## **CEPF FINAL PROJECT COMPLETION REPORT**

### I. BASIC DATA

Organization Legal Name: Agricultural Research Council-Range and Forage Institute

Project Title (as stated in the grant agreement): Informing the Development of an Integrated Land Use Management Plan For the Commons of the Namaqualand Uplands

Implementation Partners for this Project: Conservation International, Kamiesberg Local Municipality, local land users.

Project Dates (as stated in the grant agreement): January 1, 2006 - March 31, 2010

Date of Report (month/year): 21 April 2010

### **II. OPENING REMARKS**

#### Provide any opening remarks that may assist in the review of this report.

This project is a first where local ecological knowledge and scientific evidence were used to provide options for sustainable land use management in the biodiversity rich region of the Namaqualand Uplands. This project also provided ARC with the foundations for closer symbiotic relationships with land users, local municipality and Conservation International. Even though almost all project outputs were met, other challenges have emerged which should be dealt with in the near future. However, the knowledge and experiences gained through this project will make these tasks easier to tackle.

## **III. ACHIEVEMENT OF PROJECT PURPOSE**

**Project Purpose**: For the Kamiesberg municipality and relevant stakeholders to implement an integrated land use management plan that ensures sustainable livelihoods and biodiversity conservation

#### Planned vs. Actual Performance

Indicator	Actual at Completion	
Purpose-level:		

<b>1.</b> People understand and value the co-existence of biodiversity conservation and rural livelihoods in the context of land use practices, policies, objectives and their impacts, and are prepared for implementation	Achieved. Land users have developed a better understanding for the need and value of the co- existence of biodiversity conservation and rural livelihoods. This was achieved by means of a series of workshops held with the communities, the ARC local newsletter and workshops done by project partners including CI. This also resulted in improved relationships between land users and local authorities when the plan was developed.
2. Policy and legal framework in place at municipal level to ensure adequate implementation of the plan	Achieved: Legal framework that ensure sustainable use and management of the natural resources as described in the management plan are entrenched within the Kamiesberg Municipality Grazing Regulations (Notice 18 of 2002) in terms of the Municipal Structures Act, Act 117 of 1998 and the Municipal Systems Act, Act 32 of 2000 of South Africa. Furthermore, municipal cropping regulations (Notice 34 of 2003) lay the legal foundation for managing sowing allotments in the Leliefontein Communal Area. Other national legislations applicable in Leliefontein include the Conservation of Agricultural resources Act (Act No. 43 of 1983) and Transformation of certain Rural Areas Act (Act 94 of 1998).
<b>3.</b> In collaboration with appropriate partners, an integrated land use management plan for the Kamiesberg Municipality is prepared	Achieved: With the approval of the municipal council, the second draft of the integrated land use management plan was prepared in collaboration with other stakeholders. The plan is currently in circulation for additional comments before it is finalized and forwarded to the council for approval. ARC will oversee these duties even after the project has ended. We are also interested in monitoring the impacts that the plan's implementation has on the biodiversity and the people's livelihoods.

## Describe the success of the project in terms of achieving its intended impact objective and performance indicators.

The successes of this project were:

- The transfer of scientific knowledge to the rural communities in their local language. This culminated into conservation-wise land use practices which was ultimately included in the management plan.
- The realization by land users and local and provincial authorities of the importance of livestock mobility in sustainable land use.
- > The closer relationship developed with and between all stakeholders.
- The use of scientific evidence obtained through this project to inform the development of the National Rangeland and Forage Policy of South Africa.
- Researchers of this unit of the ARC are now regarded as experts in communal land use management and have been approached by several other researchers, decision-makers and the private sector to assist in developing management plans for other communal areas in the rest of South Africa. The process and model developed through this project will thus also be tested elsewhere.

#### Were there any unexpected impacts (positive or negative)?

An unexpected positive impact was the use of the knowledge gained through this project at the expert workshop on South Africa's Rangeland and Forage Policy on 29-30 March 2010.

## **IV. PROJECT OUTPUTS**

#### **Project Outputs:**

Indicator	Actual at Completion
Output 1: Social and biological data	Achieved: We developed a bibliography on research
requirements, collection methods, and	conducted in Namaqualand Uplands from various
products formats determined.	disciplines.
<b>1.1.</b> Types of social and biological data	Through the bibliography, we identified gaps where
requirements have been identified	further social and biological research is required. We
	also interviewed land users and other stakeholders on
	which type of information they would need for their
	daily operations.
<b>1.2.</b> Methodologies for collecting and	We used participatory methods, literature searches,
collating data identified and the format of	field surveys, mapping exercises and laboratory
outputs defined	methods to collect the necessary data.
<b>1.3.</b> Other products to come out of	transfor the estimation knowledge gained through this
project determined	transfer the scientific knowledge gained through this
	study to fand users. Our opiands bibliography was
	Ribliography that is maintained by the University of
	Cape Town
Output 2: Appropriate information required to	Achieved: The information was used to inform the
prepare a land use management plan collected	management plan but this process needs to continue
and analysed	to inform any changes needed to the plan in the future
	The management plan developed allow for changes to
	be made due to the dynamic socio-political and
	environmental conditions of the region.
2.1. Farmers, livestock keepers and	Land use diversity and farmer objectives were studied
landuser diversity, objectives and	in Sept. 2007 only. We conduct similar research on the
priorities documented by June 2006	pilot site and used those experiences to inform our
	research in Leliefontein. We presented our research
	results at national conferences and meetings with
	stakeholders.
<b>2.2.</b> Rangeland management practices	We assessed rangeland management practices were
and other natural resource use practices	studied using participatory methods. Firewood
(e.g. firewood collection) are identified	collection was assessed through questionnaires with
and assessed by June 2006	about 200 fire wood collectors from the ten villages.
	Results were presented at several national and two
	international conferences , workshops and
	management practices by farmers in Leliefontoin word
	published in 2008 <sup>3</sup>

#### **Planned vs. Actual Performance**

<sup>&</sup>lt;sup>1</sup> Samuels MI, Allsopp N, Hoffman MT (2008) Temporal mobility patterns of livestock in semi-arid communal rangelands in South Africa. XXI International Grassland Congress and VIII International Rangeland Congress, 27 June – 05 July 2008, Huhhot, China.

<sup>2</sup> Samuels MI (2010) Water availability and requirements by communal livestock in an ephemeral river catchment in South Africa. Flood-Pulsed Wetlands International Symposium, 01 - 05 Feb 2010, Maun, Botswana.

<sup>3</sup> Samuels MI, Allsopp N, Hoffman MT (2008) Mobility patterns of livestock keepers in semi-arid communal rangelands of Namaqualand, South Africa. Nomadic Peoples 12(1), 123-148.

<b>2.3.</b> Perceptions among farmers on communal and private land of rangeland condition with respect to rangeland management, including those regarded as best practices are collated by December 2006	We conducted workshops with livestock farmers on their perceptions of rangeland condition and the livestock management practice they regard as most suitable for the region. Their perceptions will be used to inform the PM&E system.
<b>2.4.</b> Long term data, such as climatic records and livestock numbers, are collated by June 2006	We collected climatic and livestock data from numerous sources. We developed a livestock database to inform future interventions on the communal areas.
Output 3: Work with partners to select and operationalise a pilot site	Achieved: We worked with 10 other institutions to select the pilot site and develop its management plan. The Roodebergskloof Communal Farm which is 4412.16 ha in size was selected as the pilot site.
<b>3.1.</b> An agreement for a pilot site is formalised by end of 2006	CEPF-funded studies conducted by Helme & Desmet 2006 and Colville 2006 identified the importance of conserving the unique biodiversity of Roodebergskloof. This as well as the urgent need to assist the 14 land users to practice better land management resulted in Roodebergkloof Farm being selected as the pilot site.
<b>3.2.</b> Land use options are discussed at meetings with landusers	ARC conducted a study in Sept. 2006 <sup>4</sup> on land use in Roodebergskloof . We had several meetings with all stakeholders, including land users, to discuss existing and other options for land use on the farm. Existing land uses are livestock farming and communal food gardens. Additional land uses identified are tourism, conservation and organic gardening.
<b>3.3.</b> At least three management options are in place by June 2007	The study on the farm revealed that existing land use management practices were destructive and unsustainable. The three management options proposed were 1) livestock farming and gardening only on the entire farm; 2) livestock farming, gardening, tourism and conservation on the entire farm; (3) different land uses in different parts of the farm. Option three was selected. About 1225 ha was set aside exclusively for conservation due to the high number of endemics and endangered plant species found in that area. One third of the grazing land was set aside for rest due to its poor condition which was caused by the previous management system. The farm was partitioned in three so that seasonal rotational grazing could be introduced. Hiking trails were developed by CI. Surplus Peoples Project provided resources for more land on the farm to be put under organic farming.
<b>3.4.</b> Participatory monitoring and evaluation (PM&E) process developed	Within the management plan developed for the farm, a PM&E system for land users was included where they could monitor rangeland resources regularly and their animals on a monthly basis.
<b>3.5.</b> Regular PM&E undertaken by stakeholders	The management plan for the farm has yet to be fully implemented on the farm. A change of local government officials have delayed the implementation. Suitable infrastructure has already been put in place by CI and Dept. of Agriculture to implement the plan. Tourism and conservation of the farm have already been implemented, but the three-camp livestock farming system has yet to commence. Stakeholders are working currently on strategies to fully implement

<sup>4</sup> Samuels MI, Allsopp N (2006) An assessment of livestock farming practices in the Roodebergskloof communal farm in Namaqualand, South Africa. Report submitted to Conservation International, 25pp.

	the plan on the farm.
<b>3.6.</b> The process is documented with an emphasis on lessons learnt	The process of developing the Roodebergskloof management plan was presented at numerous workshops in Leliefontein as well in other communal areas in the region. We followed the same process to develop the integrated management plan for the Leliefontein Communal Area.
Output 4: In collaboration with SPP and appropriate partners, an integrated land use management plan for the Kamiesberg Municipality is prepared	Achieved: SPP withdrew from the project and did not receive any funds. ARC resumed those duties of SPP as stated in the project proposal. However, SPP did play an advisory role in the plan's development
<i>4.1.</i> Project participants attend quarterly partnership workshops to share data and learning experiences.	Project partners shared data and learning experiences at the Namaqualand Wilderness Initiative platform as well as several other workshops in the area from 2006 to 2010. These include two meetings in July and September 2009 where the Premier of the Northern Cape Province (where Leliefontein is located in) was in attendance.
<b>4.2.</b> Data are presented to relevant to local stakeholders for verification and discussion at six monthly intervals	During the study period ARC made about 35 presentations to stakeholders and other experts on the data. Discussions took place at the NWI platforms, the Roodebergskloof process where stakeholders met regularly, national conferences, CI capacity building training sessions for municipal officials, and recently the Namaqualand Biodiversity Initiative platforms.
<b>4.3.</b> Final reports, maps and proposed rangeland management regimes provided to SPP for inclusion in the land use management plan	Since SPP withdrew, ARC used research data to generate the maps which were used in the management plan. ARC facilitated all the workshops with the ten communities to discuss the management plan. In these workshops different management regimes were identified for different communities.

#### Describe the success of the project in terms of delivering the intended outputs.

- The close relationship developed with and between stakeholders resulted in easier delivering of project outputs. Land users realized the importance of this study through the various knowledge transfer methods and took the initiative to develop their own sustainable breeding programmes.
- This project gave ARC the opportunity to network with other researchers and to 'advertise' the project at national and international conferences and workshops. This resulted in securing several additional funding for projects with similar and overlapping objectives of this project.

## Were any outputs unrealized? If so, how has this affected the overall impact of the project?

The PM&E booklet has yet to be completed. This has delayed the formal and coordinated monitoring of natural and agricultural resources. CI will develop the PM&E systems but ARC has and will continue to provide the necessary information to develop the booklet. ARC and CI agreed that separate booklets will result in duplication since these two organizations have similar objectives with the PM&E system.

## V. SAFEGUARD POLICY ASSESSMENTS

*Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.* Not Applicable

## VI. LESSONS LEARNED FROM THE PROJECT

# Describe any lessons learned during the various phases of the project. Consider lessons both for future projects, as well as for CEPF's future performance.

- We gained an in depth understanding of the social dynamics with rural communities when developing land use options.
- We realized the importance that functional institutions are needed to implement community-based natural resource management.
- We learnt that there will often be delays when working with government structures that administer communal areas.
- We found ways to successfully translate scientific information and findings to local land users.
- We learnt that it is difficult to use scientific evidence and translate it into a management plan for communal areas when there are numerous social, political and economic drivers that dictate land use. Multi-disciplinary research projects are a necessity when investigating rural land uses.

# *Project Design Process: (aspects of the project design that contributed to its success/failure)*

- > The strong emphasis on participatory research contributed to the success of the project.
- The collation of existing information on land use in the study area ensured the research conducted is not a duplication of work already done. Often research findings for communal areas are not always publicly available.
- The underestimation of the time needed to develop an integrated land use management plan resulted in extension needed to complete project tasks.

### Project Execution: (aspects of the project execution that contributed to its success/failure)

Land users were involved throughout the project. This built a strong relationship of trust between ARC and land users. They viewed the management plan development process as transparent and thus participated in all activities.

## VII. ADDITIONAL FUNDING

# Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	Type of Funding*	Amount	Notes
Agricultural Research	A	\$50 000- \$70 000	This covered the salaries of N
Council		p.a. (yrs 2006-10)	Allsopp, L. Saul and then later I.
			Samuels and C. Cupido who
			worked directly on this project.
Global Environment	A	Approx. \$10 000	These funds covered expenses
Facility			relating to research conducted
			(2006-8) on rangeland
			rehabilitation, natural resource
			use and livestock management
			in the Leliefontein Communal
			Area. This information was also
			used to inform the management
			plan.

SKEPPIES & Development Bank of South Africa	C	Approx. \$17 000	These funds were obtained in May 2008 for building a communal ram camp in Tweerivier village in the study area. Scientific evidence obtained through this project showed that an uncontrolled breeding season resulted in overgrazing in flatter regions of
			the commons and an increase in livestock mortality. The new ram camp alleviated all the above problems and the management of the camp serves currently as a success model for other Leliefontein communities with ram camps.
SKEPPIES & Development Bank of South Africa	C	Approx. \$20 000	Funds were obtained in Sept. 2009 to rehabilitate an ephemeral wetland in Leliefontein village. Ephemeral wetlands in Namaqualand have numerous ecological and socio- economical benefits. This project's research results show that insufficient water supply for animals during the dry seasons resulted in local overgrazing in areas adjacent to livestock watering points. Rehabilitating wetlands would results in watering points keeping water for longer periods and well into the dry season. Rehabilitation of this wetland resulted in almost a R1 000 000 worth of ecosystem services to the area, including providing the only water supply to an entire community when municipal water supply was cut in December 2009 due to technical problems.
BIOTA - Germany	C	approx. \$15 000	Working with local communities through this project reiterated the complexity and significance of local ecological knowledge in sustainable land use in Namaqualand. By using these funds in 2009 we conducted research on ephemeral wetland function in Leliefontein and local rehabilitation techniques to restore them so that the wetlands could continue to provide essential ecosystem

			services. Research results were used to inform the development of the management plan.
Desert Research Foundation on Namibia	С	approx. \$12 000	From 2007-9 we conducted research on the effect of water availability on the livestock management system in the Buffelsriver catchment which Leliefontein Communal Area forms part of. Research results were used to inform the development of the management plan.

\*Additional funding should be reported using the following categories:

- **A** Project co-financing (Other donors contribute to the direct costs of this CEPF project)
- **B** Complementary funding (Other donors contribute to partner organizations that are working on a project linked with this CEPF project)
- **C** Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)
- **D** Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)

# *Provide details of whether this project will continue in the future and if so, how any additional funding already secured or fundraising plans will help ensure its sustainability.*

This project laid the foundation for further research in the region. This includes monitoring the success of the management plan as well as research on the impacts of climate change on these rural communities. We will also aim to develop early warning systems for livestock keepers to inform their decision-making. We have applied for funding to implement some of these plans. The decision to fund this project has yet to be made.

### **VIII. ADDITIONAL COMMENTS AND RECOMMENDATIONS**

Developing land management options in communal areas is complex and should be carefully planned so as not to exclude people or infringe on the rights of stakeholders during the process. Planners should not only include scientific evidence but information of other disciplines as well. Multi-disciplinary information is crucial since socio-economic as well as political factors play a crucial role in land management. Therefore, in the future, I would recommend that research institutions funded to work in communal areas would have a strong scientific and socio-economic background. Otherwise they should have close partners that will handle the socio-economic aspects of the research. Local administrative authorities could be approach to give insights into the legislative information necessary to ensure sustainable communal land use management.

### **VIII. INFORMATION SHARING**

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. One way we do this is by making programmatic project

documents available on our Web site, www.cepf.net, and by marketing these in our newsletter and other communications.

These documents are accessed frequently by other CEPF grantees, potential partners, and the wider conservation community.

### Please include your full contact details below:

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