

Governing wetlands in the commons: the challenges to management of complex systems

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Abstract

The upper reaches of Sand River Catchment contribute significantly to the water production of the Inkomati system; the drainage basin stretching across South Africa, Swaziland and Mozambique. Much of this area are communal lands: the former ‘homelands’ of the apartheid era which today reflect high levels of socio-economic and environmental problems. Recently there has been increased attention on the wetlands within these areas, and their important role in the socio-ecological system. Degrading and dessicating wetlands threaten important livelihood sources of poor local residents, as well as impacting on down-stream users and the eco-system.

Work is being undertaken to rehabilitate wetlands, and to work with farmers on more sustainable practices. However it is clear that the problem of degradation goes beyond the practices of wetland farmers. There are other users upstream and beyond the wetlands and of the community itself, (including a new brick factory with substantial outside investment) whose activities have significant impacts. Moreover there are others who are impacted upon, most obviously by water insecurity. There are also multiple structures that have responsibilities to manage and care for the affected resources, at a range at levels or scales. Understanding of the roles of different agencies is currently weak, as many policies and structures are new in South Africa and the region.

While improved management is clearly needed, this is in the context of a multiplex system – i.e. a system that has many aspects to it. To strengthen governance we need to understand the dynamics of the institutional environment, and also the complexity of the socio-ecological system. We believe that the community level is critically important, but that appropriate linkages need to be made with other levels, in order to have integrated planning and capacity for implementation of agreed approaches.

In this paper we explore the contribution of the experience of a research, learning and action project working in the village of Craigieburn. Working from the basis of some understanding of the socio-ecological system, both practical and strategic considerations are informing how to proceed in this complex and uncertain environment. The paper sets out the emerging insights, challenges and lessons regarding strengthening community based governance of wetlands.

Key words

Governance wetlands complexity tenure

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1. Introduction

Wetlands play important roles in providing water security and ecosystem services in water catchments. There is a growing acknowledgement of the importance of wetlands in the livelihoods of poor rural people within communal lands. However, in many areas the use of wetlands for small-scale farming is eroding the wetland integrity and associated ecosystem services, through unsustainable practices. These situations express the challenging intersection between sustainable management and livelihood needs of people using the wetlands. A range of factors determines the long-term sustainable use of wetlands: the biophysical conditions, land-use practices, the livelihoods of users, and the governance arrangements.

This paper focuses on governance, drawing on the experience of a project currently in progress, which is seeking to establish more effective governance for sustainable wetland use. The paper sets out background information, the theoretical underpinnings, and the findings of earlier research to give the context. More recent work to understand land tenure arrangements, land administration and natural resource management, allows the setting out of the current understanding of “how the world works”. This is the basis for building improved governance for the future. A framework for what is needed is proposed, along with a hard assessment of the challenges, and this provides a path for action.

The Leap (Learning approaches to tenure security) Project and the Association for Water and Rural Development (AWARD) are two NGOs collaborating on a project in the village of Craigieburn, where extensive use is being made of wetlands for cultivation. Leap² is working on a number of research sites in partnership with NGOs that have ongoing relationships with communities. Leap’s interest is in understanding and articulating tenure practices and institutions, and how these can be best supported to provide tenure security that supports poor people livelihoods strategies. AWARD³ undertook intensive research in Craigieburn in 2004/2005 to understand the wetlands functioning, biophysically, its contribution to the water resources and also to local livelihoods. Following on from this work AWARD is working with Craigieburn wetland users on improving their agricultural practices so as to both preserve wetlands and increase their productivity.

These activities are carried out within the framework of Integrated Catchment Management (ICM) as well as new water laws and policies. The key focus for the collaboration is to explore, together with communities, user groups and appropriate stakeholders in the catchment, current realities, practices and needs, and also opportunities emerging policy may provide, for strengthening governance of natural resources. Options for institutional arrangements will be explored, decided upon collectively, and then governance structures and procedures established and supported. This will feed into the larger learning about developing appropriate land management and tenure arrangements to improve and secure poor people’s livelihoods.

² See www.leap.org.za for more on information Leap

³ See www.award.org.za for more information on AWARD

2. Context

South Africa is seeking to achieve the sustainability of its natural resources through instruments guided by a relatively new policy and legal framework. Water and environmental policy recognises the need to balance human and environmental needs for long-term sustainability, while also concerned with equity between people. However economic policy and the political commitment to a capitalist economy sets a course at times in conflict with the policy principles.

The flurry of new policy in the post 1994 era included land reform to redress inequities and water reform to change water rights and management. Land reform has three “legs”: redistribution, to change the distribution of land between black and white; restitution, which is give people land or compensation for forcible removals carried out under discriminatory legislation; and tenure reform, to give tenure security to all citizens.

Today land and natural resource access and utilization in communal areas are governed by a set of western-style statutes as well as local-level rules and practices. Overlaid on this legal pluralism is a state and society that is in transition, as policies, statutes, planning instruments and institutions are all changing as part of South Africa’s process of democratization. Various actors have a role to play in natural resources management in communal areas, and there are conflicting claims as to where authority for which specific resources lies (Pollard & duToit, 2005). Wetlands are an interesting nexus of water and land, and challenge the approach to managing these resources independently of each other.

The National Water Act (1998) provides a widely acclaimed policy context for water management, and promotes principles of equity and sustainability. Water resources will be governed by the national department, together with (new) Catchment Management Agencies (CMAs) at a basin scale. Statutory water reform has failed to recognise that some water-based systems (such as wetlands) fall in communal areas and are managed locally, according to local rules and norms (Pollard & Cousins 2007). However CMAs are directed to embrace local-scale institutional arrangements.

Tenure reform for communal areas has been protracted and contested, and is expressed in the Communal Land Rights Act (2004) (CLRA), which is not yet implemented. The contemporary reality of communal land tenure must be understood in the context of the history of colonial dispossession, state intervention before and during the apartheid era, and that there was a variety of local adaptation. The CLRA has given some recognition to the existing tenure practices and realities; yet critics assert that it fails in some fundamental aspects, and that this will make tenure reform untenable (Cousins and Claasens 2006, Kingwill et al 2006). CLRA was explicating designed to go hand in hand with the Traditional Leadership and Governance Framework Amendment Act (of 2003) These two laws reflect the shifts in the political power of traditional leaders since 1994, with increasing political gains on their part. In effect these two laws seek to give traditional leadership statutory authority as land administrators and representatives of communities “as owners of communal land”, and the powers to allocate and register “new order” rights in communal land – these are almost, but not quite, full ownership rights. The laws are

not specific as to natural resources management responsibilities. (See a detailed analysis of this in Cousins et al 2007 b).

The changing policy and institutional context is bringing changes to governance and management of wetlands. Added to this are attitudinal shifts in the communities whose livelihoods depend directly on natural resources. This complex and dynamic societal and institutional landscape makes understanding where authority for wetlands does and might lie (both in theory and in practice) difficult to fathom.

Poor people living in communal areas have vulnerable livelihoods, and many rely on directly natural resources for many key elements. South Africa's relatively good economic growth over the last decade can be characterised as "growth driven by the affluent." It has been a period of increasing inequality, and has not been environment friendly. (May 2000, Creamer media reporter, April 08). Food prices are rising rapidly, disproportionately burdening the poorest. HIV and Aids infections remain high, and push vulnerable households into poverty as they lose income earners. Where wetlands are present in communal areas, they provide important contributions to vulnerable livelihoods and in the current economic trajectory, and the rising food prices, this need is unlikely to decrease.

3. Key Concepts guiding the work

An enormous amount of work has been done on property relationships and regimes, and while a detailed review is beyond the scope of this paper, the work underway has been informed by a study that has done this in some detail (Pollard and Cousins 2008).

We define **governance** as a socio-political process to manage affairs; it thus describes the relationships between people and the rules and norms that are set up to guide these interactions. Underlying the discourse on governance and natural resources are the issues of property **property rights and relationships**. How property is theorised is fundamental to how we understand and therefore work with it. The western notion of property as fixed assets is not very useful when trying to understand how natural resources have been managed by communities using them (Meinzen-Dick and Nkoya 2005). A more appropriate and embracing definition of **property** is the "rights and obligations of individuals or groups to use the resource base; a bundle of entitlements defining owner's rights, duties, and responsibilities for the use of the resource" or "a claim to a benefit (or income) stream". A property right is a claim to a benefit stream that some higher body – usually the state – will agree to protect through the assignment of duty to others (Bromley 1992). Von Benda Beckman et al (2006) propose that study of property is aided by going beyond the commonly used categories (of private, state, communal, open access), as this reduces complexity. The three major elements of the system they consider are its social units, property objects and rights and responsibilities. The system is further unpacked by looking at how these elements are conceptualized as bundles of rights, at three "layers": cultural ideals and ideologies, legal and institutional relationships; and daily social relationships between people (in relation to property). Notably they make the point that rather than focusing on "gaps", it is by looking at the interactions

between the layers that we reach more understanding of a property system. Peters (2000) emphasizes the complexity of land and resource management in Africa, that there are layers of institutional and rights systems, and that overlapping and competing modes of authority and of administration are common. She emphasizes the importance of meaning, and of the historical, political, cultural and social context, when we are seeking to understand why people, and structures, do as they do.

Resource tenure lies at the heart of our work. It is defined as “all the ways by which people gain legitimate access to natural resources for the purpose of management, extraction, use, and disposal” (IDRC www.idrc.org). Importantly, this includes unwritten, so-called ‘informal’ practices through which people gain access to resources. Resource tenure regimes are generally complex and overlapping where for example, one resource (a field) can be many different resources all at once, that are accessed by different people in different ways at different times of the year. The term ‘legitimacy’ places power at centre stage, recognizing that it can be based in both control of material resources such as land or trees, and in the more subtle ability to shape legitimacy through social norms and interactions. In discussing natural resources tenure regulation, Lavigne-Deville (2004) defines tenure regulation as “– set of practical decisions regarding rights”. This includes elements of: governance (power and capacity to define rules), management (organisation of rule implementation), operating (concrete implementation through adjudication, citations, surveys, contracts).

Resource tenure can be considered as ‘**bundles of rights**’. These are described differently by different authors, dependent mainly on the resource at hand. Cousins and Claasens (2004) working in the land reform sector in South Africa for example, talk of the right to occupy, use, bequeath, transact, mortgage, exclude and accrue benefits from land. Murphree (1991), focusing in the field of community-based natural resource management, notes the importance of sanctioned user rights, the right to decide, to determine the extent and mode of use and to benefit from exploitation. Schlager and Ostrom (1992) talk of the right to access, withdrawal, management, exclusion, and alienation and conceptualise these in terms of ‘levels’. Nonetheless, as noted by Meinzen-Dick and Nkonya (2005), they can be grouped into three broad categories:

- Use rights of access and withdrawal;

- Decision-making rights to regulate and control (water) use and users, including the rights to exclude others, manage the resource, or alienate it by transferring it to others (Schlager and Ostrom 1992), and to appropriate (Agrawal 2001).

- Usufruct rights or the right to earn an income from a resource.

Land tenure arrangements and resource tenure are intimately linked, being different “sticks in the bundle”. The Leap project considers land administration to be the operational arm of land tenure, and that thus the operation of land administration is linked to how secure tenure rights are. The Leap framework (Cousins et al 2007 a) offers a way of assessing tenure security and governance. Leap uses the following description of tenure arrangements, which describes not only rights but also processes. It also sets out indicators of tenure security

Tenure arrangements comprise a set of connected processes:

Rights, and obligations to property, and benefits flowing from property, and the processes and procedures through which rights, obligations and benefits are invoked and materialized;
Authority in relation to these rights, duties and procedures
Social and institutional practices governing rights, duties, benefits, processes and procedures”

Indicators of tenure security:

Clarity⁴ on who holds rights, where, when, how and on what basis
Known and used processes for application, transfer, adjudication, evidence and land use regulation.
Processes do not discriminate unfairly (e.g. against women, refugees)
Clarity on where authority resides – this is known and used
There are accessible and known places go for recourse, and people use these
There are not major contradictions between law and practice.

This framework provided the basis for our research questions. It has also contributed, along with other work, to develop **principles for and indicators of wise governance** of natural resources (Pollard 2008). Three governance indicators for have been distilled to work with:

- i. Claims and rights to access and benefit and the basis of these, are known and defended (Note: “defended” implies they are valued.)
- ii. Sustainable use is understood and defended
- iii. Authority is accessible, is exercised, and is cooperative across levels and plural systems

Systems thinking and its corollary, **complexity theory**, has arisen in part as a critique of linear, single-system approaches to natural resources management, with increasing calls for integration in the last decade. A paradigm shift in linking ecological to social and economic systems has taken place with the Resilience Alliance (<http://www.resalliance.org>) developing a framework which is being increasingly used as a basis (currently mainly conceptual) for understanding the social, economic and biophysical ‘systems’ as one interacting system. This approach has developed of the notion of a ‘socio-ecological system’, which includes the idea of a generalised adaptive cycle, which is understood to be intrinsically scaled and nested. ‘Resilience thinking’ holds three key concepts. Firstly, social systems are inextricably linked with ecological systems within which they are embedded. Thus, we exist within socio-ecological systems. Secondly, these socio-ecological systems are complex adaptive systems. This means that they do not behave in a linear, predictable fashion. Moreover, because systems are linked, changes in one ‘sub-system’ will cause changes in other sub-systems. (Pollard 2008 forthcoming). Complexity thinking has been embraced by this project as it offers an integrating approach and useful concepts and tools for analysis and for thinking about the realities we seek to understand and to interact with for change.

⁴ By clarity what is meant is that most people know, not that these issues are legally clear or necessarily formally documented and static

4. The study site of Craigieburn Village

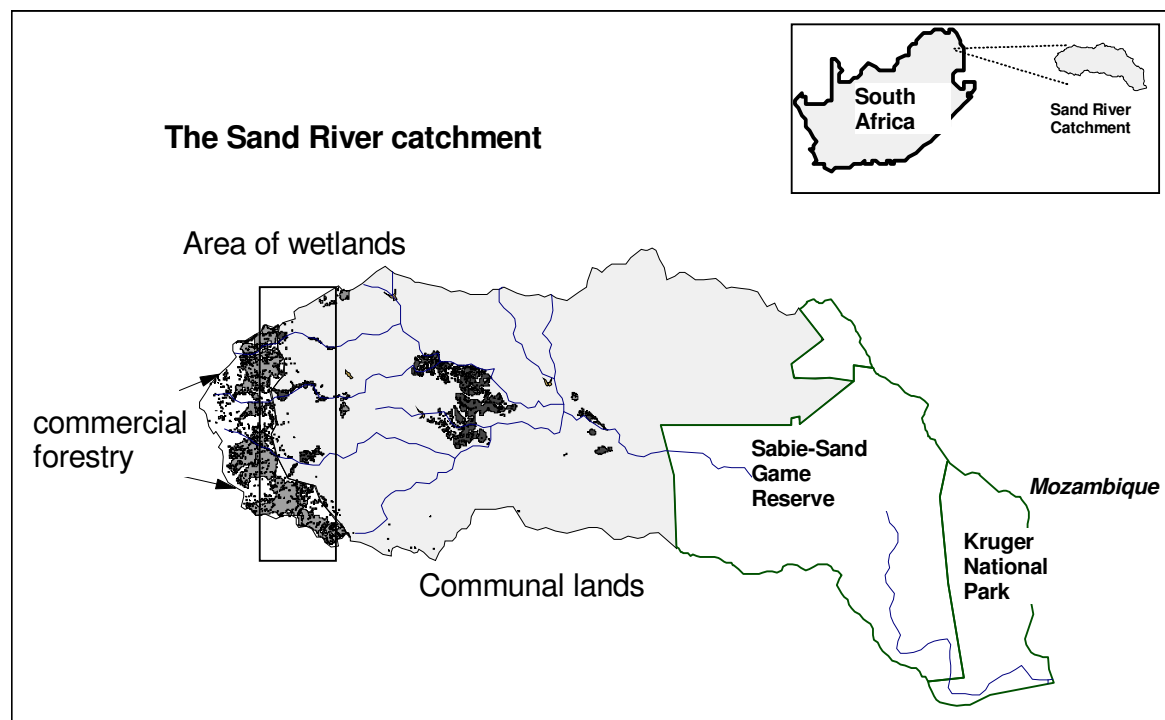
4.1 Craigieburn village in the Sand River Catchment

Craigieburn village lies in the Sand River Catchment (SRC), in the north-eastern region of South Africa. The area is semi-arid with erratic rainfall, and the catchment is regarded as vulnerable in terms of water security. Wetlands occur in the upper reaches of the catchment, and are used for harvesting and cropping. The Sand River Catchment is a relatively small area of 2000 km² and home to some 380,000 people (Pollard et al. 1998). Livelihoods for the catchment residents became increasingly vulnerable under grand apartheid, and today most families rely on income from pensions, social grants or wage remittances. The poverty that accompanied the removal of people to the area resulted in the increasing environmental degradation.

More recently the commercial exploitation of communal land and resources is growing: particularly that of harvesting of wood, medicinal plants for urban use, and the mining of sand and clay. Sand mines are illegal, mobile operations that result from deals with a local authority figure (Pollard et al 2005 b). A large clay brick factory with significant capital investment has been established. Although it operates without following environmental and social procedures, it is touted as employment creation and “economic development”. It is an important case study for this work and we return to this later.

Figure 1. Map of the Sand River Catchment

Showing the three major zones that comprise the catchment. Zone A is under commercial forestry. Zone B, where most of the population resides, is known as Bushbuckridge. The village of Craigieburn lies in the northern foothills of Zone B. Zone C consists of conservation areas.



(Pollard et al 2005)

4.2 Removals, land tenure and administration – a brief history

Native reserves were created in the early 20th century in South Africa as part of the disenfranchisement of the black population (Bundy 1998, May 2000). Within these, residents received 'Permission to Occupy' (PTO) certificates for residential sites, fields and business sites. Chiefs and headmen undertook land allocation, agricultural officers surveyed the boundaries of sites and fields, and magistrates issued PTOs. Apartheid saw the establishment of "independent homelands" within which these systems of land administration continued. Chiefs and their indunas (headmen) played a role in natural resource management and land allocation, although in many cases individuals 'friendly' to the regime were co-opted to replace existing traditional leaders. During the 1980s the political struggles included resistance to the authority of these individuals by the emerging democratic structures, which led to a weakening of the authority and power of traditional authorities.

Many of the people of Craigieburn are of the Mapulane people (Niehaus 2001). With the settlement of whites in the area they were living, they were forcefully removed from their lands and homesteads close to the mountains in the 1940s. In the late 1960s and early 1970s they were moved again to what is now Craigieburn.⁵ And subjected to betterment planning (de Wet 1995, see also Fischer 1996). Apart from those who were removed from the mountains, others were forcefully resettled from other areas (de Wet 1995; de Wolf et al 2008). Thus the people of Craigieburn do not have generations-long history of living on this land, and of living together (Niehaus 2001). The land-cover/land-use changes that have occurred, visible on aerial photographs, give a vivid picture (Pollard *et al* 2005). The removals into the area can be seen between 1965 and 1974 when the residential areas increased by 1000% over nine years , and veld areas decreased. Wetlands are estimated to have decreased by 50% from 23 ha to about 13 ha.

After 1994 the homelands were incorporated back into South Africa, leading to further changes to the institutions of land administration. Resources and departmental staff to support traditional authorities in land and natural resource administration were significantly reduced, which affected the role they have been able to play. New land tenure and administration law has been drafted with a lot of contestation – much of which has centred around the role and authority of traditional leadership in these areas. New laws which claim to 'transform and democratize' traditional authorities (TAs) is currently being implemented, and law to change ownership and administration is on the books, but not yet implemented, as related in section 2. This adds to a rather confused and uncertain institutional environment.

4.3 Craigieburn wetlands

Wetland farmers approached AWARD for support in addressing wetland degradation, citing desiccation, and reduced fertility as key concerns. The baseline

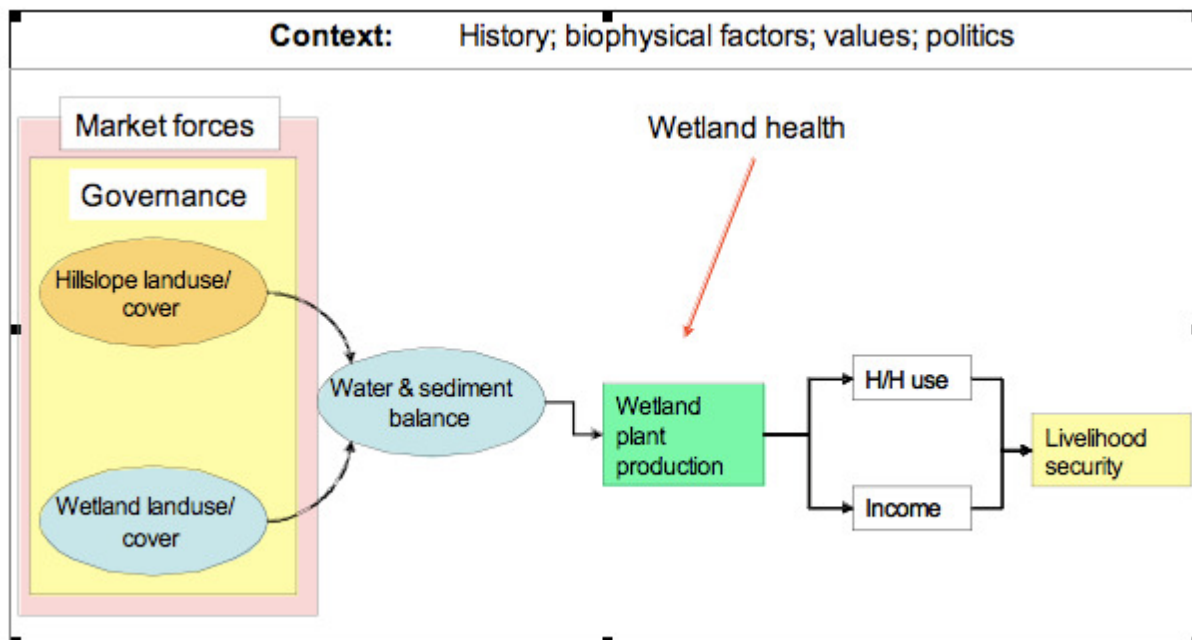
⁵ Some people were moved three times before settling in their present homesteads.

research AWARD then undertook established the relationship between these factors, and looked at the linkages to farmer practices, and to livelihoods.

In summary, the findings indicated that the overriding profile of wetland users in Craigieburn is that of women between 35 and 70 years of age – mainly from single-headed households. In general, the livelihoods of this group are very vulnerable. A quarter of these households has minimal income and secures food through what they grow. Only 14% of wetland users are regarded as well-off, whereas over half (60%) of users have limited income. It is striking that 63% have accessed their fields in the last 10 years, citing hunger as the key driver. The wetlands thus offer an important safety net, particularly for the poor. (Pollard et al 2005). There is little understanding of wetland functioning and that land use practices could be improved. Importantly wetland degradation reflects both wetland use and that of the surrounding catchment. Confusion exists over governance which is weakening. These last two points highlight the need for support for an integrated governance arrangement that incorporates local-level involvement.

A systems view clearly shows the linkages between wetland health and livelihoods, and the underlying drivers of change (Figure 1; Pollard & Perret 2007). The diagram shows how land use covers impacts on the wetlands, and the plant production in the wetlands, used as a proxy of wetland health, impacts ultimately on livelihood security. Note that both governance and market forces provide a context within which land use and land cover take place.

Figure 2: Overall systems diagram of Craigieburn wetlands (modified from Pollard & Perret 2007)



The outcomes of Phase 1 led to AWARD supporting rehabilitation in the wetlands, undertaking a programme of farmer support with the farmers in wetlands on their

practice in the wetlands and on the hillslopes, and a governance-focused project in partnership with Leap.

5. Findings

5.1 Land tenure and administration in Craigieburn Village

The following summary is drawn from work captured more fully in a research report (Cousins et al 2007 a), and ongoing engagement with Craigieburn.

Three types of land uses have been identified in Craigieburn, and are significant for understanding land tenure and administration: residential stands, fields and “commonage”. These constitute three distinct sets of “sticks of the bundle” of household land rights. There are significant differences in the property relationships and in land administration processes regarding each of these uses.

Land tenure in Craigieburn is operating within a context of legal plurality. Craigieburn lies on State Land under the jurisdiction and administration of various national and provincial departments, and the Sethlare Traditional Authority (TA). There are administrative procedures and documentation for residential plots. On these, family decisions are backed up by approval from the TA. A yearly fee is paid to the TA, which provides household heads with receipts which are the evidence of “ownership” that people use. Land used for cropping is negotiated within families and with neighbours. Natural resource gathering is subject to a range of known use rules, which are however not enforced. Disputes regarding lands and resource uses seldom go beyond individuals and families. While the TA claims a role in land allocation and natural resource management - and community members agree with this -, it is also acknowledged by most people that no longer do so. (Cousins et al 2007) Departments play no role, citing capacity as their limitation, and largely expressing ignorance or confusion as to new law and policy (Pollard and du Toit 2005). A new system of local government was put in place after 1994, as the third tier of elected, democratic government. The local municipality is responsible for the provision of services such as water and electricity, although at times will claim authority over land and natural resources. There is an expression of tensions between TAs and municipalities about their roles and authority.

This land is typically that which the Communal Land Rights Act will seek to transfer from the state to “the community”, It will then fall under the authority of a newly formed Land Administration Committee (LAC), which may, or may not, be the current Traditional Authority – which is supposed to “transformed” into a Traditional Council before then. Part of the commons which people in Craigieburn use for cropping, grazing and gathering plants is part of a restitution land claim – and thus due to fall under the jurisdiction of yet another group and structure, to whom this land will be transferred. There is contestation as to who the legitimate body is, and the timing and progress is unclear to most people and claimants themselves (de Wolf et al, 2008).

Membership of the community of Craigieburn in and of itself affords rights to access and use land and natural resources. Households are the socio-economic units to which residential sites are allocated, with the household head as the nominal “owner” whose name appears on papers. Membership also entitles people to find fields and to access and utilise the resources of the communal land, although people from further afield can also access these resources. Different land parcels that the household claims as theirs may have different members of the household regarded as ‘owners’, depending on the land use, how the specific land parcel was accessed, and the context of the conversation.

Each household has a stand for residential purposes, and most of these stands include a cropping area and some fruit trees. Those that have fields cultivate between 1 – 3 fields, often a mix of wetland and dryland fields. Dryland fields were mostly allocated when the original residential sites were assigned, but wetland fields were not ever “formally” recognized, they were indeed “illegal” in the eyes of the Department of Agriculture, who were responsible during apartheid for demarcating and approving stands and fields. Many, but not all, wetland fields are shared with others, who are most often household members, or those with kinship ties of some sort. All household members have access to the communal land and the resources on that land. The boundaries for the commons are not clear-cut.

The distinction between the three main land uses is important for understanding how land is accessed, the strength and clarity of rights, where authority is exercised, and what form evidence of rights takes – be it verbal or documented.

Each year a levy is paid for residential stands, and receipts are received and these are what are produced as evidence of ownership. The name on the receipt reflects the person responsible for payment, and so is changed at death or on request. These stands appear to be the most generally valued land resources, where the highest investments of community members are made. The homesteads fields, being more secure from animals and theft, and are thus where people are more willing to invest their energy.

Where there is commercial exploitation of the commons, as with the brick factory (Box 1), local people accept that the chief has usufruct rights. They feel that there should be consultation before such decisions are made, but do not assert this as a right. There has been illegal and abusive activity on this land by the brick factory, with no recourse being pursued via local structures, and no protection given by the TA, the municipal councilor or the departmental officials that are meant to monitor the factory. The brick factory is thus illustrative of power and authority in relation to commonage land. Local peoples use and benefit rights are weak when the value of the resource changes through an entrepreneurial venture with powerful outside interests, as they are neither asserted nor defended, even though various statutes provide for such protection.

Box 1: The Brick Factory

In 2004 a large brick factory was initiated on the perimeter of Craigieburn, with substantial financial backing from the Development Bank of South Africa, and political support from local to national levels. The enterprise entails the operation of a fired clay brick factory on the communal lands. This venture was promoted and is lauded as part of governmental plans to accelerate economic development in poor areas in South Africa, the setting of economic growth targets (6% growth in GDP) and employment creation. The factory will eventually cover some 30 hectares of land. In the process about 250 m³ of water is used per day to produce 220 000 standard size and 120 000 quantum blocks per day on a six day shift. The factory represents a commercial venture into natural resources use with significant impacts on the inhabitants and resources of Craigieburn. While pleased with the local employment opportunities, local people are unhappy about levels of dust, the degrading manner in which graves were removed, low wages and irregular employment, the sedimentation of the local dam, and most recently, the death of a worker in questionable circumstances. Investigation makes it clear that the brick factory is legally not compliant to environmental requirements, has no mining licence, nor has it fulfilled its obligations regarding community beneficiation. It does enjoy support from the local municipal councilors and the traditional leadership, who many assume are receiving direct material benefit, leaving local people with no-one to turn to for help and recourse with problems. (Cousins et al 2007)

4.5 An analysis of governance

To capture some key elements of the property system, and their interactions with the wetlands and vulnerable livelihoods, two matrices have been developed. These matrices help to set out the key positions and relationships, and thus indicate who should be considered in (a) understanding the current situation, and in (b) working on improving it.

Rights and authority

The first matrix (Table 1) describes aspects of the “bundle of property claims and rights” households have with respect to land and resources, by considering access to the three land uses and where levels of authority for which decisions are located. Rather than seeking to map out here the different layers of the ideological, the official legal and the variety of actual practices, some comment on this is made below the matrix.

Table 1: Matrix illustrating land access and authority relationships

		AUTHORITY					
		Household head	Family	Traditional Authority	Municipality	Magistrate	Gvt depts
ACCESS:Claims/ rights							
Residential stand Adult community members can seek stands for housing and homestead gardens. Family members can claim rights to reside on family stand		Decides who can reside, what is done on stand, who the stand is transferred to – in consultation with those resident, and the wider family.	Adjudicate disputes: especially regarding transfer of stands within or outside of family	Affirms outsiders rights to reside, seek land. Approves new stands, and changes in stand holder. Charges a levy, provides documentation that serves as evidence of rights	Responsible for services, can demand changing boundaries for public good. Approve creating new residential sites, burial sites.	Levies for “stands and grazing” to be paid to the magistrate – very low fee, and most do not pay now	Dpt of Agriculture used to play big role in sand demarcation. Now has a limited role in approving new residential site areas.
Dryland field Stand holders originally received an allocation of a dryland field for cropping. Now residents seek from others, or open new fields where they see opportunity		Decides who to lend or transfer fields to – in consultation	Adjudicate disputes regarding transfers	Claims to allocate, but does not. Adjudicate disputes when called to. Can impose fines		Supposed to approve allocation of new fields – this does not happen.	
Wetland field Adult residents can work family fields opened previously, take over or borrow from others, or open new fields These were considered “illegal” in the past, and have not be incorporated into formalized processes		Is said to decide on who to lend or transfer fields to – in practice those who work them have a large say in this – usually women	Adjudicate disputes regarding transfers	Can adjudicate disputes if called to			Dpt of Agric has tried to prevent cultivating in wetlands. Working for Wetlands rehabilitated eroded wetlands.
Communal land Community members can harvest resources of grass, reeds, wood, wild food etc graze animals. Is not a strict or agreed definition of who can be excluded – does go beyond the village, disputed. Can seek fields – this is “unassigned” land. Adult residents should be consulted over major land use / ownership changes		Participate in decisions about the granting of usufruct rights of commonage – the majority should agree before these are granted.		Chief and council sets rules, adjudicate disputes. Induna to monitor and enforce rules, mediate – pass upwards what cant manage. Approves new commercial use (brick factory) on community behalf – supposed to be done in consultation with residents	Promoted brick factory development – is supposed to see various approvals are given regarding planning regulations.		Various Departments to approve changes in land use, water use, mining, labour conditions - & to monitor resources and uses, with regard to compliance to laws, to protection of rights.

Rights, tenure and administration vary across the different land uses, as does the combination of authorities at different levels, and this is an important consideration in planning and future work. Also, it is noted that there are some (unsurprising) differences in what is said happens, or should happen, and what takes place in practice.

Households and families have a lot of authority with regard to their residential plots, and also fields. While these may be weak legally, functionally people feel they have strong and autonomous rights – more subject to family authority than external actors. The TA plays the role largely of administrative affirmation of their decisions. However the TA can be called to resolve disputes that the family or neighbours cannot resolve.

Although many people still talk of the household head as the senior male –numerous households are headed by women, and so that women do carry this responsibility, and, in some cases, the authority. The degree of assertion of male gender power regarding land and resources seems to be variable across households, and some say this is changing. Women do express an increasing fear of gender violence – reporting that they are afraid to go to remote fields for fear of rape. There is a clearly much more to be understood on gender dynamics, land rights and authority – and this is part of ongoing work.

While the TA claims, and is recognized as having, responsibility and authority for a range of roles regarding land and resources management, as well as dispute resolution, this is no longer exercised. The loss of governmental support after 1994, together with challenges to legitimacy during the resistance years of the 1980s, and ineffective individuals, means that governance of natural resources by TAs is weak. Problems regarding fields or the commons are left for households and individuals to deal with, or live with. Likewise, while roles for government departments and the magistrate are described – both formally and informally - it is also clear that these are no longer played in any significant way. Remnants from apartheid era years, this is an expression of the long drawn-out transition in land administration of communal areas, leading to inconsistent, often illogical and sometimes illegal practices. New roles of oversight, planning, monitoring and support that are derived from revised environmental laws are largely not understood, or there is no capacity or institutional will to implement in the communal areas.

The brick factory development on communal land is contravening laws and overriding rights of local people. Municipal councillors and TA appear to have colluded with the factory, potentially for personal benefit alone, as beneficiation in the plans is not taking place, and people and resources are not protected by these local leaders. Departmental officials are unable to act, tangled in red tape and uncertainty. Ordinary community members are not asserting their concerns or claims, having no confidence to do so. On communal land, then, governance is weak on every front.

Role-players in natural resources management

The second matrix (Table 2) looks more specifically at natural resources management, unpacking the rights and responsibilities, and where authority for these lies. This is taking plural systems into account and so is from the perspective of formal statute and local custom. It is indicated where these rights and responsibilities are taken up and are not, and where authority is exercised in regard to natural resources in Craigieburn.

Table 2: Summary of role-players involved in natural resource governance in the Craigieburn

T.A. = Traditional Authority; CDF = community development forum; NGO = Non-governmental organization.

X = have a role **X** = have, but do not play this role

	Community membership	T.A. /Induna	CDF	NGO/ civil society	STATE
Rights					
Access to resources	X				
Decision-making (rules and sanctions)		X			X
Allocate usufruct		X			X
Participate in decisions regarding major changes	X	X			X
Responsibilities					
Abide by rules	X				
Administer		X			X
Monitor use	X	X	X		X
Report transgressions	X	X	X	X	X
Act on transgressions		X			X
Act as recourse when rights infringed		X			X
Adjudicate disputes		X	X		X
Authority					
Administer land		X partial			X partial
Monitor resources, and transgressions		X		X	X
Enforce rules		X			X

It is notable which rights are taken up, and which are not. For example, community members do access resources, but not decision making. When it come so responsibilities, only the NGO (i.e. AWARD) is carrying out its rather limited role at present. Statutory bodies provide no monitoring role, and no recourse to investigate or check abuses. Although lack of capacity is cited as the reason, there is no expression of political will. Authority is only expressed in a limited way with regards to administration. The local government councilor and local structure that is the link to the councilor, the community development forum, are seen to be extensions of the ruling political party, and so carry political more than functionary power. These bodies express no concern for or interest in or understanding of natural resources, and their sustainable use and livelihood role, but focus solely on their potential or actual commercial exploitation.

There is little demand for stronger governance, although the wetland farmers experience numerous difficulties that they cannot solve themselves. For example the destruction of fences by cattle is a perennial problem. Another is that of a farmer whose practices in his wetland field have, and continue, to cause such erosion that others farmers fields have lost their fields. Nonetheless, despite engagements with various actors, no effective action has been taken by anyone. This is attributed by

local people themselves to their sense of powerlessness on the one hand, and to wanting unfettered access to resources to meet immediate needs on the other. Another factor may be that people do not identify themselves positively as farmers, but rather see the growing of food and use of natural resources as survival activities, which are looked down upon, not aspired to, and are without status, to be replaced as soon as is possible with “proper” employment.

Governance, wetlands and livelihoods linkages and interactions

While the focus of the governance work is wetlands, the argument made here is that they cannot be understood or worked with in isolation from the institutional, social and bio-physical systems within which they are located. Figure 3 indicates the linkages.

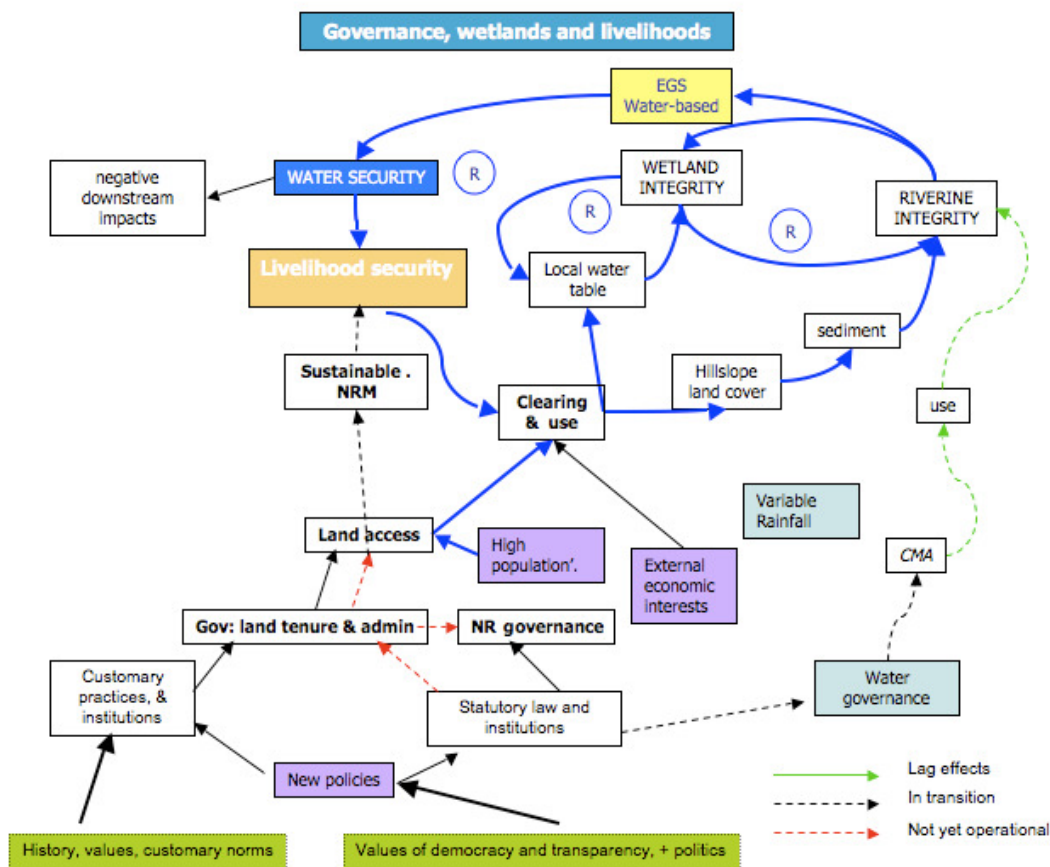


Figure 3: Governance, wetlands and livelihoods system. This systems diagram summarises the key drivers and linkages in Craigieburn (modified from Pollard et al 2008). The diagram does not suggest that livelihood security is only influenced by one variable (NRM) - this is simply highlighted given the focus of the work. EGS: ecosystem goods and services. CMA= Catchment Management Agency – the new structure to govern water resources, in part replacing the current government role.

Importantly legal pluralism is evident so that both customary and statutory systems influence the governance of land tenure rights and administration, and these are closely tied to natural resources management (Pollard & Cousins 2007). Values

underlie each of these systems. They do not operate independently or in parallel, but with some interaction. There are other factors that also affect land access (high population, and external economic interests), and this in turn affects both the degree of natural resource use, and of land clearing. Land clearing then affects the riverine and wetland integrity, and so livelihood security, with three reinforcing loops evident. Notably, the influence of new statutes and policies is slow with lags clearly evident so that the reinforcing loops, characteristic of the past, still persist (see also Pollard et al 2008)

The systems diagram can be examined based on the three aforementioned indicators of governance:

- claims and rights to access and benefit, and the basis of these
- sustainable use
- authority across levels and plural systems

Currently claims and rights come from different sources, and new policies mean that this is due to change. Nonetheless, an analysis of policy and examination of current realities leads to concerns about how this will play out, and certainly not to a confidence that it will lead to rights being clearer, better understood and better defended. With regard to use, the diagram sets out the negative re-inforcing loops that are leading to increasing degradation. The indicators suggest that those with responsibility and authority need to have an understanding of this, and the impacts, if the various functions are to be played appropriately. For example, despite enormous socio-political changes in Tanzania, Tengo and Hammer (2003), suggest that a decentralised but nested system of institutions that allows for response to feedback signals at several levels, have been fundamental for a viable system. Authority sits in a number of places, and while there are formal processes that are supposed to enable communication and cooperation across levels and sectors, in reality does not take place without some extraordinary effort, intervention or catalyst.

6. Discussion: Challenges and potential strategies to address these

In order to support effective and viable governance, a process for collective analysis, visioning and planning is envisaged. In brief, the project's next steps are to work with local wetlands farmers, other groups such as the youth, care workers and livestock owners, and with the local structure of the CDF and the Induna's "helpers" in the first instance. We plan to then work with actors at other levels of the TA, municipality and government departments, and possibly the land claim structure. There will be a series of interactions starting with analysis of the key dynamics, by taking our research outcomes and using them to design appropriate materials and processes for interaction. Groups will be worked with separately, and then collectively for analysis and to seek a level of joint understanding and agreement. The next step will be to develop a vision for natural resources and their management – again likely doing some work separately, and then collectively. From here the idea would be to develop possible scenarios for governance, so as to think through options and their implications, given the changes in structures that can be anticipated. After this plans can be agreed on.

However, given the picture that we have developed and shared in this paper, there are a number of challenges.

- Wetland users have a desire and need for ways to resolve the problems they face, but little sense of agency. They do not identify themselves as farmers, with a long term interest in and concern for the land and natural resources, making issues around sustainable land and resource management difficult to address.
- The country is in a prolonged period of transition, and this brings with it many new policies and institutions, much that is confusing to those in authority, exacting demands, and a constant complaint about “not having enough capacity”.
- Many of the institutions demonstrate little sign of will, capacity and understanding to work with a positive starting point for the process described above.
- With so many actors and the promise/threat of new, untested structures, it is not clear who the project can and should prioritise working with.
- There are clear signs of corruption, and there is conflict between structures – so this is not a harmonious, “good” institutional environment.

Transition and change presents a difficulty, but perhaps also an opportunity. As the TA currently needs to become a Traditional Council, the project will seek an opening to work with it, utilizing the discourse of transformation and “lack of capacity” and offering this work and ourselves as a resource. For example the brick factory problems are becoming increasingly apparent, and so this project is engaging in a more activist role to challenge its operation, environmental impact, lack of community beneficiation and lack of transparency. There is a high energy around the factory, which can be dangerous, but which, if incorporated into the broader picture could provide the catalyst needed to engage on a number of governance issues (rights and benefits, responsibilities and authority, monitoring and recourse, and sustainable development.) Equally the land claim is contentious, and may be too messy to work with now, but it too can offer opportunities for visioning and planning, and for making clear the need for communication across structures and levels.

As mentioned in the beginning, these challenges demonstrate that such systems are complex and, given the multiplicity of drivers and interactions, outcomes can only be anticipated but not predicted. This places a particular onus on the project to work openly, cautiously and judiciously thereby supporting the community to prepare for change.

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