The Kouga Catchment Newsletter

Friday, 1st February 2013 1st edition

Hello

In front of you lies the first Living Lands newsletter for the Kouga catchment area. Living Lands is currently initiating its project: 'Mobilizing civil society to create living landscapes in the Kouga catchment'. The main aim of this project is to create so-called 'living landscapes' together with local stakeholders and/or initiatives. Living landscapes are areas where a healthy natural ecosystem goes hand in hand with economic, agricultural, ecological and social activity. This newsletter will inform you about the activities that have been undertaken and will provide feedback to those that have collaborated with Living Lands until now. Furthermore, it serves to shed light on future plans and activities.

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Quotes from the stakeholders:

"I like this fynbos of ours"

tmf FUNDING FYNBOS WWF

LIVING LANDS

Living Lands is 'n Suid-Afrikaanse niewinsgewende/nie-regerings organisasie vir die bewaring en restourasie van lewende landskappe. Ons bring toegevoegde waarde aan die landskap deur die mobilisering van die gemeenskap vir volhoubaarheid en fasiliteer sosiale leerprosesse; Living Lands is die sekretariaat van die PRESENCE-netwerk.

PRESENCE

Participatory Restoration of Ecosystem SErvices and Natural Capital, Eastern Cape (PRESENCE) is 'n veelvoudige belanghebber- leernetwerk wat mense help om saam te werk om landskappe tot die voordeel van almal te restoureer.

ONS DOELWITTE IN DIE KOUGA:

- **Om grondeienaars en ander belanghebbers te help om saam meer oor volhoubare grondgebruik en -restourasie te leer.**
- **Om openlike en voortgesette dialoog tussen belanghebbers te bevorder.**
- **Om nuwe inligting en kennis te verskaf en te versprei.**
- **Om nuwe idees, geleenthede en netwerke aan te bied en te bevorder.**

livinglands

THE KOUGA CATCHMENT AS YOU KNOW IT

The Kouga catchment is located on the boundaries of the Western and Eastern Cape Provinces. It covers an area of approximately 282,040 hectares and is surrounded by the Tsitsikamma and Suuranys Mountains to the south, and the Kouga Mountains to the north.

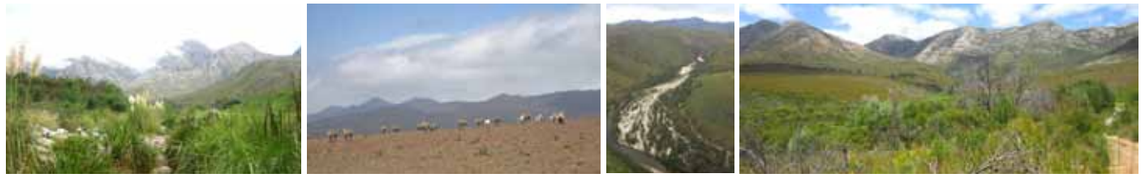
The main river, the Kouga River, cuts through these mountain ranges creating deep kloofs and steep slopes, and is fed by way of various tributaries that terminate at their base level (the Kouga Dam). Between 73% and 77% of the water in the Kouga Dam originates from the Kouga River.

Taking a closer look at the catchment's climate, geology, land cover and land use characteristics, great diversity can be seen. For example, whereas the more western part of the catchment is wetter and has perfect apple production conditions, the eastern part is drier and has better grazing potential. The mountains are primarily covered by fynbos growing in sandy soil whereas the kloofs have deeper, sometimes even more clayey soils with very different vegetation types such as thicket, grassland and forest.

Before the first European settlers arrived, the catchment was home to the Khoikhoi and San people. After the settlers' arrival, the catchment (especially the Langkloof Valley) became a predominantly agricultural production area. Nowadays, the Langkloof Valley is renowned worldwide for its deciduous fruit farming. Alongside fruit production, livestock farming is the main income for farmers in the Suurveld area. Around 33,421 hectares are under cultivation, 7,000 of which by intensive fruit farming. Most of the catchment is mountainous (248,043 hectares).

The catchment is not only of high agricultural importance but is also characterized by a unique and great diversity of flora and fauna. The area intersects with three so-called "biodiversity hotspots": the Maputaland-Pondoland region, the Succulent Karoo, and the Cape Floristic Region (CFR). The CFR (declared as a World Heritage Site since 1994) is associated with its characteristic fynbos vegetation that dominates the catchment's land cover and is globally recognized as one of the world's biodiversity hotpsots; it may even be the "hottest" hotspot of the world. Nowhere else on earth can a higher density of plant species be found in one area – around 70% of these plants are endemic to South Africa. A large part of the Kouga and Baviaanskloof Mountains is protected within the Baviaanskloof Nature Reserve. As a catchment area, it provides drinking and irrigation water for immediate use in the area. Downstream, the water is stored in the Kouga Dam which has a capacity of 128,7 million cubic metres – Nelson Mandela Bay Metropolitan Municipality as well as the citrus farmers in the Gamtoos Valley depend on the water from this dam. Downstream water demand is expected to increase by ±30% once the developing Coega IDZ industrial site becomes fully operational. Furthermore, expected population increases in Port Elizabeth will contribute to a higher water demand, not to mention the high water-consuming alien invasive plants that provide another challenge to water security.

The upcoming challenges for the Kouga catchment demand solid research with a focus on the landscape and environment. Over the last two years, Living Lands has initiated its research activities in the Kouga catchment, and identified several topics in need of additional research.



Sustainable agriculture and water management

As mentioned earlier, water security is an important and sensitive issue especially seeing as downstream water demands are likely to be significantly increasing in the coming years. Since 1992, people have not been allowed to build any dams in the area. Deciduous fruit farmers, being the biggest water consumers in the Kouga catchment, optimise their water usage through efficient irrigation systems such as drip and/or micro irrigation. However, the 1998 regulations limit the possibilities to expand their businesses. Future research should focus on opportunities to efficiently use the available water and land.

Alien invasive plants (AIPs)

Another issue closely related to water security is the alien invasive plants (AIPs) that are present in the area. According to the Department of Water Affairs, AIPs alter the ecological functioning of natural systems which cause threats to biological diversity, water security, and the productive use of land. The fynbos biome is the most invaded biome in South Africa; dense invasions can be found in the mountains, lowlands and along the river systems. Available data suggest that 12,5% of the land surface area in the Kouga catchment is invaded by IAP at 100% density. AIPs in the Kouga catchment mainly include black wattle (Acacia mearsnsii), but pines (Pinus ssp), hakea (Hakea ssp), Sesbania, and Eucalyptus spp are also present. The Working for Water programme is active in the Kouga catchment to rid the area (particularly the Kouga River that is so infested) of AIPs. Furthermore, there is a need to find a market for the black wattle wood, once it is cut: mulching is practiced on a small scale but offers potential to (1) use the black wattle wood, (2) save water and (3) bring carbon back into the soil.

Honeybush

Honeybush is an upcoming issue in the Kouga catchment. Currently, many people are looking with great hope at this new farming practice. For centuries people harvested wild honeybush in the Kouga and Tsitsikamma Mountains for the production of Honeybush tea. However, local people are becoming worried about the increased illegal and unsustainable harvesting, and so planting honeybush is seen as a new opportunity. But not much is known about the ecology of this plant as well as its cultivation which makes this an interesting area for research. Different stakeholders and institutes are starting to investigate this topic and Living Lands would like to contribute to the existing and future knowledge production regarding this plant and bring the different stakeholders together.

Fire management

The fynbos biome is highly dependent on and adapted to the regular occurrence of veld fires. For many fynbos species fire is a necessary requirement for seed germination. Ecologists say that to attain the highest biodiversity possible, fynbos needs fire in a 10-15 years' cycle. However, local (sheep) farmers often burn their veld in shorter cycles to benefit grass production which is more suitable for grazing. The balance between agricultural production and nature preservation needs to be found and maintained.

Challenges of the Kouga catchment

The focus of the research is on the landscape which includes the biophysical characteristics and natural ecology of the area, as well as opportunities for sustainable resource management and communication patterns between people in the catchment. Besides information gathered from scientific research, we also performed interviews with local stakeholders in the Kouga catchment. Most research was based on the combined data from interviews with local people and those with scientific expertise. The collective results of our (and other) studies have indicated several important environmental challenges that exist in the area. The

All Living Lands research is available for anyone, and can be requested through email: eberhard@earthcollective.net or ebervdm@gmail.com. [Later we will make it available on our website.]

reasoning behind the stakeholder interviews was to understand their perspective of the area and to find out their major challenges in the area – in the following section we provide an overview of the most mentioned challenges. It was identified that Living Lands could assist by bringing in research and/or other organizations, and could facilitate communication between different stakeholders. All Living Lands research is publicly available and can be requested via email: eberhard@earthcollective.net or ebervdm@gmail.com. We will make it available on our website at a later stage.

Awareness and Communication

Many people mentioned the lack of environmental awareness as a challenge for the Kouga catchment area. Knowledge about the natural environment is lacking and people do not know what impact their behaviour has on the ecosystem and how they may benefit from nature. People suggested that Living Lands could assist by bringing knowledge to the area, and educating people about the environment. A second issue that came to the front was the lack of communication between different stakeholders in the catchment. To manage a catchment area which is connected by the river, it is of vital importance to landscape management that people work together to address environmental issues. At the moment, this is not the case.

FIRST KOUGA STAKEHOLDER WORKSHOP

In the afternoon of Tuesday June 5th, an illustrious group of stakeholders in the Kouga catchment gathered at Die Kraaltjie in Joubertina – not to have lunch, nor to drink a coffee, but to discuss the future of the Kouga catchment and to see how they could contribute to this future. You may wonder why they gathered at this specific place, at this specific time…

The reason is that they were invited for the first Living Lands workshop concerning the project: 'Mobilizing civil society to create Living Landscapes in the Kouga catchment'. After several students had performed their research in the area and numerous stakeholder interviews had provided some basic insight into the area, it was time for the project to really begin.

Local stakeholders, varying from farmers to teachers and from extension officers to disaster managers, joined the workshop. During this workshop they were asked to think about their ideal picture of the Kouga catchment five years from now. Combining the inputs from all stakeholders, this utopia would look something like this: The Kouga catchment would be a green, healthy area where everyone has jobs to provide their families with income. Alien invasive plants have all been eradicated and alcoholism has been reduced to a few nice drinks on the weekend. Healthy drinking water and a well functioning sewage system are available to everyone. Furthermore, everyone would be five years younger.

Of course, a utopia is merely a utopia. Therefore, the second part of the workshop focussed on the practical side of this image: how can we (together) achieve this? The focus was placed on what each individual stakeholder could contribute to the bigger picture; each individual has their own set of skills and is able to contribute a piece of the puzzle. When you combine all these pieces, the puzzle will be able to be completed, or at the very least allows one to obtain an idea of what the puzzle is about.

After the workshop, we identified a few pieces of the puzzle although we do not yet know exactly where the pieces belong. However, as the project develops they will hopefully fall into place. All in all, the 'real' start of the project was positive, inspiring, and provided enough space to move forward.

OOS KAAP
FRYDAG
8 JUNE 2012

DIE BURGER

KOUGA OPVANGSGEBIED LEI DIE LAND IN VOLHOUBARE WATER-EN GRONDBESTUUR (2017)

Gedurende die laaste vyf jaar het baie veranderinge in die Kouga-opvangsgebied plaasgevind. In 2012 is besluit dat sodanige veranderinge aan die gebruik en bestuur van grond en water gemaak moet word dat 'n volhoubare toekoms vir die nageslag verseker sal word.

Belanghebbendes by die gebied het saamgewerk om baie van die doelwitte wat hulle vyf jaar gelede gestel het, te bereik. Hulle het bewys dat dit moontlik is vir die natuur en natuurlewe en die landbou om langs mekaar te bestaan.

Een van die grootste en belangrikste veranderinge in die gebied is dat daar bewustheid onder die mense wat in die Kouga woon, gekweek is vir die omgewing en dat 'n skoon en gesonde omgewing allerbelangrik is vir hul voortbestaan. Een van die mense wat aktief betrokke is by die opvoeding van jonger geslagte oor volhoubaarheid sê: "Dit begin met opvoeding. As ons nie die manier waarop mense dink verander nie, sal ons niks verander nie."

Vyf jaar gelede was indringerplante soos swartwattel wat regdeur die opvangsgebied verspei was, een van die grootste kopsere vir boere. Vandag werk hierdie boere saam met WvW (die Werk vir Waterprojek) om hierdie plante uit die gebied uit te roei. Die meeste

Quotes from the stakeholders:

"The Kouga catchment has a unique ecosystem. We have to look after the environment."

van die plante is nou verwyder, maar dit is belangrik om hulle uit die gebied te hou. As ons terug kyk en sien hoeveel van die doelwitte bereik is, of byna reeds bereik is, is dit nie moeilik om trotse mense te vind wat bereid is om hul mening met ons te deel nie. ‘n Plaaslike boer sê: “Ek het my water- en kunsmisverbruik verminder. Ek het ook begin om deklaagbewerking toe te pas en dit het ‘n groot verbetering gebring.” En hy is nie die enigste boer wat sy boerderymetodes verbeter en verander het nie.

Toe die projek in 2012 begin het, het meeste van die rolspelers in die gebied mekaar glad nie geken nie. Die fasiliteringswerk van Living Lands, het die kommunikasie tussen grondeienaars en ander belanghebbendes aansienlik verbeter.

Vandag vergader grondeienaars op ‘n gereelde basis om die huidige situasie te bespreek. Hulle besef dat hulle saam baie sterker staan as wat hulle ooit alleen kon gedoen het. As gevolg van sulke sterker verbintenisse onder grondeienaars en ander rolspelers is dit makliker om hulp van die munisipaliteit te kry. Natuurlik is daar nog baie dinge wat verbeter kan word en daar sal waarskynlik altyd iets wees om te verbeter. Maar mense in die Kouga-opvangsgebied het getoon dat enigiets moontlik is as dit met ‘n visie en gemeenskapsgees aangedurf word.

Quotes from the stakeholders:

“By working together, we can do more for the area “

PRESENCE STUDENTS DOING RESEARCH IN THE KOUGA

Damian Baselsmans & Odi Selomane (2010)
We conducted a basic area survey to find out the fundamental characteristics of the Kouga catchment. Who is in the catchment? What are they doing? The survey was mainly to find out opportunities for follow-up research.

Egle Draugelyte (2011)
I worked in the co-initiation phase of the new project of Living Lands. During this phase, the first contact with landowners and other stakeholders in the Kouga catchment had to be made. My role was to identify key stakeholders and key issues in the Kouga catchment area. This could potentially result in the establishment of a working group aiming towards creating living landscapes.

Clara Veerkamp (2011/2012)
In my research I focussed on the interaction between farming practices and the natural environment. I used local knowledge and experiences combined with scientific expertise to understand key ecological processes, the (history of) local land use, and the current status of the catchment area. This so-called biophysical assessment will provide a basic understanding of the area and will help to improve management to sustain ecosystem services (benefits people obtain from nature such as water and food). The research also contributes to developing new opportunities for creating living landscapes in the Kouga catchment.

Craig Galloway (2012)
I am speaking to landowners about their experiences with, attitudes towards, and perceptions about nature conservation. The idea is to find out from landowners how they feel about conservation and sustainable farming practices and to what extent they practice these methods on their farms. The research will inform conservation professionals about the perception of local landowners towards conservation.

Marijn Sandbrink (2012)
My research focuses on the fruit farmers’ social networks; to see through which communication channels they mobilise their knowledge about (1) water management and (2) alien invasive plants. With whom do they (not) connect? What do they talk about? The research provides insight into the main platforms of communication and tries to identify communication gaps. The research will be informative to look for opportunities to improve information flows.

Breanne Robb (2012)
My research takes an upstream-downstream approach to analyse land and water use and management. It focuses on the way water is used and managed within a catchment and within sub-catchments. Whilst investigating how water is used and managed, land use and management is also examined as this influences water management. It also takes into account the biophysical aspects of the landscape such as soil distribution, slope, and vegetation distribution and identifies the links between these landscape factors and water management and how each affects the other. This research is important in investigating the way in which water is managed in a water scarce area.

THE NEXT STEPS

THESE ARE THE FUTURE ACTIONS OF THE PROJECTS:

- Government engagement
- Municipality engagement
- Department of Water affairs engagement
- Department of Agriculture engagement
- Visiting farmers associations meeting and other meeting platforms
- Awareness raising of project to more people and at the farmer associations
- Awareness at the farm and town level, and identifying key individuals with same vision
- Keeping this newsletter ongoing
- Further Research and collaboration on Honeybush and other topics
- Building trust with stakeholders

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Quotes from the stakeholders:

"My only goal is to make a difference"