



PKSOI PAPERS

Ground Truth in Building Human Security

Douglas Batson



PKSOI PAPER

**Ground Truth
in Building Human Security**

Douglas Batson

November 2012

The views expressed in this report are those of the author and do not necessarily reflect the official policy or position of the Department of the Army, the Department of Defense, or the U.S. Government. Authors of Peacekeeping and Stability Operations Institute (PKSOI) publications enjoy full academic freedom, provided they do not disclose classified information, jeopardize operations security, or misrepresent official U.S. policy. Such academic freedom empowers them to offer new and sometimes controversial perspectives in the interest of furthering debate on key issues. This report is cleared for public release; distribution is unlimited.

This publication is subject to Title 17, United States Code, Sections 101 and 105. It is in the public domain and may not be copyrighted.

Comments pertaining to this report are invited and should be forwarded to: Director, Peacekeeping and Stability Operations Institute, U.S. Army War College, 22 Ashburn Drive, Carlisle, PA 17013-5054.

All Peacekeeping and Stability Operations Institute (PKSOI) publications are available on the PKSOI homepage for electronic dissemination. Hard copies of this report also may be ordered while copies last from our homepage. PKSOI's homepage address is: <https://pksoi.army.mil>

The Peacekeeping and Stability Operations Institute publishes a quarterly journal to update the peace and stability operations community on the research of our analysts, recent and forthcoming publications and upcoming conferences sponsored by PKSOI. Each quarterly journal has a specific theme related to peace and stability operations and a commentary by the Director of PKSOI entitled *The Director's Corner*. If you are interested in receiving this journal, please subscribe on our homepage at <http://pksoi.army.mil/subscription.cfm>.

ISBN: 978-0-9833514-8-1

DEDICATION

Dedicated with sincere thanks to National Geospatial-Intelligence Agency (NGA) colleagues and supervisors Darma Bennett, Karen Pauer, Randy Headrick, Jim Crawford, Rich Ilvarsonn, and Gary Hacker. Special thanks to Mr. Collin Agee, Senior Advisor for Intelligence Community Engagement, U.S. Army G-2 and Mr. Christopher W. Williams, former Washington, D.C. Representative for the United Nations Settlements Programme (UN HABITAT).

Acknowledgement and thanks are also kindly made to the U.S. Army Peacekeeping and Stability Operations Institute (PKSOI) and in particular, William Flavin and Karen Finkenbinder for their assistance and encouragement.

Lastly, many thanks to COL (Ret.) George Oliver, the Director of the Peacekeeping Institute, PKSOI's predecessor, from 1999-2003 for his comments on the drafts as well as his support through the Peace Operations Training Institute (POTI).

FOREWORD

Land has been at the center of human conflict throughout recorded history. Although there are now fewer interstate conflicts concerning land, we increasingly see conflict fueled by land tenure issues exacerbated through the inability of failing states to address such fundamental concerns of their populace.

Doug Batson provides a history of land governance issues and how such issues are integral to stability. He describes a world in which indigenous peoples are vulnerable to exploitation and forced eviction when land disputes occur. He shows us the role of land disputes, in places like Afghanistan, in which spoilers and insurgents have stepped in to exploit such situations. Through it all, he reminds us that land administration underpins development and supports social justice, economic growth, and environmental sustainability. In short, Mr. Batson draws a fundamental linkage between proper land administration and human security.

We are pleased to offer this monograph to help illuminate the essential role that good land governance plays in conflict prevention, conflict mitigation, and peacebuilding.

CLIFF D. CROFFORD
Colonel, U.S. Army
Director, PKSOI

ABOUT THE AUTHOR

Douglas Batson joined the National Geospatial-Intelligence Agency (NGA) as a political geography analyst in 2004. He is a staff member to the Foreign Names Committee of the U.S. Board on Geographic Names. In 2006 Batson was selected as an Office of the Director of National Intelligence (ODNI) Research Fellow. He conducted field research in Afghanistan that was published as *Registering the Human Terrain: a Valuation of Cadastre* (NIU Press, 2008) and continues to write about land tenure as a human geography theme. Most recently as a Fellow with the U.S. Army Peacekeeping and Stability Operations Institute, Batson examined the role of property rights in United Nations peacekeeping. He holds a Master of Education from Boston University, a Bachelor of Science in geography from Excelsior College, and the German language diploma from the Goethe-Institut. He previously worked for the U.S. Geological Survey and the U.S. Department of Justice. Sergeant First Class Batson completed a 22-year career in the U.S. Army Reserve as a Turkish linguist. He was awarded the Bronze Star Medal during Operation DESERT STORM.

GROUND TRUTH IN BUILDING HUMAN SECURITY

INTRODUCTION

During the Cold War, United Nations (UN) peacekeepers patrolled buffer zones between warring interstate parties who had signed a peace agreement and consented to the UN's "blue helmet" presence. Post-Cold War conflicts, on the other hand, have been chiefly of the intrastate variety with its attending complexities. When UN peacekeepers deploy today, they often find no uniformed enemy to contain and no peace to keep. Donning instead blue berets, as befitting their peacebuilding¹ vice peacekeeping role, they encounter populations disillusioned with governments that have failed to protect them from 21st century internal threats to peace: political repression, organized criminal violence, and civil unrest from economic crises. Many countries and sub-national areas are fragile, with one in four people on the planet at risk from repeated violence, weak governance, and instability.² These terms are admittedly vague, and offer few clues to the underlying drivers of the conflict. The thesis of this paper is that overwhelmingly, the drivers of much violence and instability in many developing countries stem from land conflict, and solutions to this age-old, ensnaring problem are achievable with structured practices and available tools that focus on land administration.

Rapid urbanization, the emergence of sub-state entities, trends toward privatization, decentralization, and participatory governance typify a peace operations environment unrecognizable from a decade ago, the aftermath of the 9/11 attacks with its rush to

aid post-Taliban Afghanistan. These socio-political trends complicate peacebuilding and underscore why it is doomed to failure in the absence of functioning land governance. There is a systemic inability and, at times, unwillingness on the part of international actors to address post-conflict land tenure and property rights (LTPR) in Iraq and Afghanistan. This paper asserts that the endemic problems encountered there are shared by an additional 1.5 billion people elsewhere in the world, who, although not dwelling in war zones, lack good land governance and are thus vulnerable to repeated criminal and political violence.

The two largest international actors, the United States and the UN, wrangle with how to address future human security³ challenges. One challenge is to overcome the previous lack of focus on and capacity to deal with land tenure property rights (LTPR) issues encountered in their respective peace operations. Dealing with the legion of sub-state entities that recently have emerged as important players in monitoring and resolving land conflict is another challenge. Perhaps more daunting still is the struggle international actors have in elevating land governance to a key pillar of peacebuilding in an era of diminished resources.

There are new tools that can help peacebuilders incorporate land governance into their work. A new sub-state entity, Customary Land Secretariats in Ghana, and a nascent technology based on the Land Administration Domain Model (LADM) are examined. Restoration of human security often takes decades and requires metrics to gauge incremental progress. Thus, the paper introduces a methodology for civil-military peacebuilders to monitor and measure progress in building local-level institutional land governance capacity in post-disaster and post-conflict areas. For the

United States and the UN, their coffers drained and troops exhausted by multiple peace operations, it is time to embrace these new tools because they empower the host nation to create and maintain viable land governance systems.

CHAPTER ONE: PEACEBUILDERS AND LAND GOVERNANCE

After the guns fall silent and peace operations begin, seething problems over land rights inevitably emerge. Many of these land disputes are spatial in nature and serious enough to impede reaching end state goals. Population displacements brought about by unexploded ordnance, territorial conquests, and, as in the following example, ethnic cleansing, have grave post-conflict repercussions. In Iraq in 2003, collective action over land disputes rooted in the previous regime's Arabization policy in traditionally Kurdish areas saw hundreds of armed men battling in the streets. The U.S. Army Stability Operations commander exclaimed, "Kirkuk is a place that could unravel Iraq. This is a place that could begin a spiral, a downward spiral. Civil unrest is right here."⁴ U.S. military commanders in Afghanistan, too, have been vexed by competing claims over land. They have not attempted to settle them for a number of reasons. The myriad of unwritten Afghan customary rules and invisible social power structures surrounding land are cultural nuances few outsiders understand. Add to that the scores of fraudulent documents to compare against a string of legitimate documents from now-defunct regimes. Sorting out land tenure and property rights (LTPR) quickly becomes a nightmarish, politically-charged task. But avoidance comes at a price. "The Taliban has used land disputes adroitly, sometimes settling them justly to further their influence, and at other times exacerbating them to gain the allegiance of one side."⁵ These U.S. military commanders have run head-long into the significance of land governance, a subject that very few have had any exposure to.

Fundamentally, land governance is about power and the political economy of land. Land tenure is the relationship among people with respect to land and its resources. The rules of tenure define how access is granted to rights to use, control, and transfer land.... they develop in a manner that entrenches the power relations between and among individuals and social groups”⁶

With a sigh of relief, commanders of already complex operations have quipped, “land issues belong to GIROA (Government of the Islamic Republic of Afghanistan).” While this is true in theory, it offers no escape from seething societal problems when the host nation government is not up to the task. In a vacuum, non-state actors, not all of whom are nefarious, exercise de facto land governance. As a result, many sincere and altruistic peacebuilders have been insufficiently informed about what customary institutions already exist “and so have tended to reinvent the wheel (or worse, invent an extra wheel) based on the assumption of *terra nullius*⁷ rather than build on preexisting institutional architecture.”⁸

Further, not all local actors are allies in building human security. Many host nation officials lack the political will for increased transparency and accountability in land matters. They prefer the status quo, through which social power, prestige, and profit come directly to them and indirectly to their well-placed relatives. Whether in rural Afghanistan or the informal settlements surrounding African megacities, an individual or group secures raw power by obtaining control over land. When rule of law fails to protect peoples’ LTPR, sub-state entities rush in to provide these “services.”

This dynamic is aptly explained in *Where There Is No Government*, Sandra Joireman’s research on prop-

erty rights enforcement mechanisms in a Nairobi slum. Joireman identified three sub-state entities in Kibera, “a pocket of statelessness located directly in the geographic center of power in Kenya,”⁹ that have emerged to fill the void left by a state that lacks the political will to resolve land disputes. Non-governmental organizations (NGOs), the first type of non-state entity, conduct alternative dispute resolution because the government is perceived as aloof (offering bureaucratic forms to fill out at unaffordable costs), ethnically biased, or corrupt (demanding bribes). The second alternative is government officials who, outside their formal authorities, misuse their positions to resolve disputes for personal enrichment. The notorious third option is ethnic gangs who run protection rackets and use violence and intimidation on behalf of clients seeking redress. While the last two mechanisms often achieve results faster than the NGO route, and at less cost than the convoluted government judiciary, their ill-gotten gains ultimately weaken the state and invite larger-scale conflict.¹⁰

Decades of rural-to-urban migration have resulted in 1.1 billion¹¹ people now eking out a living in peri-urban informal settlements (slums), without infrastructure or land rights. Another billion are expected to join that number by 2030.¹² Add to that a 21st century phenomenon which just may answer the philosophical question, “if a tree falls in a forest and there is no one there to hear it, does it make a sound?” The UN Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD), backed by the World Bank, aims to compensate countries commensurate to their commitments to mitigate carbon emissions by sustaining forests.¹³ For indigenous peoples whose an-

cient livelihoods depend on forests, this new “REDD scare” is a very real, even insidious threat. Even when armed with some knowledge of their land rights and interests, forest dwellers, due to their lack of access to land institutions, and cash to pay associated fees, are hard-pressed to realize those rights. They become more vulnerable to exploitation and forced eviction when, unbeknownst to them, REDD has dramatically increased their land’s value. To ensure that payments for reduced carbon emissions continue to flow into the pockets of unconscionable national elites, it is not unimaginable that today’s forest dwellers end up as tomorrow’s slum dwellers. The twin avarices of large-scale land grabs by resource-hungry rich countries and now cash payments, based on calculations of invisible greenhouse gases over areas of chiefly customary land tenures, represent knotty new threats to human security. It is no coincidence that these novel perils are chiefly about LTPR.

CHAPTER TWO: RETOOLING THE INTERNATIONAL PEACEBUILDING MACHINERY

Many stability operations tasks are best performed by indigenous, foreign or U.S. civilian professionals. Nonetheless, U.S. military forces should be prepared to perform all tasks necessary to establish or maintain order when civilians cannot do so. Successfully performing such tasks can help secure a lasting peace and facilitate the timely withdrawal of U.S. and foreign forces. DoD Directive 3000.05

While the United States has been fighting simultaneous wars in Iraq and Afghanistan, all has not been quiet elsewhere in the world. At least eight complex UN peace operations have been conducted since 2003.¹⁴ As the United States examines the lessons learned from intervening in Iraq (a rogue state¹⁵) and Afghanistan (a failed state¹⁶) it also must acknowledge that peace operations in under- or ungoverned areas of the world remain essential to U.S. national security interests. Accordingly, U.S. President Barack Obama's 2010 National Security Strategy included a commitment to "strengthen the UN's leadership and operational capacity in peacekeeping, humanitarian relief, post-disaster recovery, development assistance, and the promotion of human rights."¹⁷ However, a decade of war has limited the United State's ability to provide military and civilian personnel and other direct support to UN peace operations. As a result, few U.S. civilian and military operators have experienced the titanic transformation in UN peace operations, from military-patrolled, buffer-zone peacekeepers to civilian-led, multi-partner peacebuilders.

United States Military Services

Because it faces major budget cuts, the Pentagon views UN peace operations “as an essential and high priority area for needed investment.”¹⁸ The U.S. 2010 Quadrennial Defense Review (QDR) champions robust global peacekeeping, namely, Special Operations Forces (SoF) to “train, advise, and assist partner-nation security forces and contribute to coalition and peacekeeping operations.”¹⁹ In the years 2012-2015, the Pentagon plans to increase SoF by 10%, from 63,750 to 70,000. Many Obama administration officials see the 2011 international military intervention in Libya as a model for future conflicts, with the United States using air power in theatre while relying on its allies and on local forces to fight on the ground.²⁰ Thus, the U.S. Army and Marine Corps are experiencing a combined reduction in conventional ground forces of 100,000 active duty troops.

If hindsight is foresight, the Pentagon would do well in the drawdown of 2012 and beyond to retain the state-building knowledge and experience honed by soldiers’ multiple deployments to Iraq and Afghanistan. In short, exponentially more military personnel possess critical peacebuilding skills. Training and advising of foreign officials were, until recently, solely in the domain of SoF. Only due to the pressing needs in Iraq and Afghanistan did conventional forces venture into this realm. Without intentional attempts to preserve this capability through such institutionalization it stands to be quickly lost. In announcing that U.S. Army Brigade Combat Teams will be deployed to the Africa Command in 2013, U.S. Secretary of Defense Leon Panetta concurred, “I want to see the military retain the hard-won capability to train and advise

foreign security forces in support of stability operations.”²¹

Because the Taliban takes advantage of land disputes in Afghanistan, Australian Counter-insurgency (COIN) expert David Kilcullen noted that “the higher the percentage of secure [land] titles in a given area, the less chance [there is] for the Taliban to step in and exploit the situation.”²² Foreign policy pundit Tom Ricks reacts to Kilcullen’s latest direction for mission creep, “Can you imagine being a new battalion commander in the area trying to keep up with this stuff? Tribes, women, [blood] feuds, land disputes...it is just too hillbilly for me.”²³ Land disputes are inherently uncivil. They are politically messy and socially nasty, creating gloating winners and very sore losers. They hearken back to a time in not-too-distant American history when the reach of governance institutions was not ubiquitous.

Yet such is often the situation that stability operations commanders are thrown into with the mandate to keep peace and order. For that reason the U.S. military, with *Army Field Manual 3-24*, *Marine Corps Warfighting Publication 3-33.5*, both titled *Counterinsurgency*, and *A Guide to Rebuilding Public Sector Services in Stability Operations: a Role for the Military*²⁴ has created new doctrine with civil considerations. More recently, the Army Technical Publication *Stability Techniques* (ATP 3-07.5) anticipates the war-to-peace transformation with phases and mechanisms for resolving post-conflict land and property disputes. It provides doctrine to ensure that conflict resolution is consistent and fair, but flexible enough to achieve justice in a wide variety of situations, and most importantly, to avoid making any decisions about land tenure claims or disposition of properties. For example, when the

host nation government lacks presence, legitimacy, or capacity, land disputes might still be addressed via sub-state entities.

Such conflicts include disputes over possession of livestock, water distribution rights, land ownership for farming or grazing, or ownership of homes abandoned by their owners and resettled by squatters. Transitional authorities implementing dispute resolution mechanisms early helps prevent escalating violence that often occurs when people seek to enforce resolution on their own terms.²⁵

In preparation to hand-off their findings to host nation authorities, U.S. personnel may be tasked with compiling a roster of contested properties for legal adjudication, an assignment that may be facilitated by involvement of local leaders. “Especially in the absence or incompleteness of written records, local leaders know the locations of contested properties and often can identify people involved in ongoing property disputes.”²⁶

To date the Pentagon has provided the bulk of the muscle and money for both U.S. reconstruction and stability operations and U.S. Government (USG) support to UN peace operations. However, the largely civilian tasks associated with peacebuilding are best nested in a civilian agency, one capable of taking into account the concerns and perspectives not only of host nation officials, but also of civil society organizations and marginalized populations. According to James Cricks, professor at the U.S. Army Command and General Staff College, non-state personae include “pillars of social power in the affected nations, including religious groups and tribal leaders.”²⁷ Cricks then asks, “Who could possibly be (or become) better

equipped within the interagency community to provide such information than the Department of State and its affiliate USAID (U.S. Agency for International Development)?”²⁸

United States Civilian Agencies

Cricks was likely aware that in 2008 Congress authorized the Civilian Response Corps (CRC) within the Department of State to provide deployable civilian expertise in international conflict prevention. In November 2011 the CRC was placed within the new Bureau of Conflict and Stabilization Operations (CSO) led by Ambassador Rick Barton. U.S. Secretary of State Hillary Rodham Clinton aims for CSO to accomplish what its aptly-named predecessor, the Office of the Coordinator for Reconstruction and Stabilization, could not fully achieve, to serve the whole USG as the locus for policy and operational solutions for crisis, conflict, and stability. Clinton explains how the CSO will harness civilian peacebuilding expertise from the whole of USG:

With the right tools, training, and leadership, our diplomats and development experts can defuse crises before they explode. Creating new opportunities for advancing democracy, promoting sustainable economic growth, and strengthening the rule of law in fragile states are all overlapping and mutually reinforcing endeavors. They cut across bureaus and offices and agencies. They demand not just the skills of our State Department diplomats and USAID development experts, but also the expertise of civilian specialists across the U.S. Government.²⁹

CRC members have lived up to their billing by sup-

porting the successful South Sudanese independence referendum in January 2011. Their ongoing collaboration with local and UN officials, civil society, and aid agencies assists the U.S. Embassy in Juba and the USG in Washington DC to better understand conflict dynamics in the world's newest country. Disputes over ownership and control of land and property are, not surprisingly, among the concerns reported by a CRC member deployed in the South Sudanese Central Equatoria State (CES):

In CES there exists a strong tradition of managing internal disputes in a non-violent manner, relying on cultural traditions and customary law or, more recently, the formal justice system. Overall, the state remains fairly peaceful. Nonetheless, two key challenges threaten stability in CES: land issues and perceived Dinka (ethnic) dominance. The land issues—including access, claims, and disputes—serve as the primary source of conflict drivers in CES. In a predominantly agrarian society, land tenure determines not only wealth and status, but also survival. With increasing numbers of people returning home after decades of war, disputes over land are increasing. These disputes are exacerbated by a weak system of land ownership and poor records. A large number of Sudan People's Liberation Army and Dinka currently occupy indigenous (mainly Bari but also Kuku and Kakwa) lands, breeding local resentment. Key areas to monitor include Yei town and between the borders of CES and Western Equatoria at Baka and Maradu.³⁰

Such conflict is rarely about individual property ownership rights. The land disputes in South Sudan, while culturally nuanced, are of the garden variety, differing little from their antediluvian antecedents, revolving over competing communal interests in rural

land: sharecrop farming, water resources, timber harvesting, livestock grazing, etc. Assessing these drivers of conflict is child's play compared to the dizzyingly complex human landscape that the fledgling CSO will encounter in densely populated urban slums and REDD-affected forest zones. The CRC Active Corps originally was to manifest 500 deployable civilians, including three Property Law/Cadastre experts.³¹ Global land administration is not an academic degree-producing discipline in the United States as it is elsewhere in the Western world, thus, three such experts would have been adequate. However, Assistant Secretary of State Barton, given budgetary constraints and his desire to see CSO make tangible impacts within 12 months, will limit the Bureau's engagements. This narrower focus also caps the CRC Active Corps to no more than 100 personnel, none in the crucial LTPR specialty. The reduction of CRC "to a proven leadership cadre who can lead our engagements," says Barton, allows the CSO to expand:

...our reach to deploy experts from inside and outside the government on a "pay as you use" basis. So instead of keeping a large standing staff, just in case of any eventuality, we are moving to the ability to deploy the right person to the right place, just in time, while expanding our partnerships.³²

Even without LTPR experts in the CRC Active Corps, the nascent CSO remains the nesting place of choice for LTPR Community of Practice (CoP). A Land Tenure and Property Rights CoP would be a comparatively low-cost pillar of peacebuilding that, with a few dozen experts, perhaps represented in the CRC's Standby and Reserve components, which was originally envisaged to be staffed with 2000 deploy-

able members each.³³ And, in Washington DC, two USG agencies already offer 3- to 4-day introductory courses in this topic:

- The United States Institute of Peace. *Land, Property, and Conflict* draws on case studies from peace operations; participants explore the range of entry points (humanitarian, human rights, state building, development, etc.) and options for dispute resolution and structural reform.³⁴
- USAID. *Property Rights, Resource Governance Issues and Best Practices* explores how natural resources and land tenure impact economic growth, agricultural productivity, food and energy security, political stability, Humanitarian Response and Disaster Assistance, and Resource Management and Climate Change Mitigation (REDD).³⁵

The United Nations

With the United States focused on Iraq and Afghanistan, the UN, too, has learned lessons from its 21st century peace operations. To measure its own progress in fostering development, the UN in 2000 established the Millennium Development Goals (MDG)—eight bold goals to free people from extreme poverty and deprivations by 2015.³⁶ Sadly, no low-income, fragile or conflict-affected country has yet to achieve a single MDG.³⁷ Moreover, human security, the goal of UN peacebuilding, is not included among the MDG.

In championing a prospectus for economic recovery and development, UN Mission in Nepal Chief of Staff Elizabeth M. Cousens and American University

professor Charles Call tout peacebuilding with a very different agenda. That is the “establishment of institutions with the capacity to prevent, manage, or otherwise adjudicate disputes between groups through political process instead of violence.”³⁸ Call continues:

Institutions include social norms and behaviors—such as the ability of leaders to transcend sectarian and political differences and develop bargains, and of civil society to advocate for greater national and political cohesion—as well as rules, laws and organizations. Where states, markets, and social institutions fail to provide basic security, justice, and economic opportunities for citizens, conflict can escalate. In short, countries and sub-national areas with the weakest institutional legitimacy and governance are the most vulnerable to violence and instability and the least able to respond to internal and external stresses.³⁹

Building confidence in justice and land institutions takes at least one generation,⁴⁰ even longer in post-conflict zones. Although pillars of stability take considerable time to nurture, state-community, state-NGO, state-international, and state-private sector partnerships can ultimately extend the state’s capacity to deliver much-needed services. Some serious re-tooling lies ahead for international actors to address the 21st century challenges of building both state and non-state institutions that deter criminal and political violence.

In an austere fiscal climate it is prudent for leaders of the International Community to recognize and leverage alternatives to very expensive UN peace operations—the UN Department of Peacekeeping Operations’ 2011-12 budget accounted for a whopping \$7.84 billion USD.⁴¹ In response to some crises, regional

organizations, the North Atlantic Treaty Organization (NATO), the African Union (AU), and the Organization of American States (OAS), have provided the UN non-reimbursable logistical support and rapid reaction forces – above and beyond their assessed share of peacekeeping costs. At times, they have modeled the idealized “integrated mission” by aiding nongovernmental organizations (NGOs) and national actors to prevent conflict and strengthen civil society.

The costs for UN peace operations need not be so onerous; their approach to LTPR not so gangling. Scott Leckie, Director of the NGO Displaced Solutions, agrees that national actors are instrumental in determining how seriously LTPR are addressed in a given country. Nevertheless, he argues, the role of the international community in influencing these decisions should not be underestimated and he offers an unvarnished opinion about which UN agency should have the lead.

Although a comparatively small UN agency, lacking the clout or stature of some of the larger and more influential actors, UN Habitat has led the way in advancing [LPTR] concerns within a growing number of UN peace operations (Iraq, Kosovo, Timor Leste, Sudan, Crimea, DRC, etc.), and its mandate as the UN Housing Agency and UN City Agency places it in perhaps a better position than many other agencies in this respect... This does not mean that UN Habitat should be the only agency involved; far from it. As the lead agency, it will be UN Habitat’s crucial role to coordinate the multi-armed efforts of all the agencies that are, and in most senses *should be*, engaged in the [LPTR] sector in post-conflict settings. There is a place for all types of expertise and assistance, but what remains missing is the agency to design, establish, implement and coordinate a full [LPTR] spectrum approach which en-

sure that all [LPTR] rights issues are addressed, that a Housing, Land and Property Rights Directorate is established in all relevant settings and that everyone dealing with [LPTR] rights within a post-conflict society has somewhere to turn in the hopes of finding support and relief. In this way, [LPTR] rights will finally get the attention they clearly deserve.⁴²

Leckie is adamant that the traditional “tarps and tents” shelter-centric response to LPTR concerns is woefully insufficient. One UN peace operation downplays LPTR rights issues, and another, once pressured to act, grapples with perhaps one LPTR concern, on an ad hoc basis, while overlooking others. “Arguably, no post-conflict operation implemented by the international community has tackled [LPTR] rights issues in an integral, comprehensive manner.”⁴³ And concerning recent UN peace operations, Leckie fumes, “leaving a ‘light footprint’ as the UN Mission in Afghanistan has sought, or leaving no footprint at all, as far too many UN and related missions have done when their impact is viewed through an [LPTR] lens, is no longer good enough. Every conflict involves stresses within the [LPTR] sector!”⁴⁴

Because post-conflict environments foment deep, structural LPTR challenges, Leckie believes that competencies to address them consistently must reside in a future UN Housing, Land and Property Rights Directorate within UN-HABITAT.⁴⁵ Within such a notional Directorate, seven departments encompassing policy, legal, housing, land, construction, claims, and records “would assist in providing greater political stability; enhance the prospects for economic development; and expedite the re-establishment of national capacities to restore peace, justice, governance and rule of law.”⁴⁶ Three of the proposed departments are described be-

low because they represent arenas in which the broadest section of a shattered society could receive tangible LTPR assistance from the UN.⁴⁷

- The *Land Department* would maintain institutional competence on all matters relating to residential, agricultural and commercial land, focusing in particular on issues of land administration, dispute resolution and broader land policy, including possible measures of land reform and land demarcation... Issues relating to customary land allocation and control in areas governed by custom would also be overseen by the Land Department.
- The *Claims Department* would be entrusted with collecting and processing [LPTR] restitution claims, resolving [LPTR] disputes linked to restitution claims, the enforcement of successful claims in coordination with other bodies and backstopping traditional forms of mediation and dispute resolution when these proved inequitable or otherwise unable to resolve long-standing disputes.
- The *Records Department* would be entrusted with (re)-establishing the housing, land and property registration system, updating the national land cadastre, carrying out GIS surveys of the country or territory and all other matters concerning the administration of the housing, land and property arrangements.

Both the United States and the UN exhibit signs of being fiscally and politically drained from a decade of

intense peace operations. New human security challenges, many with roots in LTPR disputes, offer no respite for the exhausted largest international actors. The impetus behind North Atlantic Treaty Organization (NATO) Comprehensive Approach is this same realization, borne out from its operations in Afghanistan, that no single instrument of power can solve the population-centric challenges faced by intervening actors. A common consensus points to a need to expand unity of effort in detail to feature proactive engagement between actors, shared understanding between all parties, practical outcome-based thinking and collaborative working, operating under shared doctrine as epitomized in NATO's Comprehensive Approach.⁴⁸ Only then can the deeper human security issues be addressed. At the forefront are the LTPR, which require the long-term institution-building that most donors have shied away from. The establishment of the U.S. Civilian Response Corps is a concrete step in that direction. However, CRC's funding limitations and re-focus on a fixed set of present problems means that a U.S. civilian venture into a new peacebuilding discipline like land governance is unlikely to occur.

Planning for the Future

By 2030, sixty per cent of the world's population will live in cities, with the most explosive growth occurring in developing countries.⁴⁹ Conflicts on and over land will inevitably occur and they will be increasing ugly. Land warfare, the Army's forte, will feature multiple actors in dense, urban environments where shaping and winning the information domain invariably will include a robust knowledge of how persons are tied to places. A U.S. strategic pivot away

from land warfare toward air and sea dominance only creates more disparity between the military capabilities of the United States and those of its allies. In Iraq and Afghanistan, coalition forces, unable to complement U.S. forces in unified land operations, were often relegated to niche roles. Fortunately, land governance can be an important niche role for the U.S.'s European allies, and potentially for rising powers such as Brazil, India, and Indonesia. Several academic programs in allied countries, at reasonable tuition rates and with English as the language of instruction, offer graduate-level training and education in land administration disciplines with field work conducted in developing countries.

- The International Institute for Geo-information Science and Earth Observation (ITC) is part of the Dutch University of Twente and also a UN University. The Enschede campus offers 3-week to 18-month certificate, diploma, and Master of Science degree programs in Land Administration.⁵⁰
- The Technical University of Munich, Germany, offers an International Master's Program Land Management and Land Tenure as well as short-term training. Three semesters are spent on campus and conducting field research. The thesis can then be written from the student's home country.⁵¹
- The University of Melbourne, Australia, Centre for Spatial Data Infrastructures (SDIs) and Land Administration has, as its research agenda, the legal, institutional and technical issues

of establishing and accessing information about land faced by land managers and administrators, in both developed and developing countries. Full-time researchers focus on problems at local, state, national and multinational levels, creating new links through national and international collaboration.⁵²

- KTH Royal Institute of Technology, Stockholm, Sweden, offers a Master of Science degree in Real Estate Development and Financial Services is offered by the Department of Real Estate and Construction Management. The program prepares graduates for different occupations related to the real estate, financial services, government, and construction management sectors, both nationally and internationally.⁵³
- The University of Calgary, in Canada, offers graduate degrees in Geomatics Engineering with a specialization in GIS and Land Tenure. Development of advanced geospatial database management techniques for resource evaluation and spatial models for environmental resource management; Land tenure studies: land tenure reform, analysis and modeling of cross-cultural tenure systems, use of traditional ecological knowledge for aboriginal land claims; survey law, cadastral surveying issues, international boundaries, women's rights in land, implications of legal pluralism for land tenure and land administration, public participation and its role in resolving land conflicts.⁵⁴

At long last in the United States, a distance education course in this discipline, SU5480 Cadastre, is now offered by Michigan Technological University.⁵⁵ This graduate course surveys global and multi-purpose cadastres; land rights: land ownership, leases, access; traditional rights; mortgages; descriptions of boundaries; Cadastre 2014 and other modern technical approaches. Previously, the only such course had been SUR 6427 Land Tenure and Administration, a resident course periodically offered at the University of Florida.⁵⁶

In order to gain a fuller understanding of ground truth in building human security, the USG might leverage its allies' training capacity and send select military members and civilians to foreign academic institutions for graduate education in land administration. This approach would be a cost-effective vehicle to groom small cadres of deployable LTPR experts who, in turn, could train regional organization and host nation personnel in land governance skills.

The following fictitious example attests to LTPR's complexity and the need for new tools. When a U.S. or UN mission advance party member arrives in the capital city of a post-conflict or disaster area, he will likely ask about the area of interest, "Who owns the land?" A host nation official, perhaps citing an obscure statute, replies, "it is all government land." Satisfied, the member reports this "fact" back to headquarters and extensive plans are made based on it, often for ill. This debilitation occurs because overlapping and competing land rights and interests, many of them customary and informal systems of land governance, operate outside of host nation government purview, as depicted below.

Imagine a well-watered valley in a post-conflict country (Figure 2.1). Every year herders do what their ancestors have done for centuries—bring their flocks to pasture in the valley every spring (Layer A). In that same valley there are farmers practicing their ancestral livelihood (Layer B), who, honoring a long-standing verbal agreement, allow the herders water rights every spring. Recently, a major drought forced a related ethnic group from a neighboring country to migrate to the valley. The government does not enjoy friendly relations with the neighboring country and considers these new arrivals to be illegal squatters. Decades ago, unbeknownst to either the herders or the farmers, the newly emergent government laid claim to the entire valley as State domain (Layer D). This law remained obscure until recently. The government had never attempted to develop the area until a foreign mineral company notified it of a valuable natural resource in part of the valley, and negotiated a lease (Layer C) for the entire valley. For each of these four layers, and the squatters as a quasi fifth layer, a different land right is at work. Now imagine deployed peacebuilders, under the assumption that given this is state-owned land, all land-related decisions reside solely with government officials. With every well-intended peacebuilding intervention that affects land, the human terrain suddenly becomes very complex, and potentially violent, with an ever-increasing number of stakeholders unexpectedly stepping forward.

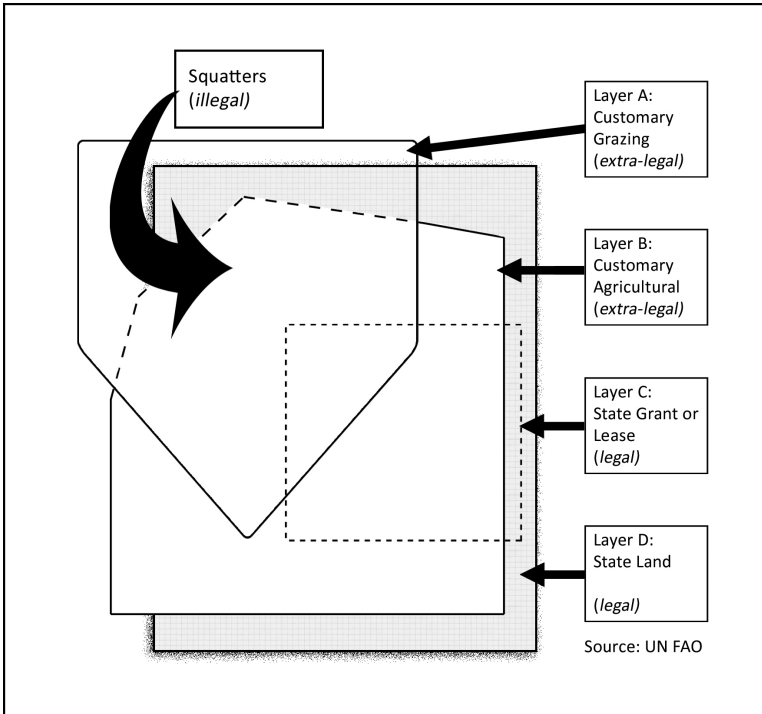


Figure 2.1: Overlapping Land Rights, Source: Food and Agriculture Organization of the United Nations (FAO)

The notional peacebuilders here require in-depth human geography knowledge, the ability to graphically depict a population’s numbers, spatial extents, and the socio-culture power exerted by five parties: two extralegal (Layers A–B), two legal (Layers C–D), and the illegal squatters.⁵⁷ The next chapter elucidates new tools to improve peacebuilding interventions for such complex human landscapes.

CHAPTER THREE: A COMMON OPERATING PICTURE FOR LAND GOVERNANCE

Land Administration is the process of determining, registering, and disseminating information about the relationship between people and land.⁵⁸ Beyond the formal definition, former International Federation of Surveyors (FIG) president Stig Enemark heralds land administration as a “backbone of society,” supporting social justice, economic growth, and environmental sustainability, all key components facing the global agenda.⁵⁹ Until a decade ago the preferred way to confer land rights upon individuals and groups across the globe had been through formal land titling administered by the state. A new paradigm has recently emerged, recognizing a continuum of rights and interests in land, one inclusive of individuals and groups who live in areas where formal titles are not the norm, or not accessible or affordable. Registered title (or deed) ownership of land, common in only 50⁶⁰ developed countries, account for 1.5 billion land parcels. The remaining 4.5 billion of the world’s estimated six billion land parcels are held informally and are thus susceptible to disputes, land grabs, environmental degradation, food insecurity, and social unrest.⁶¹

Continuum/range of land rights

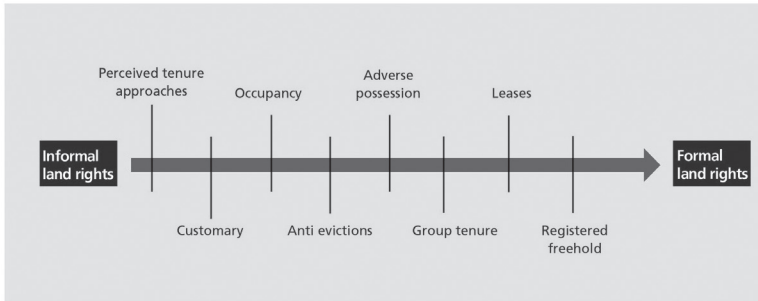


Figure 3.1: Continuum of Land Rights.
Courtesy of UN HABITAT

Thus, the continuum, from left to right, begins with informal land rights, which are usually oral agreements, and then customary tenures, both relied upon by poor and marginalized populations.⁶² Certificates of occupancy, while not enabling the holder to sell or lease, do provide a measure of tenure security against predatory slum lords and unscrupulous customary or government authorities bent on eviction. Adverse possession gives formal tenure to one who produces evidence of having lived on or worked land for a given time period. Group tenure is much easier to secure than individual tenure. Efforts to formalize group tenures in land administration systems (LAS) have also done much to improve the livelihoods of people at risk of losing their communal land rights in land grabs and other nefarious schemes. Pursuant to such efforts, the authors of *Land Administration for Sustainable Development* contend:

Fundamentally, LAS are about formalizing tenure, irrespective of its local form and content, whether it's short-term occupation rights or full ownership. Simply, land administration is about formal systems. We don't apologize for this. We accept that informal systems are essential parts of any system of society, but without organizing a coherent, formal system for administering land...a country or society will be doomed to poverty. This does not mean that that the formal system needs to be complicated, national in scale, or expensive.⁶³

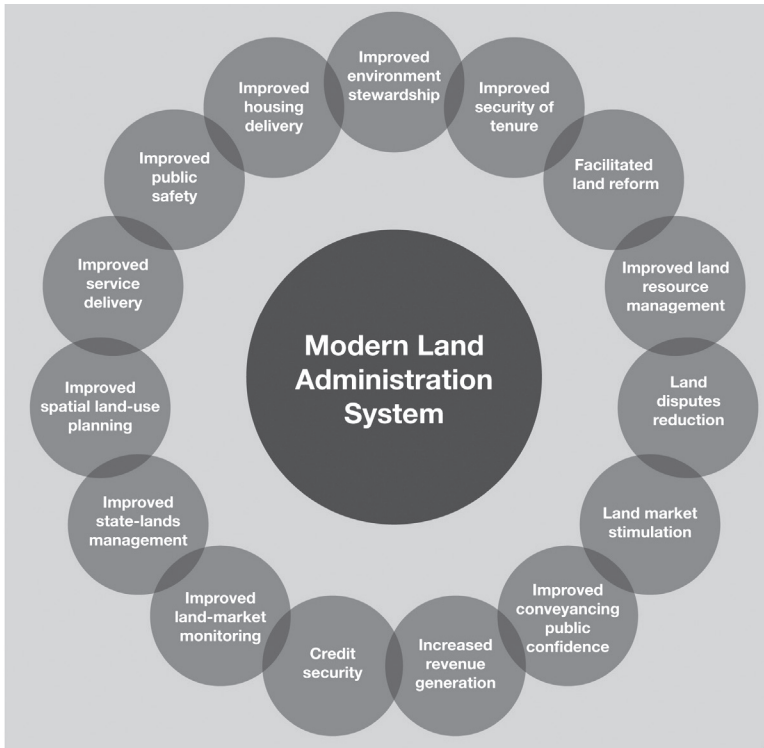


Figure 3.2: Benefits of Modern Land Administration Systems, Courtesy of Know Edge, Ltd.

CHAPTER 4: MODELS AND METRICS

For decades, the question among land professionals has been whether or not informal rights could be included in land administration systems (LAS) alongside formal titles and deeds. To accommodate the variety of informal land rights found in the continuum, innovative ways of describing and recording this information, heretofore unsuitable for formal property regimes, have been developed.

MODELS

Two low-cost, people-centric innovations have been honed in the West African nation of Ghana: *Customary Land Secretariats* and *Land Registration Inclusive of Customary Land Tenures*.

Customary Land Secretariats

According to Mr. Collins Dauda, Ghanaian Minister of Lands and Natural Resources, his country is beset by an incomprehensive land policy and a weak land administration system. The resulting problems are manifold: conflicting claims to ownership, encroachments on lands, multiple sales of the same land parcel, unapproved development schemes, and indeterminate boundaries of customary-owned lands. In sum, the land market is investment unfriendly and uncondusive to development. It is marked by high transaction costs, high incidences of poverty, and tension born of tenure insecurity.⁶⁴

Even in the Greater Accra Region land disputes can turn violent. Chiefs enlist armed gangs of land guards to protect some land users, while forcing others to pay again for land they have already bought, or blocking efforts to develop purchased land and thereby triggering development covenants that allow the land to be repossessed. In some cases, these groups physically assault developers or burn down partially-completed buildings.⁶⁵

Months after my 2011 visit there, a mysterious fire engulfed the Ghanaian Lands Commission building.⁶⁶ Accusations abound that the fire which destroyed the land records was deliberately set in order to delay release of land to a certain ethnic group. Increased ethnic tensions and hints of more violence to come are reflected in the on-line comments posted about the incident.⁶⁷ A Customary Land Secretariat (CLS) can help defuse such tensions. CLS is an arm of civil society striving for an accountable, harmonious, and transparent customary land administration system that utilizes simple and cost-effective land rights documentation practices attuned to local interests.⁶⁸ Furthermore, CLS bring “greater clarity and transparency to the customary land governance system, as similar institutions have played an important role in this regard in other African countries (for example, the Communal Land Boards in Namibia and Botswana).”⁶⁹

Ghana, a comparatively stable and progressive African state, is one of four pilot countries in the Obama Administration’s new Partnership for Growth Initiative. Yet without a clear, written understanding of peoples’ rights, restrictions, and responsibilities (RRR), chiefs who unilaterally sell or lease communal lands provoke conflict where trust born of shared lineage had existed. The USAID, the USG executive agent

for the Initiative, has among its developmental aims for Ghana to see customary land tenure and property rights (LTPR) rules put in writing in order for all parties to understand RRR pertaining to customary lands. CLS are a promising sub-state organ to carry out these and other LTPR-strengthening measures because the majority of Ghanaian lands are managed by customary as opposed to statutory authorities.

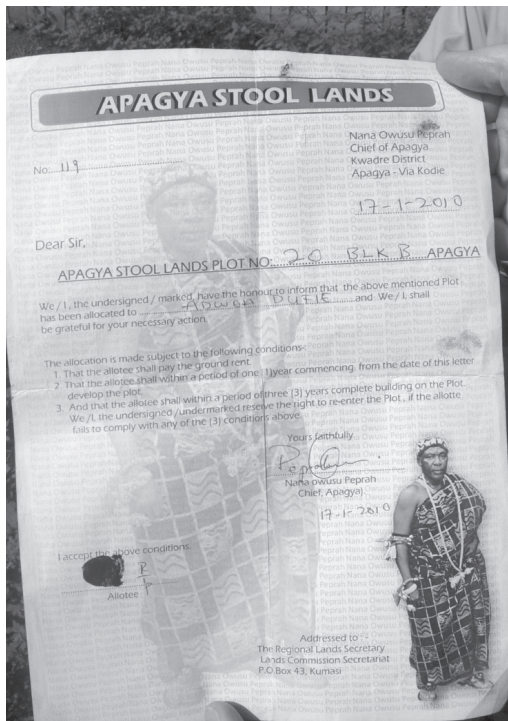


Figure 4.1: Land lease from an allodial title-holding Ghanaian chief Source: Thomson Reuters

Historically, unwritten customary land rules are subject to abuse. In Ghana, one source of definitive, customary land knowledge currently beyond

the ambit of international actors and the host nation government lies with CLS. Community perception of impartiality is important for stability, and the sub-state CLS have shown promise as a vehicle for dispute resolution. When they operate within the jurisdiction of customary leaders and responsibly manage and record land allocations and transactions made by customary authorities, CLSs not only deter violence with improved tenure security, but also improve economic well-being via increased investment, appreciation of land values, and revenue generation. However, implementing the 37 CLS in Ghana since 2004 has been uneven. Some CLS are fully operational and others are barely functional. The initial effectiveness of CLS depends on the amount of foreign donor support, the local chiefs' willingness and ability to pay staff, and the staff's level of training.⁷⁰ Once Ghanaian CLS become sustainable through self-financing and community demand, increasing their capacity is an avenue through which the United States and UN can not only improve human security in that country, but also develop the skills of their respective peacebuilding cadres to effectively identify and engage with customary authorities on LTPR matters for work in more conflict-prone environments.

Customary land authorities have long acted autonomously in administering their lands and are themselves challenged when dealing with state land agencies. They often view the expansion of government as interference in their affairs. The community-based LAS used by CLS to record customary land holdings and transactions reflect the buy-in and trust of stakeholders and thus facilitates CLS institutionalization.



Figure 4.2: Customary Land Secretariat in Ghana.
Source: Thomson Reuters.

Lastly, Jolyne Sanjak, formerly chief program officer at Landesa, a land rights consultant group, notes another benefit of CLS. Their unsung work increases pressure on host nations governments to take concrete steps to improve human security. "Political will is malleable," she says. "The collective push from civil society organizations, private sector businesses, and investors can positively influence developing nations to elevate LTPR on their domestic agendas."⁷¹

Land Registration Inclusive of Customary Land Tenures

This topic begins with the conceptual framework of the Land Administration Domain Model (LADM) and concludes with an on-the-ground application via a USAID-funded project implemented with Open-Title® cadastral software developed by Thomson Reuters (formerly International Land Systems, Inc.).⁷²

The Land Administration Domain Model

Western governments have developed their own LAS based on either a deeds or titles registration system. LAS have been initiated for different purposes, for example, fiscal versus legal. And with varying levels of records centralization and precision of surveyed boundaries, communication of land information across LAS, even within developed countries, has been precarious. Further land data miscues occur when vast tracts of land under state domain are not recorded in cadastres. Even more disappointing have been peoples' expectations for immediate economic growth in a country with customary land tenures following importation of a LAS based on freehold ownership of private land. The Land Administration Domain Model (LADM) spans the discipline of land administration with administrative (to include legal) and spatial components. The LADM is a basis for combining data from different LAS, providing a common language to describe similarities and differences between them. The LADM is not a data product but a conceptual model that ties people to geographic places. It is organized into three packages:⁷³

- Parties (people and organizations)
- Rights, Restrictions and Responsibilities (ownership and land use rights)
- Spatial Units (land parcels, buildings and utility networks) with a Surveying and Representation sub-package

The LADM has undergone a decade-long comprehensive design process and fostered creative approaches to find common denominators in LAS, and to uniquely capture evidences for layered, overlapping, group, and secondary land rights. **All people-land relationships** may be represented and human security measurably improved. Increased protection of LTPR in slum or customary areas relies on forms of tenure far different from individual freehold or other formal land rights. Many of the customary rights included on the UN HABITAT continuum of land rights generally cannot be described relative to a land parcel. Therefore, new forms of spatial units not topologically-based (sketch map-, text-, or point-based, or unstructured boundary lines) are, for the first time, with the LADM determinant in a LAS.

The LADM is a tool for increased action by international actors, host nation governments, and civil society institutions interested in RRR affecting land, or water, and their associated geospatial components. "It is important to note that LAS are not just 'handling geographic information,' they represent statutorily or customarily lawful relationships amongst people, and between people and land."⁷⁴

By recording and codifying customary tenure laws regarding tenure, the LADM mitigates abuses of power by making RRR clear for all stakeholders. The perils of a paper-based system that exposes land records

to loss from theft, arson, natural disasters, or war are precluded via a digital repository with electronic back-up capability. Nearly all cadastres implemented in the developing world have been one-offs from each other; expensive to build and maintain. Based on the LADM's shared vocabulary of land-related concepts, the Government of Finland has recognized substantial cost-savings in LAS implementation in sponsoring the Solutions for Open Land Administration (SOLA) project. Through the development and re-use of open source software, SOLA aims to make computerized cadastre and registration systems more affordable and sustainable in developing countries. Ghana is one of three countries to take part in the pilot project.⁷⁵ The initial software version was released in June 2012.⁷⁶

In 2008, the International Federation of Surveyors (FIG) submitted the LADM as a New Work Item Proposal to the International Organisation for Standardisation Technical Committee (ISO/TC 211), which is responsible for worldwide geographic information standards. After intensive review, in 2010 the LADM became draft international standard (DIS) 19152. The model is not intended to be complete for any particular country, nor is it to replace any existing LAS. This fact alleviates expressed concerns about the cost prohibitiveness of conforming 3100 disparate U.S. county-level LAS to a new global standard. At this writing, the LADM has been unanimously approved, by both ISO and the European Committee for Standardization (CEN), as the first international standard for land administration. ISO standard 19152 will be published by the end of 2012.

Social Tenure Domain Model

I have previously written about the LADM's activity-based intelligence⁷⁷, military⁷⁸, engineering⁷⁹, and natural resource management⁸⁰ applications. This section introduces the *Social Tenure Domain Model (STDM)*, a pro-poor specialization of the LADM, as a peacebuilding tool that decreases conflict, limits forced evictions, and motivates the poor to engage with the land industry in undertaking slum upgrades or improvements to rural land.⁸¹ Future peace operations will be conducted in areas where the ground truth about people and land is often unknown or ignored in formal land tenure arrangements and statutory legislation. As a result, many people caught up in or fleeing conflict are invisible to host nation governments and international actors because their secondary land rights, such as access to forests and water, are not documented. The STDM is an initiative of UN-HABITAT to address these land tenure gaps.

The STDM identifies relationships between people and land independent of levels of formalization or the legality of those relationships. It signally improves human security by realizing the LADM aim of including every human being in some form of LAS. The STDM can contribute to poverty reduction, as the land rights and claims of the poor are brought into the formal system over time; it opens new land markets, and aids development by equipping communities with land management skills, helping them deal with the future challenges of population pressures and climate change.

In 2011, equipped with a laptop computer and a digital camera, I accompanied a team implementing the USAID-funded *Title Registration and Microfinance*

Project in Ghana. The project's goal is in concert with the *Global Land Tool Network (GLTN)*, an initiative of UN HABITAT and other agencies, to develop pro-poor land management tools that assist those who find themselves excluded from formal land registries.



Figure 4.3: Author surveys parcel boundaries in Ghana with the Thomson Reuters team. Source: author

Thomson Reuters developed the STDM-compliant land registry software, OpenTitle®, to collect and digitize images, record oral testimonies, capture ground photographs and other documents that tie people to geographic places. OpenTitle® is commercial off-the-shelf, geographic information system (GIS)-based registry system that is easy to learn, deployable, and very affordable (\$600 USD per site license). A detailed description of how Open Title® registers overlapping

property rights is in Appendix II. All default fields can be modified according to user needs. Something as simple as having a mailing address is the basis for the ability to use the land as security or collateral for a microfinance loan, typically \$100 to \$500 USD for six months, to buy a sewing machine, basket weaving material, or other equipment and supplies for an in-home business.⁸²

The *Title Registration and Microfinance Project* addresses the dual challenges of conducting land registration system in the developing world. First, peoples' inherent distrust of government inculcates resistance to any top-down mandate to register their properties, which is why many large-scale land registration projects, despite promises of near-term economic benefits, have failed. People simply abhor an inordinate number of bureaucratic steps, each requiring travel and payment of gratuities or bribes to government gatekeepers. Should one irregularity be detected, they perceive that they will face fines, penalties, or government expropriation of their land. Even if a taxation schedule is perceived to be fair, there is little faith that they will witness improved local services or infrastructure as a result. Challenges also exist for the host nation government to formally register land in customary areas beyond the cost and time of surveys. Government officials fear that they might create unsolvable problems by issuing deeds or titles in areas where no property mapping has ever been undertaken, or where a previous government had granted land concessions in return for patronage, or where fluid, unwritten, and sometimes contradictory customary rules are voiced by numerous parties. Concerned that the requirement for high accuracy field surveys would be both overly costly and time consuming, Thomson Reuters gained

agreement from the Ghanaian Surveyor General for lower accuracy surveys based on Global Positioning Systems (GPS) readings. This pro-poor flexibility provided a framework to ensure the GoG's consent to less formal, though no less rigorous, procedures for recording of land rights for as low as \$90 USD per parcel.⁸³ Other research cites land title issuance in Africa for as low as \$25 USD per parcel.⁸⁴

In addition to GPS-based surveys, a *Provisional Real Property Questionnaire* was used to record land occupancy details, neighbor testimonials, and other documentary evidence in support of land rights. The questionnaire language, by using that of the prevailing land law, is easily understandable, legally valid, and sufficient to gather field evidence. In order to build a comprehensive database of communities being mapped, the form could also be extended to capture other information such as construction materials, owner/occupant's health and education attainment.⁸⁵ The field interviews prompted the divulgence of various types of property rights evidence: leases such as in Figure 4.1; receipts for utilities or rent payments; testimonies of neighbors; attestations by community leaders (customary or religious leaders, mayors, traditional councils,); video and voice recordings; and ground photographs.

Relying on "best evidence," property folios were prepared in a form analogous to the land certificates currently issued by the Ghanaian land registry and kept in a private database maintained by the microfinance institution (MFI). The MFI provides the Government of Ghana (GoG) with an alternative service arm by which title can be delivered to the poor at reduced cost to the government. The term "trusted broker" indicates that the MFI conducts due diligence ahead

of the loan offering, in terms of affordability and risk, and enables the GoG to receive titles for inclusion in the formal registry. Other trusted brokers may include bio-fuel or mining companies in a cropland or mining area who would assist residents to formalize their land rights. An important legal impact of formal title creation is that third parties will recognize the heretofore informal LTPR, creating value for the owner. Although no direct government action is required prior to incorporation into the formal registry, the MFI acts as facilitator and consolidator for collections of property folios which can be delivered to the government in accordance with a predetermined plan. This reliance by the MFI on the evidence presented demonstrates the commercial trustworthiness of the land information and becomes another form of “de facto” title. The MFI, now vested with its own financial interests in seeing the title formalized and acting on behalf of the borrower, can assist in streamlining formal registration.⁸⁶

Without a low-cost means to record, compare, and analyze locally-determined land tenure and property rights (LPTR) arrangements across political, cultural, and juridical boundaries, the proposed U.S. and UN mainstays for housing LTPR capacities within peace-building auspices cannot be realized. A “grass roots,” bottom-up compilation of STDM-enabled participatory and community mapping, that demarcates property boundaries and brings peoples’ secondary land rights and even their land disputes to the fore, fills that void. More importantly, the STDM, as demonstrated by the viability of the Title Registration and Microfinance Project using OpenTitle® to register informal LTPR in Ghana and elsewhere, provides to the world’s poor and marginalized populations not only

improved livelihoods, but the hope of shaping their political and economic futures away from violent conflict.

METRICS

As noted earlier, none of the UN Millennium Development Goals (MDG), set to free people from extreme poverty and deprivations, have been met in poor or fragile states. Still, to track progress over the 2000-2015 time period, the UN developed a gigantic framework comprised of 18 targets and 48 indicators for monitoring projects' progress.⁸⁷ With this feedback, deep contemplation is afoot at the UN to reinvigorate global partnerships for development beyond 2015.

With the new tools and technologies available, even in an austere budget climate, the time is right for the United States and the UN to make the building of land governance institutions a pillar of their respective peacebuilding efforts. USAID land tenure specialist Karol C. Boudreaux summarizes the ineffectual attempts of donor agencies to build formal institutions in Sub-Sahara Africa, and the possible harm that extractive⁸⁸ institutions might exact on an unsuspecting populace:

Over the past decade numerous donors including, but not limited to, the World Bank, USAID, UN HABITAT, the FAO, the Inter-American Development Bank, DFID (Department for International Development, the U.K. aid agency) and SIDA (the Swedish aid agency) have spent hundreds of millions of dollars to help African countries build land administration institutions, to train officials, to provide equipment to map and survey lands, and to craft land policies, and revise land laws and implementing regulations. Less

attention has been paid to supporting or strengthening customary land institutions as it was thought that these institutions needed to be replaced by more modern formal systems designed to identify, value, and record land rights and resolve land disputes. However, building formal land administration systems has proved to be a contentious, time consuming, and costly process... And finally, in the wrong hands, this kind of data can be used for predatory purposes. Aggregating data in the hands of a corrupt or predatory centralized authority can make it easier for that authority to use information to harm political, economic, or other enemies.⁸⁹

Boudreaux is mindful that such concerns are prevalent where the rule of law and good governance are wanting. Both remain deficient because of three misdirected priorities of international actors. The first foible is the paltry amount of attention, in the form of human and fiscal resources, paid to rule of law and governance as development arenas. In the case of U.S. foreign aid budget in Fiscal Year 2009, only eight percent was directed toward the rule of law and governance. Moreover, when the two budgetary and foreign assistance anomalies of Iraq and Afghanistan are removed from the equation, only four percent of the foreign assistance budget is allocated for governance programs.⁹⁰

A second defect is the agenda with which international actors approach the task once some modicum of resources are allocated. With deep introspection of her legal profession, the Senior Counsel to the World Bank's Justice Reform Practice Group, Deborah Isser, challenges the Western assumption that justice must emanate solely from the state. She champions legal pluralism in post-conflict situations where "more nu-

anced relations between the different legal orders... can then be more responsive to social and political imperatives in ways that support sustainable peace.”⁹¹ Her insight is most valuable in indentifying three constraints that hinder rule of law professionals from engaging customary justice systems, which, are often perceived by aggrieved populaces to be more accessible and just than ineffective or biased formal institutions:⁹²

- The widely held tendency to see justice reform as a technical exercise of drafting laws and building institutions to be done by international legal professionals. But lawyers schooled in Western formal law rarely have the background, skills, or access needed to account for the contextual complexities of customary justice systems.
- A built-in normative bias concerning standards. The UN Definition of “rule of law” explicitly calls for consistency with international human rights norms and standards. This normative bias poses an obvious challenge to customary justice systems, which fall short of international norms. To many rule-of-law practitioners, the choice is, either eradicate the deviant customary justice system or intervene to “fix” it.
- The objective of state building that calls for the (re-)establishment or expansion of state sovereignty, which is generally seen as entailing a state monopoly on delivery of justice. Rule-of-law practitioners thus tend to regard customary systems as a distraction from their main

task or even as an obstacle that undermines the sovereign authority of the state.

Also, international actors often hail “the immediate post-conflict period as a ‘window of opportunity’ to step in and “get it right.”⁹³

The third misdirected priority is the clash of the counter-bureaucracy⁹⁴ and development. Even if sufficient human and fiscal resources were allocated, and international actors acknowledged customary land tenures and worked to include and improve these in institution building, former USAID Administrator and distinguished professor at Georgetown University, Anthony Natsios opines that:

One of the little understood, but most powerful and disruptive tensions in established aid agencies lies in the clash between the compliance side of aid programs – the counter-bureaucracy – and the technical, programmatic side. The essential balance between these two in development programs has now been skewed to such a degree in the U.S. aid system (and in the World Bank as well) that the imbalance threatens program integrity. The counter-bureaucracy ignores a central principle of development theory – that those development programs that are most precisely and easily measured are the least transformational, and those programs that are most transformational are the least measurable.⁹⁵

Natsios views development as the building of public, private, and non-profit institutions in poor and fragile states. The ultimate goal of which is:

Developing a capable state, market economy, and civil society that can manage public services, design good

policies, create jobs, and protect human rights and the rule of law on a reliable, sustainable basis after the aid program is over and funding ends. All construction or service delivery projects should be subordinate to the larger institution-building task.⁹⁶

Natsios laments that the demands of the counter-bureaucracy are now so intrusive that they have “distorted USAID’s development practices to such a degree that it is compromising U.S. national security objectives and challenging established principles of good development practice.”⁹⁷ In sum, he exposes the counter-bureaucracy’s cop out to apply metrics to things which can be easily measured. Input metrics, such as how many children in a given country received immunizations, are temptingly easier to measure than the societal outcomes of an inoculation or other programs. This practice generates more funding for preventive medicine and other hard sciences, and accounts for the measly amounts allocated to soft science governance programs. Governance improvements are significantly less visible, harder to measure, and much slower to demonstrate success. It is also the case that effective democracy, governance, and economic institutions threaten powerful elite interests and thus face opposition whereas the delivery of health services generally does not.⁹⁸

Metrics That Matter

To make an initial assessment about the state of land governance (land tenure, records, and use), land professionals Jaap Zevenbergen and Tony Burns compiled a useful list of post-conflict land issues to assess.⁹⁹ Perhaps wary of labyrinthine indicators of per-

formance, they suggest limiting the number of goals in the first place and pursuing a phased approach that focuses on what is most urgent in the specific circumstances. This limited, step-by-step approach reduces the temptation to measure inputs and measures the societal effects of an intervention (outputs). Simplicity is golden, but a bureaucracy abhors simplicity. Politically-charged, post-conflict environments inevitably attract a parade of Ph.D.s, economists, surveyors, and attorneys. With each new expert brought in as an advisor to higher headquarters, the more esoteric and Orphic the metrics become for the non-experts assigned at the local level. In Iraq and Afghanistan, that local level officer-in-charge typically has been the 28-year-old company grade officer, who, as Tom Ricks suggested, might already be overwhelmed supervising a plethora of non-military tasks in a “hillbilly” landscape abounding in land disputes.

Observations of ground truth over time are key metrics for building human security, but far too often local level observations fail to factor into decision-making in the larger, grandiose schemas used by many international actors (a number of LTPR assessments, guides, and metrics frameworks are listed in Appendix I). Peacebuilders at the local level value simplicity. It is of paramount importance not only that metrics reflect observable realities on the ground, but that they are understood and clearly communicated horizontally. Members of a national or coalition team will likely possess different levels of education, technological sophistication, and English language proficiency than the officer-in-charge. Vertical communications, too, tend to be clouded by the “provide input to my chart” expectations of higher headquarters. The use of arcane language such as “negative externalities”¹⁰⁰ that only a

Ph.D. or highly-trained specialist comprehends leads to one being marginalized or ignored. Moreover, the definitions of “freedom of movement,” “expanded economic opportunity,” “improved governance,” and other imprecise terms frequently change. Remote site personnel must guess at the meaning of the shifting terminology used at headquarters. The resulting Power Point chart, while satisfying reporting requirements, will reflect less and less ground truth.

Center for Strategic and International Studies (CSIS) Senior Fellow Robert D. Lamb noted that “governance in Afghanistan does not have to become ‘good’ in American terms, just ‘good enough’ in Afghan terms – and incrementally better over time” and that “accepting and supporting formal and informal systems already in place is an approach consistent with the coming decline in international resources.”¹⁰¹ Michael Woodgerd developed a methodology for realizing improved governance from peacebuilding efforts with finite resources. Exasperated by untenable, lumbering metrics frameworks, he created a simple methodology that makes governance metrics truly useful at the local level. From 2008-2010, Woodgerd was embedded in three successive U.S. Army Brigade Combat Team/Interagency Partner (DoS, USDA, USAID) staffs in the P2K (Paktya, Paktika, Khost), an austere region of eastern Afghanistan. His eclectic background includes several years of operations research and systems analysis. And, as a retired Army Lieutenant Colonel, he could anticipate and understand the needs of senior officers and civilian decision makers. After 18 months of observing their repeated struggles over synchronizing kinetic (security) with non-kinetic (governance, agriculture, and development) efforts, Woodgerd conceived the Comprehensive Assessment

Prioritization Resourcing Synchronization (CAPRS)TM methodology as a basis for allocating resources, measuring Lines of Efforts(LOE), (re-)directing them within a geographic region toward a precise and pre-determined end state. Upon seeing an example of CAPRSTM for other governance components, I sought out Woodgerd and collaborated with him to expand his methodology to the needed land institution-building work described in this monograph. My contribution to the knowledge corpus is a facile, 2-page measure of indicators that can be replicated globally for all actors, civilian or military, international or host nation. It appears as Figure A.III.3 in Appendix 3.

CAPRSTM, pronounced “capers,” is an acronym chosen to both uniquely identify this comprehensive planning and assessment methodology and to mnemonically reinforce that the four components—Assessment, Prioritization, Resourcing, and Synchronization—are equally important, sequential, and interrelated. The assessment component, which is the focus in this writing, is limited to the bare bones of what is essential to achieve a desired end state. The assessment is not designed with experts in mind, but rather for commonality of understanding. Realizing that many peacebuilding leaders are young Army captains, Foreign Service Officers, or USAID officials without specific training in agriculture, public works, rule of law, **land administration**, etc., the methodology is designed for a college graduate to understand and use in the field. The CAPRSTM assessment defines a fixed end state that is neither today’s ground truth nor malleable to a visiting expert’s assertion that yet another facet of the Gordian knot be examined. The end state is defined by local level actors, at the same level where decisions are made and resources allo-

cated, not by working groups at higher headquarters. Without CAPRS™, international actors tasked with a generic aim to “improve land governance” are not likely to craft a concrete vision of what can (or cannot) be achieved in a given time frame with finite resources. According to Woodgerd:

This methodology allows each leader to produce a clear and justifiable request to higher headquarters for more assets or effort. Perhaps even more important, it allows organizations to decide when to stop because the push just isn't worth the squeeze. This methodology was not intended to add to the academic literature. It is designed to give decision-makers in austere, even hostile, environments a simple, logical decision aid to make hard, real-world choices.¹⁰²

Woodgerd relates that when he first briefed CAPRS™ to key peacebuilding actors in the P2K region of Afghanistan, the audience included U.S. State Department members at Provincial and District levels, Army Battalion Commanders at the roughly 10-month mark of their 1-year deployment, Provincial Reconstruction Team (PRT) commanders, and Brigade Combat Team (BCT) J9 (civil-military coordination) staff members. When a colonel on the Division staff scoffed, an infantry battalion commander stood up and stated, “This [CAPRS™ methodology] is exactly what I wish I'd had to prioritize and allocate all of my resources, and then I could have turned to Brigade (higher headquarters) to say and this is what else I need.” An Army Human Terrain Team leader, who led sociologists with long experience in eastern Afghanistan, stated that if the entire “Board of Directors” (the BCT Commander, U.S. State Department, U.S. Department of Agriculture, and USAID leads)

did such an assessment then, “this alone tells me how to allocate all my efforts for the year.” During his two years in Afghanistan, Woodgerd attended hundreds of briefings and command updates, worked closely with the key leaders across governance LOE, listened to higher level assessment cells and reviewed their products. But to him they missed the salient point, which is “the only reason for any assessment is to lead directly to a precise decision and courses of actions, which in many cases could be to do nothing or delay action.”¹⁰³ To have a chance for success, the chosen interventions must mesh with other ongoing actions and other LOE. Not only must the assessment process simultaneously factor in each action in each LOE, but he adds this key qualifier, “it must have defined ‘break points’ of clearly discernible differences between levels that would lead to a decision.”¹⁰⁴ The five Components of the Land Governance Focus Area within CAPRS™ mirror the World Bank Land Governance Assessment Framework (LGAF)¹⁰⁵ and are included in Appendix III.

This paper has focused only on the assessment component of CAPRS™ because all LOE are included in **one** structured approach using a common assessment methodology and language. This enables the simultaneous visibility that is required to make peace-building resource and timing decisions. CAPRS™ is comprehensive because it ensures the commander’s intent is uniformly applied across a geographic region and can be used to plan, brief (all on one slide), and mentor. In sum, most of the LTPR assessments, guides, and metrics frameworks listed in Appendix I, created by Ph.D.s, economists, and lawyers, are too academic for field use. Of course, these instruments are very useful for international actors to design detailed, long-

term interventions, based on thorough analyses, to affect needed societal changes that CAPRS™ can then measure incrementally at the local level. As Woodgerd aptly states, “CAPRS™ is for the rest of us.”

Conclusion

Land issues contribute not only to conflict, but also to peace. By addressing land issues, peacebuilding can work to safeguard 1.5 billion people from escalating criminal and political violence rooted in a lack of formalized land tenure and property rights. Attorney and former U.S. Defense Attaché Officer Geoffrey Demarest recalls an unheralded pillar of Western Civilization: “The original reason of property was and remains conflict resolution.”¹⁰⁶ He suggests to the U.S. and UN, not to continue to place property formalization on a secondary plane of goals.¹⁰⁷ Land administration underpins development and forms a societal backbone that supports social justice, economic growth, and environmental sustainability, all elements of human security. Thus, the UN should include land administration with its next generation of Millennium Development Goals beyond 2015. It should also heed Scott Leckie’s suggestions and establish a lead agency within its large and sometimes unwieldy system to consolidate land administration functions.

Both the United States and the UN should invest in comparatively low-cost civilian standby or military reserve personnel for a range of governance lines of effort, including, for the first time, land administration. They must be equipped with critical peacebuilding tools such as the Social Tenure Domain Model (STDm), and engage host nation stakeholders in land matters beyond government officials. Based on my

observations in Afghanistan and Ghana, the STDM can cost-effectively improve tenure security, decrease conflict, limit forced evictions, and motivate the poor to engage with the land industry. That industry increasingly includes sub-state actors, who succeed where government could not, for example, in upgrading peri-urban slums and managing natural resources.

The conduct of ad hoc peace operations in Iraq and Afghanistan has been costly in blood and treasure and shown very modest results. Donor fatigue has set in and resources are too scarce to build developing world institutions to Western standards. In localities outside the state's capacity to provide services, it is time for "Afghan good enough." Foreign nationals have to own the process of institution building, and many of the most capable national actors are outside government. A very diffuse and particularized set of power brokers operates in the non-Western world. Most notably, a rapidly-expanding, empowered, and educated middle class, demanding a share in governance, material development, and economic well-being, has come to the fore. Many are social media-savvy and use crowdsourcing and participatory mapping to monitor land rights and resolve land conflict. Ghanaian Customary Land Secretariats exemplify this type of sub-state entity, and their efforts should be nurtured by peacebuilders.


Millennium Development Goals and peacebuilding have yet to lift one fragile state out of poverty and want. A lack of attention paid to land issues is one cause of the failures—and that is ground truth. Once viewed as a narrow, technical field, land administration is instrumental in building human security.

APPENDICES

Appendix I

A selected list of Land Tenure and Property Rights (LTPR) assessments, guides, and metrics frameworks.¹⁰⁸

1. *The USAID LTPR Basic Matrix* is designed to visualize the categories of possible constraints and interventions associated with land tenure and property rights. In a word, it functions as a menu of six constraints and seven interventions that need to be considered within the realm of land tenure and property rights. Within each heading of the LTPR constraints categories are sub-issues that include historical, cultural, political, economic, and social nuance. This nuance provides depth and complexity to the issues. For example, “Resource Conflict and Displacement” in itself is generic, but when the focus is an issue dealing with displaced persons or the restoration of rule of law in a conflict or post-conflict situation, this category takes on practical dimensions for LTPR policy and program development.

		BASE MATRIX	LAND TENURE AND PROPERTY RIGHTS	TREES AND FORESTS	PERMANENT LANDS, RIVERS, GROUNDWATER	MINEALS	WOMEN'S VULNERABILITY
		CONSTRAINTS					
		Resource Conflict and Displacement	Weak Governance	Insecure Tenure and Property Rights	Inequitable Access to Land and Resources	Poorly Performing Land Markets	Unsustainable NRM/ Biodiversity Loss
INTERVENTIONS	Institutions and Governance						
	Legal and Regulatory Framework						
	Rights Awareness and Empowerment						
	Conflict and Dispute Resolution						
	Restitution, Redistribution, and Consolidation						
	Rights Delivery and Administration						
	Resource Use Management						

May 2011

Figure A.I.1: USAID Land Tenure and Property Rights Base Matrix, Source: USAID

2. *Logframe Analysis for Titling Projects*, by Land Equity International PT, LTD.¹⁰⁹ A Logframe is a tool for planning (goals and objectives) and managing (inputs, processes, and outputs) development projects. That the Logframe is included in a broader discussion of project management and evaluation in Chapter 13 of *Land Administration for Sustainable Development* is especially useful, as is the Logframe's listing a hierarchy of objectives, indicators of success, along with major risks and assumptions.

3. *Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflict*,¹¹⁰ prepared by UN-HABITAT on behalf of the UN Interagency Framework Team for Preventive Action. The Framework Team is an internal UN support system that pro-

motes interagency collaboration on early preventive action and assists UN Resident Coordinators and UN Country Teams to proactively work with national partners to strengthen their capacities to mediate and manage potentially divisive issues.¹¹¹ Chapter 7 of this publication lists no fewer than 40 existing toolkits and guidance documents in its Table 6.

4. *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries, and Forests in the Context of National Food Security*, by the Food and Agriculture Organization of the United Nations (FAO).¹¹² These valuable Voluntary Guidelines are the result of intense negotiations amongst 96 countries along with civil society organizations, UN agencies, and other international organizations, farmers associations, and private sector representatives. The Voluntary Guidelines are organized in 7 parts (I – Preliminary, II – General matters, III – Legal recognition and allocation of tenure rights and duties, IV – Transfers and other changes to tenure rights and duties, V – Administration of tenure, VI – Responses to climate change and emergencies and VII – Promotion, implementation, monitoring and evaluation) and within those parts are 25 sections. Virtually all parts and sections of the Voluntary Guidelines rely on systems to record tenure rights, restrictions, and responsibilities.¹¹³

5. *The Land Governance Assessment Framework (LGAF)* by Klaus Deininger, Harris Selod, and Tony Burns maintains the all-important view to institution-building. Before trying to assess or measure land governance, one has to clearly understand the roles to be

fulfilled by public institutions in the land sector. Based on the literature, these are essentially three-fold: First, there is need for a legal and institutional framework that clearly defines the rules for allocation of property rights to land and, by allowing their enforcement in a cost-effective way, encourage land-related investment. Second, reliable and complete information on land rights needs to be made available freely to interested parties so as to allow low-cost verification of land ownership status, which in turn forms the basis for low-cost land transfers to more productive use(rs) and the use of land as collateral in financial markets. Finally, there is need to perform a regulatory function to avoid negative externalities that may arise from uncoordinated action by private parties...The above functions led us to identify five key areas of good land governance, namely:¹⁴

- A legal, institutional, and policy framework that recognizes existing rights, enforces them at low cost, and allows users to exercise them in line with their aspirations and in a way that promotes the benefit of society as a whole.
- Arrangements for land use planning and taxation conducive to avoiding negative externalities and supporting effective decentralization.
- Clear identification of state land and its management in a way that provides public goods cost-effectively; use of expropriation as a last resort only to establish public infrastructure with quick payment of fair compensation and effective mechanisms for appeal; and mechanisms for divestiture of state lands that are transparent and maximize public revenue.

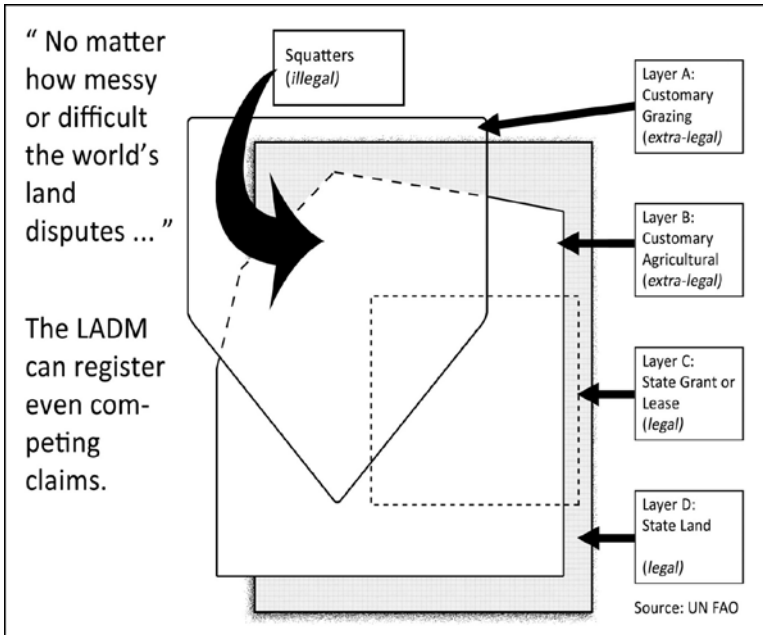
- Public provision of land information in a way that is broadly accessible, comprehensive, reliable, current, and cost-effective in the long run.
- Accessible mechanisms to authoritatively resolve dispute and manage conflict with clearly defined mandates, and low cost of operation.

Appendix II

Thomson Reuters Open Title® software registers overlapping property rights and creates property folios¹¹⁵

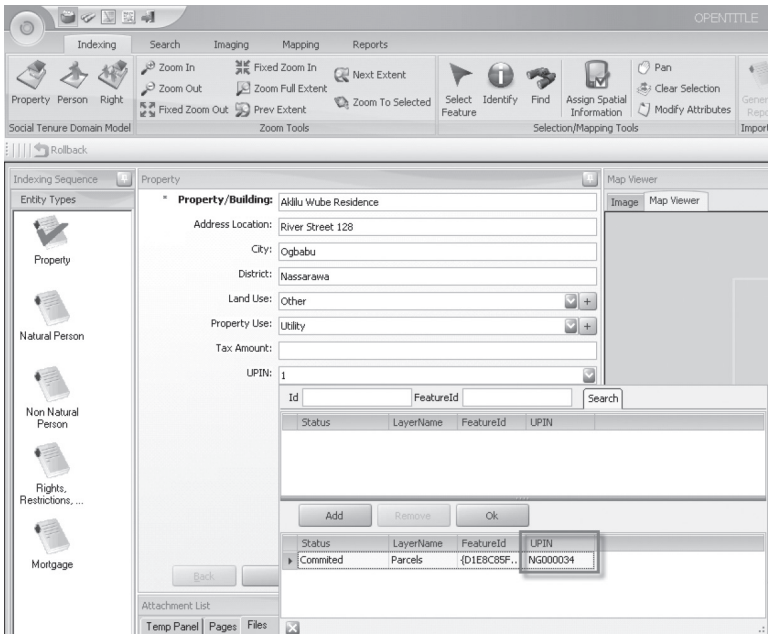
With Thomson Reuters OpenTitle® (OT) software one can represent legal and extra-legal rights recorded via the Social Tenure Domain Model (STDM). The software integrates parties, social tenure relationships between people and land, and spatial units. The model has been specifically developed for communities where informal land rights may overlap with or are interconnected by familial or clan relations. A notional expansion of the overlapping rights depicted in the reprinted Figure 2.1 follows:

- Legal Rights:
 - Owner's property (Aklilu Wube)
 - Lessee's property (Adom Adika)
 - State Land (Nasarawa Region)
- Extra Legal Rights:
 - Customary Grazing (Awe Community)
 - Customary Agricultural (Tiv Ethnic group)

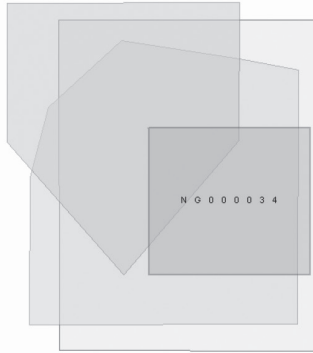


OpenTitle® Solution:

1. Use the Indexing Tab in OT to fill in STDM fields (Property, Natural Person, Non Natural Person, Right-Restrictions-Responsibility, Mortgage).
2. Introduce Property Data: Location of the Property, Land Use, Property Use, Tax Amount and the UPIN (Unique Property Identification Number) data from the map. This latter information will be useful to link the map representation of the property with the parties’ registered data.



3. Introduce Natural Person Data: For this example, it is necessary to introduce property owner data and the lessee of the property.
 - a. Data for the owner of the property with the 100% of rights over the land parcel.



Natural Person

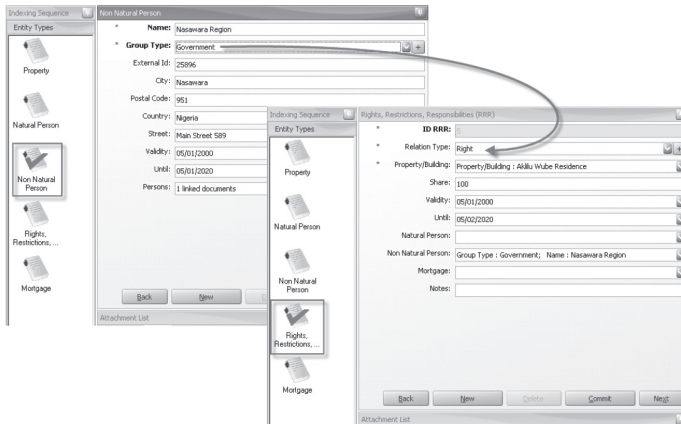
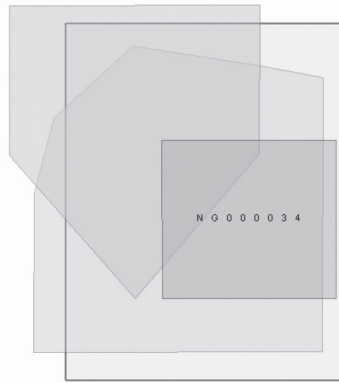
- * **Person Id:** 2563984
- * **First Name:** Aliku
- * **Last Name:** Wube
- City: Nassarawa
- Date of Birth: 10/08/1969
- Gender: Male
- Postal Code:
- Country: Nigeria
- Street: River Street 128
- Validity: 07/01/2007
- Until: 07/01/2012

Rights, Restrictions, Responsibilities (RRR)

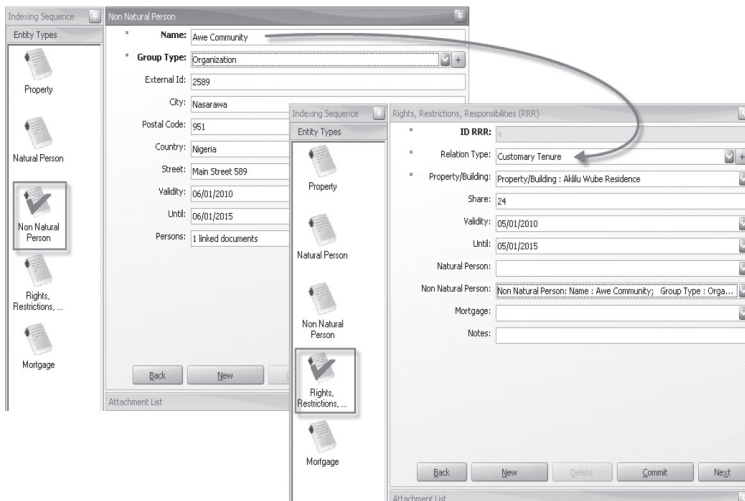
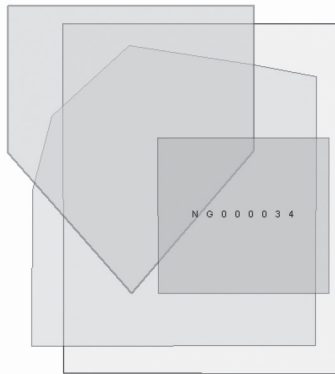
- * **ID RRR:**
- * **Relation Type:** Ownership
- * **Property/Building:** Property/Building : Aliku Wube Residence
- Share: 100
- Validity: 05/01/2000
- Until: 05/01/2020
- Natural Person: Person Id : 2563984, First Name : Aliku, Last Name : Wube
- Non Natural Person:
- Mortgage:
- Notes:

b. Data for the lessee of the property with 100% tenant rights over the land parcel.

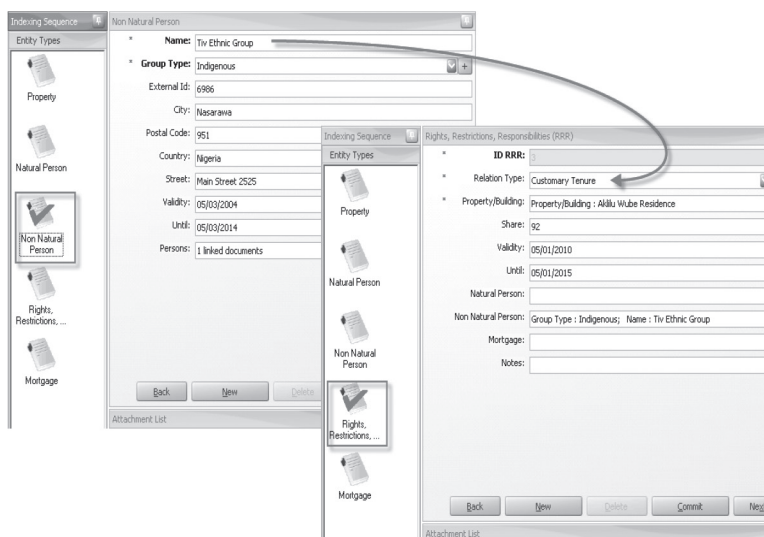
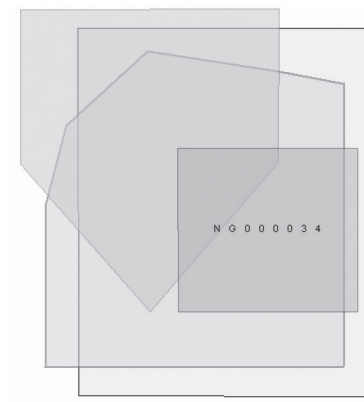
4. Introduce Non Natural Person Data: In this example, it is necessary to introduce the data for Nasarawa Government, Tiv ethnic group, and Awe community's rights over the land parcel.
 - a. Data for the property of Nasarawa Administrative Region with the 100% of government rights over the land parcel (taxation).



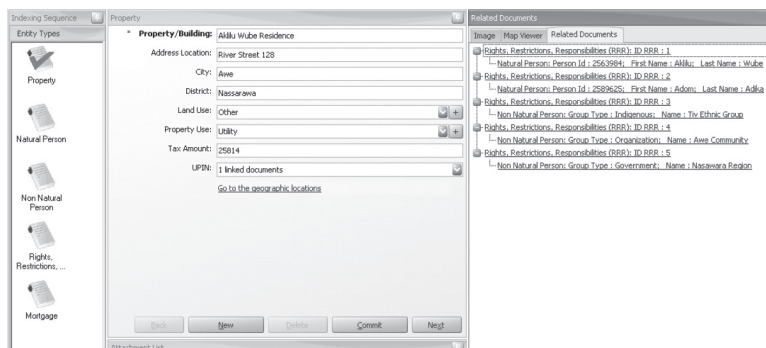
- b. Data for the property of Awe community with 24% of rights over the land parcel (customary grazing).



- c. Data for the property of the Tiv ethnic group with 92% of the rights over the land parcel (customary agriculture).



- At the end of the process all the legal and extra-legal rights over the land parcel are documented.



- In a final report, with the information indexed, OT compiles a report that shows all the aforementioned property rights over the land parcel

Figures A.II.1: Screenshots of Thomson Reuters Open Title® Software applications.

Appendix III

Each component of CAPRS™, Assessment, Prioritization, Resources, and Synchronization is described below.

Comprehensive: All Lines of Effort (LOE) are included in one structured approach using a common assessment methodology. Only in this manner can the simultaneous visibility occur that is required to make resource and timing decisions. It ensures commanders' intent is uniformly applied across entire Area of Operations (AO), and can be used to plan, brief, and mentor.

Assessment: Military and civilian agency leaders new to CAPRS™, at first, thought the Assessment to be the hardest part of the methodology. This is often the case when multiple, higher echelon groups or outside advisors, who try to cover everything, are involved. This step actually proves to be the easiest when working with the true "doers/experts" at the local level. The greatest error in conducting an assessment is starting with "these are the numbers we can measure," "this is what we are doing," or "higher headquarters tasking is" rather than:

- A *tabula rasa* or blank slate definition of each LOE.
- A process that first literally asks "What is development or governance," and defines the end state (what success looks like).
- Simple, actionable, metrics that are commonly understood and agreed upon.

- Observations (snapshots) taken from the same spot over time is the only way to measure change.
- Ground truth assessments at one of four levels: Red, Orange, Amber, or Green, with clearly defined break points between them, and make simple definitions of each that can be determined by observation.

This type of assessment provides much needed continuity to LOEs, and is the first step (with Synchronization as the last) of making an honest and measured time estimate of “how long will this take?” It lends itself to a 1-slide chart for leaders to monitor all LOEs. It guides reporting and makes routine updates easy to enter. It also guides planning, and is simple enough for each leader to sit down with a host or partner nation counterpart and communicate the “big picture” across language or cultural barriers.

Prioritization: Asking questions such as “What matters most?” and then “What would make one area more important than another?” must be done in a vacuum and separately from developing the assessment. Prioritization must be done across the entire AO, by district, so that actions take place within defined space and time, then peacebuilding actors’ organization and budget are to be likewise structured. This allows for the creation of one master matrix where the assessment results are collected for each AO and then weighted. Assessments should not influence or change the prioritization of an area because an assessment is only a snapshot in time of ground truth. An area’s priority is driven by such factors as its population density, location along a border, or in a key tribal area, etc.

Resourcing: With the prioritization matrix and local level assessments, leaders allocate available resources in priority order. Think of resources as poker chips. Every commander or agency lead has a finite amount of resources: people, money, time, expertise. When resources are inadequate for the task at hand, leaders can now quantify what is needed to make progress in a request to higher headquarters, enabling informed decision-making. After it becomes clear that further progress is not achievable without a huge influx of often unavailable resources, a sound decision to stop work should be praised, not punished.

Synchronization: All actions take place in space and time. After prioritization and resourcing decisions are made, they are reflected on a synch matrix that guides the team's efforts and serves as a feedback loop to the resourcing step. If an action in one LOE is significantly influenced by another LOE, then an action may be delayed or changed so resources might be allocated differently. The Prioritization Effort, followed by the Resourcing Effort, and now the actual Synch Matrix, together provide the Synchronization of Effort and show when to ramp-up an effort because improvement at the break point from Orange to Amber, for example, is feasible near-term, or to stop efforts should resources be needed elsewhere or timing dictates a shift.

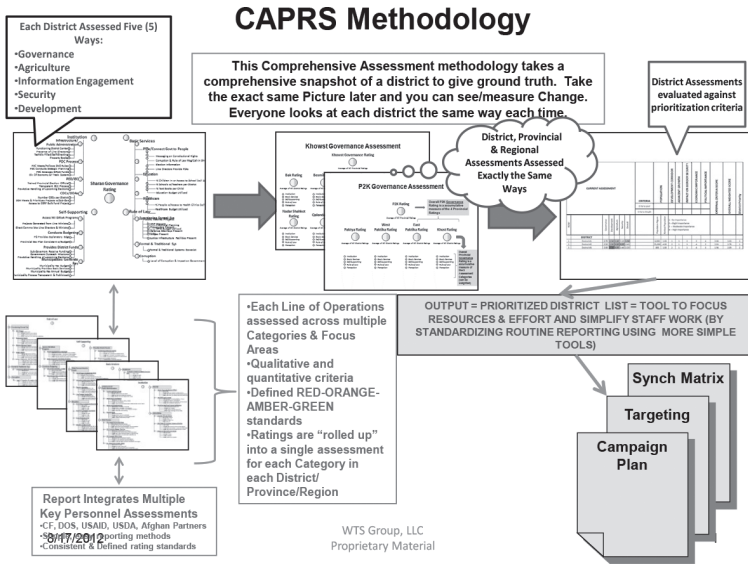


Figure A.III.1 CAPRS™ Methodology. Source: WTS Group used with permission

CAPRS Land Governance Assessment

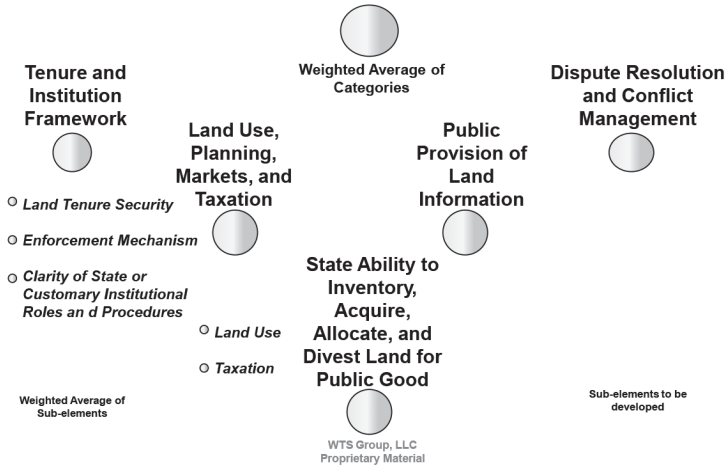


Figure A.III.2: CAPRS™ Land Governance Components

New Land Governance Focus Areas within CAPRS:

A. Tenure and Institutional Framework

1. Land Tenure Security

- Red-No tenure security, land controlled by elites, informal settlements (undocumented slums, shantytowns) are widespread
- Orange-Tenure security for select few with the means to pay, property rules remain ambiguous
- Amber-Tenure security for most people due to clear, documented property rules
- Green-Nearly all people enjoy tenure security, informal settlements are few

2. Enforcement Mechanisms
 - a. Red-None of police, court, or customary authorities enforce property rules
 - b. Orange-Enforcement by one of above authorities for select few who can pay
 - c. Amber-Two of the above authorities enforce most property rules for most people
 - d. Green- Impartial enforcement by all authorities for all members of society

 3. Clarity of State or Customary Institutional Roles and Procedures
 - a. Red-Unclear, complex procedures and overlapping institutional roles push most people into informality (undocumented properties and land use rights)
 - b. Orange-Less overlap of roles, but formal registration procedures are costly and time consuming
 - c. Amber- Accessible institutions and efficient procedures encourage most people to make formal property registrations and transactions
 - d. Green- Clear institutional roles; efficient, affordable procedures; very little informality
- B. Land Use, Planning, Markets, and Taxation
1. Land Use
 - a. Red-No master land use plans; no public participation, no requirements for construction
 - b. Orange-Planning is ineffective, process for permits invites corruption and informality

- c. Amber-Planning guides most development; efficient permit process encourages formality
 - d. Green-Public participates in planning, corruption is rare, all new construction is formal
- 2. Taxation
 - a. Red-Tax policy and schedule are unclear, no assessment or collection systems
 - b. Orange-Policy is clear, but systems are inefficient, no information on taxes collected
 - c. Amber-Schedule is equitable, systems efficient, but information on public good from taxes is limited
 - d. Green-Few exemptions to policy and schedule, all systems are efficient and complete
- C. State Ability to Inventory, Acquire, Allocate, and Divest Land for Public Good
 - 1. Red-No clear definition, classification, or inventory of public lands
 - 2. Orange-The above exist but are incomplete, expropriations (government taking of private land) are inexplicable
 - 3. Amber-The above exist, and are mostly complete, expropriations are explicable
 - 4. Green-The above are well-managed, allocation and divestiture (government land awarded to private parties) of land is transparent and accountable

D. Public Provision of Land Information

1. Red- Land registry is grossly incomplete, land records unreliable, elites benefit
2. Orange-Land Registry is incomplete, land recording process is not generally understood
3. Amber-Land Registry is largely complete, recording process is understood & affordable
4. Green-Land Registry is complete, land records are up-to-date and publically available

E. Dispute Resolution and Conflict Management

1. Red-Rampant conflict over land has negative social and economic consequences
2. Orange-Courts settle few disputes, “forum shopping” for alternative resolution is widespread
3. Amber-Courts settle most disputes but costs remain high, customary resolution, when used, is fair and equitable, instances of land conflict are decreasing
4. Green-Land disputes do not drive conflict; courts settle nearly all disputes equitably

Figure A.III.3: Land Governance Focus Areas.

Source: author.

Province	District	Overall Assessment Score	Legal and Inst Framework	Land Use...	State Land/Pub Infrastructure	Public Prov of Information	Dispute Resolution
1	A	1.77	1.33	2.5	2	1	2
1	B	2.60	2.00	3	3	2	3
1	C	2.87	2.33	3	4	2	3
1	D	2.47	2.33	3	3	2	2
1	E	3.23	2.67	2.5	4	4	3
Overall Prov 1		All	2.59				
2	F	2.77	2.33	2.5	4	3	2
2	G	2.37	2.33	2.5	3	2	2
2	H	3.70	3.00	3.5	4	4	4
2	I	2.57	2.33	2.5	3	2	3
2	J	2.23	1.67	2.5	3	2	2
2	K	2.07	1.33	2	2	2	3
Overall Prov 2		All	2.62				

LEGEND	
Green	3.25 - 4.
Amber	2.5 - 3.2
Orange	1.75 - 2.
Red	0 - 1.74

Figure A.III.4: CAPRS™ land governance assessment for two Ghanaian provinces.

Figure A.III.4 depicts a CAPRS™ land governance assessment, based on the five Focus Areas in Figure A.III.3, for two Ghanaian provinces. The overall provincial assessment scores, 2.59 and 2.62, respectively, reveal that the two provinces are roughly equal in land governance capacity, albeit their respective districts exhibit different strengths and weaknesses. Even with additional resources, they are unlikely to attain a green status in the near-term. Still, one must guard against regression into weak governance that may stoke violence. For example, Province 1 District A’s overall assessment rates a mere .02 percentage points above the break point from red to orange; its lowest scores are in elements A (Legal and Institutional Framework) and D (Provision of Public Land Information). Element A has the advantage of having been broken down into three sub-elements, which allows for more fine-tuned decision-making against

what LOE resources might be applied. Assuming, notionally, that staffing and training of Customary Land Secretariats have been responsible for two districts advancing from orange to green, and one from orange to amber status for element D, then a possible course of action is to replicate this effort in Province 1 District A. Guiding metrics might include “To what degree is the land registry complete?” “To what degree is the land registration process understood?” and then “To what degree is the land registration process actually utilized?” If the land registry is underutilized, then determine whether the hindrance is a lack of trust in the registry as an institution, inordinately high registration costs, or a registry’s location is too distant for most people to walk to, or something else, and design the intervention accordingly. The CAPRS™ prioritization matrix, with weighted criteria for a geographic region’s value to overall policy aims, aids in decision-making where to best allocate resources when, as in this example, two geographic regions are fairly equal in their respective land governance capacity. Prioritization factors to consider include:

- adjacency to a green(er)-status region
- adjacency to a critical border area
- a greater population density
- possessing development corridors
- possessing key land or sea transportation hubs
- possessing political significance for the host nation

ENDNOTES

1. Definition: a range of actions that reduce the risk of lapsing or relapsing into conflict.

2. The World Bank, "World Development Report 2011: Conflict, Security, and Development," Washington DC, 2011, p. 2.

3. Definition: human security focuses on the protection of individuals, rather than defending the physical and political integrity of states from external military threats - the traditional goal of national security, available from www.humansecuritygateway.com/aboutUs.php , accessed June 13, 2012.

4. Frontline, The Public Broadcasting System. December 1, 2003, available from www.pbs.org/wgbh/pages/frontline/shows/beyond/interviews/mayville.html, accessed June 13, 2012.

5. Thomas E. Ricks, Foreign Policy (on-line blog), February 9, 2010, available from http://ricks.foreignpolicy.com/posts/2010/02/09/kilcullen_ii_how_to_tell_the_effect_of_your_operations_on_the_population, accessed June 13, 2012.

6. Food and Agriculture Organization of the United Nations (FAO), "Towards Improved Land Governance" Land Tenure Working Paper No. 11, September 2009, pp. 1-2, available from <ftp://ftp.fao.org/docrep/fao/012/ak999e/ak999e00.pdf>, accessed June 13, 2012.

7. Definition: a legal term meaning land that belongs to no one.

8. Sarah Cliffe and Nick Manning, "Practical Approaches to Building State Institutions," Chapter 8 in *Building States to Build Peace*, Charles Call and Vanessa Wyeth, Editors, International Peace Institute, 2008, pp. 164-5.

9. Sandra F. Joireman, *Where There is No Government: Enforcing Property Rights in Common Law Africa*, New York: Oxford University Press, 2011, p. 151.

10. *Ibid.*

11. United Nations Human Settlements Programme (UN HABITAT), World Habitat Day Feature, October 3, 2005, available from www.unhabitat.org/documents/media_centre/whd2005/boxes.pdf, accessed June 13, 2012.

12. The Boston Globe, "One Billion Slum Dwellers," February 24, 2012, available from www.boston.com/bigpicture/2012/02/slum_life.html, accessed June 15, 2012.

13. The Bretton Woods Project, "World Bank Ignoring Forest Communities?" April 5, 2011, Update 75, <http://www.brettonwoodproject.org/art-567943>, accessed April 15, 2012.

14. Nancy Soderberg, "Enhancing U.S. Support for UN Peacekeeping," PRISM, National Defense University Press, Vol. 2., No. 2, March 2011, p. 16, available from <http://ccoportal.org/sites/ccoportat.org/files/prism2-2.pdf>, accessed April 15, 2012.

15. Definition: A nation that disregards international law and threatens world peace.

16. Definition: A nation that that cannot provide basic services, has lost territorial control or the monopoly on the use of force

17. The White House, "2010 National Security Strategy," Washington DC, available from www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf, accessed April 15, 2012.

18. Soderberg, "Enhancing U.S. Support for UN Peacekeeping," p. 16.

19. U.S. Department of Defense, "Quadrennial Defense Review Report," Washington DC, 2010, p. 13, available from www.defense.gov/qdr/qdr%20as%20of%2029jan10%201600.pdf, accessed April 15, 2012.

20. Adam Entous, Julian E. Barnes, and Siobhan Gorman, "More Drones, Fewer Troops," *The Wall Street Journal*, January 26, 2012, p. 1, available from <http://online.wsj.com/article/SB10001424052970204624204577183234216799116.html>, accessed April 15, 2012.

21. Jennifer Rizzo, "U.S. Military Seeks to Spread Skills around the World to Ease Burden on Itself," Cable News Network (CNN), June 28, 2012, available from <http://security.blogs.cnn.com/2012/06/28/us-military-seeks-to-spread-skills-around-the-world-to-ease-burden-on-itself/>, accessed July 13, 2012.

22. Thomas E. Ricks, "Kilcullen (II): How to Tell the Effect of your Operations of the Population," The Best Defense blog: Ricks' comments on David Kilcullen's essay, "What Works in Counterinsurgency, what doesn't, and how to tell the difference," February 9, 2010, available from http://ricks.foreignpolicy.com/posts/2010/02/09/kilcullen_ii_how_to_tell_the_effect_of_your_operations_on_the_population, accessed April 15, 2012.

23. *Ibid.*

24. Derick W. Brinkerhoff, Ronald W. Johnson, Richard Hill, RTI International, "Guide to Rebuilding Public Sector Services in Stability Operations: a Role for the Military," PKSOI Papers, U.S. Army War College, Carlisle, Pennsylvania, 2009, available from www.dtic.mil/dtic/tr/fulltext/u2/a507815.pdf, accessed April 15, 2012.

25. United States Department of the Army, Army Technical Publication Stability Techniques (ATP 3-07.5), 2012, p. 3-15.

26. *Ibid* p. 3-16

27. James Cricks, "Moving Beyond Force-on-Force Planning," Interagency Journal Vol. 2, Issue 1, Winter 2011, p. 34, available from <http://thesimonscenter.org/wp-content/uploads/2011/03/IAJ2-1-Winter-2011.pdf>, accessed April 15, 2012.

28. *Ibid.*

29. Hillary Rodham Clinton, "A Message from the Secretary." U.S. Department of State, 2011, available from www.civilianresponsecorps.gov/, accessed April 15, 2012.

30. Personal correspondence with U.S. Embassy contacts, November 12, 2011. Permission to reprint obtained from CSO February, 14, 2012.

31. Douglas E. Batson, *Registering the Human Terrain: a Valuation of Cadastre*, 2008, National Intelligence University Press, Washington DC, pp. 135-140, available from www.ni-u.edu/ni_press/pdf/Registering_the_Human_Terrains.pdf, accessed April 15, 2012.

32. U.S. Department of State, Ambassador Rick Barton's Remarks at the 2012 Alliance for Peacebuilding Annual Conference, 11 May 2012, available from www.state.gov/j/cso/releases/remarks/2012/189975.htm, accessed May 15, 2012.

33. Samuel S. Farr, "From Idea to Implementation: Standing up the Civilian Response Corps," *PRISM*, Vol. 2 No. 1, December 2010, available from www.ndu.edu/press/civilian-response-corps.html, accessed April 15, 2012.

34. United States Institute of Peace, 2012, available from www.usip.org/education-training/courses/land-property-and-conflict, accessed April 15, 2012.

35. United States Agency for International Development, 2012, available from <http://usaidlandtenure.net/usaidltprproducts/training-documents/property-rights-and-resource-governance-issues-and-best-practices-oct-20-22-2010-washington-dc>, accessed April 15, 2012.

36. United Nations Development Programme, 2012, available from www.undp.org/content/undp/en/home/mdgoverview.html, accessed April 15, 2012.

37. International Dialogue on Peacebuilding and State-building, 2012, available from www.oecd.org/document/19/0,3746,en_21571361_43407692_46008211_1_1_1_1,00.html, accessed April 15, 2012.

38. Charles T. Call and Elizabeth M. Cousens, "Ending Wars and Building Peace: International Responses to War-Torn Societies," in *International Studies Perspectives*, Volume 9, February 2008, p. 9, available from <http://nw08.american.edu/~call/Publications/Ending%20Wars%20Building%20Peace.pdf>, accessed April 15, 2012.

39. *Ibid*, p.7.

40. The World Bank, "World Development Report 2011: Conflict, Security, and Development," p. 147.

41. The United Nations, "Financing Peacekeeping," 2012, available from www.un.org/en/peacekeeping/operations/financing.shtml, accessed June 5, 2012.

42. Scott Leckie, "Leader of the Pack: Who Will Take the Lead on Post-Conflict HLP Issues?" in *Uncharted territory: Land, Conflict and Humanitarian Action*, Sara Pantuliano, Ed. Humanitarian Policy Group, Overseas Development Institute, London, 2009, available from www.displacementsolutions.org/files/documents/ODI_article.pdf, accessed June 5, 2012, with limited correction: Leckie's preferred term for LPTR is HLP (housing, land, and property rights).

43. *Ibid* p. 5

44. *Ibid*. p. 13

45. The United Nations Human Settlements Programme, known as UN-HABITAT, is mandated by the UN General Assembly to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all. See www.unhabitat.org

46. *Ibid*. p. 6

47. *Ibid*. pp. 8-9

48. Michael Rostek and Peter Gizewski, Eds., "Security Operations in the 21st Century: Canadian Perspectives on the Comprehensive Approach," 2011, p. 15.

49. United Nations Department of Economic and Social Affairs, Population Division, "World Urbanization Prospects: The 2011 Revision," 2011, p. 4.

50. Faculty of Geo-information Science and Earth Observation (ITC), University of Twente, the Netherlands, 2012, available from www.itc.nl/Pub/study/Course-domains/Land-administration, accessed June 5, 2012.

51. Technical University of Munich, Germany, Masters Programme in Land Management and Land Tenure, 2012, available from www.landentwicklung-muenchen.de/master/index.html, accessed June 5, 2012.

52. The University of Melbourne, Australia, Centre for Spatial Data Infrastructures and Land Administration, 2012, available from www.csdila.unimelb.edu.au/, accessed June 5, 2012.

53. KTH Royal Institute of Technology, Stockholm, Sweden, Master of Science degree in Real Estate Development and Financial Services, 2012, available from www.kth.se/en/studies/programmes/master/programmes/be/realestate/master-s-programme-in-real-estate-development-and-financial-services-1.48568, accessed June 5, 2012.

54. The University of Calgary, Canada, Geomatics Engineering with a specialization in GIS and Land Tenure, available from www.geomatics.ucalgary.ca/specializations, accessed June 5, 2012.

55. Michigan Technological University's Master of Science degree in Integrated Geospatial Technology, available from www.mtu.edu/technology/graduate/igt/, accessed June 5, 2012.

56. The University of Florida course syllabus for SUR 6427 Land Tenure and Administration appears in Batson, "Registering the Human Terrain: a Valuation of Cadastre," pp. 141-42.

57. This illustration was first used in Batson, Registering the Human Terrain: a Valuation of Cadastre, pp. 55-56.

58. Geographic Information – Land Administration Domain Model (LADM) as a Draft International Standard, International Organisation for Standardisation (ISO) TC 211/SC, Geneva, Switzerland, available from www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=51206, accessed 13 June 2012.

59. Stig Enemark, "Facing the Global Agenda-Focus on Land Governance," International Federation of Surveyors (FIG), July 2009, available from www.fig.net/pub/monthly_articles/july_2009/july_2009_enemark.html, accessed 13 June 2012.

60. 42 countries' cadastral systems are compared at www.cadastraltemplate.com.

61. Robin McLaren, 2011, "Crowdsourcing Support of Land Administration: a new, collaborative partnership between citizens and land professionals," Royal Institution of Chartered Surveyors (RICS) Report November 2011, available from www.rics.org/site/scripts/download_info.aspx?fileID=10844&categoryID=545, accessed May 15, 2012.

62. Klaus W. Deininger, Clarrisa Augustinus, Stig Enemark, Paul Munro-Faure, "Land Governance for Rapid Urbanization," Chapter 5 in *Innovations in Land Rights Recognition, Administration, and Governance*, 2011, The World Bank, Washington, DC, p. 178.

63. Ian Williamson, Stig Enemark, Jude Wallace, and Abbas Rajabifard, *Land Administration for Sustainable Development*, ESRI Press: Redlands, California, 2010, p. 438.

64. Klaus W. Deininger, Clarrisa Augustinus, Stig Enemark, Paul Munro-Faure, "Improving Land Administration in Ghana: Lessons and Challenges in Moving Ahead," Chapter 1.3 in *Innovations in Land Rights Recognition, Administration, and Governance*, 2011, The World Bank, Washington, DC, pp. 20-21.

65. Ato K. Onoma, *The Politics of Property Rights Institutions in Africa*, Cambridge, U.K.: Cambridge University Press, 2010.

66. Ghanaweb News, "Ga-Damgbe Youth Suspect Foul Play in Lands Commission Fire," March 1, 2012, available from www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=230958, accessed May 22, 2012.

67. Comments on the fire at the Ghanaian Lands Commission, March 30, 2012, available from www.ghanaweb.com/Ghana-HomePage/NewsArchive/artikel.php?ID=230958&comment=0#com, accessed April 22, 2012.

68. United States Agency for International Development (USAID), "Report on Ghana by the Partnership for Growth Interagency Land Tenure Working Group: Analysis and Recommendations on Constraints Analysis," 2011, p. 9.

69. Ibid, p. 4.

70. Ibid.

71. Center for Strategic and International Studies (CSIS), "Land Tenure & Development: Innovations and Progress Titling Systems Forum," December 12, 2011, available from <http://csis.org/event/land-tenure-and-development-innovations-and-progress-titling-systems>, accessed May 22, 2012.

72. The work described was performed by International Land Systems (ILS), Inc. The Thomson Reuters acquisition of ILS in July 2011 established the Government segment within that company. <http://grm.thomsonreuters.com/news/july-2011/thomson-reuters-completes-acquisition-of-manatron/>

73. P.J.M. van Oosterom, C.H.J. Lemmen, H.T. Uitermark, G. Boekelo, G. Verkuil, "Land Administration Standardization with focus on Surveying and Spatial Representations," 2011, available from http://proceedings.esri.com/library/userconf/survey11/papers/pap_3834.pdf, p.4., accessed May 14, 2012.

74. Christian Lemmen, "The Social Tenure Domain Model: a Pro-poor Land Tool," International Federation of Surveyors (FIG), Global Land Tool Network (GLTN), and UN-HABITAT, 2010, available from <http://fig.net/pub/figpub/pub52/figpub52.htm>, accessed May 22, 2012.

75. Food and Agriculture Organization of the United Nations (FAO), 2011, available from www.fao.org/hr/tenure/sola/en/, accessed May 22, 2012.

76. The SOLA web site is *www.flossola.org*.
77. Douglas E. Batson, Registering the Human Terrain: a Valuation of Cadastre.
78. Douglas E. Batson, "Napoleonic Know-how for Stability Operations," in *Modern Military Geography*, Francis Galgano and Eugene Palka, Eds., 2010, Routledge, New York.
79. Douglas E. Batson, "Reconstructing Post-Conflict Human Landscapes: The Land Administration Domain Model," in *Engineering Earth*, Stanley D. Brunn, Ed., 2011, Springer, New York.
80. Douglas E. Batson, "Snow Leopards and Cadastres: Rare Sightings in Afghanistan," in *Land and Post-Conflict Peacebuilding*, Jon Unruh and Rhodri Williams, Eds., forthcoming 2012, Earthscan-Routledge, New York.
81. Christian Lemmen, "The Social Tenure Domain Model: a Pro-poor Land Tool," International Federation of Surveyors (FIG), Global Land Tool Network (GLTN), and UN-HABITAT, 2010, available from <http://fig.net/pub/figpub/pub52/figpub52.htm>, accessed May 22, 2012.
82. Nigel Edmead, "OpenTitle®: A Model for Low-Cost, Customizable Land Administration Technology," paper presented at the World Bank Land and Poverty Conference, 18-20 April 2011.
83. *Ibid.*
84. Douglas M. Black, "An Innovative Approach to Land Governance," paper presented at the International Federation of Surveyors (FIG) Working Week, Rome, Italy, May 6-10, 2012, p. 7, available from www.fig.net/pub/fig2012/ppt/ts01g/TS01G_black_5532_ppt.pdf, accessed July 26, 2012.
85. Nigel Edmead, "OpenTitle®: A Model for Low-Cost, Customizable Land Administration Technology."
86. *Ibid.*

87. United Nations, "United Nations Millennium Declaration," Millennium Summit, New York, 6-8 September 2000, available from www.un.org/millennium/declaration/ares552e.pdf, accessed May 10, 2012.

88. Definition: Institutions bent on gaining wealth from human and natural resources to benefit an elite few in contrast to inclusive ones which foster a literal "commonwealth" with participatory governance that protects peoples' rights and encourages productivity and innovation.

89. Karol C. Boudreaux, "The Two-edged Sword of Administratively Derived Data in Sub-Shara Africa," in *Challenges of Socio-Cultural Dynamics for Global Security*, forthcoming 2012, United States Geospatial Intelligence Foundation Press.

90. Andrew Natsios, "The Clash of the Counter-bureaucracy and Development," The Center for Global Development, 2010, p. 8, in revised abstract, available from www.cgdev.org/files/1424271_file_Natsios_Counterbureaucracy.pdf, accessed June 13, 2012.

91. Deborah H. Isser, Ed., "Customary Justice and Rule of Law in War-Torn Societies," United States Institute of Peace Press: Washington DC, 2011, p. 5.

92. *Ibid*, pp. 3-5.

93. *Ibid*, p. 5.

94. Definition: a bureaucracy so removed from field operations that it actually counters the program's stated (in this case) development aims.

95. Andrew Natsios, "The Clash of the Counter-bureaucracy and Development." p. 3.

96. *Ibid*, p. 14.

97. *Ibid*, p. 5.

98. *Ibid*, p. 7.

99. Jaap Zevenbergen and Tony Burns, "Land Administration in Post-Conflict Areas: a Key Land and Conflict Issues," paper presented at the International Federation of Surveyors (FIG) Congress, Sydney, Australia, 11-16 April 2010, pp. 8-9.

100. Definition: a negative consequence of an economic activity experienced by unrelated third parties.

101. Robert D. Lamb and Brooke Shawn, "Political Governance and Strategy in Afghanistan," Center for Strategic and International Studies (CSIS), 2012, p. 45.

102. Michael Woodgerd, "CAPRS: A Simple and Measurable Methodology to Effectively Synchronize Kinetic and Non-Kinetic Efforts," Unpublished Paper, 2012, p. 1.

103. *Ibid*, p. 2.

104. *Ibid*.

105. Klaus Deininger, Harris Selod, and Tony Burns, "The Land Governance Framework: Methodology and Early Lessons from Country Pilots," in Chapter 7 Making Land Governance Real, in Innovations in Land Rights Recognition, Administration and Governance, a joint organizational discussion paper—issue 2 of the World Bank, Global Land Tenure Network, FIG and FAO, 2011, p. 191.

106. Geoffrey Demarest, Property and Peace: Insurgency, Strategy, and the Statute of Frauds, 2010, Foreign Military Studies Office, Fort Leavenworth, Kansas, p. 331.

107. *Ibid*. p. 335.

108. The USAID Land Tenure and Property Rights Base Matrix, available from <http://usaidlandtenure.net/usaidltprproducts/matrix>, accessed June 5, 2012.

109. Ian Williamson, Stig Enemark, Jude Wallace, and Abbas Rajabifard, Land Administration for Sustainable Development, Table 13.1, pp. 417-420.

110. The UN Framework Team for Preventative Action with funding and Support of the European Union, "Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflict," 2010, UN: New York.

111. The UN Interagency Framework Team for Preventive Action, 2011, available from www.unep.org/conflictsanddisasters/Portals/6/documents/FRAMEWORK_TEAM_FLYER-1Oct10.pdf, accessed June 13, 2012.

112. Food and Agriculture Organization of the United Nations (FAO) "Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security," 2012, available from www.fao.org/fileadmin/user_upload/newsroom/docs/VG_en_Final_March_2012.pdf, accessed June 13, 2012.

113. Neil Pullar, Andrew McDowell, Alexander Solovov, Elton Manoku, and Maria Paola Rizzo, "Solutions for Open Land Administration (SOLA) Software - Customising Open Source Software to Support Land Administration Services and Responsible Land Governance," paper presented at the Annual World Bank Conference on Land and Poverty, 23-16 April 2012, Washington DC.

114. Klaus Deininger, Harris Selod, and Tony Burns, "The Land Governance Framework: Methodology and Early Lessons from Country Pilots."

115. The following diagrams were made by a Thomson Reuters Government Revenue Management staff member in concert with a news article, "Addressing Political and Economic Stability through Land Administration," June 6, 2011, available from <http://grm.thomsonreuters.com/news/june-2011/addressing-political-and-economic-stability-through-land-administration/>, accessed July 31, 2012.

116. Michael Woodgerd, "CAPRS: A Simple and Measurable Methodology to Effectively Synchronize Kinetic and Non-Kinetic Efforts," Unpublished Paper, 2012.

U.S. ARMY WAR COLLEGE

**Major General Anthony A. Cucolo III
Commandant**

**PEACEKEEPING & STABILITY OPERATIONS
INSTITUTE**

**Director
Colonel Cliff D. Crofford**

**Deputy Director
Colonel Lorelei E. Coplen**

**Author
Douglas Batson**

**Chief, Research and Publications
Ms. Karen Finkenbinder**

**Publications Coordinator
Mr. R. Christopher Browne**

**Composition
Mrs. Jennifer E. Nevil**

PKSOI



This Publication



PKSOI Website



USAWC Website

ISBN: 978-0-9833514-8-1