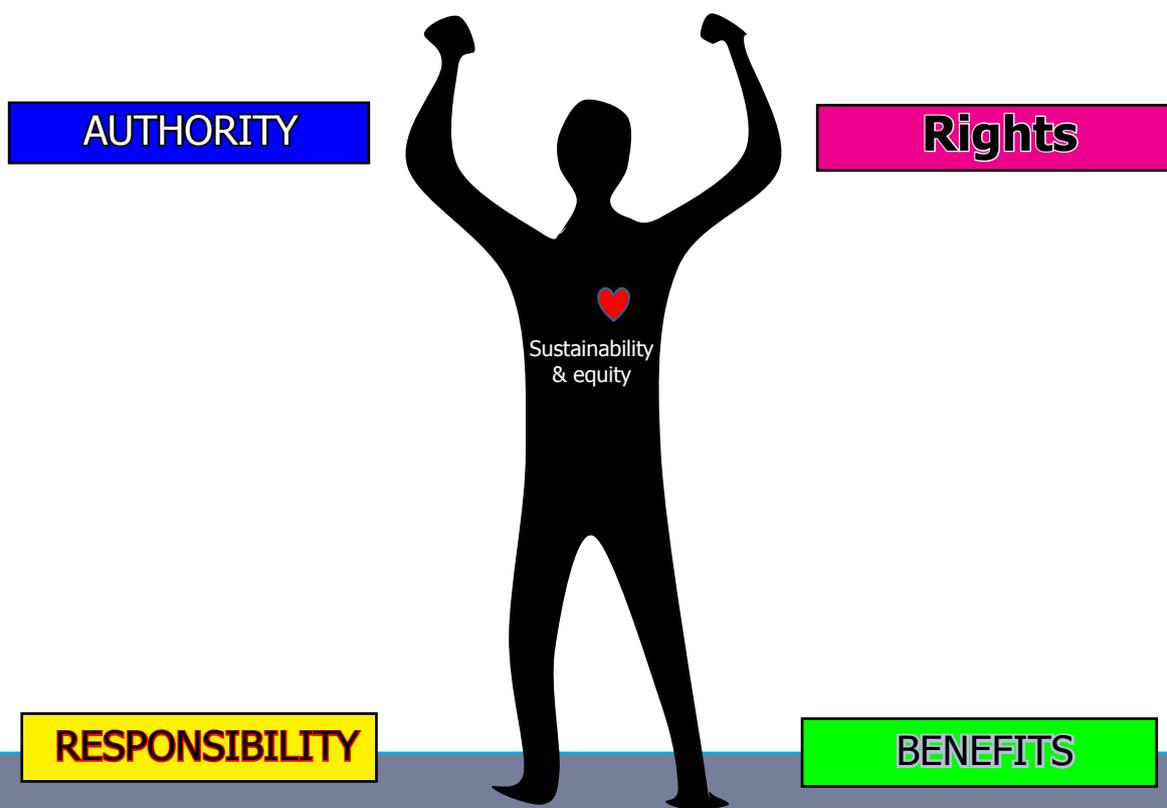


WETLANDS & GOVERNANCE



Why is it important?

A visual case study from the Craigieburn Wetlands of the Sand River Catchment, South Africa

This report has been prepared as learning support material to the project:

An action-research project for wise use of wetlands as a contribution to an integrated rehabilitation and management plan for wetlands in the communal areas of the Sand River Catchment

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for

AWARD & LEAP

IDRC

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What is LEAP and who is AWARD?

The Leap (Learning approaches to tenure security) Project and the Association for Water and Rural Development (AWARD) are two collaborating partners on a project in the village of Craigieburn, where extensive use is being made of wetlands for cultivation. Leap is an association of tenure practitioners who are working on a number of projects associated with land tenure, land reform and governance. Leap also has 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. Find out more about Leap at: www.leap.org.za

The Association for Water and Rural Development (AWARD) is a NGO operative in the Sand River Catchment in the north eastern part of South Africa. AWARD is a registered non-profit organisation working with more than 18 years experience in the water sector. AWARD specializes in research-based project implementation aimed at addressing issues of inequity, poverty and poor access to water resources through building sustainable rural livelihoods. AWARD commits itself to stakeholder participation in all issues of development and transformation. You can learn more about AWARD at: www.award.org.za

The focus for the collaborative work in this report 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.

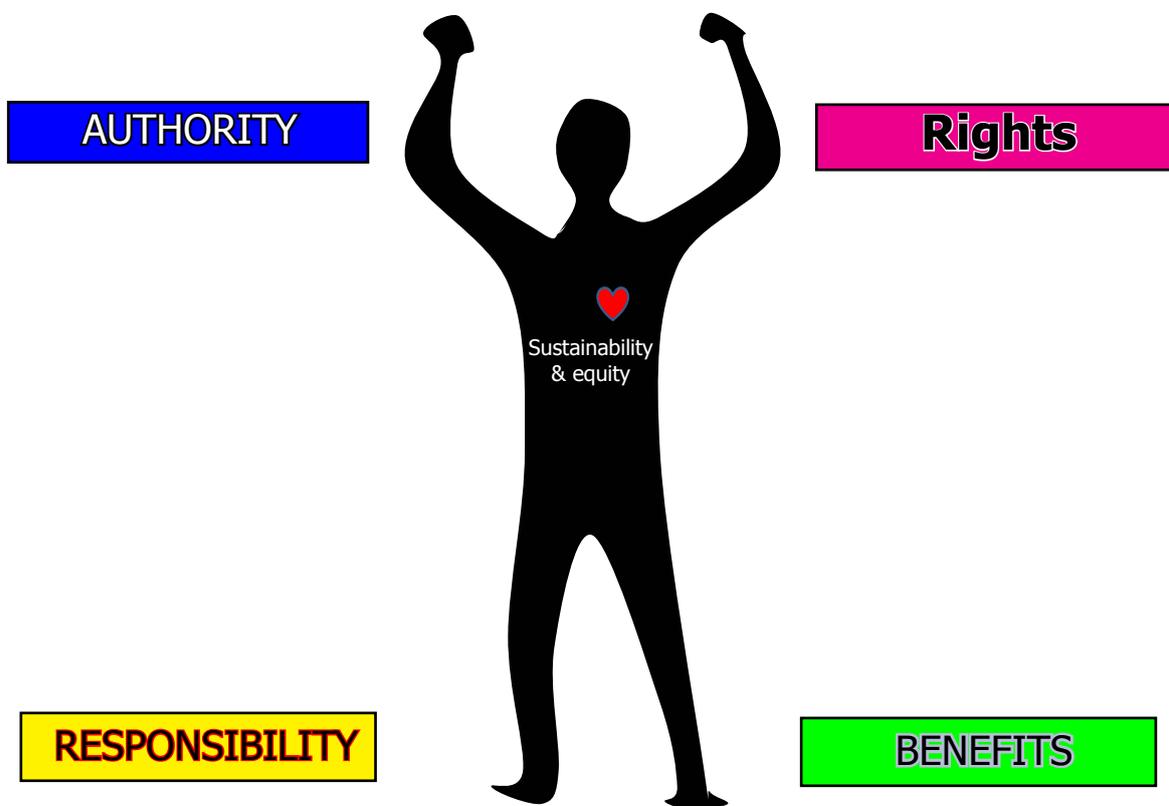
AWARD undertook intensive research in Craigieburn in 2004/2005 to understand the wetlands functioning, biophysically, its contribution to the water resources and also to local livelihoods. Following on from this work AWARD is working with Craigieburn wetland users on improving their agricultural practices so as to both preserve wetlands and increase their productivity.



SECTION 1

Wetlands Governance

Background



- Background to the research
- The importance of wetlands management and why it matters
- Wetlands on communal lands
- The example of Craigieburn wetland farmers

What is this research about?

This is a visual summary of a project carried out in the Craigieburn Wetlands of the Sand River Catchment, South Africa. The findings are drawn from an action research project conducted by AWARD and LEAP and funded by IDRC and WWF. More information can be obtained from: www.award.org.za

The objective of the project is to facilitate the development of wise and effective governance of natural resources of Craigieburn and to share the learning with a wide group of policy makers and practitioners. The key areas of the research included:

- Understanding of the governance of a wetland and its resources
- to understand land tenure arrangements, land administration and natural resource management,
- the basis for building improved governance for the future.
- A framework for what is needed is proposed, along with an assessment of the challenges, and this provides possible plan for action.



This research was conducted collaboratively with villagers by attention to dialogical enquiry

Who should read this report?

This document is a report on a work in progress. It does not pretend to provide all the answers to governance, land management practices, sustainability, livelihoods and so on. But it is a starting point to a discussion that highlights challenges and issues facing people living on communal lands. People living in such contexts are likely to find the report interesting and useful. We believe that the following groups might find a use for the document:

- Traditional authorities
- Local government and councilors responsible in communal and rural areas
- Officials from various government departments dealing with water, environment, agriculture, land affairs, local government and traditional affairs
- People using wetlands, indigenous forests or any other communal natural resources
- Non-governmental organizations and developmental organizations working in such contexts



What is the issue?

Soil, plants, rivers and wetlands are all natural resources. Unfortunately many of them are degrading... this has serious consequences for all...now, and in the future. Poor people are the most vulnerable to resource degradation. Individual resource users, such as farmers, can do something to try to improve the health of their resources through how they farm, but other aspects need better governance. It is not just about improving practices... Sustainable resource management must consider: rights, authority, responsibilities and benefits!

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 set a course at times in conflict with the policy principles.

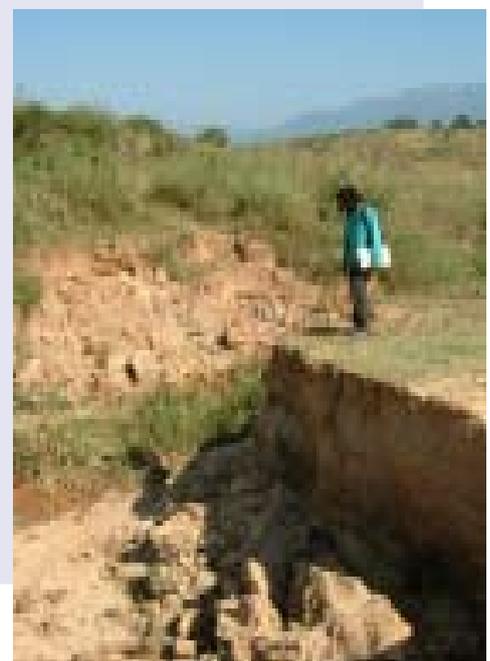


A farmer demonstrates some of the valuable produce of the wetlands of Craigieburn

Why does it matter?

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).

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 likely to increase.



Erosion in the wetlands due to poor practices has led to a massive drop in wetland health and crop production

What is a wetland?

Wetlands are defined according to the National Water Act and include floodplains, valley bottom wetlands, hillslope seepage wetlands and pans/depressions.

Wetlands are unique features in the environment that play an essential role in the stability and biodiversity of ecosystems as well as the functioning of the hydrological cycle. Wetlands vary in their characteristics and environmental role, depending on the nature of the landscape in which they occur. Different types of wetlands require different management and protection actions, and exhibit different levels of vulnerability to impacts and resilience to environmental change.

Wetlands play a crucial role in managing, at no cost, the scarce water that South Africa receives. Wetlands are therefore of national importance due to the functions that they perform, such as water purification, storage, recharging of underground aquifers and streamflow regulation. They are of a further national importance for their control of erosion, flood attenuation, biodiversity value, and the wetland resources that many rural communities depend on for their daily livelihood. Many people are also directly dependent on natural ecosystems, such as wetlands, for the goods and services it provides in food and water.

Unfortunately people are uninformed of the importance of wetlands, and as a result wetlands are prime examples of ecosystems that, despite their provision of beneficial services, functions and products, have not escaped the impacts of human activities. Although no systematic national survey of wetland loss has been undertaken in South Africa, studies in several major catchments have revealed that between 35% and 50% of the wetlands, and the benefits they provide, have already been lost or severely degraded [reference?]. This loss can be attributed to extensive drainage and conversion of wetlands for agriculture, dams, mining, infrastructure and urban development. Poor management of resources have also resulted in infestation with alien plants and the occurrence of erosion. One of the main causes of the uncontrolled development is the lack of communication between different spheres of government in terms of the implementation of legislation, Integrated Development Plans (IDP) and other planning tools.

Consequently, a clear challenge has emerged with respect to the link between sustainable development and wetland protection. The challenge is to maintain and reinstate the functions of South Africa's wetlands in order to ensure that the per capita ecosystem service levels provided for by wetlands keep pace with a developing population and its growing demands on the resource base.

Wetlands play important roles in providing water security and ecosystem services in 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 point to the difficult situation of needing to balance sustainable resources use with livelihood needs of people using the wetlands. Without a wise-use approach the resources may be damaged leading to a situation where livelihoods are negatively affected and the with the resource base collapsing completely.



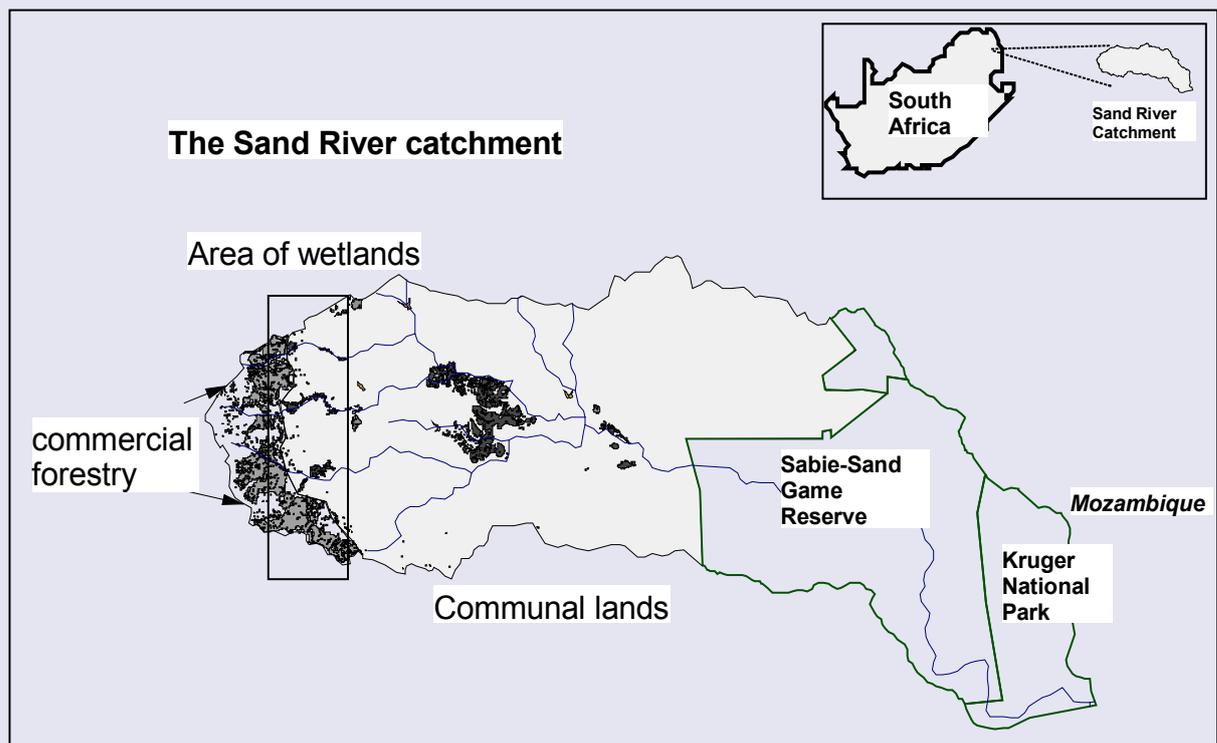
Wetlands may be cultivated as long as some basic principles are adhered to. For example reads are left between beds

The Wetlands of Craigieburn

The Sand River Catchment, lying in the eastern region of South Africa, is extremely vulnerable in terms of water security. Specifically, the upper reaches of the catchment are critical in that they contribute significantly to water production. However, poor management practices have resulted in continued environmental degradation, evident in the reduction in runoff, loss of soil and invasion of riparian zones and wetlands by alien plants. Additionally, a large proportion of the wetlands occur within communal lands. A recent survey of the wetlands of the upper Sand and Klein Sand Rivers indicated that they were far more extensive than previously recognised (some 1200 ha). The underestimation of their size was due to the conversion of a substantial area of the wetlands to subsistence agriculture and hence their full extent was not immediately apparent. Initial work with wetland users indicated that the function and integrity of these wetlands were being progressively eroded.



The village of Craigieburn is located on the uplands adjacent to the wetlands. The soils are sandy and of low fertility



Map showing the location of the wetlands at the base of the mountainous western part of the Sand River Catchment

Land ownership administration during the apartheid era – a brief history

Bantustans or “homelands” were created in the early 20th century in South Africa as part of controlling and regulating the black population. In a bantustan, residents received ‘Permission to Occupy’ (PTO) certificates for residential sites, fields and business sites. Chiefs and headmen were responsible for the land allocation, agricultural officers surveyed the boundaries of sites and fields, and magistrates issued the PTOs. During the later part of apartheid “independent” homelands were established but the 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 apartheid regime replaced existing traditional leaders. During the 1980s political struggles included resistance to the authority of these individuals by the newly born democratic structures. This challenge led to a weakening of the authority and power of traditional authorities.

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.



The creation of furrows to drain “excess water” is thought to be a major cause of desiccation in the wetlands



Furrows that run parallel to the water flow speed up the draining process. Such a plot loses water and nutrients at a rapid rate

Wetlands in communal lands

Craigieburn is a village within the Bushbuckridge Local Municipal area and under the Sethlare Traditional Authority, and thus on communal land. During apartheid it was in the homeland of Lebowa. The land is owned by the state, and there are many structures that have some responsibility to look after the land, the water, the plants and the people. There are confusions, overlaps and gaps in management that communal lands in particular suffer from. Here we will look at the wetlands and natural resources in Craigieburn.

Craigieburn lies near the foot of the mountains, and the many streams that flow from the mountains have wetlands (hlakaze) in them, which people use for cropping as well as for collecting water and reeds, and for grazing and clay. Some farmers approached AWARD saying that their wetland fields were drying out and becoming less productive. On investigation it became clear that this happening because there is erosion, which is happening because of clearing reeds in the stream, digging beds so that water drains out of the wetlands too fast when it does rain, and water running off the upper roads, paths and upper slopes too fast when it rains. This erosion leads to too much drying out and the soil losing its fertility, and the water running away down the river faster when there is rain, which in turn causes more erosion.

*D*isaster in the making...



Farmers raise planting beds to increase water flow from the fields this eventually leads to the fields and the wetland drying out



Over number of years the furrows “bleed” all the water out of the wetland plot and the soil becomes dry and infertile

Who are the farmers of Craigieburn?

Users of the wetlands can be placed in one of four 'well-being' categories: those with jobs, those who have pensions or grants, those with part-time income, and those with no source of external income at all.



Only a few households have a member with a full time job. All categories use the wetlands but it appears that wetlands offer a critical safety-net to the poorer households. Livelihoods are extremely vulnerable and households flip easily from one category to another. Most households employ multiple strategies for their livelihoods and wetlands comprise a key component of this. This becomes most critical in dry years, when dry land fields can produce almost nothing.

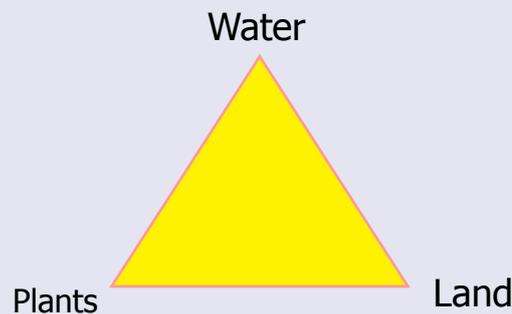
Research has shown that many of the wetland farmers are elderly women, between the ages of 35 and 70, mainly from single headed households. Thus in addition to farming activities, these women have to look after their households i.e. cook, clean, care for family members etc.



Mumthetwa with her cattle at her home. On the right she attends a cluster meeting with other wetland farmers

Why are healthy wetlands important?

There are three important elements to wetlands:



We need healthy wetlands to have healthy rivers, with water flowing in them that is clean and does not dry up too fast, water for people, animals and plants. The land in wetlands is where particular plants grow because of the soil and the damp, plants that like to stay wet, natural plants such as (reeds) and ones that people cultivate (such as madumbes, cowpeas, ground nuts). People, plants, animals, water and soil rely upon each other; when one side gets weak or sick, the others parts are badly affected. In communal lands, it is particularly poor people who rely on growing food to feed their families, and feed them with healthy food.

Healthy wetlands = healthy plants = healthy people and animals



Healthy wetlands support healthy plants that in turn produce nutritious food for the poor and the vulnerable

To make and keep wetlands healthy requires that those farming there cultivate in a way that looks after and does not harm the wetland. There are also problems that arise outside of wetlands plots, and this means that what happens in people's homesteads, and on the land in between – the fields, the paths and roads, all need to be understood and well managed so as not to cause harm. Who will look and notice that people are not doing harmful things, and then will take action to stop this, or solve the reason it is happening. Who has this concern, this responsibility, and the authority to act?



*F*armers are learning to use wetlands wisely



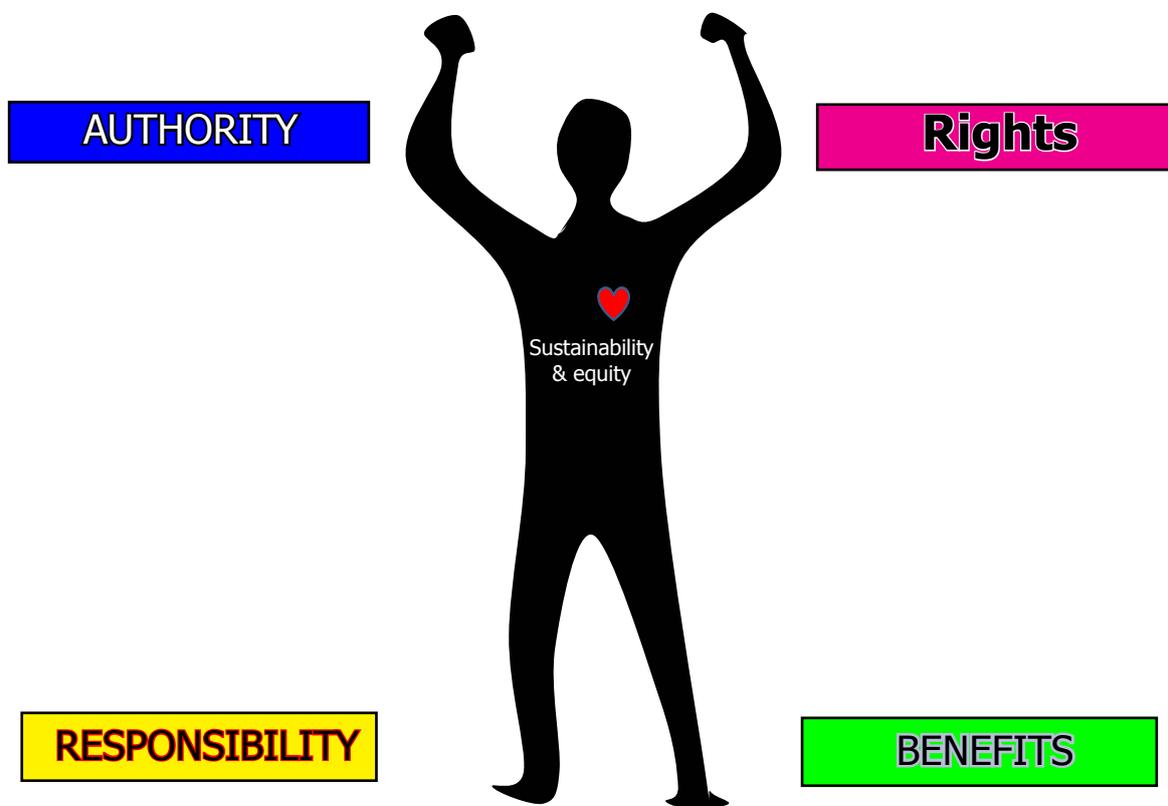
One of the components of the AWARD wetlands project has been to explore more sustainable ways of using the wetlands for food security

*B*ut...

In Craigieburn farmers are slowly learning the right ways to farm, but new people are opening fields, as families come under strain and need to grow food. No-one is giving the new people approval, or guidance. There are some pressing problems people face, and that many people talk about, for example erosion, problem between farmers and cattle owners, reed harvesting and the brick factory. The structures in and outside of Craigieburn are not addressing these problems. The farmers who mostly poor, older and many of whom are women, do not feel empowered to solve the problems outside of their own fields.

SECTION 2

Wetlands Governance Key Concepts



- Key concepts and what you should know
- Linking land tenure and natural resource management
- Legal issues and legislation

Some key concepts

Governance

Definitions of governance vary widely, depending upon the context. Governance can be applied to countries and sovereignty, financial markets, transboundary resources, property, or social relations. In this work the focus is on the governance of natural resources. Governance is often taken to mean management, but we regard management as only one aspect of governance. Governance is also often thought of as the same as government – and indeed governments are engaged with governance - but they are only one of the institutions and actors involved. Governance happens at a number of levels, which although independent must be linked. For example the legitimacy of traditional leadership is not derived from government but they are affected by them and co-operative governance is vital. On communal land natural resources governance involves community structures, traditional authorities, civil society and government. Governance of natural resources involves the power, processes, rights and responsibilities that are associated with making and enforcing the rules that guide society in relation to natural capital.

Wise and effective governance is the kind of governance that we are seeking. Wise governance will understand and seek to balance the immediate needs and rights of people, sustainable use of natural resources, and the rights of future generations to a healthy environment. Effective governance will respond to issues through a feedback process that involves action to solve problems. It thus seeks to work cooperatively across levels. We have developed a framework to help understand and explore governance (see later).

Land and resource tenure

Tenure can be considered as 'bundles of rights'. The bundle is made up of "sticks" consisting of a number of peoples' rights, duties, and responsibilities to resources. These will vary in detail depending on the place, the land, the resource, its use, and the person. Rights can be grouped into three broad categories which help guide thinking but may vary under different circumstances:

- use rights – to access and make use of land and natural resources;
- decision-making rights - to regulate and control resource use and users;
- usufruct rights - to earn an income from giving others the right to use a resource

Tenure arrangements refers to the processes, rules and procedures that determine peoples access to land and resources, how they it can be used and what it can be used for. The rights people have to natural resources are tightly linked to their rights to land.

Plural legal systems

Legal pluralism recognises that land and resources on communal land are subject to different laws that derive from different places: on the one hand the laws and institutions may be customary in nature, whilst on the other hand they may reflect colonial history, laws and democratic institutions (often know as statutory law). For example, in theory natural resources may be governed by the formal laws of the land, but in practice their day-to-day use and management is subject to local 'rules of the game'. Legal pluralism raises a number of ambiguities. Harmonising customary and statutory law is not simple as these systems of governance are based on radically different principles of authority and rights. Nevertheless this is the reality that must be worked with rather than ignored or 'tidied up'.

Complexity and viewing governance as part of a wider system

The governance and use of natural resources is embedded in a wider socio-political and ecological system. Thus multiple factors both influence – and are influenced by – the elements of governance. For example, governance may be influenced by power, politics, the scarcity of the natural resource and interests in financial gain. The 'strength' of these may vary and hence the outcomes may vary and also may not always be predictable. It is in accepting this that one accepts that management has to take a reflexive approach based on trying, learning and adapting.



Social interaction, self-organisation, involvement of multiple stakeholders, a shared vision are some of the important ingredients of wise natural resource management



Legally speaking...

Important laws to guide practices

A number of new and important laws apply to governance in democratic South Africa. Unfortunately the main policies that relate to the governance of natural resources on communal land do not focus specifically on the issue.

A number of laws apply to specific natural resources and their management such as water, trees, biodiversity, land, etc. The key laws relevant to this work are:

- The National Environmental Management Act (NEMA),
- the National Water Act (NWA), and the
- Conservation of Agricultural Resources Act (CARA).

Working with these laws calls for learning to do things in new and different ways such as collaborating across levels and structures, and seeking integration and cooperation from different groups. It is unclear where, in the state, responsibility and authorities lie regarding natural resource governance and management. It is clear that the state has a role, but this is often limited, e.g. to protected species. Given this and extremely limited capacity local communities must be involved in governance – but the silence around this is notable in its absence in the policies above and this is concerning. The work explained here hopes to make a contribution in this regard.

Since 1994 a whole new set of policy and laws has been developed. These laws have been developed in consultation with communities in the hope that they are more relevant and democratic than the previous apartheid legislation. While it is impossible to expect everyone to have a thorough understanding of all the laws that apply to natural resources it is useful to know that what exists and how it might impact on people using a particular natural resource.

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. More can be read about the various legislative instruments by downloading them from the government websites.

Goverance of natural resources on communal land

The main policies that relate to the governance of natural resources on communal land do not focus specifically on the issue. This makes supporting wise and effective governance of these resources on communal land difficult. Also, they set up overlapping structures which further complicates the endeavour. Two key laws are:

- **The TGLFA, Traditional Governance and Leadership Framework Act** - a new law, still being implemented, which recognises traditional authorities, but also requires them to transform to become more democratic and gender equitable, setting up Traditional Councils to replace Traditional Authorities

- **The CLRA - Communal Land Rights Act** - still to be implemented. It aims to transfer ownership of land from the state to the community. Communities need to write down their "community rules", and to elect a Land Administration Committee who will be responsible for implementing these rules. This can be, but does not have to, the Traditional Council – people in each area can choose for themselves.

Communal 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.



Farmers gather to discuss common problems and a strategy for addressing them. The organisation of farmers was one of the most important issues in addressing problems in the wetlands

Co-operative governance of wetlands

The National Environmental Management Act, 1998 (Act 107 of 1998) places a large responsibility on government to provide for co-operative governance with respect to natural resources. In order to achieve this, the development of a shared vision between all spheres of Government to promote the application and evaluation of best environmental practices in relation to wetland management, is required. This shared vision and ways of implementing it, should be communicated to communities, corporate business/ private sector and the general public.

Steps towards achieving this were made with the establishment of the DWAF Wetland Task Group (DWTG) and the Working for Wetlands (WfWet) Steering Committee. The DWTG consist of representatives from various Chief Directorates and Directorates in the National Office with growing representation from Regional Offices and is aimed at ensuring co-ordination and integration of functions pertaining to wetlands between the various Directorates as well as between DWAF and other organisations/ Departments. The WfWet Steering Committee was established under the auspices of the Department of Environmental Affairs and Tourism (DEAT) through the South African National Biodiversity Institute (SANBI). The Committee consists, in addition to DEAT, of DWAF and the Department of Agriculture, is chaired on a rotating basis by the three Departments and have the endorsement and support of the Departments top management in order to support the committee and project's purpose and objectives. The purpose being to champion the protection, rehabilitation and sustainable use of South Africa's wetlands through co-operative governance and partnerships. A strategy in this regard has been developed.

List of legislation and relevant sections applicable to the management of wetlands

Constitution of the Republic of South Africa

Section 24: Environment

National Environmental Management Act, 1998 (Act 107 of 1998)

Section 2: Principles

Section 24: Implementation

Section 28: Duty of care and remediation of environmental damage

Regulations

The National Water Act (Act 36 Of 1998)

Section 2: Purpose of the Act and definitions

Section 16 - 18: The Reserve

Section 19: prevention and remedy of pollution

Section 21 & 22: water use

Section 53: Rectification of contraventions

Section 104: Floodlines and establishments of townships

Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983)

Regulation 6: Control measures

Government Notice R1048, 25 November 1984: Regulations (CARA, 1983)

Regulation 2: Cultivation of virgin soil

Regulation 7: Utilisation and protection of vleij, marshes, water sponges and water courses

Regulation 8: Regulating of the flow pattern of run-off water

Regulation 13: Restoration and reclamation of eroded land

Government Notice R22166, 30 March 2001: Regulation 1 and 15 amendment (CARA, 1983)

Regulation 3: Substitution of Regulation 15

Table 3: Declared weeds and invader plants

Mountain Catchment Areas Act, 1970 (Act 63 of 1970)

Section 2: Declaration of mountain catchment areas

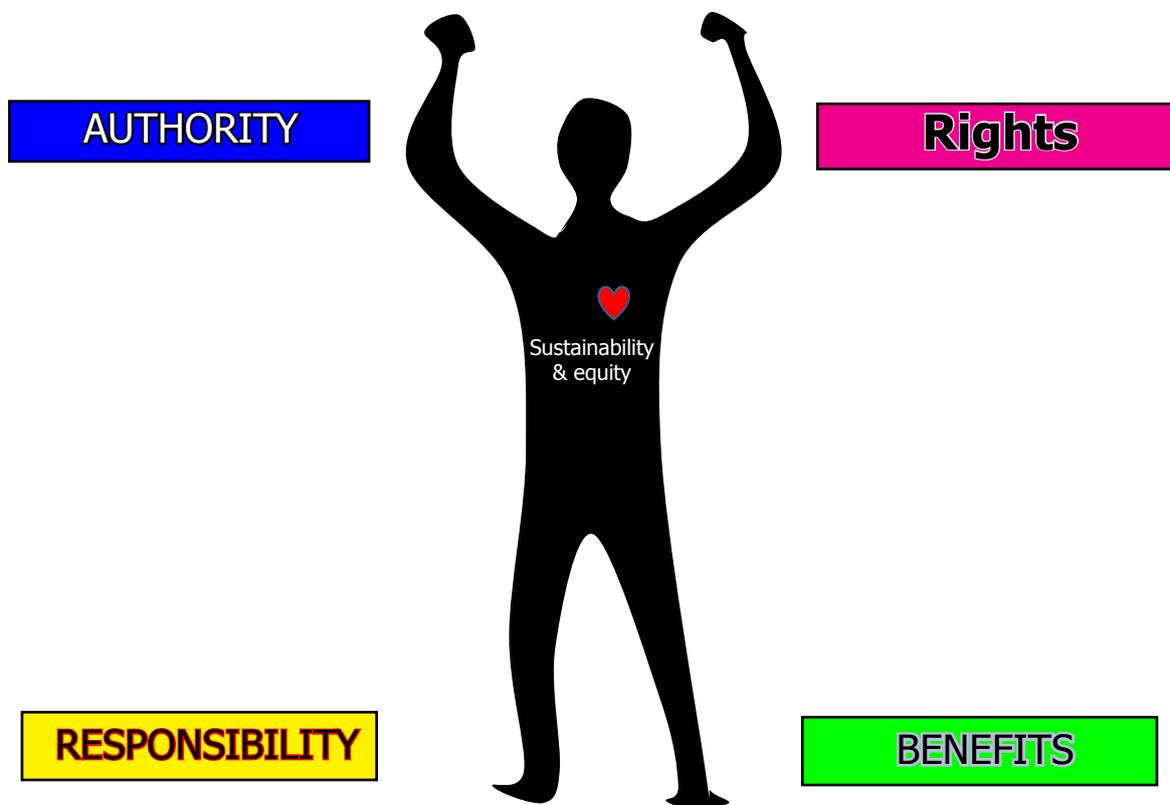


Furrows in the wetlands, cattle paths, livestock that eat crops are all some of the problems that farmers need to face when farming on communally owned lands. The legal framework is often inadequate for resolving conflicts in such contexts

SECTION 4

Wetlands Governance

Research Findings



- Key findings from the research
- Implications for natural resource governance
- The wider implications for wetland governance

Key findings from the research

1. Craigieburn's land and its natural resources are governed by plural systems

In other words rights and authorities that are derived from both custom on the one hand and from the Constitution and statutory laws on the other. Customary rights are well understood by people, but their statutory rights are not. Both of these systems have weaknesses in relation to authority over natural resources. The Induna is old and sick, there are fewer traditional policemen than there used to be, and the chief was ill for some years - so mediation, enforcement and problem solving capacity is weaker than it used to be.

Government departments are severely hampered by capacity both in numbers of people and their competence to act. Most people see the Induna and the Chief as having the major role in land natural resources functions. However in the face of their inaction some people take problems and disputes to the CDF (Community Development Forum), which is linked to local government, or to the Community Policing Forum, which is seen as being close to the Induna, and also to the police. Several departments have functions pertaining to natural resources which local people do not recognise or call upon, and these officials do not monitor or take up issues even when they are raised by NGOs.

TABLE 1 Multiple role players in natural resource governance

Governance	Community membership	Traditional Authority	CDF	NGO/ civil society	State (resource dependent)
Rights					
To use resources (for self)					
To participate in setting rules & sanctions					
To participate in decisions regarding major changes					
To self-organise	Starting				
Responsibilities					
To abide by rules					
To monitor state of resource and use					
To report on above					
To act on transgressions					
To mediate disputes					
To act as recourse when rights infringed					
Authority					
To approve landuse change with conditions					
To allocate usufruct					
To set rules and sanctions					
To monitor resources, and transgressions					
To enforce rules					

This table gives an example of the multiple role-players currently involved in natural resource governance on communal land in Craigieburn. T.A. = Traditional Authority; CDF = community development forum; NGO = Non-governmental organization. Blue = do play this role Orange = should, but currently do not play this role.

Implications:

- This ambiguity creates an environment that is confusing and at times contradictory, where functions overlap, where there are no clear or agreed paths to resolve problems related to fields and commonage (see below), and where legitimacy to act is weak. It has been important to understand this and to seek to work with all structures, at many levels, so as not to expect easy or quick resolutions to problems. We have sought to build capacity to address problems, not pushed for new structures which will add to not and not resolve confusion and power struggle.

2. Governance in Craigieburn occurs within a complex system and one needs to understand the relationships and links between the different parts of the system.

By recognising that governance occurs within a complex system means that there may be multiple links between things and that we can therefore not work with fixed recipes or step-by-step ways of solving problems. A practitioner needs to take time to understand the context before designing action. Interventions need to draw participants who understand the context into the design of solutions. This sometimes means that we need to work in new and different ways to the ways we have always used.

Implications:

- The facilitators or researchers need to take time to understand the range of issues, drawing on people with different expertise and using participatory methods so as to gradually and collectively build a common understanding.
- Being part of a complex system means that the outcomes cannot always be predicted. The development of robust principles (such as those developed by the project – see below), and a willingness to learn and adapt to the unplanned are essential.

3. There are variable and nested boundaries of land and natural resource tenure.

There are different tenure arrangements (see Section 2) for different land uses in Craigieburn Village and this affects the governance of land and natural resources on each of them. Thus governance plays out a little differently on each land type.

Three main land uses in Craigieburn:

- residential stands,
- fields and
- commonage.

Although land rights and authorities on the different land uses are different, they are linked. Residential plots have much clearer, stronger rights and authorities than fields, whilst commonage is the least clear. See the table on the next page.

Implications:

- The management of natural resources on commonage is weak and requires support.
- There are multiple roleplayers on each land type. Thus in order to develop and enforce “rules for wetland fields” it will be necessary to (a) include different interests and authorities working collaboratively and (b) extend the boundary for governance beyond the wetlands so as to include a larger area and a wider variety of natural resources. Both of these requirements are challenging in practice.

TABLE 2: Matrix illustrating land rights and authority relationships

RIGHTS	AUTHORITY					
	Household head	Family	Traditional Authority	Municipality	Magistrate	Gvt depts
Residential stand Adult community members can seek homestead stands Family members can claim rights to reside on the family stand	Senior male, widow or single women. Make decisions, in consultation with wider family.	Adjudicate disputes	Give rights to reside. Approve new stands Charge levies & provide documents that serve as evidence of rights.	Responsible for services, Approve creating new residential sites, burial sites.	Small levies for "stands and grazing" to be paid—most people do not pay now	Dpt of Agriculture used demarcate stands. Approves new residential site areas.
Dryland field Dryland were field allocated with stands on removals. Now residents inherit, borrow or open new fields where they see opportunity	Decides who to lend or transfer fields to – in consultation with family members	Adjudicate disputes regarding transfers	Claims to allocate, but does not in practice. Adjudicates disputes when called to. Can impose fines		Used to, and said to need to approve allocation of new fields – in practice this does not happen.	Dpt of Agriculture used to demarcate fields.
Wetland field Inherit family fields opened previously, borrow, or open new fields. These were considered "illegal" in the past, so were never incorporated into formalized processes	Decide on who to lend or transfer fields to those who work them have a large say in this – usually women	Adjudicate disputes regarding transfers	Can adjudicate disputes if required			Dpt of Agric tried to prevent cultivating in wetlands
Communal land Community members can harvest natural resources found here and graze animals. No strict or agreed definition of who can be excluded. Adult residents should be consulted over major land use / ownership changes	Participate in decisions about the granting of usufruct rights—the majority should agree before these are granted.		Chief & council set rules, adjudicate disputes. Induna to monitor and enforce, mediate & pass upwards what he cant manage. Approve major changes, in consultation.	Plan for land use and approve major changes.		Various Departments to approve changes in land & natural resource use,- & to monitor with regard to compliance to laws.

4. Responsibility to protect and care for natural resources is weakening

There are many reasons for this, including:

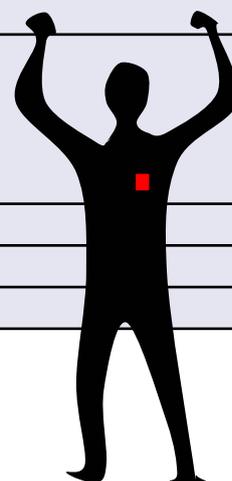
- The 'traditional' systems of governance have weakened over the last two decades
- We are in the midst of change (policy, institutional), which becomes confusing.
- Some policies are silent on natural resource governance (e.g. land reform, traditional authority).
- There are multiple claims of authority and power. However natural resources for local use are not given attention by those with responsibility or in authority, mainly because the status of the people affected is low and the issues are not easy to deal with, and so they are often left unresolved.
- Departments lack capacity and skills to implement even where policy is in place.

Implications:

- Given the above reality, sustainable use in Craigieburn will only be achieved with strong, effective and wise use in place at the local level and supported by provincial and national oversight. This will require supporting and building locally-based structures for collective action, and working with traditional and statutory institutions.

TABLE 3: A picture of current governance of wetlands in Craigieburn

RIGHTS	Who has these?	Is this happening?
to use fields, reeds, grazing and water	Community members	
to participate in decision making	Community members	Not happening well
to organize to address problems	Community members	
to set rules	Community members	Not happening
RESPONSIBILITIES	Who has these?	Is this happening?
to abide by rules	Users	No rules
to monitor and report problems	Community structures: CDF, CPF, TA	Not happening
	Government: DWAF, DALA, DEAT	Not happening
	NGOs	
to mediate problems	Induna	Not any more
to act on problems	Government, TA	Not happening
AUTHORITY	Who has these?	Is it happening?
to transfer fields between people	Users/Family	
to open season for collecting reeds	TA / Induna	Not often
to approve new fields	Induna; Dept of Agriculture; Municipality	Not happening
to set rules	Government: DEAT, DALA, DWAF	
enforce rules	TA	trying but not very well
COSTS & BENEFITS	Who has these?	How?
Benefits of the wetlands • crops, reeds • grazing • water	Users	Sell
	Livestock	
	People + livestock	
now and in future		
Cost of unhealthy wetlands • lose wetland (erosion) • crops • grazing, reeds	Users	
water loss	Community	
dirty water	Community	
future generation		



5. With weak governance, the large commercial venture by external entrepreneurs of a nearby clay mine and brick factory on communal land represents a threat – rather than a benefit - to both the community and the environment.

This is a new situation, such that

- people are unfamiliar with rights and procedures
- the lure of immediate jobs and development prospects was compelling, and
- the potential for corruption of those who should be 'caretakers' is high.

Therefore, it is difficult to recognize, assess and address the real costs and benefits at a local level. Illegal and irregular operations were allowed by those whose mandate is to monitor and protect, causing harm to a range of community people. Actions to seek information, accountability and recourse have been met by negative attitudes, untruthful responses and at times threats

Implications:

- Opportunism of those with power can be used for the gain of a few and not to protect the general community, or the resources.
- Poor people around the factory and mine have carried many costs and attained few benefits.
- This has major implications for livelihoods, security and environmental impacts. For example, the small Manalana wetland of Craigieburn is estimated to provide about R150,000 worth of benefits (such as harvestable products, grazing, water and crops) per year.
- The costs of a degraded environment will be borne by future generations
- The common perception that there is no governance and that the commons are subject to open access is not true. However governance of natural resources is weakening.
- There is an urgent need for more attention and cooperation on governance of natural resources in Craigieburn and surrounding areas.

What are the wider implications?

We suggest that the above findings are not unique to Craigieburn alone but are representative of the situation in the communal lands of Bushbuckridge and indeed of all the communal lands (i.e. former homelands) of South Africa. The degree to which governance is weakening will vary, and understanding this is the critical basis for working on livelihoods and the wise use of natural resources.



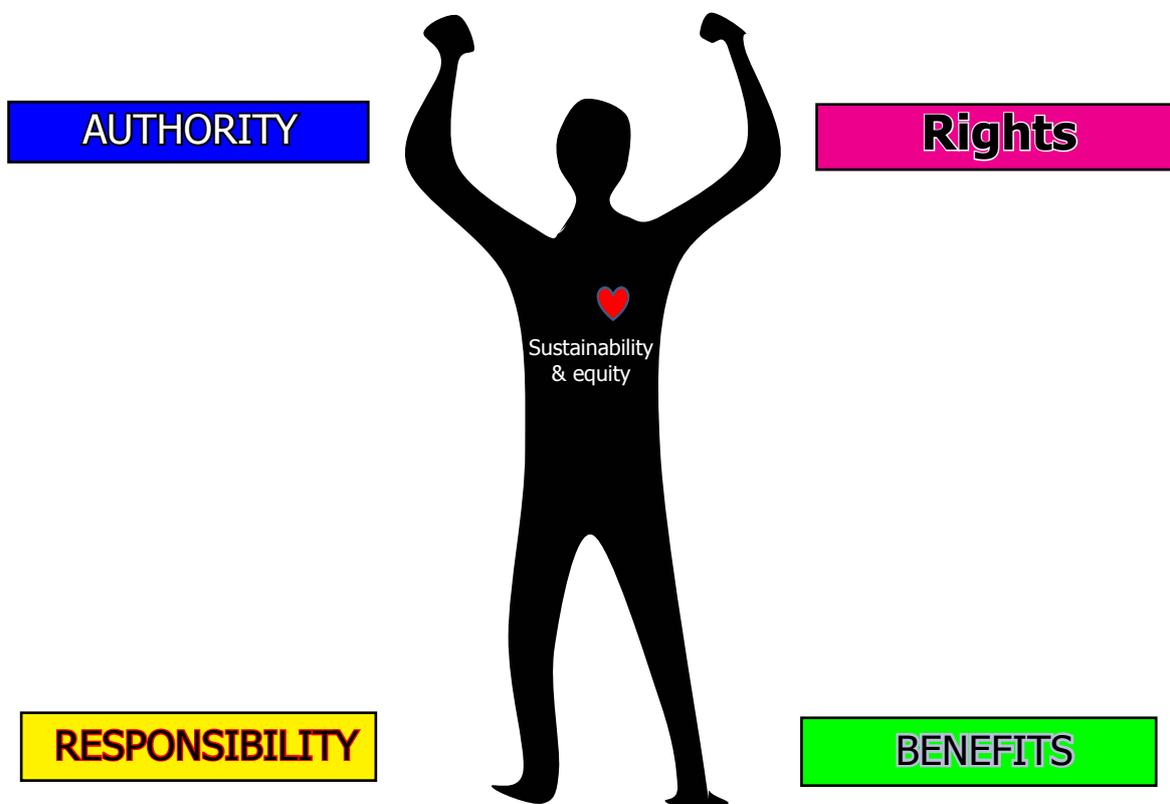
Sand and clay mining adjacent to Craigieburn have been taken as 'development' by local authorities, however the issues of authority, rights, cost and benefits have been poorly thought through

SECTION 5

Wetlands Governance

5 ACTIONS

for the way forward



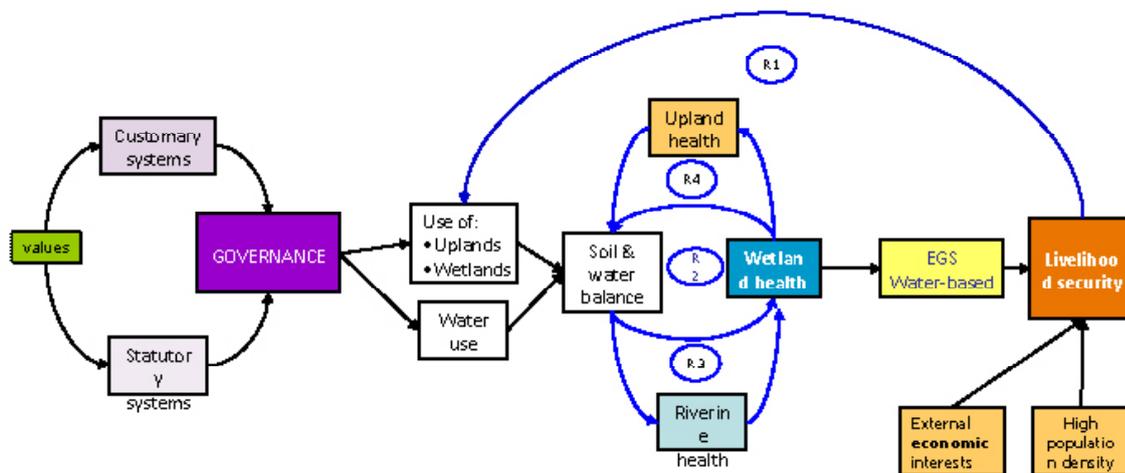
- **Suggestions for the way forward**
- **Working in complex systems**
- **A set of 5 actions**
- **Principles for taking action**
- **Learning by doing**

ACTION 1: Understand governance as part of a complex socio-political and ecological system

Recognise that governance occurs within a complex system and one needs to understand the relationships and links between the different parts of the system. To do this it is important to draw on insight across different disciplines, and different perspectives...

Questions:

- Do you understand the important socio-political, economic and ecological factors that drive the system and their relationships?
- Can you say anything about how these have changed over time?



The above figure shows how governance is linked to land and water use, wetland health and livelihood security. Governance - derived both from customary and statutory systems - directly influences land use (extent and practices) in both uplands and wetlands. These in turn influence sediment and water dynamics which, amongst other factors, characterise wetland health. The health of the wetland determines its ability to deliver key ecosystem goods and services (such as crops and reeds) which contribute to livelihood security (through sale or household use). Livelihood security (or vulnerability) directly drives land use – a key feedback loop in the system. How poor or vulnerable people are is also influenced by historical factors including apartheid forced removals into the area leading to high densities of people trying to eke out a living. New external economic interests will also affect peoples' livelihood security. From this it is clear that wetland health is directly linked to peoples' well-being.

ACTION 2: Manage adaptively and learning-by-doing

Given that governance is part of a wider, complex system in which the outcomes are not always known or predictable, learning-by-doing and a process of incorporating these learnings into management (that is, managing adaptively), is critical. Facilitation of this process – preferably from within the community – is an essential element.

A process of seeking to improve governance needs to include those who are willing from amongst users and actors from the nested layers of authorities, from both customary and statutory systems. The process involves participatory processes in which people:

- describe their context with a strong focus on governance (see Action 3)
- identify and agree on key strengths and problems of governance
- agree on principles of good governance
- develop a collective vision
- develop indicators of good governance
- develop objectives, and draw up plans
- implement plans
- undertake cycles of monitoring, reflection, learning and action.

ACTION 3: Collectively develop robust principles to guide governance

Because it is impossible to produce a 'blueprint' of things to do that will be appropriate for every context we provide instead a set of principles that practitioners can work within. This way the context will determine what specific actions are important and the practitioner will be able to design actions that are appropriate for a particular situation. It also means that the participants can be more involved in deciding on what is appropriate for them whilst still sticking to the general principle. We provide 4 key principles that we think will be useful for wise and effective governance of natural resources. These are:

Four key principles guiding the wise and effective governance of natural resources on communal land:

Principle 1 - People's claims and rights to access and to benefit, and the basis of these, need to be known and defended.

It is important to understand that on communal land peoples' rights to land and natural resource use derive from both customary and statutory law – and that these confer significantly different kinds of rights, which are at times contradictory. The equitable distribution of benefits and costs, and sustainable beneficiation, will not happen without active and effective governance, as there are competing interests, immediate needs and power differentials involved.

Rights are the basis for seeking equity in society, and they reflect that some people and groups are more vulnerable than others, and need protection by those in authority. Weak and insecure rights undermine achieving equity and motives for working the land sustainably.

Rights that are not understood will not be defended, and rights must be defended or they will be lost to the powerful. Rights that cannot be defended against the powerful provide no incentives and no security and rights without recourse are not real. Rights need to be known by people themselves, and known by those in authority – through the layers and levels. Authority is needed where people seek recourse, or for conflict management

Principle 2 - Sustainable use should be understood and defended

For users and those in authority to carry out their responsibilities with regards to sustainable

use they need to have a base of understanding to work from. This need not – and perhaps cannot - be complete, but will be built up through reflexive learning processes.

The status of the resource needs to be understood by people who are responsible for its care. The resources and their use need to be monitored if the resources concerned are to be protected. When monitoring detects problems, action needs to be taken to defend the integrity of the resource. When decisions are made about resource allocation and use, the health of the resources and the sustainability of these needs to be brought to and taken account of at the decision-making table.

Principle 3 - Prompt response to feedback signals (of problems that need addressing) at a number of levels of governance.

People rights and the status of the resources can come under threat from various quarters – social and environmental trends, seasonal events, or unexpected disasters. Depending on the nature of the threat or problem, adaptive management experience indicates that an operative feedback loop is a key attribute of effective governance (see Pollard & du Toit, 2009). Lack of response can lead to undermining the legitimacy of authority, exacerbating the problem at hand and creating a negative cycle in people and in the natural system.

Principle 4 - Authority must be accessible, exercised, and cooperative across levels and plural systems

In addition to existing structures (e.g. Traditional Authorities) and emerging bodies (e.g. Communal Property Associations), new policies also create structures, confer rights and assign authorities over land. Thus not only do the land and resources involved have different but overlapping boundaries, but such reforms lead to overlapping rights, responsibilities and authorities. Mechanisms for communication, collaboration and cooperation that acknowledge this dynamic are required.

Land and water are governed by different polices, but wetlands are an intersection between land and water. This adds an additional layer of complexity for governance, because in the face of problems different bodies have authority over water and land resources, Again this must be accounted for.

To be effective, those with responsibility for resources need to have the requisite authority to be effective. This delegation needs to be agreed between different authorities at different levels. Authority needs to be considered legitimate to be exercised. Authorities need to be accessible to common people, and to each other. Authorities should not be competitive or mutually undermining, but cooperative.

Working with principles, not content, in a reflexive learning environment is important



ACTION 4: Work with people on governance in a simple and structured way

Governance can be daunting – it is both complex and can seem abstract. To help people understand and then work with governance it is helpful to consider it as having some distinct aspects. Work with people to understand what was, what is now, and what they would like to have.

We have developed a heuristic to help people to understand the elements of governance and we encourage people to test its applicability and usefulness

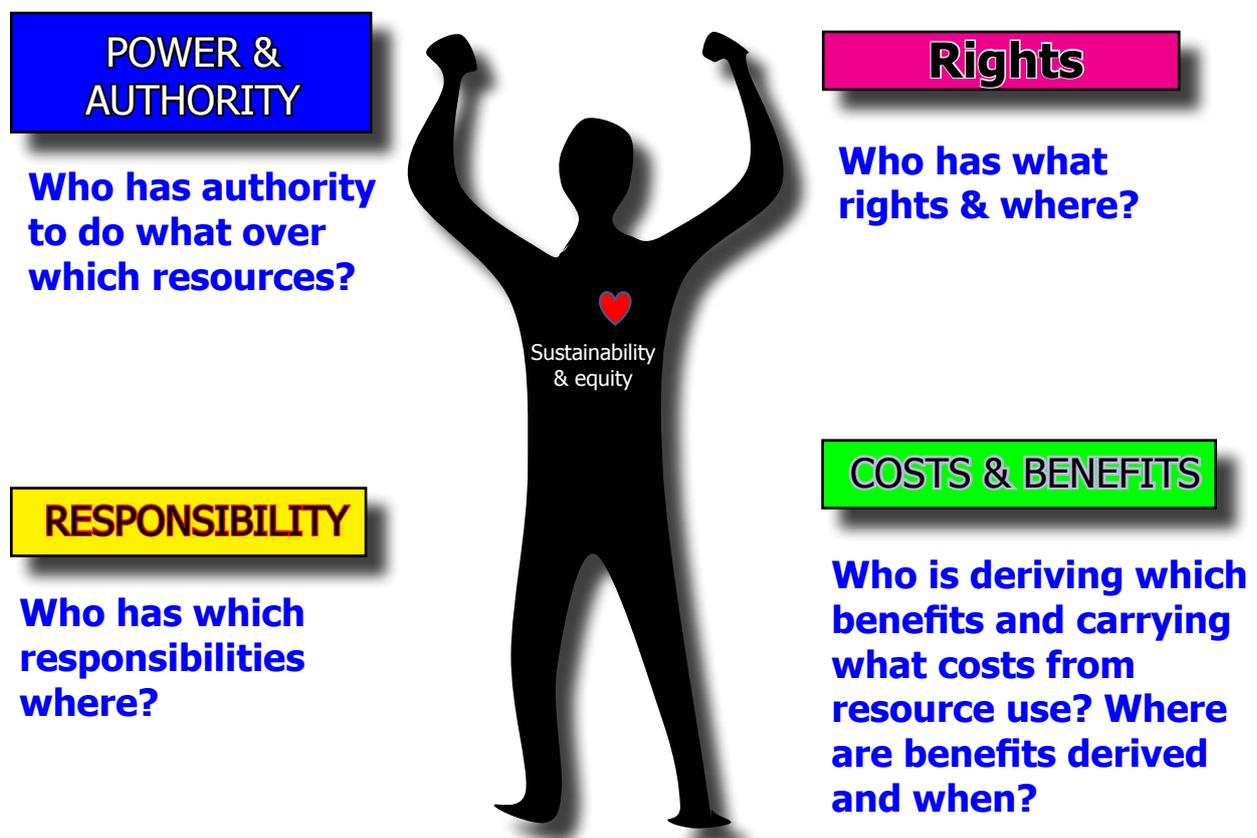
The project has developed a framework (see figure below) to help understand the complex nature of governance. It is based on the approach that 'everyone has a body' and thus can easily recall the four elements, represented and recalled as follows:

- the lifted LEFT HAND is a universal symbol of power (and authority) which confers rights (to the right hand);
- with rights come responsibility and thus the LEFT LEG balances (or grounds)
- the RIGHT ARM (rights);
- with rights (of use) come BENEFITS AND COSTS which need to be considered.

At the heart of governance lies the objectives/ principles/ vision of equity and sustainability, In answer to the question of 'governance for what?'

This framework can be used to describe the governance context as well as offering a basis for planning. Although key questions are indicated, further questions can be explored under each of the four aspects – which ones are most relevant will depend on the situation at hand. This tool should be used along with the principles.

A simple framework to help remember the key aspects related to resource governance



ACTION 5: Use foundation principles to develop a vision for guiding action and reflection

Once principles are developed a collaborative vision can be negotiated that is specific and relevant to a particular context. In developing a vision for Craigieburn we have found the following four principles provide robust and appropriate guidance.

TABLE 2: Developing principles into action - an example

Principle	Issues (examples from Craigieburn)	Key questions to ask
Principle 1 People's claims and rights to access and to benefit, and the basis of these, need to be known and defended	<ul style="list-style-type: none"> The rights people have depends on which kind of land and for what use There are changes in laws and in customs, so rights are also changing People do not always know what their rights are People do not always feel able to assert their rights Not everyone agrees on who has what rights (e.g. can only Craigieburn villagers or others from neighbouring areas harvest reeds?) 	<ul style="list-style-type: none"> How clear are community members and authorities on people's rights regarding land and natural resources? Who is benefiting, and in what way? Are people rights being asserted on the one hand and defended on the other? If not, why not?
Principle 2 Sustainable use should be understood and defended	<ul style="list-style-type: none"> Different benefits derive from different land types and uses There are short term and longer term benefits and also costs to think about Commercial exploitation needs to be well thought through so that the costs and benefits are derived within a sustainable and equitable framework Equitable distribution of benefits and costs and sustainable beneficiation will not happen without active and effective governance as there are competing interests, immediate needs and power differentials involved. 	<ul style="list-style-type: none"> Do people understand the natural resource in questions and limits on harvesting specifically? What support does a governance system require to be able to balance the costs and benefits?
Principle 3 Prompt response to feedback signals (of problems that need addressing) at a number of levels of governance	<ul style="list-style-type: none"> Overlapping responsibilities can lead to problems not being taken up by anyone, and so not being addressed Overlaps require processes for communication and cooperation, and these are not well developed 	<ul style="list-style-type: none"> Who is carrying out their responsibilities? How well are they doing so? (i.e. is it wise and effective?) Who is not carrying out their responsibilities? Why is this – are these good reasons or excuses? review issues and questions under this one re monitoring and response...
Principle 4 Authority must be accessible, exercised, and co-operative across levels and plural systems	<ul style="list-style-type: none"> In addition to existing structures (e.g. Traditional Authorities) new policies also create structures, confer rights and assign authorities over land. Thus not only do the land and resources involved have different but overlapping boundaries, but reforms lead to overlapping rights, responsibilities and authorities. To be effective, those with responsibility need to have an appropriate level of authority. This needs be agreed between different authorities and at different levels. Authorities should not be competitive or mutually undermining, but cooperative 	<ul style="list-style-type: none"> Do common people and structures know about new structures and their intended roles and responsibilities? Are mechanisms for communication, collaboration and cooperation that acknowledge multiple structures with differing sources of sources of authority and overlapping boundaries in place? Are authorities accessible to common people, and to each other?

In conclusion

Wetlands play a crucial role in managing, at no cost, the scarce water that South Africa receives. Wetlands are therefore of national importance due to the functions that they perform, such as water purification, storage, recharging of underground aquifers and streamflow regulation. They are of a further national importance for their control of erosion, flood attenuation, biodiversity value, and the wetland resources that many rural communities depend on for their daily livelihood. Many people are also directly dependent on natural ecosystems, such as wetlands, for the goods and services it provides in food and water.

Protection, use, development, control and management of water resources are the mandate of the DWAF. The Department is one of the main role-players responsible for this task and must play a leading role in the management of these systems, together with its co-operative governance partners. Attaining this is however a long term process of capacity building and co-operation in and between different Departments and spheres of government but also between government, industries and water users in general. This is specifically in line with the national environmental management principles described in section 2 (4)(b), (f), (l) and (r) of the National Environmental Management Act, 1998 (Act 107 of 1998). These principles should form the basis for implementation of sustainable use.

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. Wetlands are an interesting nexus of water and land, and challenge the approach to managing these resources independently of each other.

The people of South Africa are seeking to meet the challenges of using natural resources in a way so that they are not damaged and so that future generation may benefit for a clean, healthy and safe environment. In order to achieve this the people of the country are working closely with the government to develop policy and guidelines that point us in the right direction.



RIGHTS

who, what & where?

Who has what rights and where in the village do they apply? The rights people have in relation to natural resources depends on the kind of land being referred to and for what it is being used. In our research it was clear that understanding rights depended on 'where' in the village we were referring to – did we mean 'my home', 'my field', 'the wetland' or 'the communal land'. Also, there are changes in laws and in customs, so rights are also changing and people do not always know what their rights are or how they can assert them. And we need to remember that not everyone always agrees on who has what rights. Some examples of rights from the village of Craigieburn are:

- Right to use the land and resources, and to benefit from it.
- Rights to bequeath land, and to exclude others
- Right to be secure on the land
- Right to participate in decision making
- Right to allocate usufruct (allowing someone else to benefit under certain conditions)

Key questions

- *How clear are community members and authorities on people's rights regarding land and natural resources?*
- *Are people rights being asserted on the one hand and defended on the other? If not, why not?*

COSTS & BENEFITS

who, what, where & when?

We have the right to benefit from resources on our land. This aspect asks us to consider **who** is deriving **what** benefits, and also is carrying what costs, from land and resource use. **Where** the benefits and the costs are derived, and **when** are other important aspects. But remember that benefits to one group can be a cost to another group (e.g. cattle and crops). A community may give the right to develop and benefit from their land to someone else, usufruct rights (e.g. to build a lodge, or a mine and factory). Commercial exploitation needs to be well thought through so that the costs and benefits are derived within a sustainable and equitable framework. It is important to remember that where a lot of money is involved conflict can arise. There are always short and longer term costs benefits to think about.

Key questions

- *What support does a governance system require to be able to balance the costs and benefits*
- *Can a commercial mining enterprise be a model of balancing social and environmental costs and benefits*
- *What will land reform and its attendant structures and assigned authorities mean for governance that balances costs and benefits*

AUTHORITY

who & why?

Authority refers to a claim of legitimacy – this is the justification and right to exercise power in a certain way. Power is assigned to an authority in order that they are able to carry out their responsibilities. And this power can be assigned in different ways depending on the values and social system. But remember, power can be exercised by people who do not have authority assigned to them.

Authority should to be exercised for wise and effective governance not for corrupt purposes or personal enrichment. Also responsibilities are sometimes given to, or assumed by, people without the necessary authority (or power) to carry these out which can lead to poor and weak governance.

Key questions

- *Do those with responsibility have the necessary authority to carry them out?*
- *If structures who are given authority do not exercise it, how can we rectify the situation?*
- *How can we support the development of wise and effective governance where there is confusion and a lack of clarity?*
- *If different laws, policies and programmes are setting up different structures of authority without reference to each other, how can wise and effective governance be developed?*

RESPONSIBILITY

by whom & for what?

Who has what responsibility for which natural resources? We have responsibility in how resources are allocated amongst people, how they are used, and how they are looked after for future generations. Responsibility can be delegated by an authority. With change in laws, policies, procedures and in customs, responsibilities can change. Also there might be overlaps in responsibilities. Overlapping responsibilities can lead to problems not being taken up by anyone, and so the problem ends up not being addressed at all. The result is degradation and abuse of the resources. Remember that responsibility and authority are not the same thing.

Key questions

- *Who is carrying out their responsibilities?*
- *How well are they doing so – in other words is it wise and effective ?*
- *Who is not carrying out their responsibilities?*
- *Why is this – are these good reasons or excuses?*
- *What situation does that lead to?*

Important reading

Firstly, visit these websites for all the relevant papers:

LEAP: www.leap.org.za

AWARD: www.award.org.za

or contact:

The Mpumalanga Wetlands Forum

Also check out, specifically:

Cousins T, Pollard SR, de Wolf J, Mabooyi J and du Toit D, 2007. Developing community based governance of wetlands: The tenure arrangements and land management system in Craigieburn. Prepared for the LEAP learning symposium, Cape Town, November 2007.

Pollard, S., Kotze, D., Ellery, W., Cousins, T., Monareng, J., with assistance from King, K., Chuma, E. and Thomas, V. 2005. Linking water and livelihoods: The development of an integrated wetland rehabilitation plan in the communal areas of the Sand River Catchment as a test case. Submitted by AWARD, on behalf of the Save the Sand Programme

For more on community based governance, including a policy perspective

Pollard S & Cousins T 2008 Community Based Governance of Freshwater Resources in Southern Africa Report of the Water Research Commission Report no TT 328/08.

On legal pluralism

Meinzen-Dick, R. and L. Nkoya 2005 'Understanding legal pluralism in water rights: lessons from Africa and Asia' International workshop on 'African water laws: Plural legislative frameworks for rural water management in Africa', Johannesburg, South Africa.

Viva wetlands viva!

