CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

I. BASIC DATA

Organization Legal Name: University of Cape Town

Project Title (as stated in the grant agreement): *Actions for Improved Vegetation Management on the Bokkeveld Plateau*

Implementation Partners for This Project:

Project Dates (as stated in the grant agreement): August 1, 2007 – December 31, 2008

Date of Report (month/year): February 2009

II. OPENING REMARKS

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

The Bokkeveld Plateau has been identified as a hot-spot of plant diversity, with over 1300 species and an exceptional degree of endemism. Many of the vegetation types are inadequately conserved, and there are also a large number of range-restricted species. Consequently, the long-term conservation of the Bokkeveld Plateau will rely heavily on the actions of private landowners. Major threats to the biodiversity of the area include poor veld management and the rapidly-expanding Rooibos tea industry. The purpose of this project was to address these two main threats by producing products aimed at improving veld management in the area and assessing the extent to which Rooibos tea production represents a threat to the area.

III. NARRATIVE QUESTIONS

1. What was the initial objective of this project?

The initial objective of this project was to provide products that would contribute to improved management and biodiversity of the Bokkeveld Plateau. Two main products were anticipated; firstly, a guide that describes the different veld types of the area and identifies indicator species that can be used as simple indicators for veld condition assessment; secondly, an assessment of the current and historical distribution and expansion of cultivated areas on the Bokkeveld Plateau, with a particular emphasis on the impact of Rooibos tea cultivation.

The goal of the transformation study was to document the current extent of transformation of the Bokkeveld Plateau and examine the extent to which the recent rapid expansion of the Rooibos tea industry is a driver of transformation. We anticipated that the results of this study would help to identify the drivers of transformation in the area; assess the extent to which illegal transformation is taking place, and identify those areas which have been most badly impacted by transformation as well those areas least impacted. These results could then be incorporated into stewardship programmes

operating in the area, as well as used to raise awareness among farmers as to the current extent of transformation and demonstrate the ability of modern satellite imagery to detect their activities, and in so doing act as a deterrent for illegal activities.

The purpose of the guide is to meet the need for an accessible guide to the vegetation patterns and associated dominant ecological processes of the Bokkeveld Plateau. The guide draws on existing information, personal knowledge and the results of the Conservation Farming Project which was conducted in the area. We expect that the guide will contribute to achieving a greater understanding and awareness among landusers about the relationship between management activities, ecological processes and veld condition, which will ultimately lead to improved veld management practices and biodiversity benefits. The section on indicator species will allow landusers, scientists and conservation officials to quickly and easily familiarize themselves with vegetation in different condition states through the presence of various indicator species that are commonly associated with veld in good or poor condition. This will enable landusers to better monitor their veld condition and more easily assess the outcome of their management practices.

2. Did the objectives of your project change during implementation? If so, please explain why and how.

There were no changes in the objectives of the project during project implementation.

3. How was your project successful in achieving the expected objectives?

The booklet designed for use by farmers, extension and conservation officials and scientists working in the area was successfully completed. The booklet describes the vegetation patterns associated with the Bokkeveld plateau from a broad down to a fine scale. The different vegetation types of the Bokkeveld Plateau are illustrated with photographs of each in different condition states and the important ecological processes which operate within each are outlined. Condition in the guide is related to the level of disturbance prevalent in the vegetation type rather than the productive potential which may remain relatively high even in heavily impacted vegetation. However, since different farmers have different production goals with different inherent levels of veld utilization, no single state is identified as optimal. Furthermore, the booklet is not prescriptive with regards to recommended grazing practices, but rather attempts to simply provide a tool for users to quickly and easily assess the condition of the veld, so that they can adjust their management to their own purposes. To these ends, photographs of more than 50 indicator species are included which we have grouped into categories indicating vegetation from good to poor condition. The results of the transformation study have also been included in the booklet, thereby linking the two aspects of this project, and increasing awareness of the issues around transformation among farmers.

In addition, during the execution of the project, over 2000 photographs of different species, plant communities and vegetation types were taken. These include many species that are not included in current guides of the area such as the wildflower guide produced by the Botanical Society. Many rare and endemic species were also

photographed. These photographs represent a useful resource that will be made available to local NGOs as well as the Hantam National Botanical Garden.

We were also able to meet the second goal of the project to produce a scientific paper which addresses the pattern, rate and extent of transformation of the Bokkeveld Plateau. Ultimately, this was produced in collaboration with Mark Thompson of Geoterraimage who was concurrently working on a landuse classification for the area. In the study, we were able to include seven different sampling periods in a time series of satellite imagery, each being roughly five years apart beginning in 1979 and ending in 2007. The four vegetation types that are restricted to the Bokkeveld/Gifberg/Maskam escarpment were the focus of the study. The results indicate that the majority (85%) of the current level of transformation was already present in 1979. The recent expansion of the Rooibos tea industry does not appear to have been achieved through the transformation of intact vegetation, but primarily through the conversion of existing cereal croplands to rooibos tea lands. Transformation was the most severe in the northern Bokkeveld and almost 60% of Nieuwoudtville Shale Renosterveld has been lost to croplands. There does not appear to have been an increase in the rate of transformation over the past 25 years, suggesting a gradual but constant intensification of agriculture over this period. The relatively low rate of transformation over this period reflects a shortage of available arable areas rather than a lack of desire on the farmers' side for additional croplands. In the long-term, the expansion of Rooibos tea production will impact the area available for other crops, most likely resulting in additional transformation.

4. Did your team experience any disappointments or failures during implementation? If so, please explain and comment on how the team addressed these disappointments and/or failures.

There were no significant failures or disappointments.

5. Describe any positive or negative lessons learned from this project that would be useful to share with other organizations interested in implementing a similar project.

Through collaboration with other scientists/organizations on the transformation aspect of the project, we were able to produce a much better end product than we would have been able to do had we tackled the problem alone.

The complementary range of technical expertise that resulted from the collaboration with Geoterraimage meant that we were able to benefit from the greater level of remote sensing expertise of Geoterraimage and they were able to benefit from our detailed knowledge of the study site, to the mutual benefit of both parties and their respective products. In practice, this meant that we were able to assess the historical pattern of transformation going back to 1979 which is much further back than we had planned and we were able to extend the study beyond the Bokkeveld Plateau to include the Gifberg/Maskam escarpment as well. We also collaborated with Nick Helme in order to benefit from his extensive expertise in the vegetation patterns of the area and in particular the Gifberg/Maskam area with which we were less familiar.

6. Describe any follow-up activities related to this project.

The results of the transformation study and the booklet will be introduced to local farmers at the next Nieuwoudtville Farmers Association meeting.

7. Please provide any additional information to assist CEPF in understanding any other aspects of your completed project.

IV. 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
		$	
		$	
		$	
		$	

***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.)*

V. ADDITIONAL COMMENTS AND RECOMMENDATIONS

VI. 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.

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