An Innovative Approach to Land Governance— Moving Beyond Word Processors to a Logistical Oriented Implementation Strategy

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SUMMARY

The world is in the throes of many rapidly changing environments. Among them is the economic environment. Due to economic stress, undoubtedly, funding from many of the donor organizations that have traditionally supported land governance programs designed to help other so called "developing countries" will become more and more limited. This economic stress, unfortunately, coincides with the time when developing countries are beginning to recognize the necessity of good land governance as a means to manage their natural resources to benefit the population and reduce poverty. As potential funding sources shrink and necessity increases—strategies need to be developed to utilize limited resources prudently. While acknowledging that there is no quick fix to the dilemma, this paper—looking through the lens of the implementation of a land governance project in the developing east African country of Mozambique—will explore an alternative strategy donor organizations within the international development community could consider that would help make efficient use of available funding.

This strategic approach was garnered from lessons learned while struggling to implement a new countrywide land administration system. The strategy consists of six key components that emphasize logistical implementation. It is the objective of this paper to provoke a thought process on the part of donor organizations to perhaps re-focus their approach to land governance projects.

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INTRODUCTION

In the context of Land Tenure Security, millions upon millions of donated dollars have been and continue to be spent by international aid agencies on producing studies, analysis, reports, needs assessments, etc addressing a host of issues on Land Governance. There certainly is a need and a place for these—but has the land governance environment evolved to the point that we need to 'move beyond the word processor' and focus attention on logistical aspects of implementation? When all is said and done, a good land governance program fundamentally begins with establishing, documenting, and registering individual rights in land and formalize titles to these rights. It would seem that most countries—as is the case of post conflict Mozambique—already have established constitutions, laws, regulations, policies or strategic plans to define individual rights in land that they have deemed appropriate for their respective countries. Some form of administrative and technical capacity is in place and operating. But still, due to numerous sociopolitical factors and traditional norms, informal land occupation has become the practice rather then the exception and informal land markets thrive. Existing land administration institutions severely lack the capacity and resources to systematically and officially document and fomally register the land rights of the individual citizens. Empirically speaking, these institutions don't really need as much help in knowing what to do—but how to get it done.

This paper proposes a standardized approach strategy to formalize existing land rights. The strategy consists of six key components that emphasize logistical implementation. These six components are:

- Have A Definitive Work Flow Process
- Focus on Implementation to Initiate Policy Reforms
- Involve the Local Community
- Standardize to Build Capacity
- Simplify Procurement Procedures
- **Unify Donor Support**

It is the objective of this paper to initiate dialogue and to provoke a thought process on the part of aid agencies and donor organizations to perhaps re-focus their approach to land governance projects.

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1. A DEFINITIVE WORKFLOW PROCESS

The first key element in this innovative approach is to develop a definitive work flow process to legitimize existing land use rights. Although described and defined by differing terminology, existing land use rights usually have been conveyed either formally or informally in one form or another to the occupants of the land, even if it is based on 'good faith' occupation. Therefore, the challenge to a land administration system is to gather the required legal information and launch an official ratification process to legitimize these rights. The data produced will contribute to a unified cadastre that will serve as the basis for a land administration system. This legitimization process should follow universally accepted guidelines such as Social Tenure Domain Model (STDM) adopted by FIG and other organizations.

1.1 Develop a Defined Set of Tasks

To develop a work flow process the local constraints must be reduced to specific work tasks. These tasks are then entered in to a work flow diagram. The diagram might resemble this:



Fig 1.1

1.2 Allocate Resources

Once the tasks are defined, assign the necessary human and physical resources to each task. The resources should include the proper supervision and quality control mechanisms. An example of this is a follows:



Fig 1.2

1.3 Establish a Work Unit

The establishment of a work unit consists of determining the amount of parcels or titles that can realistically be processed through the entire system on a continual basis given the resources allocated. For example, if the team(s) assigned to the first task of defining the legal status of the occupants can complete 30 parcels in a regular work day, and 30 parcels can likewise be realistically processed through all of the other tasks, the work unit becomes 30 parcels.

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4/17

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An Innovative Approach to Land Governance—Moving Beyond Word Processors to a Logistical Oriented Implementation Strategy

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The experience of this project suggests that the controlling factor in establishing the work unit is indeed the defining of the legal status of the occupants and the physical survey or describing the boundaries of the parcels. Based on the piloting phase of the field work, the work unit established for this project is 36 parcels per day.

The work unit will ultimately be based on resources allocated, local circumstances, and whether it is a rural or urban environment. In most circumstances 20 to 30 rural parcels and 30 to 40 urban parcels a day should be achievable.

1.4 Develop a Time Line

Once the work unit has been established, join all tasks together to form a time line. This time line will be useful to measure production on regular intervals and be the source to determine the amount of parcels that can be titled within the duration of a particular project. For example, if a specific project is to title 50,000 parcels, and assuming a work unit of 30 parcels a day, it could be calculated that it would take one team 1667 working days (79 months); or two teams, 833 working days (40 months); three teams, 556 working days (26 months), etc.

This logistical approach becomes a more realistic method to determine a project schedule and/or estimate the cost of resources. Utilizing this standardized approach, with time, donor organizations could have very well defined cost and time units to estimate project costs

Figures 1.3 and 1.4 on the following pages are samples of a work flow diagram and project costing worksheet developed for the project:

LTR WORK FLOW DIAGRAM

	Total Process - 64 Days						
TIME	Field Work 2 Days	Office Work 2 Days	Planning Work 15 Days	Edital 30 Days	Produce Documents 10 Days	Distribute Document 5 Days	
PROCESS	FIELD WORK - Ajudication - Access Form - ID Marcos - Surveying - Public Outreach	OFFICE WORK Access DB Data Download GIS Parcels Scan Data Archive Field Data	PLANNING WORK Corridor Planning Muni Coordiantion Prep GIS Map	EDITAL Create Notice Processos Forms Comment Period Edit DB Archive Data	PRODUCE DOC Processos File Print Document Archive Data	DISTRIBUTE DOC Muni Batch Approval Mayor Signature Occupant Signature	
RESOURCES					PRODUCE DOC Muni Tech - 1 Comm Team - 2 Ded. Computer Shared Printer	DISTRIBUTE DOC Muni Tech Laser Printer	
QC TRIGGER	Cadastral Tech	Cadastral Tech	mputer Kit, 1 Computer, 1 Planning Tech	Cadastral Tech	Municipal Tech	Municipal Tech.	
ESPONSIBILITY	Cadastral Advisor (PCA)						

Fig 1.3

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LTR Program Costs							
Assumtions:							
Number of Titles	40000						
Number Titles per Day	36						
Number of Working Days	1111						
Number of Months (21 working days/Mo	53						
Cost per Title (USD)	\$25	674.44	MZN				
Labor & Consumables (1 Field Team)	Number	Cost per Month	Total Estimated Cost				
Public Outreach	1	\$1,500.00					
Sworn Surveyor	1	\$2,500.00					
Municipal Cadastral Techs	2	\$3,000.00					
Municipal Planning Tech	1	\$1,500.00					
Community Participants	5	\$2,500.00					
GIS Tech	1	\$1,500.00					
Survey Tech	1	\$1,500.00					
Consumables		\$1,500.00					
Fuel		\$1,000.00					
Total Labor and Consumable Cost		\$16,500.00	\$873,016				
Equipment and Fixed Costs							
GIS Computer Kit		\$20,000.00					
Municipal Car		\$45,000.00					
GNSS		\$50,000.00					
High Res. Satellite Imagery		\$10,000.00					
Building Modifications & Furniture		\$10,000.00					
Training		\$10,000.00					
Total Fixed Cost		\$145,000.00	\$145,000				
Total Estimated Amount			\$1,018,016				

Fig 1.4

1.5 Develop a Unit Cost For a Parcel or Title

As shown in the foregoing figure 1.4, a cost per parcel or title can easily be developed by standardizing the cadastral team (human resource) and equipment (physical resource) used to perform the title formalization process. This becomes a model that can be adjusted and replicated to fit differing circumstances or locals.

This unit cost per title can equally be used to determine a cost to assess each occupant to secure title to land they occupy. Adopting a policy to assess the cost of

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7/17

creating a secure title and distributing this cost to each land holder is one method of making donor funded projects sustainable in the host countries.

In the case of Mozambique, it is estimated that there are 2,000,000 parcels in the entire county. Based on preliminary findings of the pilot phase, 98% of these parcels do not have a formalized title. Utilizing the Cost Work Sheet, not considering inflation, it would cost an estimated \$49,000,000 to formalize titles to all of the existing parcels in the country.

Few, if any, aid agencies would have the financial resources to fund this effort of this magnitude. But, by assessing the cost to create the title to each recipient, donor funds can be used to build local capacity and to start the funding mechanism to sustain and expand the effort.

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2. FOCUS ON IMPLEMENTATION TO INITIATE POLICY REFORMS

In the context of the Mozambique project it is often said, "Implementation is all about logistics, logistics and logistics". This saying characterizes the logistical challenges that impacted the implementation of this specific project. The evidence suggests that the majority of the project resources, both financial and time, were directed in such a manner that first, legislative and policy reforms based upon external ideology would need to be made, and then, based upon these reforms, a legitimate land administration system could be built and implemented—indicating perhaps that implementation was not possible without policy reform. This concept negated that there was a fundamental internal contentment with the constitutional and legislative framework as it existed.

This philosophical divergence created a virtual stalemate to the implementation of the project. It was obvious some minor reforms would be necessary, but it became very apparent that these legislative and policy issues would become easier to resolve in an environment where the governmental structure would be solving legitimate problems that affected their citizens, as opposed to adopting laws or policy based upon a hypothetical or quixotic approach considered to be what has been called 'international best practice'. In other words, the concept immerged to first create the demand to change the policy framework, instead of changing policy to create the demand.

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8/17

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This concept spawned the redirecting of the project resources toward the notion of a large scale systematic documentation and registration of existing land rights already recognized by the constitution and the law. What was the obstacle to the notion—the logistics of implementation.

2.1 Begin Implementation First

If the inception phase of the project is oriented in the direction of piloting and then the actual implementation of the process of formalizing titles, several advantages are attained. The time to perform the preparatory work necessary to procure goods, mobilize resources and train personnel, affords opportunity to set the ground work for any policy reform issues. The ground work may include the review of legal framework, sensitizing the legislative bodies and policy making groups, establishing review committees, and the like. Usually, a greater effort though, is required to mobilize resources than to lay ground for policy reform. This approach allows these two processes to proceed simultaneously.

Once the policy reform ground work is laid, and the actual title formalization process has been initiated in the field, real needs will begin to immerge that will require legislative and policy solutions. 'Necessity as the mother of invention' will become the basis for the Legislative bodies and policy makers to create the adaptive reforms—reacting to real situations that need solutions instead of engaging in protracted philosophical debates.

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3. INVOLVE THE LOCAL COMMUNITY

One of the most surprising phenomenon of the Mozambique land project, is how engaged the local citizens, technicians, and community leaders have become involved the project. This experience highlights the value of immediately involving these local assets. So one aspect of a logistical oriented implementation strategy is to build capacity at the local level by instituting a 'learning by doing' process, whereby experienced international and local experts teach by working with the local people in the communities to perform the actual tasks of registering existing land rights. These community leaders

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9/17

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and workers at the neighborhood level are essential in bridging the social, language, and gender gaps that often impede successful implementation.

3.1 Building Technical Capacity

Local land administration technicians often need additional tools, resources and skills to adequately perform their regular duties. Donor funds are a helpful way to make resources and training available. Formal training is an important first step to build capacity. In addition to this, using international and local experts to work side by side with local technicians helps build capacity to solve problems and develop skills to continue the long term effort to formalize titles and administer the land. When local technicians are included in the process and given the opportunity to take ownership of their work, many times positive results are attained.

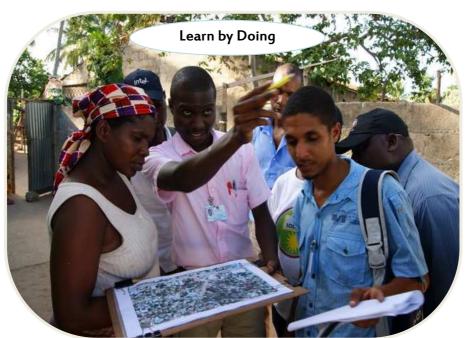
3.2 Local Community Leaders

In this project local community leaders, at the neighborhood level, have been a critical link to the individual land holder. The respect they usually have with their neighbors helps build the confidence in the project and the processes. They have knowledge of neighborhood land issues, they speak the local language or dialect, and can often times resolve disputes on the spot. Engaging these community leaders from the start and utilizing the local cultural understanding, significantly increases the efficiency of the project.

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10/17





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12/17

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4. STANDARDIZE TO BUILD CAPACITY

Although they are an essential element in the process, local level land administration agencies in Mozambique lacked the technical resources, infrastructure, and abilities to accomplish large scale systematic registration. It was learned that by developing standardized, modular, and scalable technical and administrative solutions that were necessary to accomplish the work in the initial phase of registering land rights, these solutions provided the very resources that could be left in place as an infrastructure foundation for the agency to build sustainable administration system. This idea of a standardized, modular and scalable cadastral office becomes another component to a logistical oriented implantation strategy.

4.1 Standardized Equipment

To create consistency, simplify training, and reduce procurement costs, standardize equipment is selected. The standard equipment includes:

- Satellite Imagery
- Hardware and Software
- Survey Equipment
- Vehicles
- Office Furniture

Using this tactic, the cost of fixed goods is easily determined during the project design phase. The amount of parcels that could be formalized with one set of standard equipment could be quantified; leading to a determination of the staff resources and time duration needed to accomplish project objectives.

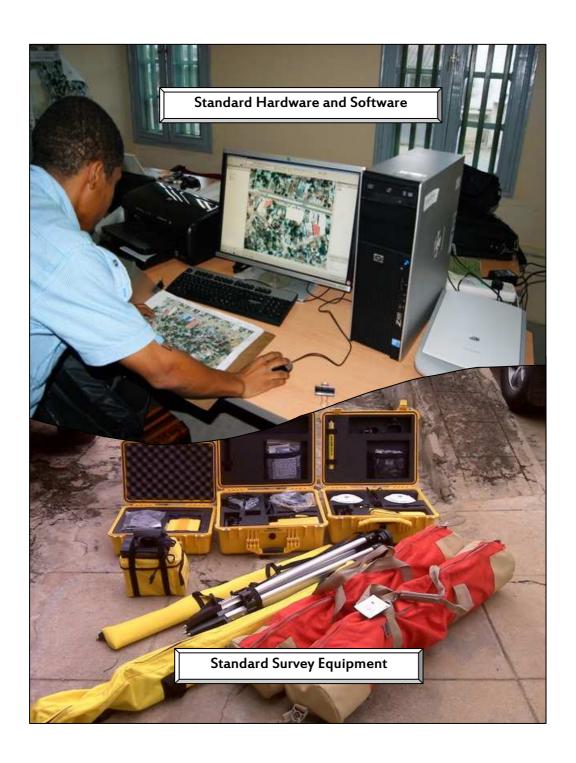
4.2 Standardized Cadastral Teams

As with the equipment, standardized staff resources could be determined in the design phase of the project. Well defined Terms of Reference would be developed and recruitment initialed early in the project. Scaling up could be facilitated where needed.

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13/17

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14/17

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5. SIMPLIFY PROCUREMENT PROCESS

Without doubt, one of the greatest challenges and frustrations to the implementation of the Mozambique land project has been the procurement process. What might take a few days to procure in a typical private sector environment, takes months in the context of the project. Much of the extended time involves donor organizational procurement processes that are necessary to control abuse and corruption. To help streamline procurement processes, this logistical oriented implementation strategy would call for donor organizations to develop standard equipment specification and pre-approved qualified venders meeting pre-established legal criteria. Additionally, a challenge is made to hardware, software and equipment vendors to create cost effective integrated technical solutions, with a focus on long term support and sustainability.

5.1 Standardized Equipment Specifications

Accepting the use of standard equipment would permit donor organizations to develop pre-prepared, brand neutral, standard equipment specifications meeting the rigorous requirements of procurement rules. With these standard specifications, procurement tenders could be launched as soon as equipment requirements are quantified. Due to the reason that equipment lists will be well defined, the initial procurements will be more complete, thereby reducing the need for additional procurements, and waiting for regular procurement cycles.

5.2 Pre-Approved Qualified Venders

Having standard equipment specifications will permit the development of a qualified venders list that would meet the donor's organizational procurement requirements. Having pre-qualified venders, that have an understanding of local importation requirements, taxation issues, and transportation constraints, will help streamline the procurement process.

5.3 Integrated Technical Solutions

This logistical oriented approach would challenge purveyors of satellite imagery, computer hardware, computer software, GIS or land administration solutions, and surveying equipment to craft integrated packages designed and optimized to function harmoniously. The purveyors would also develop homogenous training programs oriented to the process of title formalization and land administration.

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15/17

6. UNIFY DONOR SUPPORT

Certainly, there is recognition on the part of donor agencies for the need to unify their resources to minimize the duplication of effort and make the most of limited funds. This recognition is supported by fairly concerted efforts to establish forums to discuss means to share resources and prevent haphazard or redundant implementation. But, because of seemingly impenetrable organization barriers, unity is often allusive and tangible results difficult to attain. This logistical oriented implementation strategy would call for, not only multi-organizational standardized methodology, but also leadership at the upper management levels to create a mechanism to unify donor support.

6.1 Adopt a Standardized Methodology

As demonstrated in this paper, formalizing the rights in land is easily reduced into a set of tasks that can be universally standardized. Donor organizations should embrace this concept and develop this methodology to be implemented in land governance projects they support.

A standardized methodology creates distinct project components that lend themselves to multi-organizational funding schemes. This would allow donor organizations to combine and maximize resources to reach common objectives. It creates a forum to harmonize efforts to prevent overlaps and duplication. Limited financial resources from smaller donor organizations could be combined with other larger funding sources to support a common project.

6.2 Unified Leadership

It is essential that directors and managers—the leaders—of aid agencies recognize the need to re-direct the way their organizations approach land governance projects. Change must start from the top down. These leaders will be the force behind potential policy changes and/or staff modifications in their respective organizations to implement a new approach. They also can be the envoys to encourage other organizations to support this methodology. In the end, perhaps it will be one of the avenues to help the international development community to obtain the UN Millennium Development Goals.

It is the recommendation of this paper that now is the time for donor organizations to change the focus of their land governance programs from

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16/17

Douglas W Black, PLS

academic to logistic. Leaders are called upon to include logistical oriented professionals—experienced project manages, field surveyors, construction managers—in their staffs to collaborate with lawyers, researchers and economists in developing programs that are workable, focused on logistics and are ultimately sustainable.



7. CONCLUSION

The myriad of reports and studies completed to date, nearly all point to the fact that tenure security, documented by a formalized title, is fundamental to reducing poverty. To accomplish this task in all of the developing countries of the world is indeed a monumental task. While not the 'fix-all' solution, this logistical oriented implementation strategy provides a cost effective means to help achieve that goal.

BIOGRAGHY

Douglas W Black, PLS, has been a practicing geomatics professional for over 30 years. He was first registered as a Professional Land Surveyor (PLS) in 1987 and is licensed in three States in the United States of America. His most recent assignment is a Technical and Cadastral Advisor to the Government of Mozambique's, National Directorate of Lands and Forestry, in the implementation of a Millennium Challenge Corporation (MCC) land governance project.

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