

CEPF FINAL PROJECT COMPLETION REPORT

I. BASIC DATA

Organization Legal Name: Environmental Monitoring Group

Project Title (as stated in the grant agreement): *Conserving Biodiversity and Enhancing Livelihoods in the Small-Scale Rooibos Tea Production Areas of the Northern and Western Cape, South Africa*

Implementation Partners for this Project:

- Leslie Hill Institute for Plant Conservation, University of Cape Town
- Heiveld Co-operative Limited
- Wupperthal Rooibos Tea Association
- Northern Cederberg Conservancy
- Wupperthal Conservancy
- Botanical Society of South Africa
- Indigo development & change
- Cape Nature and the GCBC Project Team

Project Dates (as stated in the grant agreement): July 1, 2005 – December 31, 2008

Date of Report (month/year): January 2009

II. OPENING REMARKS

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

This report reflects on the activities, achievements, outcomes and expenditures of this project during its initial 3 year phase, as well as in the course of the 12 month extension granted for the completion of certain project activities. The project has been a very significant one in terms of its impacts and contributions to broadening scientific knowledge of wild rooibos, as well as engaging local knowledge holders in sharing their knowledge and

III. ACHIEVEMENT OF PROJECT PURPOSE

Project Purpose: *By the end of 2007 land owners and collectors of endemic sub-species of *Aspalathus linearis* in the Suid Bokkeveld, Elizabethfontein, Biedouw Valley and Wupperthal areas will utilize and manage this resource in a sustainable way and derive sustainable incomes from it.*

Planned vs. Actual Performance

Indicator	Actual at Completion
Purpose-level:	

<p>1. By the end of the project, formal conservation status (Contract Nature Reserve, Co-operation Agreement or Conservation Area) has been extended to at least 10% of farm land where stands of endemic sub-species of <i>Aspalathus linearis</i> occur</p>	<p>Achieved: Despite the previously reported delays in finalizing the legal agreements required for extending conservation status in the Northern Cape Province, the legal agreements for the farms Wit Klei Gat, Blomfontein and Zaaikloof have been prepared and it is anticipated that they will be signed in January 2009 (approx. 3,434 ha in total). In addition, the owners of the properties Landskloof, Papkuilsfontein, De Lande and Matarachope (approx. 9,934 ha in total) are also in the process of developing legal conservation agreements. The owners of all of the above properties are committed to conservation and, where appropriate, sustainable harvesting. The Botanical Society Stewardship Project staff and the Northern Cape Department of Environment, Tourism and Conservation have taken forward the negotiations with these landowners. In the Western Cape Province landowners have entered into contractual agreements for a total area of 25,423 ha, and voluntary agreements for a further 35,5735 ha. Wupperthal is a Conservancy and as such enjoys a significant degree of conservation. In the Rooi Cederberg area on the southern boundary Wupperthal formal conservation status has been achieved by farms forming the Matjiesrivier Nature Reserve, and land owners are conserving wild rooibos stands and exploring sustainable harvesting options. The owners of the farms Dwarsrivier (5,510 ha) and Kromrivierkloof (3,532 ha.), both of which have significant populations of wild rooibos, have entered into Contract Nature Reserve agreements with Cape Nature. In total these areas amount to more than 10% of the farm land on which wild rooibos is known to occur.</p>
<p>2. By the end of the project, at least 60% of the identified populations of endemic sub-species of <i>Aspalathus linearis</i> in the project area are either not harvested, or are harvested sustainably</p>	<p>Achieved: Approximately 66% of the populations identified that are harvested are being managed and harvested in a sustainable manner, including 50% of Suid Bokkeveld populations, all of those on the Wupperthal lands, the populations in the Rooi Cederberg and in the Pakhuis area.</p>
<p>3. At least 60% of wild rooibos sold by land owners and collectors in the target area is certified "sustainably harvested" by Naturland e.V. or another internationally recognised certification body</p>	<p>Achieved: 80% of the wild rooibos marketed as such from within the target area in 2007 and 2008 was certified by Naturland e.V.</p>
<p>4. Collectors of wild rooibos earn at least 50% more than the minimum agricultural wage for their labour</p>	<p>Achieved: Wild rooibos harvesters in the Suid Bokkeveld earned R65 per day, which is more than 50% more than the minimum wage of R37.50 per day. In Wupperthal no wild rooibos was harvested in 2007 or 2008, but plans have been developed to ensure that harvesters earn at least R80 per day.</p>

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

Overall the project has managed to achieve what it set out to do. Scientific knowledge of wild rooibos, its ecological significance and the parameters of sustainable use have been greatly expanded, incorporating and enriching local knowledge. Conservation of wild rooibos populations has become recognized by many producers as important for their long term livelihood strategies, and its value in enabling producers to adapt to climate change has been recognized widely.

Were there any unexpected impacts (positive or negative)?

Positive: Some farmers not in the original area of the study (in the Matjiesrivier and Pakhuis areas) have engaged with the project and are applying sustainable production principles on their lands.

Positive: Equal Exchange of the US is marketing Heiveld Wild Rooibos as a biodiversity and climate friendly product. The fair trade movement in Germany and Austria has recognized the significance of conservation and sustainable harvesting of wild rooibos in the long-term survival strategies of the rural people of the area, as well as the conservation of the fynbos biome.

IV. PROJECT OUTPUTS

Project Outputs:

Planned vs. Actual Performance

Indicator	Actual at Completion
<p>Output 1: The distribution and taxonomy of endemic sub-species of <i>Aspalathus linearis</i> has been adequately described and mapped, incorporating local and scientific knowledge</p>	<p>Achieved: The findings of action research undertaken by the project that incorporates both scientific and local knowledge has been published in both popular and scientific versions (see 1.2, below). The project also contributed insights to a joint UCT/ CIRAD/ Indigo study undertaken by Dr Heidi Hawkins, Dr Estelle Bienabe and Rhoda Malgas entitled "Ecotypes of wild rooibos tea (<i>Aspalathus linearis</i> (Burm. F) in plant communities with differing structure, distribution and threatened status, and the results were presented by Rhoda Louw at the Interfaces conference in August 2008. A report on research undertaken by Dr Heidi Hawkins in 2008, entitled "Wild rooibos germination and propagation trial under greenhouse conditions", funded by the GEF Small Grants Program and supported by this project has further added to the body of scientific knowledge.</p>
<p><i>1.1. At least 4 workshops held with farmers</i></p>	<p>6 workshops and 2 training courses were held in the course of the project, GEF Small Grants Program and the European Commission projects (see below)</p>
<p><i>1.2. Research describing the distribution and taxonomy of the sub-species of <i>Aspalathus linearis</i> occurring in the project area is published</i></p>	<p>The publication of the manual "The Sustainable Harvest of Wild Rooibos" made information on the distribution and taxonomy of the sub-species of <i>Aspalathus linearis</i> occurring in the project area available to producers and the general public. A scientific paper entitled "Distribution, quantitative morphological variation and preliminary molecular analysis of different growth forms of wild rooibos (<i>Aspalathus linearis</i>) in the northern Cederberg" by Rhoda Malgas, Alastair Potts, Noel Oettle, Bettina Koelle, Simon Todd, Tony Verboom and Timm Hoffman explores the scientific findings in more depth. It has been published on the EMG website and in SynBioSys Rooibos. It will be submitted for publication in a scientific journal in 2009.</p>
<p>Output 2: The impact of different management strategies and harvesting practices on endemic sub-species of <i>Aspalathus linearis</i> is described and published in a popular publication, and key hypotheses relating to sustainable management</p>	<p>Achieved: The popular publication "The Sustainable Harvest of Wild Rooibos" has been printed in English and Afrikaans, and has been widely distributed and well received. It describes the observed impact of different management strategies</p>

<p>and harvesting practices are tested with farmers</p>	<p>and harvesting practices on endemic sub-species of <i>Aspalathus linearis</i>. Key hypotheses relating to sustainable management and harvesting practices have been defined, and testing with farmers is on-going, leading to an ever-increasing body of knowledge being available.</p>
<p><i>2.1. Farmers, scientists and extension staff conduct experiments to assess impacts on the local ecosystems of alternative management strategies</i></p>	<p>Farmers, scientists and project staff have experimented with different management approaches, including exclusion of livestock after lightning-induced fires and in-situ burning of wild rooibos seed. Current work includes propagation experimentation with seed, and will be extended to vegetative propagation, funding allowing, in order to re-establish areas of wild rooibos where poor management has led to its decline. Farmers at Blomfontein, Melkkraal, Dobbelaarskop and Landskloof have participated in this work. On-going experimentation and monitoring have proved to be positive mechanisms for enhancing farmer learning,</p>
<p><i>2.2. Farmers and scientists undertake in-situ tests of different harvesting strategies</i></p>	<p>Monitoring of harvesting sites was undertaken with farmers and scientists in the Suid Bokkeveld to assess re-growth and seed production. Harvests taken from each area have been recorded over the past 4 years, and present a valuable record of production trends. Mentor farmers have consistently monitored the harvesting techniques on all farms in the Suid Bokkeveld.</p>
<p><i>2.3. Research results are published in peer reviewed journal</i></p>	<p>The research results encapsulated in the scientific paper "Distribution, quantitative morphological variation and preliminary molecular analysis of different growth forms of wild rooibos (<i>Aspalathus linearis</i>) in the northern Cederberg" will be submitted for publication in a peer reviewed journal in 2009.</p>
<p>Output 3: The majority of farmers and farmer organisations in the project area apply sustainable land management and harvesting practices and thus maintain the ecosystems within which wild populations of <i>Aspalathus linearis</i> occur.</p>	<p>Achieved: The Heiveld Co-operative and the Wupperthal Rooibos Tea Association both require their members to apply sustainable land management and harvesting practices. Previous practices of land clearing for cultivated rooibos plantations have been curtailed. Sustainable harvesting practices are followed (or will be followed when harvesting commences in the future) by the landowners of the properties Klipopmekaar (Pakhuis area), Vogelvlei and Kromrivierkloof (Rooi Cederberg).</p>
<p><i>3.1. An illustrated popular manual of at least 20 pages describing sound harvesting practice, and based upon research results, is published</i></p>	<p>The manual "The Sustainable Harvest of Wild Rooibos" has been published in English and Afrikaans, both in hard copy and soft copy.</p>
<p><i>3.2. Farmers and harvesters express understanding of research results</i></p>	<p>Improved practice is implemented by farmers reflecting an understanding of the research results. Positive feedback in terms of the content of the manual reinforces this perception.</p>
<p><i>3.3. Farmers and harvesters apply harvesting practices that are consistent with "best practice" as described in the harvesting manual</i></p>	<p>Sound harvesting practices are observed by all producers of Heiveld Wild rooibos (and are monitored by two Mentor Farmers of the Heiveld Co-operative). At Wupperthal the Conservancy and the land owner (the Moravian Church) have undertaken to monitor the harvest to ensure sustainable practices are followed. Farmers in the Matjiesrivier Nature Reserve are introducing sustainable harvesting practices on the populations of wild rooibos under their stewardship</p>

<p>3.4. Producer organisations promote and adhere to sustainable harvesting standards that are consistent with sound practice as described in the harvesting manual</p>	<p>See 3.3 above: achieved</p>
<p>3.5. Prices realized for sustainably harvested wild rooibos are at least 10% higher than the market prices for cultivated rooibos</p>	<p>Consistently higher prices are achieved for wild rooibos by the Heiveld Co-op, between 15% and 50% higher than the equivalent prices for cultivated rooibos. Heiveld producers receive a 20% more for their product than for cultivated rooibos. Wupperthal and the has yet to harvest and market its sustainably produced wild rooibos</p>

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

Processes planned within the project in some cases took longer than planned, leading to overall lag behind the intended timelines. In some cases local dynamics beyond the control of the project prevented progress with project outcomes. Nevertheless, the project did succeed in delivering its primary outputs.

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

The publication of the scientific results of the project in a peer reviewed journal has yet to be achieved. The paper scientific paper entitled “Distribution, quantitative morphological variation and preliminary molecular analysis of different growth forms of wild rooibos (*Aspalathus linearis*) in the northern Cederberg” has been authored by Rhoda Malgas, Alastair Potts, Noel Oettle, Bettina Koelle, Simon Todd, Tony Verboom and Timm Hoffman. It will be submitted for publication in 2009 so as to make the findings of the project available to a wider scientific audience.

V. SAFEGUARD POLICY ASSESSMENTS

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

N/A

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.

The project provided scientific data that proved vitally important in the development of Geographical Indicators for the rooibos industry, as well as specific guidelines for the Rooibos Biodiversity Initiative

The contribution of experienced scientists who have insight into dynamics within the local farming community in the conceptualization and actualization of the project was invaluable. It was essential for the scientists to develop relationships of mutual trust with the harvesters and land owners.

Knowledge exchange has been a very powerful method of sharing and deepening insights into appropriate management of the resources, whilst also enhancing the enthusiasm of farmers to be active stewards who take pride in their natural heritage.

Combining informal and experiential learning with more formal training has been very effective, and resources from other sources (the European Commission and the GEF Small Grants Project) have created invaluable synergies for engaging more land users.

The compilation of the manual so as to reflect farmer knowledge added greatly to its accessibility, and its popularity within the producer communities. Its colorful format and use of the local language has made it easily accessible to a wide local audience, whereas the English language version in PDF format has been widely popular and has been mailed out around the world.

A project such as this one is ideally situated within on-going processes affecting and involving the lives and livelihoods of the farmers, who are the primary custodians of the biodiversity that the project seeks to conserve. This “process orientation” means that projects should seek to draw on and identify with existing work, and should not be seen by farmers to simply cease when the funding cycle of the particular project comes to an end.

Regular sharing of project progress and outcomes in a variety of forums (for example, the Arid Zone Ecology Forum, Fynbos Forum and Greater Cederberg Biodiversity Corridor Steering Committee meetings) provided useful profile for the project, and was apparently also inspirational for others working on similar topics or with similar challenges.

The project was able to create synergies that led to additional work, including the further research undertaken by Malgas and Hawkins and the development of SynBioSys Rooibos as an information system that provides a high degree of access to the scientific findings of the research within a platform that also enables the user to compare and collate it with a vast amount of additional data (such as VegMap, a comprehensive spatial compilation of all vegetation types in South Africa).

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

The project was designed in collaboration with a wide range of stakeholders, which not only provided a robust and practical approach, but also created the necessary groundwork and buy-in for practical collaboration. Scientists were engaged, and farmers saw the project as something that would contribute positively to their well-being. Collaboration with NGOs such as the Botanical Society and Indigo development & change was enhanced by consulting them at the project development stage. Government conservation agencies such as Cape Nature which contributed to the thinking towards the project design understood and supported the project and its approach. When later contributions were made by the project to the Rooibos GI and Biodiversity Initiatives, these were well received.

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

Empathic engagement with the custodians and harvesters of wild rooibos by project staff built up a strong bond that was crucial to the success of the project. Farmers of all shades of relative wealth or poverty understood their contribution to be that of knowledge holders and co-learners, and wholeheartedly took part on the project.

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	Date Received	Notes
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Netherlands Government	C	\$5,576	December 2008	Synbiosis rooibos is an information system for biodiversity information related to rooibos
European Commission	B	\$116,177	November 2007	Funding includes provision for farmer training in sustainable production and the deployment of mentor farmers trained in sustainable harvesting techniques
GEF Grants Programme	B	\$43,680	February 2007	Project focused on soil erosion control and biodiversity conservation in and around cultivated rooibos tea lands in Wupperthal, and included a training component

***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.

The work undertaken by this project will continue in future in a number of ways. The manual will remain the basic guide for producers and producer organizations that promote sustainable harvesting. The data generated by the project will be disseminated by the SynBioSys information system, which will probably be housed by SANBI in the longer term. Additional research will also be supported by funding from the government of the Netherlands in 2009 and 2010. A grant of \$42,300 has been allocated by the government of the Netherlands for this work in 2009. Some associated aspects of the work are supported by the European Commission (the Mentor Farmer Programs of Heiveld and Wupperthal) and the GEF Small Grants Program (propagation trials for wild rooibos).

VIII. ADDITIONAL COMMENTS AND RECOMMENDATIONS

The online reporting proved to be a great challenge, given the poor internet connection from the project office and some inconsistencies in the software.

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.

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