

MULTIMEDIA DATA IN LAND RECORDS SYSTEMS: FIELD TRIALS IN NIGERIA

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Abstract

Multi-media data in the form of videos, sound recordings and still photographs are a means of collecting and recording land tenure related information in uncertain situations such as a post-conflict situation or in situations where land rights are contested. Multimedia may also be useful in recording claims to land rights in societies where oral traditions rather than documentary evidence forms the basis of the land tenure system and the property rights associated with it. Land records systems can use multimedia data on their own as the sole record of land rights, as a start up system where the data is used for adjudication purposes, and as data to augment existing documentary evidence such as cadastral survey plans and deeds or titles. Field trials in Nigeria over a period of eight weeks suggest that, in a supportive environment, multimedia records should be useful in improving land tenure security and may be used increasingly as information and communication technology becomes more readily available in rural areas in developing countries.

Introduction

Nigeria has a land mass of 923,769 sq km, divided into 36 states. It is Africa's most populace country, with an estimated population of 135 million (Index Mundi 2008), and there is immense population pressure on the land.

Formal land tenure management is devolved to state governments. It is plausible to deduce that years of inept government by successive military regimes and widespread corruption (e.g. see Achebe 1984, Lewis 1996) have contributed significantly to registration and cadastral survey systems falling into disuse in many of the states. This has given rise to what appears to be a thriving racket in landed property. In the cities, many land holders have resorted to painting notices on their street boundary walls such as "Beware of 419, this land is not for sale" to protect their land from being sold over their heads by unscrupulous racketeers¹. In addition, access to land under customary systems in rural areas has become increasingly difficult due to population pressures, and there are numerous territorial boundary disputes between local customary authorities and disputes between holders of communal land within these customary authorities. Customary authority boundaries tend to be defined according to lineage groups.

Regularisation, survey and registration can address these issues in part, at least outside of customary areas. However, years of misrule have left some states without the capacity to manage the demand for registration, and the process of regularizing a claim to title and finally registering it is long and expensive. In certain states, the costs can be as much as 50% of the land value (Author's Notes 2006a). There is an argument that some form of official or private record, which at least acknowledges a claim to land without necessarily registering the land, may be an interim measure in urban areas which could improve tenure security and diminish the need for landholders to literally paint their claims on their walls. Alternative methods of recording the tenure over a piece of land and objects on the land (e.g. trees) may improve the situation, and

may improve tenure security in customary areas where in most cases western notions of land registration are generally culturally inappropriate.



Figure 1 Notice on Wall to Deter Fraudulent “419” Transactions

This paper describes a set of field tests using multimedia data in land regularization projects in the city of Lagos, in recording the resolution of a rural boundary dispute in Benue State, and in documenting inventories of properties and fruit trees and crops in customary lands on the urban periphery which were scheduled to be turned into housing estates in Kano in northern Nigeria. The paper commences with information on the history and current land management situation in Nigeria and provides a background argument for the conjecture that multimedia data may improve land tenure security. This is followed by a description of previous work over the last nine years in South Africa and Canada, and then a description of the field work in Nigeria. Finally some practical lessons and conclusions about the applicability of the methodology are presented.

Background

Nigeria, a former British Colony, became independent in 1960, and constituted itself as a federal republic in 1963. By 1965, the country had succumbed to military rule. Soon thereafter, the Biafra secession, which reflected ongoing ethnic tensions in the country, resulted in a bloody civil war. A brief return to democratic civilian rule in 1983, the Second Republic, ended quickly with another military coup in the same year. The Third Republic of 1992, a further attempt at civilian rule, was still born as the elected civilian president was ousted by a military regime before he took office. In the Fourth Republic of 1999, General Olusegun Obasanjo was elected president of a civilian government (History of Nations 2008). In 2007, Nigeria celebrated its first instance of a democratically elected president relinquishing power to a newly elected president, Umaru Yar' Adua, after President Obasanjo had completed the maximum two terms. However, the elections were marred by allegations of fraud (Walker 2008). Currently, a number of state governor elections are being investigated due to similar allegations.

Many land related conflicts in Nigeria are associated with lack of access to land, contested inheritance, overlapping claims to particular parcels, fraudulent claims to land and fraudulent land sales. The situation is aggravated by an apparent pervasiveness of corruption within some state offices (e.g. Banire 2006, Author's notes 2006b). Corruption is being tackled at the highest level as the work of the Economic and Financial Crimes Commission (EFCC) instituted in 2002 will attest. For example, some 15 state governors were indicted for corruption in 2006 (Aziken/Vanguard 2006) and all 36 former state governors were under investigation in 2007 (Murray 2007). As the '419' warnings painted on boundary walls attest, it is evident that corruption remains a major problem in the management of land. At present it appears that the State's focus is on tackling high level corruption, although concerted efforts to tackle the 419 letter scams have been ongoing since the 1990's (Author's Notes 2007a).

The federal Land Use Act CAP 202 of 1978 was promulgated to try to improve land management effectiveness. In essence all land was appropriated by the State, as the act vests all non-federal land in the territory in each state land solely in the governor of each state who holds the land in trust for the people. The act empowers a state governor to allocate and control all urban land and confers similar powers on local governments with respect to rural (customary) land. Individuals and juristic persons now hold land under a right of occupancy given effect by a Certificate of Occupation (C of O) which is registered against the property. Existing land holders were supposed to be given a C of O over a part of their family land if it was undeveloped (0.5 ha in terms of S 34(5)) and over any developed land in terms of the act. Rights over the remainder of their land were extinguished. A person holds a deemed right in a particular land if they held that particular piece of land legally, such as the 0.5 ha or a developed property, prior to the promulgation of the Land Use Act in 1978.

According to Banire (2006), the rationale behind the federal level 1978 act, introduced under a military regime, and which had far reaching confiscatory dimensions, was that land tenure was extremely complex in the country and it was difficult to state with certainty the true state of the law with respect to tenure at state level. Secondly, it was becoming increasingly difficult for people to obtain access to land. For example in the south (including Lagos), land was controlled by family or communal heads. It was impossible to lay claim to absolute title to land and use it for purposes that required substantial capital outlay. Family members could not dispose of land nor use it for collateral. It was difficult for the government to access land for development due to complex protracted negotiations with families or communal owners. In the North, control and management of land vested in the governor or Chief Executive Office. But land allocation was seen as a tool for granting political favours since there was no obligation, real or imputed, for governors to hold land for the benefit of the citizens. "The cumulative effect of the problems, together with a growing recognition of land as an economic asset, rather than an ancestral heritage, necessitated a review of the policy relating to land tenure in Nigeria." (Banire 2006:104).

However, the act has not succeeded in doing away with these pre-existing problems. Banire (2006) lists some of these as:

- Access to land is difficult for the average person.
- It takes a long time to acquire land as this requires the state Governor's consent, with many government institutions involved and officials may extort money to get the process moving. The processing of a document of title often takes years so that applications for a CofO are abandoned;

- There are costly procedures to acquire land – surveys and a number of different certificates are required. Land is out of reach of the masses.
- Insecurity of title. There have been grants of the same piece of land to more than one person. The courts are very busy with land disputes.
- Sharp practices in land dealings resulting in nebulous title. The same piece of land might be “sold” to more than one person. Racketeering and the “pernicious role of middlemen” in land speculation. Descendants of land owners sell to several buyers and at times manipulate the price and the unsuspecting buyer’s title may be defeated by a member of the same family.
- Disputes over Inheritance – for example, in Igbo land female children are not entitled to a share of the inheritance (a patrilineal lineage and inheritance system – author), although this custom is in conflict with Nigerian Constitution;
- Fragmentation of Holdings – customary law allows partition by an individual, but the Land Use Act does not;
- Unsatisfactory compensation arrangements – the Land Use Act pays for improvements, but unimproved land can be taken without any compensation.

Interviews in this study suggests that although the Land Use Act of 1978 legally confiscated family land, in Lagos many land holding families merely ignored it. Video interviews indicated that many of the applicants for regularisation encountered during the course of this project had unsuspectingly purchased land from speculators and middlemen, some of whom were members of the original land owning families.

Social and political stability and a great deal of economic development depend on tenure over land being secure. Some 3% of the land in Nigeria is currently registered, and so getting more land registered in a manner that secures tenure is of major importance. For example, large residential developments in Lagos are completed without mortgage finance as the land is unregistered. Thus access to credit makes individual home ownership and home development difficult for people without the necessary social and business networks (Authors Notes 2006a).

Modernisation and general improvement of cadastral survey and land registration processes and structures is one approach that is being adopted to improve this situation. In the right situations, registration provides secure title and consequently access to credit for title holders. The more secure the title, the lower the cost of credit, and thus a thriving formal land market can stimulate the economy. In addition, registration facilitates effective estate management in that the rights in a piece of real property should be unambiguously defined and can be properly described and disposed of in a will.

The Argument for Multimedia Data

However, registration is only one approach to the problem of providing secure land tenure, and the international literature confirms that in certain situations, registration may exacerbate a conflict or catalyze a conflict in a situation where underlying tensions had not yet emerged. If land rights are not properly adjudicated, registration can extinguish a number of *de facto* rights in land and place far more *de jure* power over land in the hands of the registered owner than existed before. If this power is abused, weaker members of society are prone to eviction, rendering them landless. Women, the elderly, orphans, and ethnic and religious minorities are particularly vulnerable. In extreme cases, registration provides a mechanism for powerful or educated elites

to extinguish the *de facto* rights of existing occupants and grab large tracts of land (Barry 1998, Payne *et al* 2007).

For economic benefits to flow from registration, such as access to credit which in turn should stimulate a formal land market, it is a trite, but often disregarded, maxim that landholders should actually use the registration system to perform transactions in land. If they do not use registration in a secondary market, formal financial institutions will not provide credit using instruments where land is the collateral. Thus instead of stimulating a land market, registration may freeze it, as the costs of unravelling an informal chain of title may prove prohibitive unless re-certification is done regularly. And, if regular re-certification is necessary, then it is questionable whether registration serves its intended purpose and is perhaps an inappropriate method of trying to create tenure security (Barry 2006, Manona 1987).

Thus, ideally effective registration should be demand driven. Registration should be culturally acceptable in that it should accurately model the *de facto* land tenure system. Land holders should be confident that registration is not merely a mechanism for the state or other powerful elites to grab their land, and it should be affordable. Arguably, in an effective registration system, there should be a want for credit secured by land with a concomitant capacity to service the debt. I.e. there should be economic opportunities and social norms should dictate that transactions should be registered. The argument goes that if there is no demand for mortgages, why should landholders incur the cost of registering land transfers? If there is a belief within a family that a house should never be sold, and it should remain within the family, then why should the family incur the cost of registration when an estate is inherited?

Thus there is a need for systems – structures, technical tools, and processes - to provide tenure security which does not necessarily involve cadastral survey and registration. In concept, these systems should be designed so that the information encapsulated in them allows for a path to registration. However, they should also be able to stand alone from conventional registration and yet provide a sufficient level of tenure security to protect their claims from *inter alia* officials and planners who might consider their land as unoccupied and available for appropriation and development. For example, in a society where oral traditions underpin the tenure system, registration is unlikely to be a cultural fit. The discussion above on situations where registration is found to be unsuitable also suggests that in the event that a registration scheme fails to produce the desired results, and transactions in land rights are not registered, then alternative, catch-net systems should be in place to uphold social justice in the tenure system.

Recent advances in information, computer and digital audio-visual imaging technology have improved the feasibility of using multi-media data as evidence of land holding claims. There are certain advantages to using multi-media data, and video images in particular (Roux and Barry 2001):

1. Claimants know that what they say is on record and the record can be played back, and one can expect that they will tell the truth. Only the unwise would wilfully commit perjury, or any other crime for that matter, on video!
2. The persons claiming rights and interests and the physical objects and the people which are the subject of these rights can be visually identified from the records.
3. Videos can be recorded in a participant's own language and generally they are easy to understand, even by illiterate community members. In contrast, deeds and titles require a measure of skill in their preparation and interpretation. A video is not subject to an

interviewer's interpretation of events. Moreover, interviews do not have to be translated and transcribed for later analysis.

4. The process of collecting the evidence is cheap and simple. Nowadays, video cameras are inexpensive, especially when compared to land professionals' time. Filming an event such as a person reading an affidavit in front of their house is a simple operation and, after a short period of training, does not require much skill.

There are a number of criteria which apply to video clips if they are to be admissible as evidence in court, and these admissibility criteria should guide any data capture, storage, retrieval and dissemination processes where the data may later serve as legal evidence, even if the matter does not reach the courts. A detailed discussion of these criteria is outside the scope of this discourse, but in brief the court should regard the video as authentic; i.e. there should be no significant alteration of the clip so as to change its meaning or emphasis, and it should be relevant to the matter before the court. The video should also not be filmed in such a manner which would make the court consider it prejudicial to a particular party; e.g. a shrewd camera operator can film events which support their particular purpose and choose not to film events which are not beneficial to their case – thus the video would be regarded as authentic as evidence as there would have been no tampering, but it would be biased in favour of a particular party to the dispute. The weight which the courts apply to a particular item of evidence is also important. For example if evidence in a video challenges the written text in a deed or title, the court will weight the different items of evidence in reaching its decision (MacLaren and Barry 2007, Goldstein 1999).

Interestingly, in the Delgamuukw case in the Supreme Court of Canada, Chief Justice Lamer at paragraph 87 ruled that in First Nations land claim cases, oral history evidence must both be admitted and “placed on an equal footing with the types of historical evidence that courts are familiar with, which largely consists of historical documents.” (Delgamuukw v British Columbia 1997). Thus these oral histories need to be recorded in a manner acceptable to the courts to be afforded equal weight to documentary evidence such as written documents and maps.

Previous Work

The idea of using videos was mooted in case studies involving informal settlements, land reform and land restitution in post-apartheid South Africa, and some rural field trials were performed in the Algeria forestry village, some 200 km north of Cape Town. In this instance, forestry workers were to be given rights to their land and residents read affidavits on video which they had prepared. A small database was also set up to administer the project as part of the study (Roux and Barry 2001). The villagers were subsequently been granted ownership in 2007.

The use of video was also tested in informal settlements around Cape Town. In this instance, the study examined if video was acceptable to residents in the Imizamo Yethu settlement. Overall, videos have been shown to be feasible (Barry and R  ther 2005). As mentioned above, storage capacity has greatly increased and the real price lowered in recent years, and so storing short video clips is becoming a practical reality.

In Canada, the Delgamuukw and other cases have focussed attention on oral tradition evidence in First Nations land claims, and perhaps in land claims in general. One of the problems the trial judge had in the British Columbia Supreme Court trial, the first of three levels of court through

which this case proceeded, was how to evaluate oral history and what was presented as sacred evidence and mythology.

On oral tradition evidence, Justice McEachern at paragraph 340 states: “At an early stage of the trial I expressed the hope that I could make a convenient but simplistic distinction between what European-based culture would call mythology and "real" matters. This was because some Indian witnesses included some material which might be classified as mythology I have concluded that it would be overly simplistic to attempt such a distinction, and I must accordingly reject mythology as a valid distinction between what is and what is not part of an *adaawk* or *kungax*.” *Delgamuukw v. British Columbia* (1991). *Adaawk* is considered a true or factual history based on oral tradition by the Gitskan (Sterritt 1999); *kungax* is the oral history of the Wet'suwet'en people. As mentioned above, this view was overturned in the 1997 Supreme Court of Canada judgement, but the question remains as to how one records oral tradition in a manner where it is considered acceptable as evidence in court, at least a court which draws on long established western legal custom.

The suitability of multimedia land records was examined in western Canada based on workshops held on site with key persons in five First Nations, consultations with federal and provincial government representatives, discussions with land managers and information and communication technology (ICT) specialists in a further three First Nations at a First Nations Technology Conference in Vancouver, and discussions with academic and development specialists. Multimedia land records and software similar to the Talking Titled system are considered useful in the First Nations in British Columbia and perhaps in Alberta. In this context, this study suggests that video clips and other multimedia data containing credible statements in a visual record should improve the comprehensiveness of land tenure information and, thus, improve land tenure security. A caution is that means of assuring the security of: (i) information of cultural value and (ii) land tenure data need to be articulated. One group of participants noted that they would like to collect some information for their own purposes, but that it should not be available to outsiders such as government agencies (Barry and Khan 2005).

What did emerge from these discussions is that stories, dances and other cultural activities which might serve as oral tradition evidence have been recorded by scholars and members of some of these communities themselves over the past 50 years and before that. This provides a record of the stories passed down by the elders, and many of the elders who last knew these stories have since died. However, one participant noted that a person has to enjoy a particular status in her community before an elder will tell them a particular story. Nowadays, apparently very few people may acquire the desired status and thus many of these might be lost or are already lost (Barry and Khan 2005). Thus, it is possible to record evidence on video and other media, but from a legal evidence perspective, distinguishing between mythology and fact remains for experts to establish. Some stories will not be related in front of a camera and so they may be lost, and one can speculate that as a result the evidentiary record may be incomplete.

NIGERIA

The usefulness of multimedia data, particularly video clips, and how they can serve as information / be incorporated in an information system, as an ancillary or alternative system to land registration was examined in Nigeria in three visits over a total of 8 weeks between 2006 and 2008. Note that data can serve as information without formal incorporation into a purpose designed information system. The cultural evidence collected in Canadian First Nations

communities in the 1960's serves as an example of this. Nowadays, there are numerous forums for making multimedia data accessible on the internet, and so multimedia data can become ubiquitous as technology becomes more readily available in developing countries.

Discussions were held with senior officials, politicians, traditional leaders, lawyers, judges, attorney-generals, law academics, land surveyors, surveyors-general, regularisation agents and other land management role players in the following states: Lagos, Benue, Enugu, Kano, Abuja (Federal level) and Jigawa. Data was also collected from a presentation and discussion at a workshop involving officials and politicians from Ondo, Ogun, Osun, Lagos, Ekiti and Oyo states in 2006. Videos were filmed, along with audio recordings and still photographs, during urban land regularisation field inspections and adjudications in Lagos, an urban expansion onto customary land project in Kano, and a boundary conflict resolution hearing between two customary local authorities in Benue state. At the same time, a prototype software system, the Talking Titler system, is being developed which allows a great deal of flexibility in the manner data is stored, related and retrieved.

Usefulness of Multimedia Land Record Investigation

Discussions and interviews initially examined the usefulness of multimedia data to support land records. If it was perceived to provide no value, then clearly there was no point in pursuing field trials.

Lagos

In Lagos a multimedia system was seen by most as being useful in the regularisation process, in informal settlements, in restitution cases, and in rural customary lands. According to one senior official, some 27% of the land in Lagos is registered, and thus it is in a better position than the rest of the country (Authors notes 2007b).

There was some resistance to the multimedia land records concept following a presentation in the workshop involving officials from Ondo, Ogun, Osun, Lagos, Ekiti and Oyo states. In my observation, resistance was premised on the argument that existing systems were adequate and that "Talking Titles are unnecessary and not wanted". Much of the resistance appeared to come from surveyors, and one can speculate that the system was seen a threat in that it could replace the work of surveyors. In a one on one meeting with one of the 'resistors', a prototype of the Talking Titler software was used to demonstrate that in urban areas multimedia data should be used to augment the conventional systems of cadastral surveying and land registration, and provide a path to registration if appropriate. In customary lands it could form the sole documentary record, especially in cases of dispute. Following the individual appeared to embrace the methodology enthusiastically. Other concerns were raised about whether the society was ready to use such a system. Discussions centred around technological capacity, institutional capacity, training, political commitment and governance. One senior official wryly observed that, "Under current conditions, if you gave a video camera to a village chief, that's the last you would see of it."

Benue

Benue state is the home state of the Tiv. Traditionally, the Tiv have an interesting system of shifting agriculture, where the social hierarchy within a lineage group determines where a person is allocated land. It has been likened to a topological system (Bohannon 1963). Interviews and discussions which formed part of this study suggest that due to insufficient land this system of

shifting agriculture has discontinued. Two academics mentioned that the traditional tenure system is changing and that nowadays there is insufficient land for the shifting agriculture system to function. In some villages, effectively all the land is held by the chief, supposedly in trust for the community, but this power of land allocation has been abused. In Tiv communities, the basic land owning unit is the family compound. The head of house should ensure that there is sufficient land for the extended family unit. There have been cases where, when there is insufficient land, then the head of house has tried to grab additional land from neighbouring families. These informants also mentioned that registration may be seen as trying to steal land from the community, and talk of registration creates a lot of suspicion. They cautioned that mooted a system of multimedia land records might encounter similar resistance. Attempts to apply it would have to be done sensitively.

Benue state has Land Dispute Resolution committees with a membership of 6 officials. One of these committees holds hearings once a month in a hall in the city of Makurdi. People state their case in the hall, and if deemed necessary the committee conducts an *in situ* hearing at a later date. Committee members mentioned that taking video evidence on site, in the village or at the location where the dispute occurs, prior to testimony being given in the monthly hearing might improve the veracity of many of the testimonies. A number of interviewees mentioned that witnesses often told different, conflicting stories on site to the one they gave in the hall. At the *in situ* hearing, they gave testimony in front of a large number of witnesses who knew the facts of the case.

Internal family disputes are common. A traditional leader noted that Tiv farmers assert that they own the land. As with much of sub-Saharan Africa, borrowing and lending of land appears to be common practice. The chief stated that: "If you allow a visitor to borrow land, a problem arises when the visitor extends their use area beyond what was allocated, or their children claim that they own the land." Thus, some form of evidence of the transaction, in the contracting parties own language and with images, would be useful.

A group of government and private practising attorneys expressed some scepticism about the concept. From the discussion it emerged that many land transactions in the state are conducted orally. Videos of these transactions were seen as a means to improve tenure security. However, racketeering appears to be a major problem. They mentioned a story of a person who had sold the same piece of land to ten different buyers. One attorney, an expert on the law of evidence in Nigeria, noted that in spite of perjury being illegal, people would still lie, even on video. Thus one can deduce that attempts to implement video testimony as an evidentiary tool would have to be accompanied by parallel initiatives to diminish perjury levels.

Kano

In Kano, officials considered video to be useful in rural land claims, but not in urban areas. I accompanied officials to the Gurjiya customary area on the periphery of the city and filmed the surveyors and local farmers noting the positions and dimensions of fields on a high resolution Quickbird satellite image, measuring up the fields allocated under the customary system and classifying and counting the trees in each field. In the Gurjiya case, due to the expansion of the city, a customary area was being expropriated and developed as an urban housing scheme.

Officials noted that in this case the video would have been useful to film the initial meetings that had taken place between government officials and village representatives. From their perspective, what had been agreed in meetings had been distorted when the agreements had been

reported back to the villagers and consequently an unnecessary conflict ensued. Officials had been chased away by the farmers on a previous visit. Videos of these initial meetings may assist in reducing the level of conflict to an extent. However, proposals to individualise property involve a major change in lifestyle, power relations between villagers and their relationship to the land. Resistance to the development should be expected, irrespective of whether agreements had been captured on film or not.

Jigawa

In Jigawa state, senior officials in the Dutse Land Office, were shown how multimedia evidence can be integrated with conventional documents such as survey plans and deeds using the Talking Titler software. The following emerged from these discussions:

- People will formalise and register their land when they need a loan. Otherwise, there is little reason for them to register land. There is a perception that registration is expensive and time consuming. Thus registration tends to be sporadic and demand driven. One can deduce that attempts at large scale systematic regularisation and registration will not succeed.
- There is a major problem with establishing boundaries between customary Local Government Authorities. It would appear that in many cases the causal factors are political issues which are unrelated to boundaries, but the dispute is often articulated in the form of a boundary conflict.
- Most boundaries are defined by natural features such as trees. Over time the trees are destroyed (fire, cut down) and elders who carried the oral tradition of where the original boundaries between communities were die with their knowledge not being passed on. The trees die, are chopped down, or are burned. Different people from neighbouring groups then speculate as to where the boundary is and so the conflict arises.
- Tree remains serve as one form of evidence if they still exist. Fire resistant and goat resistant grass and durable crops are also planted along boundaries. One official noted that people also bury charcoal along their boundaries as a fuel reserve. Charcoal does not degrade and so if it is found then it can be used as evidence.

As in Benue, Enugu, Kano and Lagos, officials suggested that video evidence would be useful in disputes between customary communities and within customary communities. Most disputes in Jigawa arise over access to water. In addition, videos would assist in gathering the stories of the elders and others who know where the boundaries are, and the context of their definition, and these could form part of a land record.

Multimedia Data Collection Process

Field trials were conducted in Lagos, Benue and the Gurjiya rural settlement, Kano.

Lagos

In Lagos, video interviews in the field were arranged in the Egan, Ojokoro, Idimu, Oke-Afe and Okota districts by the Directorate of Land Regularisation, which is tasked with ensuring that people with legitimate claims to land have it registered in their name. The sample was chosen on the basis of convenience; e.g. who was available to be interviewed at a particular time and projects that were part of the Directorate's day to day operations. Interviews were performed by the Directorate's field staff, and the author filmed the process.

A total of 18 individual interviews were filmed along with two videos of group discussions. Nine of the 18 videos were of regularisation applicants or their agents standing in front of their house. These people had already applied for regularisation, had had survey plans drawn up, and had paid the necessary fees. The field inspections were part of the final stages of getting the applications approved. Interviews were filmed with a sample of 7 people from a group of approximately 30 people who were intending to apply for regularisation as a group project. In the Egan district, in addition to two formal regularisation field inspection interviews, houses were chosen arbitrarily during a “drive around” and two people agreed to be interviewed about how they came to acquire their land. Two other people refused to be interviewed.



Figure 2 Discussion of Video Data Capture Process, Ojokoro, Lagos

Prior to commencing the video interview, the author explained the purpose of the process and how the data might be used. It was emphasised that though this was part of a research project, the video clips might be used as evidence in court, and they would form part of the regularisation record. Therefore it was important to ensure that the facts were stated accurately. Interviewees were told that they could ask the interview team questions at any point. They were also told they were entitled to refuse to answer particular questions, and that they could stop the process and not answer any more questions and ask for what had been captured on video up to that point to be erased.

In the interviews people were asked to state their names and the basis of their claim to their land. Most interviews covered a discussion of how the interviewee came to acquire the property, from whom they acquired it, if they were aware of other claims to the land, how they would react if there was a counter claim, and what they expected out of the regularisation process. Most of the land had been appropriated by the government in terms of the Land Use Act of 1978, and in some cases houses had been built illegally on land designated for public use such as an abattoir. When groups of people witnessed the filming process, bystanders were asked if they had anything to add to what was said and if they would like to challenge anything that had been said.

Videos were downloaded from tape into windows media video format (WMV) and stored in the regularisation application file on CD. An audio recording was taken at the same time as the

video, and allowed to run through the entire interview and discussion process in each case. Still photographs were also taken of the interviewees, the people claiming the land, and salient features of the property being regularised. The video clips, audio files and still photographs were named according to the application file number in cases where there was an existing application. In cases where an application had not been made or was pending, the media files were referenced according to the person's name and stored on CD, as there was no other suitable means of referencing the data – official files had not been created yet as there had been no application.

In some cases a hand held GPS fix was taken close to the centre of the lot or at the position where the video was taken. The reason for this was twofold. If an application had not been received, the GPS fix was necessary to provide a location for the video and the property in question. There was no filing system to accommodate this type of data at the time. In cases where an application had been made, the GPS fix could ensure that the survey plan which was part of the document package accurately represented the location of the property in question.

This is a delicate issue which was not explored in this study. Ashafa (2005) asserts that one of the many causes of delays in property administration in Lagos is due to an incorrect survey plan being lodged with the application through error or mischief. For example, applicants use the survey plan for property A while property B is supposed to be mortgaged or assigned. At times the plan has not been approved by the Surveyor-General. He also mentions the “flying of coordinates”. These are cases where applications involve land under government acquisition /revocation in terms of the Land Use Act of 1978, but the UTM coordinates noted on the survey plan “have flown” from a parcel of land that is free from Government revocation/acquisition.

Benue

In Benue state, the Mbaiaase - Ugambe boundary resolution hearing between communities in Gwer and Konshisha Local Government Authorities was filmed. Two prominent members of the Konshisha community had been murdered in a related incident.

Gaining permission to film the field hearing required support from a number of different agents. One of the traditional leaders had invited me to the hearing the previous day, and I also obtained a letter of support from the State Attorney General. On arrival at the site, there were more than 40 men present. The first stage involved gaining the confidence of the participants and observers. I was first questioned on site by national military intelligence officers. Then I had to explain what I was doing to the other side's traditional leader and his entourage, and what I was going to do with the data. I agreed to give each side a copy of the final DVD's, even though they did not have the means to play them back.

In this boundary dispute, the proceedings were presided over by the State Security Advisor. Each party had its own contingent of about eight policemen, presumably in case hostilities broke out. The Chairman and Deputy Chairman of each Local Government Authority attended (normally these are elected politicians), committee members, as well as the traditional leaders from each community.



Figure 3 Boundary Dispute Hearing, Benue State

A great deal of emphasis was placed on the procedures. We followed a cut line along a part of the boundary which had been negotiated and agreed on until it ran dead. Angles in the line were monumented with large conical concrete beacons, which were surveyed using a hand-held GPS. At the dead end, the two adjoining farming families had not agreed to the boundary, and the farms had been reclaimed by the bush as neither party was able to farm. A point of contention was that there were graves from both groups on either side of the proposed line. Initially there was a great deal of antagonism, and then proceedings calmed down and then negotiations moved forward and the parties agreed to a give and take line.

Kano

In the Gurjiya settlement, the negotiations over individualisation of customary land had already been completed. As mentioned above, this is when the video recordings would have been useful. The contractual arrangements as agreed orally would have been available for the whole community to inspect. I filmed the surveyors measuring up the general boundaries and annotating these on a Quickbird satellite image. They also noted the economic assets on each plot (fruit trees) and plotted positions the Quickbird image.

LESSONS

There are a number of practical lessons that emerged from these exercises:

- Understanding the situation on the ground and adhering to protocol in gaining access to a community and being granted permission to film is important. Land conflicts may result in violence and one should be sensitive to the issues and not inadvertently stimulate conflict. One should be aware that resistance may not appear rationally grounded either. There are a range of reasons why people might resist the video. These may be due to fear of the camera or cultural issues. There may be more mischievous reasons, as an

intervention of this sort may interfere in existing power relations or uncover criminal activities.

- Field teams need to be trained in the technicalities of using the video, in explaining the process to potential interviewees, and in conducting interviews. For example, I had to stop one interview as the interviewer was badgering the interviewee into making statements that could have been construed as incriminatory. Procedures need to be established so that people do not feel coerced into being interviewed.
- During the interviews, I often kept a digital audio recording running during the entire process. The law of evidence indicates that it is important that there should be no tampering with a video clip. In addition, the video should not be biased in favour of a particular position. Video takes up a great deal of digital storage space, and so one is forced to use it sparingly. An audio file running throughout the process provides a more complete record.
- The sound recording system of the video needs to be adapted to cope with windy conditions. Ideally a separate, wireless linked microphone should be used.

CONCLUDING REMARKS

In conclusion, there are a number of situations, both rural and urban, where applying multi-media land records in Nigeria can contribute to land tenure security.

In general the field trials showed that interviewing landholders about their claims to land may be a rapid and easily understood means of providing data about land tenure. There are a number of other different situations where recording videos may improve the current situation. For example, filming testimony from parties to a land dispute prior to them appearing before a dispute resolution committee or customary court may encourage people to tell the truth. When positions of the interviews are measured, the data can be mapped or stored in a GIS and compared with other data such as a survey plan.

Attempts to implement such a system should be systemic, rather than systematic. A range of issues have to be dealt with at the same time as any attempt to implement a system of multimedia land records. Incremental changes and improvements are more likely to produce results than grand plans. At present there is neither the institutional capacity nor the technological infrastructure to implement such a system on a grand scale. However, technological development may enable this in the near future. As an indicator, the number of cell phones in Nigeria has grown to over 30 million users in recent years (BBC News 2007). One should also note that such a system which accurately records the tenure system as it should be may threaten local power relationships, some of which may be related to criminal activities. In these situations attempts to implement a system will probably be resisted, perhaps violently.

To start the process, capturing multi-media data using simple equipment, positioning the locations where interviews and discussions take place using a hand held GPS, storing the data on durable media such as a writeable DVD in a suitable format, and storing the DVD in a paper file assigned to a particular property appears to be the most practical start-up strategy. The DVD's should be copied and disseminated to various stakeholder institutions to ensure that sufficient "off-site" back ups of the data exist to discourage theft or manipulation of the data. However, in the Directorate of Land Regularisation in Lagos, the system is being managed using a beta version of the Talking Titler software

There are a number of concerns over the admissibility of multi-media data in court, fraudulent manipulation of the data, commitment to implementing the system, institutional issues over who should own the data, and the security of data and equipment. These concerns affect all land administration systems, not only ones where aspects of the system have become dysfunctional. Given the nature of land administration in Nigeria, it can be expected that a number of starts ups, failures and further start ups will occur if systems of multi-media land records are implemented. As with any information system or technological innovation, success will depend largely on top level people championing the system.

Acknowledgements:

This paper has been published with the permission of the British Council's, Security, Justice and Growth programme in Nigeria on whose behalf the work was performed. Research support for the Talking Titler project and Multimedia Land Records from the National Science and Engineering Research Council of Canada and the Alberta Land Surveyors Association is gratefully acknowledged.

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- (a) Zonal Workshop of National Technical Development Forum to Deliver Improvements in Land Administration Practices in Nigeria, Lagos, 15 – 16 August 2006
- (b) Discussions with senior officials and land professionals

Author's Notes 2007

- (a) Discussions with international and Nigerian security officials and advisors.
- (b) Discussion with senior civil servant, Lagos.

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Mike Barry is a professor at the University of Calgary. He has done work for the South African, Canadian and British Governments, the Southern African Development Community, the United Nations Food and Agricultural Organisation and UN-Habitat. His research interests are land administration, land tenure and cadastral systems. One of his areas of research is developing strategies and tools to support land tenure in situations where conventional land registration and cadastral surveying do not address the problems on the ground adequately.

Endnotes

ⁱ '419' schemes are named after the section relating to fraud in Nigeria's criminal code, and refer to an extensive web of international criminal schemes which originated in Nigeria in the late 1980's (Lewis 1996).