



LAND AND CONFLICT IN THE NEW MILLENNIUM

By Clarissa Fourie, School of Civil Engineering, Surveying and Construction
University of Natal (Durban), South Africa

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Introduction

The longer I work in land management, the more I come to understand that much of land management is in fact conflict management. Because I come from South Africa, and have worked mostly in Africa and Indonesia, I sometimes think that maybe I think this because of where I have been working. But last year I gave a paper at the FIG congress in Brighton at the same time as European surveyors from Holland and Denmark who were discussing land consolidation, a form of land management popular in Europe, and they also felt that land management involves extensive conflict management.

For the last 2 weeks I have been in Australia attending the Bathurst Declaration and then the Melbourne conference, and also spending 4 days on the fabulous Barrier Reef. I will be filling you in on some of the issues which came out of the workshop and conference, as requested by the organizers of this conference. But I am going to place the findings within the framework of my topic, that is land and conflict in the new millennium. I will do this by covering a range of themes:

- I will refer first to the problem statements that are the point at which the Bathurst Workshop started. That is, what is going wrong with the planet;
- I will then briefly identify the role of land surveyors in conflict management just to make you more comfortably from the outset;
- I will then look at different types of conflict and show how critical the role of land, information and land surveying is and I will speak about Kosovo and South African informal settlements;
- I will then suggest ways forward for these situations in the form of a Stakeholders' Forum;
- Another way forward concerns some of the most difficult, useful and creative discussions which were raised in Bathurst and Melbourne, namely the expanding of what is known as the cadastral infrastructure to a land administration infrastructure to accommodate additional non parcel based rights and information;
- Another new tool which was discussed, but not unpacked to the same extent, in Bathurst and Melbourne was the issue of managing overlapping rights in new ways -and I will discuss this in relation to Australia's native title;
- Finally, I will return to the Bathurst Declaration to draw out some of the major conclusions and recommendations, which seek to deal with the issues raised both in the problem statement and in the conflict which underpins most of the world's land management problems;

The problems

It is always good to start by outlining the problems one is trying to address, and I will take these problems directly from the Bathurst Declaration

- The world's population has reached 6 billion;
- The poor are increasingly concentrated in slums and squatter settlements with 40-60 percent of the occupation of cities in developing countries being informal, where people have no secure tenure. I will show you some slides later of informal settlement in South Africa and how it affects the cadastre and land owners;
- The proportion of people making their living from land is declining. In 1970 two thirds of the world's population lived in rural areas; today it is only half, while within 30 years two thirds of the world's population will live in cities;
- Fresh water availability is approaching crisis point. At present consumption levels, two-thirds of the world's population will live in water-stressed conditions by the year 2025;
- Women account for half the world's population but they own only 1 percent of the world's wealth;

Additional figures noted in Bathurst and Melbourne which illustrate problems and conflicts are that:-

- 90 percent of the world's population own only 10 percent of the world's wealth, and the concentration of land in the

hands of a few is significant in some of the larger cities in the world;

- Humans are already exploiting all the available land and fresh water resources and the picture of plenty which most of us have been brought up with is no longer a reality. I think this has been brought home already in Australia over the salination and water issue;
- Also, with the move of the population to the cities and away from the farms, there are increased water needs both for human consumption in the cities and for industrial development to replace agricultural employment. This puts additional stress on the existing water consumption patterns;
- Finally, a figure from the United Nations on housing indicates that over one third of the world's urban population lives in informal housing, generally without services such as clean water, sewerage management and so on.

A first reaction to these figures might be to go back to playing golf or to go surfing! It is just all so huge. However, if the professionals do not become fully involved in solving the problems who is going to do it.

In fact, when you hear figures like this it is no wonder that there is so much conflict in the world. However too often this conflict is not understood as a conflict over resources, but is seen as a conflict between political ideologies or personalities or as ethnic or religious differences. Of course such conflict also exists, but many times it is the conflict over resources, and access to those resources, which underlie the conflict. The figures above should indicate to us that rather than conflict diminishing in the next millennium it will increase because our resource base is shrinking in terms of the needs of the population. This need is not only about population growth, but also about consumption patterns, and I might remind you that one person from the United States has been calculated as consuming the same amount of the earth's resources in a life time as 60 Ghanians in West Africa.

The role of the land surveyor

Some people would argue that the land surveyor has very little role in tackling the issues I have just outlined, perhaps even a few land surveyors would see it that way as well. I would argue instead the land surveyors are already involved in these situations and that they are critical to the resolution of these problems, parcel by parcel. This is certainly our experience in South Africa. The majority of the postgrads are practicing registered cadastral surveyors, and their work every day is in providing information and tenure security to people who have previously not been able to have access to land or secure tenure or to land information. I will show you later on overheads some of the work of one of the postgrads who is doing, who is the Chief Surveyor of a medium sized town of about half a million people.

So there are a number of roles land surveyors can and do play in conflict management in relation to land:-

- Firstly, land surveyors tend to create the information which people need to be able to negotiate -and I will examine this more just now. The reason for this is that often the cadastral information is the first or only information available on the land;
- Secondly, land surveyors deliver land and rights. That is, they know how to access land and how to convert raw land to serviced, developed land. That is, land surveyors can have a critical role in giving access to land and secure tenure to the world's population;
- Thirdly, land surveyors have often moved beyond the cadastre to land information management in the form of GIS. That is, they are familiar with the range of data sets required to manage land beyond the cadastral layer. Land and conflict management requires the ability to visualise and manage overlapping rights. I will return to this controversial idea just now;
- Fourthly land surveyors understand issues at a larger than community level, because they are used to working from the whole to the part, and also understanding the need for land information and cadastral infrastructure to be long lasting for sustainability and cost effectiveness. In many situations in the world conflict can only be managed over time, through the resolution of disputes one by one. The processes whereby this conflict is managed have to be at the right scale, for example at national and not community level and for long time periods to build confidence among disputants that the system managing the conflict will remain in place. Here I am referring to such things as land records describing agreements.

Types of conflict

I now turn to look at some of the different types of conflict happening around the world and the role land surveyors either are playing or could play. Let me start by showing you some overheads of a historically Black area in South Africa called the Greater Edendale Area. Trevor Cowie, the Chief Surveyor of the Pietermaritzburg-Msunduzi Transitional Executive Council, produced these on Integraph using Geomedia Pro. Aerial photography, ground surveys, South Africa's geodetic all played a role in building the picture which is updated regularly using such tools as videography. The first overhead shows you an overview of the area. The pink is

informal and the blue if formal. There are about 25,000 parcels in the area, and thousands of informal subdivisions, with a population of about 300,000 people. These slides show you how the informal settlement does not conform to the state land boundaries, or the cadastrally surveyed boundaries, or the boundaries of the privately owned land which is developed. You can see how there are 2 houses on small sites which legally are supposed to have one and that on many large properties there is a large amount of what is known as shack farming. Another point of land conflict is that many of these areas have been owned in freehold by Blacks for the last 100 years. Because of a range of factors, one third of the properties, have dead titles because no registered transfers have been taken to the heirs during that time. Also one third of the properties are in an administrative limbo because owners applied to undertake subdivisions but did not meet the subdivision land use conditions. Finally, there are 6 General Plans for this area, and sites have been taken out of each of these, and the GPs have not yet been coordinated. Here I must refer you to the thesis of Trevor Cowie and say that a paper describing this will be produced as soon as the thesis is complete.

The role of the land surveyor, working with other land professionals in this situation is straight forward in one sense:-

- To deliver tenure security to the thousands of people without it in this area;
- To supply information about the land so that cloudy titles can be cleaned up thereby facilitating land and service delivery;
- Manage the land records over time during this process prior to their entry into the registry;
- Manage the information about the overlapping range of rights and claims and not just the cadastral information. That is the legal status of the cadastral information varies as does the individual status of freehold owners in relation to being able to deal with the land;

However, it is immediately obvious that most of this work will involve conflict, between the landowners and their legal tenants and illegal squatters, between the local authority and the landowners over service provision, between the squatters and the local authority and so on. That is, it is not possible for the land surveyor to do the work in isolation from this conflict. Land surveyors facing this type of situation need new tools to assist them with their work.

Lets examine a national scale land conflict such as Kosovo. There are obviously short, medium and long term priorities in such a situation in relation to the land. In the short term it is important to make it possible for refugees to be able to return to their place of origin. Ideally, they should be housed as soon as possible, but often insufficient houses exist because the houses have been destroyed. In this situation, vacant land needs to be found and people settled immediately. In this situation, precise boundaries are not the issue but rather, the provision and management of services such as water and sewerage. If people have land they will house themselves in temporary shelters fairly quickly.

Once this is completed, the focus should be on longer term security issues. This will involve:-

- Creating records of the people who are in temporary occupation of the land and ascertaining their land related needs;
- Making it possible for people to return to their own houses if they are still standing. This will in some cases also involve restitution claims for houses and land already occupied by someone else;
- This will in turn mean that information is needed about which land/houses are claimed for restitution, and a restitution process put in place;
- Land delivery, with or without housing delivery, for those living in temporary occupation, whose houses have been destroyed;
- The development of an understanding of what land administration system existed prior to the war and what records are available to assist with the relocation and the supply of secure tenure;

The building of a cadastral and land registration system in the conventional sense should be developed in the long term, building on the pre-war situation, the post war reconstruction approaches and sound land administration principles. Again the role of the land surveyor, working with other professionals, is both straight forward and made more complex by conflict. Tasks which would need to be undertaken include:-

- Maps of areas are essential to be able to identify vacant land for temporary occupation of large numbers of people;
- Large scale maps of villages will probably need to be created to be able to relocate people, manage the restitution process and begin land and service delivery;
- The creation of land records, which would underpin tenure security, would need to be developed with a spatial component;
- And so on.

Again, land surveyors facing this type of situation need both their conventional tools and new tools.

Land administration infrastructure

One of the new approaches discussed at Bathurst and Melbourne was a move away from using the cadastral infrastructure as the only tool to using the land administration infrastructure as a more encompassing tool allowing more options.

A land administration infrastructure is "the organisations, standards, processes, information and dissemination systems and technologies required to support the allocation, transfer, dealing and use of land. The Bathurst Declaration states that one of the major challenges will be to build an infrastructure that is sufficiently robust to, among other things, effectively support the goal of enhancing security.. while at the same time being sufficiently simple and efficient so as to promote and sustain widespread participation. The process for formalising property rights will necessarily involve significant community participation whilst the subsequent registration and transfer process will have to be capable of an evolving response to changing community requirements."(1999:5)

Although the Declaration did not put details into exactly what form such a land administration infrastructure would take, one of the major issues debated was whether property and information had to be parcel based and how to simplify registration. This was debated because only 14 percent of the worlds population lives in developed countries and the cadastral infrastructure designed for these countries is often inappropriate for the developing world. Many countries in the developing world only have documentary forms of evidence for only 10 percent of their land parcels and in sub Saharan Africa that drops to 1 percent. To deal with this issue a number of statements were made in the declaration and I quote these:-

Page 27 "The extent of the challenge.. varies from country to country. The land registry component of a land administration system may vary from the simple recording of tenure towards complex registration of guaranteed title. The geometric component may vary from a simple list of georeferences to complex land information systems. As such decision makers need to choose an appropriate level of sophistication, noting that much of the information that is required will need to be geo-spatially referenced.. .Land administration systems need to.. meet the requirements of a greater variety of users."

Pg 23 "Land administration systems need to be re-engineered to accommodate other forms of information which may not be parceled based. This will facilitate the collection of information on a range of tenure types such as informal settlements, occupancy claims, indigenous and customary rights, water rights and overlapping rights. It will also allow improved management of rural areas and large scale regularisation of informal settlements."

By allowing non parcel based information and property to form part of the infrastructure makes it possible for land surveyors to increase their contribution to land management and conflict management.

Stakeholders Forum

Land management involves conflict management, and to manage conflict so that they can do their jobs better land surveyors need allies. They need to build alliances with other people in the land and information field so that land management can be more effectively undertaken to address the problems raised at the beginning of this speech. To build these allies Peter Dale suggested that Stakeholders' Forums should be created. Such a forum should include all stakeholders to ensure that information is made available to all parties, thereby facilitating negotiation. Often when people have information disputes are reduced. So such a forum should be composed of those with an interest in, or who are dependent on, land information. The forum, and any LIM system associated with it, should be inclusive and not exclude certain stakeholders, otherwise it will not be possible for all the decision makers involved in a conflict to reach consensus. In some countries this means involving informal settlement leaders and/ indigenous rights leaders. The forum should:-

- Bring together technical people, such as surveyors, GIs specialists, computer specialists with other stakeholders. A major objective should be the transfer of knowledge between measurement experts and other professions, between all professions and other decision makers, and between technical experts and decision makers at the center and those at the provincial and local levels Part of this process should include building capacity in decision makers to use land information. This should be done to build up a knowledge base on land management amongst the stakeholders, so that information acquisition and dissemination is not solely a technical process but is interactive. This is a critical component of such a forum, given the relationship between information, power and conflict management;
- Address the problem of land management conflicts and advise on solutions. This approach should mean that a range of stakeholders previously excluded from such forums could now be included and could see the problems with which land surveyors are confronted;

Overlapping rights

The final new tool which needs to be developed relates to the management of over lapping rights. Discussion at Melbourne indicated that the focus on private individualized property rights was undermining the ability to manage land sustainably and that in future an approach needed to be developed which facilitated overlapping rights, whereby the bundle of rights in a parcel would be split up between a number of parties. That is public property rights would become increasingly important as would a variety of lease and

contract rights. An urban example of this is occurring in India, where landowners and the squatters on their properties are reaching agreements through land readjustment exercises whereby both the landowner and the squatters benefit.

An example of this discussed in the conference came from Australia, in relation to native land titles. It was stated by Graham Neate who is the President of the National Native Titles Tribunal. He said that processes were being set up to manage overlapping and co-existing rights, both between native rights claimants and between native rights claimants and lease holders. The process firstly included the encouragement of conflict management and mediation processes as a way forward rather than court processes as the first step. It also encouraged native land claimants to bring forward joint claims to be adjudicated. Prior to negotiations the exact type of claims with respect to land use had to be ascertained. This made it possible to decide whether the lease conditions extinguished the native title conditions, as under law native title was extinguished by registered rights. Stakeholders were also encouraged to work out detailed conditions to be registered in the native land titles registry, as a form of contract, to prevent later disputes over hunting rights, fires, closure of gates, land use, access to the land and so on. The legal structure for this is in place and he hoped that the parties would start to flesh this out, which in turn would feed back into the legal structure.

Conclusion

In conclusion, I outline the major recommendations of the Bathurst Declaration. However, given what I have been discussing, it should be clear that it will be very difficult to achieve these goals without managing land and conflict. The Bathurst workshop recommends a global commitment to:-

1. Providing effective legal security of tenure and access to property to all men and women, including indigenous people's, those living in poverty and other disadvantaged groups;
2. Promoting the land administration reforms essential for sustainable development and facilitating full and equal access for men and women to land-related economic opportunities, such as credits and natural resources;
3. Investing in the necessary land administration infrastructure and in the dissemination of land information required to achieve these reforms;
4. Halving the number of people around the world who do not have effective access to secure property rights in land by the Year 2010.

I conclude on that note.

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