intended disposition of captured leadership and demobilized military and paramilitary forces.

(c) Providing for the availability of cash.

(d) Identifying and managing potential “stabilize” phase enemies.

(e) Determining the proper force mix (e.g., combat, military police, [Civil Affairs], engineer, medical, multinational).

(f) Availability of [host nation] law enforcement and [human support services] resources.

(g) Securing key infrastructure nodes and facilitating [host nation] law enforcement and first responder services.

(h) Developing and disseminating [strategic communication] themes to suppress potential new enemies and promote new governmental authority.

3. “[Joint force commanders] must integrate and synchronize stability operations—missions, tasks, and activities to maintain or reestablish a safe and secure environment and provide essential governmental services, emergency infrastructure reconstruction, or humanitarian relief—with offensive and defensive operations within each major operation or campaign phase. Planning for stability operations should begin when joint operation planning is initiated.” *Ibid.*, xxi.

4. US Air Force, “Current Issues,” PowerPoint presentation, Curtis E. LeMay Center for Doctrine Development and Education, Air University, Maxwell AFB, AL, 2009.

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8. Amnesty International, *Nigeria: Petroleum, Pollution and Poverty in the Niger Delta* (London: Amnesty International Publications, 2009), <https://www.secure.amnesty.org/en/library/info/AFR44/017/2009/en>.

9. Hugo Slim, "By What Authority? The Legitimacy and Accountability of Non-governmental Organisations" (International Council on Human Rights Policy International Meeting on Global Trends and Human Rights—before and after September 11, Geneva, Switzerland, 10–12 January 2002), <http://www.jha.ac/articles/a082.htm>.

10. Matthew Todd Bradley, "Civil Society and Democratic Progression in Postcolonial Nigeria: The Role of Non-Governmental Organizations," *Journal of Civil Society* 1, no. 1 (May 2005): 62.

11. Amnesty International, *Nigeria*, 28–30.

12. Kent Hughes Butts and Arthur L. Bradshaw Jr., eds., *Central African Security: Conflict in the Congo: Proceedings: September 18–19, 2001* (Carlisle, PA: Center for Strategic Leadership, US Army War College, 2002), <http://handle.dtic.mil/100.2/ADA423517>; and Chen-I Lin and Allison Schuster, "Hydroelectricity Investment in the Democratic Republic of the Congo—The Grand Inga" (Medford, MA: Tufts University, 2008), <http://wikis.uit.tufts.edu/confluence/display/aquapedia/Hydroelectricity+Investment+in+the+Democratic+Republic+of+the+Congo+-+The+Grand+Inga>.

13. "Evolution in a Vortex: An Inventory of the Fishes and Mollusks of the Lower Congo River Rapids," MUSSELL Project, National Science Foundation, 2006, <http://bama.ua.edu/~musselp/m/news/supp/2006/congo.html>.

14. Lin and Schuster, "Hydroelectricity Investment."

15. Integrated Regional Information Networks, UN Office for the Coordination of Humanitarian Affairs,

"DRC: Charcoal Profits Fuel War in East," 28 July 2009, <http://www.irinnews.org/Report.aspx?ReportId=85462>.

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17. "Mine Action Country Portfolio—Angola," National Inter-Sectoral Commission for De-mining and Humanitarian Assistance (CNIDAH), African Development Information, http://www.afdevinfo.com/htmlreports/org/org_46637.html.

18. See Kimberley Process, <http://www.kimberleyprocess.com/>; and Peace Parks Foundation, <http://www.peaceparks.org/Home.htm>.

19. See JP 3.0, *Joint Operations*, VII-7:

[Humanitarian and civic assistance (HCA)] programs are governed by Title 10, USC, Section 401. This assistance may be provided in conjunction with military operations and exercises, and must fulfill unit training requirements that incidentally create humanitarian benefit to the local populace. In contrast to emergency relief conducted under [foreign humanitarian assistance] operations, HCA programs generally encompass planned activities in the following categories.

(a) Medical, dental, and veterinary care provided in rural or underserved areas of a country.

(b) Construction and repair of basic surface transportation systems.

(c) Well drilling and construction of basic sanitation facilities.

(d) Rudimentary construction and repair of public facilities such as schools, health and welfare clinics, and other nongovernmental buildings.