CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

I. BASIC DATA

Organization Legal Name: University of Florida

Project Title (as stated in the grant agreement): Biodiversity of a Landscape: Examining Forest Heterogeneity and Ecological Change in the East Usambaras Since 1975

Implementation Partners for This Project:

Project Dates (as stated in the grant agreement): December 1 2005 – November 30 2006

Date of Report (month/year): May 3, 2007

II. OPENING REMARKS

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

My CEPF grant was for data collection. I received additional data collection funding, and just returned from the field April 29th, 2007. Therefore, analysis has not yet been completed for this project.

III. NARRATIVE QUESTIONS

1. What was the initial objective of this project?
To investigate the relationship between biophysical characteristics and satellite data through integration of satellite imagery and detailed ground based biological surveys (Tree species richness, diameter, percent canopy coverage, canopy height, number of cut stumps, elevation, and slope). These relationships will be used to model species richness across the landscape, focusing on the corridors between reserves. Determine the spatial relationship between cultural features (roads, villages, agricultural projects) and patterns of forest composition change in the East Usambara landscape.

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

The objectives of my project have not changed.

3. How was your project successful in achieving the expected objectives?
Although the data collection part of my project has been completed, the data analysis has just begun.
For most of 2006 I was based in the village of Amani in the East Usambaras. I have completed 46 sites each of a half hectare in size. I spent part of November and December simply entering in and cleaning the data. I am now finishing analysis of the relationship between the floristic and satellite data, and this summer will be analyzing change in forest habitat from 1975 to present.

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.

The data collection was successful in the East Usambaras, although I had hoped to collect some data in the neighboring Nguru mountains in order to test the transferability of my results, time did not allow. I hope to in the future use Frontier data from the Nguru and Kanga mountains inorder to analyze forest condition and change.

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.

Because of the complexity of the structure of the rainforests of the Eastern Arc, many areas of forest that are highly disturbed actually look, to the trained and untrained observer, look like intact humid forest in the satellite images.

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

Now that data collection has been completed and data entered, the relationship between ecological data and satellite data will be explored. Regression models will be finalized in order to create maps of forest characteristics – for example – map of probability of high biodiversity, map of "degradation continuum". The degradation continuum is a latent variable describing a combination of forest canopy attributes that I am working on teasing out using ordination methods. The forest structure maps will be compared between years and forest change maps will be produced. The satellite images that I have for the East Usambaras include 1975, 1987, 1994, 2000, 2003, 2007 (from various satellite platforms). These images must still be geometrically and atmospherically corrected.

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

This project is not yet completed, but as I have received a write up fellowship for the 2007-2008 academic year, analysis and subsequent publications will be completed.

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
Fulbright	Data collection	$25,000	2006-2007
University of Florida Dissertation Fellowship	Write up grant	$5,000	Summer 2007
American Association of University Women	Write up grant	$20,000	2007-2008

***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

As stated in my Letter of Inquiry, data and map products will be provided once the analysis is completed.

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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