# STRATEGIC ACTION PLANNING IN POST CONFLICT SOCIETIES

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#### **Strategic Action Planning in Post Conflict Societies**

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#### SUMMARY

Developing a sustainable Strategic Action Plan for land administration/management in post conflict countries is extremely difficult. We will argue that it is not possible to use conventional conceptual frameworks concerning hierarchies, to underpin Strategic Action Planning in post conflict environments, and in fact to do so might prove both inefficient and biased. This argument is based on work in Afghanistan, South Africa, Somalia, Mozambique, Uganda and Kosovo. Instead we argue that a soft systems approach, such as that developed by Barry and Fourie (2002) in post-conflict South Africa, should be used to ensure that the correct activities are prioritised. By using examples, we show how a more appropriate Strategic Action Plan for land administration in post conflict situations can be developed using this framework. This approach should improve both national reconciliation, as well as the efficiency of the land market.

### **1. INTRODUCTION**

Developing a Strategic Action Plan in a stable situation is extremely difficult because of the numerous factors that have to be taken into account. A key to successful strategy implementation is being able to control the influences of many of these factors. Developing a sustainable Strategic Action Plan in post conflict countries is much more difficult. Identifying the dimensions to the problem to be addressed, the various forces at play and how they are likely to interact over time is a major problem in itself. Moreover, implementers of these strategies have far less control over many of these factors than they would in a stable situation. We will argue that it is not possible to use conventional planning frameworks to underpin Strategic Action Planning in post conflict environments. In fact to do so might prove both biased his) and inefficient. This argument is based on work in Afghanistan, South Africa, Somalia, Mozambique, Uganda and Kosovo.

Instead we argue that, in concept, an approach based on Checkland's (1999) soft systems theory and practice, such as that developed by Barry and Fourie (2002), should be used to ensure that the correct activities are prioritised. The paper is divided into two parts. First, a conceptual framework is presented at some length. This includes a description of the key characteristics of post conflict situations that indicate that they need to be analyzed within a soft systems framework. Secondly, by using examples, we show how a more appropriate Strategic Action Plan for land administration in post conflict situations can be developed, using the Barry and Fourie (2002) conceptual framework. This approach should improve both national reconciliation, as well as the efficiency of the land market.

# 2. CONCEPTUAL FRAMEWORK

### **2.1 Introduction**

This paper draws extensively from a conceptual framework to analyze and evaluate a cadastral system in the context of the broader system of land management during periods of substantial change in a paper, 'Evaluating cadastral systems in uncertain situations: A conceptual framework based on soft systems theory' (Barry and Fourie 2002). While this framework was developed in regard to informal settlements during periods of substantial change in post conflict South Africa, we are arguing that the framework can also be usefully applied when undertaking strategic planning in post conflict situations.

### 2.2 Why the Soft system Approach – paucity of methodologies

The framework was developed because there is a paucity of substantive and methodological theory within the cadastral discipline to conceptualise and evaluate a cadastral system in an uncertain, changing situation. In such a situation, analysis of a cadastral system has to encompass far more than merely the cadastral system itself. Due to the increased complexity of a changing situation, a broader investigation is required. In South Africa in the 1990s, the hierarchy of sub-systems (e.g. the systems of land tenure and land administration) that define the requirements of the cadastral system was not

clearly distinguishable, and there were constantly changing emphases on the major function(s) of the cadastral system by various role players (Barry and Fourie 2002).

Conventionally, analysis of cadastral systems has utilised a static hierarchy, such as that depicted in figure 1. However, this fundamental intellectual construct cannot be utilised during times of change. A conventional land management systems hierarchy in a stable situation (see figure 1 below) is different from the land management system in a volatile, changing situation (Barry and Fourie 2002). The conventional structure of the land management systems hierarchy follows a commonly used format (e.g. Barnes 1994, Larsson 1991, Nichols 1993) to depict the conceptual relationships and interaction between the various land management sub-systems. In a stable situation the system of land policy formulation and development provides strategic direction to the management of land (see figure 1). Ideally, policy provides the vision, the objectives and the strategic framework for the management and administration of land.



Figure 1 Land Management System in a Stable Situation

During periods of large scale change, one can assume that none of the above systems are likely to be stable. A cadastral designer needs to incorporate all the systems and subsystems usually associated with the land management hierarchy and a large number of other elements. Soft systems theory provides the basis for a more realistic conceptual framework under these conditions.

Such a framework:-

- Accommodates complex situations, including human behaviour (2002) –this aspect is critical in post conflict situations.
- Widens the scope of analysis and evaluation by emphasizing the dynamics of the external environment within which the system works; and also by focusing on the

whole land management system, and not just the sub-system of the cadastre (2002). In this way the conflict itself, as an external factor, can be robustly incorporated into the analysis.

• Allows the cadastral designer to conceptualise the situation from a number of different frameworks of orientation. This is important for land management, a field known for its wide range of land professionals, different institutions, and the vested interests associated with land and property (2002). Also, this is a key element for analysis in post conflict societies, where the analysis can be done from the different points of view of the different parties in conflict.

## 2.3 Core Concepts

According to Barry (1999), *land management* is a system embodying the policy development and strategic planning processes related to land. *Land administration* on the other hand comprises the sub-systems that actualise strategies to implement land policy, and other related policies, within the land management system (1999). A *cadastral system* is defined to comprise the sub-systems of adjudication, boundary definition and demarcation, surveying, registration, and dispute resolution.

A system can be defined as a collection of parts or elements that interact with one another to function as a whole, thus showing properties of the whole, rather than properties of the component parts (Kauffman 1980, Checkland 1999). The philosophy underlying systems thinking is that a particular problem or phenomenon should be defined in terms of an irreducible whole, and the properties that emerge from that whole. The components of this whole may be analysed individually but finally it is the whole that should be the focus of analysis (Checkland 1999). For example, the properties that might emerge from the land administration system in a western society conceptualized in figure 1 are sustainable land use in a manner that permits individuals to consociate wealth. This in turn contributes to the properties of higher systems which might include social and political stability and economic prosperity. The properties that emerge from the juridical cadastre, as a sub-system of land administration, are likely to be secure land tenure in a manner that allows land to be used as collateral for loans. This in turn contributes to sustainable land use. In analysing problem situations, it is difficult for individuals to visualise the whole pattern of change in a system, because they are only a component part in the larger systems of human endeavour. Analysts have a tendency to focus on snapshots of isolated parts of the system, and consequently the deepest problems (often) do not get solved (Senge 1990)."

Barry and Fourie state, in regard to what constitutes an *unstable situation and a stable situation*, that "general systems thinking assumes that systems exist for long, stable periods where changes are minor and modifications to the system oscillate around some stable, static state or trend. Substantial change occurs rapidly as a system progresses from one state to another. Oscillations in the system are large and varied during this process. Thereafter the system reaches a new, but characteristically a different, stable state where

oscillations in the system are minor" (Kaufman 1980, Checkland 1999 quoted in Barry and Fourie 2002).

### 2.4 Key characteristics of conflict

Barry and Fourie (2002) moved away from using the conventional hierarchical analysis to soft systems thinking because they found that conventional analysis did not explain reality in informal settlements, when South Africa was going through rapid change. We are arguing that a number of characteristics found in post conflict societies also indicate that the conventional hierarchical analysis should not be used.

A few of these post conflict characteristics include:-

- A lack of land policy at national level, written or unwritten and/or broadly agreed upon by policy makers.
- Limited prioritisation of land policy development that includes all stakeholders. The unacceptable nature of the some of the laws in existence, including the land laws, in terms of their discriminatory nature (e.g. ethnicity, women), requiring the passing of new land laws.
- A land management and land administration system that is largely dysfunctional, either because it has been wholly or partially destroyed and/or because it does not extend to the majority of the population. Land administration staff are likely to have been replaced and so the institutional knowledge and effectiveness is lost. Under these circumstances ordinary people undertake their land dealings outside of the formal system.
- A breakdown in the land management/administration and justice system allows powerful individuals to grab public and private land with impunity (including elites, criminal elements and municipalities).
- A land planning system that has not been updated for decades because of conflict, added together with a great need for land by refugees, Internally Displaced People (IDPs) and returnees. This leads to large scale infringement of the land plan. Parallel land record systems, where different groups in the conflict have created their own form of land records, and dispute the legitimacy of the land records and land dealings of the other group.
- A break down in law and order and/or a weakness of the central state in extending its functions to the local level throughout the country.
- Invasion of land by the poor, homeless, IDPs, returnees, refugees.

- Over-lapping rights and claims over the same parcel/house because of people returning after the conflict, government's having allocated the house/land to someone else, different groups at different times in the conflict allocating land and housing, the issue of women and especially widow's rights being infringed.
- Large scale destruction of buildings, which in turn leads to the need for rapid redevelopment of houses often outside of formal processes.
- Large scale ambiguity and gaps in the regulatory framework.

We will show that by adopting a soft systems approach it is possible to move away from a technically focused approach, which advocates a 'fix the land administration system' approach only. Instead, by using a soft systems approach, land administrators will be able to undertake better strategic action planning decisions, as history unfolds in a post conflict environment.

### 2.5 Systems Thinking, Stable and Unstable Situations

We first describe soft systems theory and then show how and why it is useful for strategic action planning in post conflict societies.

The salient feature of soft systems theory, for the purpose of analysing cadastral systems, is that firstly it accommodates complex situations. Human activity is complex. Attempts to oversimplify for technical purposes can result in incorrect assumptions about the processes and structures that underlie a particular situation. The use of soft systems theory precludes such oversimplification and prevents inappropriate interventions, which may merely attempt to "fix the problem". Secondly, soft systems theory assumes that the structure of the interaction between sub-systems is likely to change over time. Therefore, conceptual models of a particular system need to be constructed and analysed continually (Barry and Fourie 2002).

Soft systems methods are distinct from hard systems methods of analysing a situation. Soft systems methodology arises out of the nature of problems and situations that have to be addressed in systems of human endeavour. Hard systems thinking assumes problems can be formulated by the making of a choice between alternative means of achieving a known end. Hard systems problems have clearly defined desirable goals, soft systems problems do not. In contrast to hard problems, soft problems often have obscure goals (Checkland 1999).

Soft systems methodology expresses the situation in which a perceived problem exists in terms of structure and processes and the relation between the two, rather than as a clearly defined problem. Moreover in soft systems, history always changes the agenda. "The contents of such systems are so multi-various and the influences to which they are subject so numerous that the passage of time always modifies the perception of the problem... Such perceptions of the problems are always subjective and they change with time."

(Checkland 1999). Consequently, unstructured problems should be viewed as conditions to be alleviated, rather than problems to be solved.

In analysing and evaluating a particular situation, it is necessary to develop an understanding of the interrelationships between different systems. These interrelationships may be a purely intellectual construction of a situation; the systems themselves may not physically exist in reality. According to Cook (1994): "A fundamental starting point in modern general systems theory is that a system can have a number of representations, depending on the 'frames of orientation' or paradigms of different observers. A 'frame of orientation' is the means whereby an observer is oriented intellectually with observations of worldly phenomena." It follows that a frame of orientation is context dependent, and different observers will understand a system such as land management or a cadastral system differently, depending on the context of a particular situation and the observer's own thinking. This is very true for the cadastral field where cadastral system designers working in the field are confronted by the different logic of other land professionals and policy makers, such as land lawyers and planners, registry staff, surveyor general's staff, local government administrators and private sector land surveyors.

A means of developing such an intellectual framework to understand the relationship between systems is to create a hierarchy of systems, sub-systems and environments. This hierarchy assists an analyst in conceptualising which systems create requirements for, or influence the character of a particular system being analysed.

In conceptualising a situation, the analyst should establish a definition of what constitutes the whole system to be analysed, what constitutes the environment outside of this "whole" and what can be assumed to be a low level component of this whole. According to Checkland, in the formal systems model, environment is what lies outside the system boundary, and a component is a part of a system that is assumed to be unchangeable (Checkland 1999). Systems and sub-systems can be engineered to achieve specific objectives. Conversely, an environment is a higher level entity, which cannot be engineered by land administrators, only influenced (Checkland 1999).

### 2.6 Conceptual Framework of Land Management in a Stable Situation

In a stable situation, it can be assumed that the conceptual map in figure 1 above accurately portrays the operation of the hierarchy of the different systems that comprise land management and administration. Policies are assumed to be stable, largely integrated, and changes to them are incremental. The demands placed upon the cadastral system by the higher level systems of land management and land administration are served by the requirements of all the sub-systems of land administration (e.g land tax, land tenure, utilities). The tasks performed by the cadastral system are defined by these land administration sub-systems. As indicated, Barry and Fourie's studies showed that this conceptual framework was not appropriate in times of large scale change to understand reality (Barry and Fourie 2002).

#### 2.7 Land Management in an Unstable Situation

Barry and Fourie (2002) argue that a cadastral designer's perspective of the land management systems' hierarchy, in unstable situations, should include the macro environment and two main sub-systems, namely the internal system and the task system (see figure 2. below). The internal system comprises the various sub-systems that make up the cadastral system, such as adjudication, boundary definition and demarcation, surveying, registration, dispute resolution and information management. The task system sits further up the hierarchy in the land management system, and comprises a number of sub-systems that lay down the requirements of the cadastral system. These task sub-systems are land policy, land tenure and land administration.



Figure 2 Land Management System in an Unstable Situation

Whereas in a conventional depiction of these systems that make up the task system in figure 2, policy is at the top of the hierarchy followed by land administration and then land tenure at the bottom (see fig 1), we place these as equivalents. Conceptually this is necessary to enable the analysis of these task system sub-systems during change.

Case study material reveals that these task system sub-systems may continually alter their position in a systems hierarchy. Barry illustrates this from work in informal settlements where at a particular point in time, the land policy of the country may have been swept aside and replaced by an alternative local settlement level land policy dominated by factions within the settlement, or within local government. This may have resulted in alterations firstly to the *de facto* rules and regulations used in the settlement, and secondly to the hierarchy of evidence used in adjudicating disputes over interests in land, with both legal and informal boundary evidence being used (1999).

If one was utilising a conventional conceptual framework of a hierarchy in this situation, focused on 'fixing the cadastre' for use in informal settlements, one might make alterations by adapting the cadastre to suit the settlement, and then apply it at national level, based of course on a suitable number of case studies. In this scenario the cadastral designer would alter the country's hierarchy of legal evidence, in relation to boundaries, to admit other forms of local legal evidence (Barry and Fourie 2002).

Furthermore, if one is however applying the soft systems conceptual framework, it is more likely that conclusions will be reached that 'fixing the cadastre' is not the issue. Instead the cadastral designer would be able to identify that the issue to be addressed is that land policy is being developed at local settlement level, and that credible national land policy, representing settlement level demands, but not necessarily reflecting their practices, needs to first be put in place, together with a credible governance structure. Only at this stage would it be possible to reassess the role of the cadastre to see if it needs 'fixing', and whether the hierarchy of evidence needs altering. That is, local alterations in the hierarchy of evidence, with the introduction of informal and local forms, are primarily an indicator of inadequate land policy and/or governance, and are not necessarily a reflection of existing cadastral system design inadequacies (Barry and Fourie 2002).

Finally, Barry and Fourie (2002) argue that it is unlikely that problems in the cadastral system in unstable situations will be correctly diagnosed and addressed without using the soft systems approach, or something similar to it, precisely because the more serious problems often lie in the other sub-systems in the land management systems hierarchy. Their work serves to illustrate that while changes are occurring, a framework such as the one portrayed in figure 2 is more suitable for defining how a cadastral system should be evaluated.

### **3. STRATEGIC ACTION PLANNING IN POST CONFLICT SOCIETIES**

In many countries, including post conflict countries/regions, and especially where donors are very active, Strategic Action Plans are often developed by the Ministry of Lands to implement new land policy and/or land law and/or land management/administration

systems. While these Strategic Action Plans may be linked to specific projects, in many cases they are eventually tied into the Medium Term Expenditure Framework of the country. Sometimes Strategic Action Plans are general documents setting the vision. However, it has been found that Strategic Action Plans which are closely linked to specific activities and budget lines are better, precisely because they force land administrators to focus on priorities, phasing and sequencing, and outputs.

Land is both a multi-faceted and complex topic, as is land management/administration itself. Land management/administration has thousands of variables that have to be considered when prioritizing activities. All of us involved with land administration have been faced with having to choose between different activities, all of which seem to be equally important. It is not possible to do it all because of a lack of resources (human and financial). To complicate matters, in developing a Strategic Action Plan, it is not just a matter of prioritizing activities. In land administration it is often necessary to do careful phasing and sequencing, also over long time periods, to be able to reach the required outputs, of secure tenure for the majority and spatial information for the delivery of economic and social services.

Sustainable Strategic Action Plans in post conflict environments are even more difficult to produce. While they also require policy makers to be able to choose priorities and create the correct phasing and sequencing, this is much more difficult because of some of the added factors such as:-

- Lack of political will or focus.
- Because of the nature of an emergency phase, short term approaches are normal business practice. It is very difficult to keep focused on the long term approaches needed for land administration, and especially the carefully structured phasing and sequencing required. The urgent constantly takes priority over what is of long term importance.
- In the emergency phase there is no clear picture of the land situation in the country and history might be changing on a day by day basis, with the invasion of public land, re-construction of damaged houses, security problems etc. There is a constant need to both acquire information on a daily basis in this constantly changing environment, react to new demands, as well as to position land administration and/or the institutions associated with it within this environment.
- The needs of IDPs, refugees, returnees are likely to be placed at the top of the agenda for land officials to deal with, rather than re-building the system. The focus may well be on the urgent restitution of houses, rather than building a land administration system that manages the tenure security of these houses over time.
- It is likely that there will be a shortage of land administration personnel. In some case this has an ethnic dimension either because one ethnic group is no longer available and/or because another ethnic group has not been trained.
- The difficulty of moving from the emergency phase to the development phase, in as seamless a fashion as possible.

- The link between conflict, post conflict and new economic opportunities. Often criminals and warlords are associated with land allocation, and public land/house and building invasion.
- In post conflict environments institutional structures may not be in place (e.g. government departments, parliament), and/or institutional gaps and duplication exist, leading to over-lapping land related functions between institutions.
- Land administration is not done on its own but is closely linked to the institutional shape of government (e.g. decentralisation), other government departments (e.g. planning, tax, forestry, urban management), and/or relies on other departments for information (justice, roads, planning). In post conflict situations the institutional environment is extremely fluid and it is very difficult to position land administration and its functions and linkages in such a constantly changing environment.
- The complex problems associated with the development of new laws and the creation of an appropriate regulatory environment in a post conflict situation. Land administration systems are firmly anchored in law, regulations and administrative procedures and these should ideally be developed prior to the development of a new land administration system. However, because of the rapidly changing institutional landscape and the introduction of foreign laws by donor agency consultants, ambiguities and contradictions often arise in the law. It is extremely difficult to develop robust regulations and technical procedures under these conditions.

That is, against what can be an extremely fluid background, policy makers in land administration have to undertake Strategic Action Planning.

## 4. APPLYING THE SOFT SYSTEMS APPROACH TO THE DEVELOPMENT OF STRATEGIC ACTION PLANS FOR A POST CONFLICT LAND ADMINISTRATION

The common characteristics found in post conflict situations have already been identified above. We have shown that post conflict situations are unstable situations, and that in these situations the conventional hierarchy cannot be applied because there is likely:-

- To be no credible land policy and/or land law in place.
- That the majority of land dealings will often be outside of a legal framework or routine technical processes.
- That the land administration will be in serious disarray.

Therefore we need to look at other conceptual framework's, such as Barry and Fourie (2002), to assist us in post conflict situations. I attempt below to learn from Barry and Fourie's (2002) conceptual framework and see how it can be applied to post conflict situations.

Firstly, one needs to look examine the properties of higher systems than one would normally do in a stable situation. These are macro-systems relating to social, political, economic, physical, technical and legal factors. The macro-environmental factors of prime importance that need to be addressed in a post conflict situation are likely to be social and political stability, followed by economic opportunity. The properties that should emerge from the land administration system, and the cadastral system in particular, should, as their primary objective, contribute to these higher objectives.

That is, instead of focusing purely on 'fixing the system,' questions can be asked about how the macro environmental factors should be taken into account when making decisions about cadastral reform. For example, questions would be raised about whether the 'modernisation' of the cadastral system should be prioritised, or whether the system should first be reformed in such a way that it assists with conflict resolution and national reconciliation. The latter places greater emphasis on the primary objectives of achieving social and political stability, whereas the former focuses on technical aspects of the cadastral system. Strategies often select the modernisation option because prima facie it is easier to achieve measurable results.

In terms of a conventional approach the manual records would be converted into digital records as soon as possible, to modernise the cadastral system for an efficient land market. However, in terms of a conflict resolution approach, there would be no conversion of manual to digital records without first including forms of adjudication within the existing technical processes themselves –either at every dealing, or randomly, or for specific 'suspect' records. That is, in post conflict strategic planning, adjudication would not only be used at the creation of the first title. Instead similar procedures would be used as a step in existing technical processes.

Those individuals who used a conventional conceptual framework leading to a 'just fix it' approach, would argue that incorporating adjudication in the technical processes would delay the modernisation of the cadastre dramatically. However, those who supported the soft systems approach would argue that the key 'problem' is in the macro environment – that is conflict. Therefore it is this problem that should be prioritised in any technical design. They would also argue that:-

- The land administration system will lack legitimacy if the land titles/claims of people are ignored and are not adjudicated correctly. This would lead to people increasingly dealing outside of the land administration system and/or could also lead to a later destruction of the land records, if they are perceived to remain biased towards one group.
- Without a legitimate land registry and reconciliation over the land, through incremental adjudication and good governance practices, there can be no efficient land market –the aim of the modernisation in the first place.
- If a concerted effort is not made in the land sector to deal with conflict, it is likely that the national/regional conflict could re-emerge and this could lead to a renewed destruction of the land administration system.

Secondly, in terms of the conventional approach, land administrators would conclude that the system should be modernized by introducing a 'title' system rather than staying with an existing 'deeds' system. They would argue that a 'title' system, based on computerization, would create a more efficient land market. There is no doubt that in stable developed countries 'title' systems can facilitate very efficient land and property markets. However, if we adopt the soft systems approach for evaluating land administration design in post conflict situations, it is likely that a 'deeds' system would be better in the short to medium term.

By title system we mean a Torrens title system, and there are both technical and legal aspects to it. A technical feature of a title system is that it adheres to sound database rules. Simply put, data that describes land rights, be it ownership or encumbrances, is created once and stored once and the ownership and encumbrance information relating to a particular land parcel is rigorously cross referenced through a system of unique key identifiers. This feature is likely to characterise the structure and process design of all technically sound registration systems, whether we choose to label them title or deeds systems. The second feature of the Torrens registration system is that it is steeped in positive legal philosophy. In legal positivism, the law is applied strictly as derived from statutes and previous cases. There is a clear separation between application of the law and influences of personal morality. Legal validity depends on legal criteria and not moral or ethical considerations (Campell 1989). In principle, the Torrens system only recognises rights and interests that are reflected on the title. The curtain is drawn on any historical claims. For example, where a legal regime permits adverse possession, if a person claiming adverse possession over a parcel does not register their claim by means of a caveat on the title, transfer and registration of that parcel will extinguish that claim (Boyczuk vs Perry et al 1948, Alberta Supreme Court).

A deeds system on the other hand may or may not adhere to sound database rules. In its simplest form, a deeds registry is merely a depository, a library, of documents. Government does not perform a quality control role. In some jurisdictions, off register transactions through the private conveyance of the deed from buyer to seller are permitted.

A deeds system as we have somewhat simply described above accords closely to the philosophy of natural law in which the law should conform to a higher system of ethics, otherwise it is not valid law. Natural law philosophy emphasises adherence to the principles of equity and fairness above what is written in the statutes, and so it is in direct contradiction of positivist legal thinking.

In contrast to a Torrens title, the deed is an affirmation of rights in land, it does not constitute them. Deeds provide evidence of rights in land. Prima facie, they can be assumed to constitute rights in land, but this assumption may be rebutted by evidence which is not contained in the deeds.

Relating this to post conflict situations, adherence to natural law thinking is far more likely to lead to social and political stability than positivist legal thought. Relating this to the debate of a trade off decision between modernising the cadastral system versus tying the cadastral system directly to stability objectives:-

- Under a 'title' system the curtain on underlying claims and legal evidence is drawn and only the evidence on the land record is used. This means that the trails of evidence that would show off-record claims would not be considered valid. In post conflict environments over-lapping rights and claims are extremely common, and central to the conflict. In fact institutions set up to restitute houses often go well beyond the cadastral evidence when reaching a decision. To ensure a credible land administration system, and to decrease conflict in the country, the trails of evidence associated with 'deeds' systems would need to be retained to in the short to medium term to facilitate adjudication during technical processes and the restitution of property.
- Under a 'title' system the land records held by the state generally become the first evidence admitted by court. Under a 'deed' system, the private sector generally hold some evidence of the rights, as they serve as witnesses to the dealing. In post conflict societies the credibility of state officials cannot be taken for granted. The credibility of the land records in a 'title' system would be linked to the credibility of these officials. Any corrupt or discriminatory practices by these officials would immediately affect the legitimacy of the land registry and impact the land market. In addition to this, often in post conflict societies, especially where the central state has crumbled dramatically, people have been using the private sector almost exclusively for their dealings. It is not useful to replace existing social capital, such as 'trust' between buyers and sellers and the private sector facilitators of these transfers, in a post conflict society rapidly, prior to the stabilization of the country. It may well also affect the land market negatively.
- The weak such as women and widow's land rights would be generally prejudiced.

Thirdly, in terms of the conventional approach, human behaviour is expected to adapt to the technical design of the system. While the new land administration systems are increasingly being designed to be more user friendly, this has not been the case in the past. Conventionally land administration systems have not been designed to take into account human behaviour. This has meant for example, issues such as women's land rights through co-tenures, the rights of family and group members in regard to individual title deeds, the needs of the poor in regard to affordability, have not been historically taken into account in land administration designs. All of us working in land administration know that the human-technical inter-face is one of the hardest things to overcome and the Federation Internationale des Geometres (FIG) is to be congratulated on how it is attempting to address this issue.

The soft systems approach requires human behaviour to be placed at the centre of the analysis. Such an approach in a post conflict situation would mean that system's administrators would evaluate the human behaviour of users and potential users, in regard to their records, and improve their land records accordingly. For example, if they assessed the credibility of their records for users and potential users, they may find that the records had no credibility because the cadastral staff was not considered to be impartial, because of the history of the cadastre. The Strategic Action Plan would then need to contain activities and a budget to improve the image of the cadastral staff in the eyes of the public, as well as to improve management and/or administrative processes to

ensure that impartial staff were trained. By comparison, if a hard systems conventional approach were adopted, it is quite possible that a modern cadastral system would be developed which lacked widespread legitimacy with the public and did not contribute as expected to an efficient land market.

Fourthly, the land industry in a stable situation is characterized by silos, with each silo attempting to obtain optimal solutions for its own silo. Post conflict situations are extremely fluid with a range of new institutions being developed, with a lack of clarity about where land functions are placed in government (between departments and at different levels of government), with gaps, ambiguities around the law and policy, and large scale opportunism. Strategic Action Planning in this environment means that it is not possible to take a silo perspective. Instead, it is necessary to position the land administration functions within this fluid environment, which in turn makes it necessary to understand the inter-relationship between systems in terms of the Barry and Fourie (2002) approach. This would mean for instance that the Strategic Action Plan would not just have activities and budgets for 'hard core' surveying, but would also include activities and budgets associated with 'process.' These would include workshops of stakeholders, human resources to undertake information gathering and negotiation with the other systems, capacity building etc.

Fifthly, in stable situations cadastral systems mature and are tied to land policy over years and decades. In a post conflict situation the link between the two has often not been made sufficiently rapidly. This has led to land administration systems being modernised in isolation of the land policy, leading to unsustainability. It has also led to land laws that cannot be implemented. By adopting the soft systems approach used by Barry and Fourie (2002), this should be avoided, because land policy, land tenure and land administration have to be analysed together in terms of this model.

Sixthly, the land industry is well known for its 'vested interests'. This means that there are numerous organisations, institutions and individuals who work in silos, and compete with each other for market share. Conventionally analyses in the industry are undertaken in terms of these silos. It is important that such 'silo' thinking is not used in post conflict situations where there are conflicting groups.

The soft systems approach advocated by Barry and Fourie (2002) moves away from this silo thinking and makes it possible to analyze different points of view within the same conceptual framework. The designer of the land administration system and/or the authors of the Strategic Action Plan do not need to take sides in the conflict, as they may well do when adopting a hard systems approach. Instead they can use the land administration design to bring about reconciliation over time. For example, if each side is creating its own land administration system and registering land over the same parcels, the Strategic Action Plan should not focus on one system only, but should address both systems. This might mean that a land record would not just record the rights of one group, but also show the rights/claims of the other group on the same parcel. In terms of phasing and sequencing, this would also facilitate attempts to merge these parallel structures in the

medium to long term, and should be part of the phasing and sequencing envisaged in the Strategic Action Plan.

### 5. CONCLUSION

This paper has attempted to extend the debate around technical, land and institutional issues in post conflict societies by suggesting an evaluative and analytical approach that more closely models reality. The soft systems approach, when applied to the cadastral field, makes it possible to move away from the conventional simplistic, hard interventionist, sub-system focused design exercises. Instead, by rigorously integrating cadastral and soft systems theory, it is possible to undertake holistic analyses of complex situations, which include human behaviour and a range of non-static land management sub-systems –all of which are hard wired into post conflict situations. It is also possible to analyze technical processes from different points of view, or contexts, over time. This is critical in post conflict situations where history often changes on a daily; and where it is important to include the interests of all conflicting groups. This in turn facilitates more robust and sustainable cadastral systems' design and management.

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