

# CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

<b>Organization Legal Name:</b>	Foundation for Ecological Research, Advocacy and Learning
<b>Project Title:</b>	Building capacities for conservation planning using open source tools and data
<b>Date of Report:</b>	31 <sup>st</sup> July 2012
<b>Report Author and Contact Information</b>	Ravinder Singh Bhalla No.27, Appavou Nagar, Vazhakulam, Pondicherry 12. India.  Email: <a href="mailto:bhalla@feralindia.org">bhalla@feralindia.org</a>

**CEPF Region: Entire Western Ghats**

**Strategic Direction:**

2 supporting systematic

conservation planning and action

2.4 Support interdisciplinary efforts to analyse and disseminate biodiversity data.

**Grant Amount: \$18,888.75**

**Project Dates: 1<sup>st</sup> October 2011 to 31<sup>st</sup> July 2012.**

**Implementation Partners for this Project (please explain the level of involvement for each partner):**

**Foundation for Ecological Research, Advocacy and Learning (FERAL)** - main partner responsible for design and conducting the workshops, project administration and delivery of intended outputs.

**French Institute of Pondicherry (IFP) and Strand Life Sciences** - introducing the Western Ghats Portal during the workshops through presentations and hands on exercises and providing a facility to build a network of host institutions and researchers.

## Conservation Impacts

***Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.***

The project has trained over a hundred researchers active in the field of conservation and ecology in the Western Ghats in the use of spatially explicit tools. The workshops themselves were hosted by five different institutions thereby helping in networking them and creating a group of resource persons.

The training has filled an important gap in the capacities of these researchers to use spatially explicit data from a variety of sources in conservation related research.

The project has helped bring together an initial set of syllabi for teaching spatial analysis to ecologists based on discussions with experts in the field. This may have long term impacts on the quality of research outputs from institutions involved in these fields.

***Please summarize the overall results/impact of your project against the expected results detailed in the approved proposal.***

The project has exceeded the targets set in terms of numbers of students and institutions covered as well as the range of topics that were taught and discussed.

1. Over a 100 persons from conservation groups in 4 states trained in the use of open source software for GIS, GPS, remote sensing and introduced to spatial statistics and landscape ecology applications.
2. Online resources for the training in terms of tutorials, quizzes, reading materials and exercises provided via an internet based course management software.
3. Free and open source software for spatial applications installed and configured for each of the participants on their computers.
4. Roster of GIS-enabled resource persons to act locally with contact information on WGBPortal being created under the "Themes" interface.

***Please provide the following information where relevant:***

**Hectares Protected:** [Not applicable](#)

**Species Conserved:** [Not applicable](#)

**Corridors Created:**

[Not](#) applicable.

***Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives.***

The project owes its success to the support provided by the host institutions in facilitating the workshops and covering substantial costs of organising the events.

The project was unable to run workshops in the Northern Western Ghats (Pune) in spite of repeated attempts. This was largely as the P.I. had no contacts with these organisations and was unable to capitalise on the contacts provided by the ATREE/CEPF office.

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

The extent of support provided by host institutions was an unexpected and extremely positive and lead to the extension of the project enabling us to conduct two additional workshops.

## **Lessons Learned**

***Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.***

1. The wide gap between the need and actual knowledge of spatial tools in the research community engaged in conservation and ecological research was a revelation. This is clearly a handicap for researchers and will place limits on their ability to study spatially explicit relationships which often define ecological processes. Serious effort needs to be put into upgrading syllabi and courses so that students are better equipped to handle spatial analysis.
2. Given the specialised nature of advanced spatial analysis, there is a need to identify a pool of resource persons along with materials including tutorials, course work and readings.
3. The need for platforms to facilitate the exchange of ideas and information on specific topics in ecology could not be greater. The availability of features such as those provided by the Western Ghats Portal can be used to a great extent to meet this need.

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

1. The need for this intervention was identified by various conservation groups during the ATREE/CEPF monitoring workshop at Tirunelveli in May 2011. It therefore was meeting an existing demand which ensured its success.
2. Our inability to find a host institute in the Northern Western Ghats was a shortcoming which could have been overcome by more aggressive networking in the region.

**Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)**

The hands on nature of the courses run contributed to its success. No two workshops were identical as topics covered and speed of instruction was governed by the participants. This flexibility helped.

**Other lessons learned relevant to conservation community:**

The conservation community in India should be concerned about an widening gap in the tools and datasets used in contemporary research in ecology and those that they are familiar with through formal and informal means.

**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.**

<b>Donor</b>	<b>Type of Funding*</b>	<b>Amount</b>	<b>Notes</b>
IFP, ATREE, FERAL	C	Not known	These agencies have contributed data from years, of work and research to the project and to the WG portal which was used for this project.
CED, Dept. of Ecology and Env. Sciences Pondicherry University, CES - IISc, ANCF, SACON	B	Not known	Dealt with the logistic requirements of the courses and provided facilities and material which would have otherwise increased the costs of the workshops considerably.
IFP, Strand Life Sciences, ATREE, OS-GEO	B, C	Not known	Contributed as resource persons during workshops conducting and sharing presentations, materials and tutorials with the participants.
DST - Pondicherry	A	INR 50,000/-	Co-funding for workshops

**\*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** *Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)*
- C** *Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

### **Sustainability/Replicability**

***Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.***

Works initiated in the Western Ghats Portal is expected to build upon this project by providing a roster of experts in the field as well as a mechanism for interested users to interact with them.

An online evaluation form filled by participants can be accessed from the link below:

<[https://docs.google.com/spreadsheets/ccc?](https://docs.google.com/spreadsheets/ccc?key=0AhykXtTROSU2dEg2NU12aHdNVGh2eGFHdndhWVJ3cGc&usp=sharing)

[key=0AhykXtTROSU2dEg2NU12aHdNVGh2eGFHdndhWVJ3cGc&usp=sharing](https://docs.google.com/spreadsheets/ccc?key=0AhykXtTROSU2dEg2NU12aHdNVGh2eGFHdndhWVJ3cGc&usp=sharing)>. A snapshot of this report summary is presented in the appendix. As is evident, the project outputs have been used by the majority of the participants who opted for the survey.

***Summarize any unplanned sustainability or replicability achieved.***

The consensus on the need for a set of syllabi for ecologists was an unplanned outcome of this project. We will now try and extend this consensus and work towards a pool of resource persons, materials, training modules and references so that this can become a reality.

### **Safeguard Policy Assessment**

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

Not applicable to the project.

**Performance Tracking Report Addendum**

**CEPF Global Targets**

**(Enter Grant Term)**

Provide a numerical amount and brief description of the results achieved by your grant.  
Please respond to only those questions that are relevant to your project.

<b>Project Results</b>	<b>Is this question relevant?</b>	<b>If yes, provide your numerical response for results achieved during the annual period.</b>	<b>Provide your numerical response for project from inception of CEPF support to date.</b>	<b>Describe the principal results achieved from July 1, 2007 to June 30, 2008. (Attach annexes if necessary)</b>
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	No			
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	No			
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.	Not known			The project built capacities of researchers in the use of tools for managing spatial data and analysing spatial relationships. This could be a crucial ingredient in their professions.
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	Not known			
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1 below.	No			

**If you answered yes to question 5, please complete the following table.**

**Table 1. Socioeconomic Benefits to Target Communities**

Please complete this table if your project provided concrete socioeconomic benefits to local communities. List the name of each community in column one. In the subsequent columns under Community Characteristics and Nature of Socioeconomic Benefit, place an X in all relevant boxes. In the bottom row, provide the totals of the Xs for each column.

Name of Community	Community Characteristics								Nature of Socioeconomic Benefit																					
																														Other
<b>Total</b>																														

If you marked "Other", please provide detail on the nature of the Community Characteristic and Socioeconomic Benefit:

### **Additional Comments/Recommendations**

The project continues to build upon earlier work supported by the ATREE/CEPF Small Grants for the Western Ghats. It is important that a larger pool of resource persons is identified and similar programmes introduced on a wider and, if possible, in a more structured manner across research and teaching institutes across India. Agencies active in North India, in particular, need to be made part of this effort.

### **Information Sharing and CEPF Policy**

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, [www.cepf.net](http://www.cepf.net), and publicized in our newsletter and other communications.

#### **Please include your full contact details below:**

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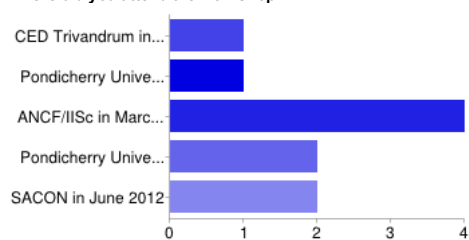
# Appendices



# 10 [responses](#)

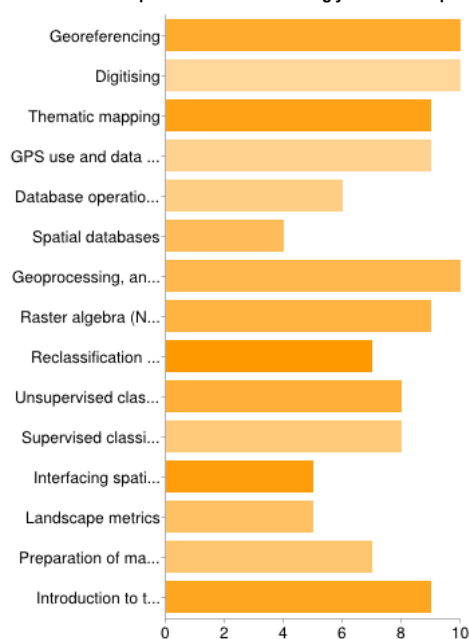
## Summary [See complete responses](#)

### Where did you attend the workshop?



Location	Count	Percentage
CED Trivandrum in December 2011	1	10%
Pondicherry University in January 2012	1	10%
ANCF/IISc in March 2012	4	40%
Pondicherry University in March 2012	2	20%
SACON in June 2012	2	20%

### Which of these topics were covered during your workshop. Please note that this is a general listing and some of these topics are broad.



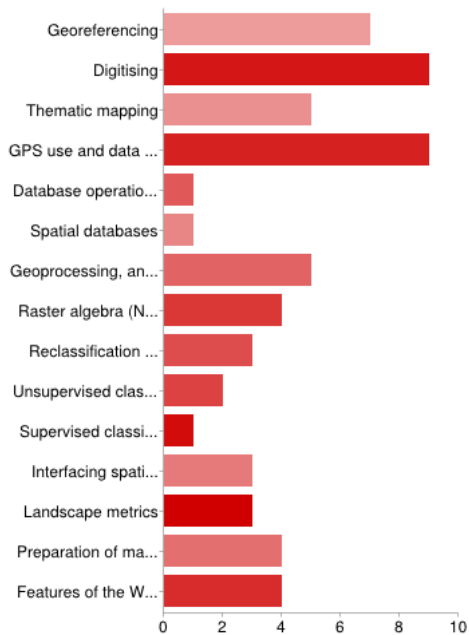
Topic	Count	Percentage
Georeferencing	10	100%
Digitising	10	100%
Thematic mapping	9	90%
GPS use and data transfer between computers and GPS units	9	90%
Database operations (not including spatial databases)	6	60%
Spatial databases	4	40%
Geoprocessing, analysis and research tools	10	100%
Raster algebra (NDVI derivation, conditional statements)	9	90%
Reclassification of raster images	7	70%
Unsupervised classification	8	80%
Supervised classification	8	80%
Interfacing spatial data with R	5	50%
Landscape metrics	5	50%
Preparation of maps on a map composer	7	70%
Introduction to the Western Ghats portal and its features	9	90%

People may select more than one checkbox, so percentages may add up to more than 100%.

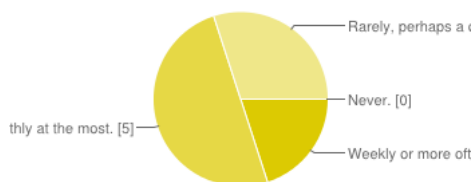
### Which of these operations have you actually used after the course?

Operation	Count	Percentage
Georeferencing	7	70%
Digitising	9	90%
Thematic mapping	5	50%
GPS use and data transfer between computers and GPS units	9	90%
Database operations (not including spatial databases)	1	10%
Spatial databases	1	10%
Geoprocessing, analysis and research tools	5	50%
Raster algebra (NDVI derivation, conditional statements)	4	40%
Reclassification of raster images	3	30%
Unsupervised classification	2	20%
Supervised classification	1	10%
Interfacing spatial data with R	3	30%
Landscape metrics	3	30%
Preparation of maps on a map composer	4	40%
Features of the Western Ghats portal	4	40%

People may select more than one checkbox, so percentages may add up to more than 100%.



**How often do you use the software or techniques that were covered during the course**

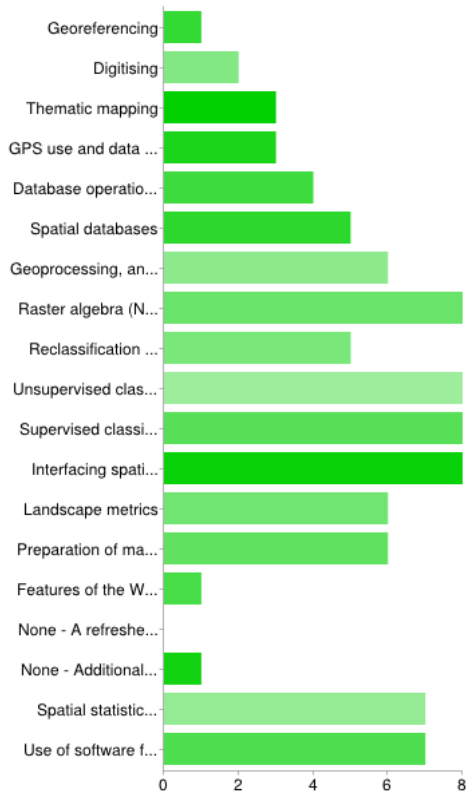


Weekly or more often.	2	20%
Monthly at the most.	5	50%
Rarely, perhaps a couple of times since the course.	3	30%
Never.	0	0%

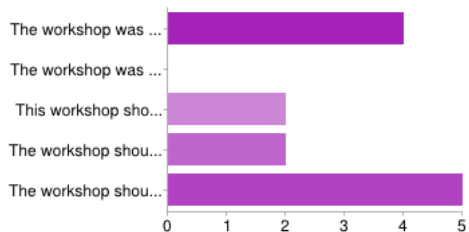
**Which of these topics would you like to cover if there were a refresher course?**

- Georeferencing
- Digitising
- Thematic mapping
- GPS use and data transfer between computers and GPS units
- Database operations (not including spatial databases)
- Spatial databases
- Geoprocessing, analysis and research tools
- Raster algebra (NDVI derivation, conditional statements)
- Reclassification of raster images
- Unsupervised classification
- Supervised classification
- Interfacing spatial data with R
- Landscape metrics
- Preparation of maps on a map composer
- Features of the Western Ghats portal
- None - A refresher course is not required
- None - Additional topics should be added for a refresher course
- Spatial statistics and analysis using R
- Use of software for specific conservation applications such as hydrology, fire, animal movement, landscape analysis e

People may select more than one checkbox, so percentages may add up to more than 100%.

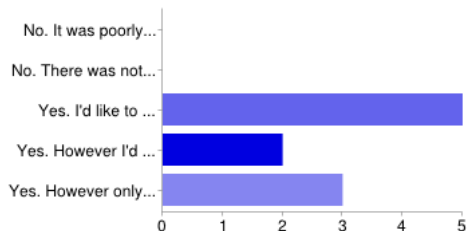


**What did you feel about the way the workshop was designed?**



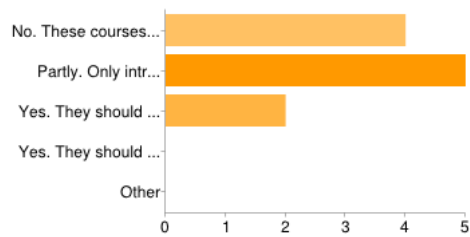
- The workshop was too short, it should be spread over a longer period.
  - The workshop was too long, it could have been run over a shorter period.
  - This workshop should be re-designed and included in curricula as a semester long course.
  - The workshop should be repeated as refresher courses with additional advanced modules being introduced with each.
  - The workshop should be broken into different modules dealing with introductory, intermediate and many advanced topics.
- People may select more than one checkbox, so percentages may add up to more than 100%.

**Would you like to attend a similar workshop.**



- No. It was poorly conducted and a waste of time. **0** 0%
- No. There was nothing I gained from it. I don't require similar training. **0** 0%
- Yes. I'd like to attend a refresher course. **5** 50%
- Yes. However I'd also like some newer topics. **2** 20%
- Yes. However only if it covers new topics and doesn't repeat earlier ones. **3** 30%

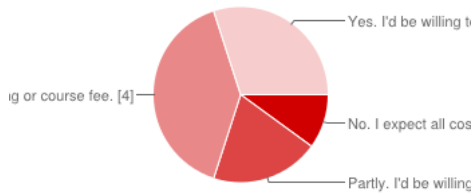
**Should entry into such workshops be restricted?**



No. These courses should be open to all.	4	40%
Partly. Only introductory courses should be open, others should require that participants know the basics.	5	50%
Yes. They should be limited to research institutions.	2	20%
Yes. They should be linked with existing courses in institutions.	0	0%
Other	0	0%

People may select more than one checkbox, so percentages may add up to more than 100%.

**Would you pay for such a course in the future.**



No. I expect all costs to be covered for me.	1	10%
Partly. I'd be willing to cover my own travel, boarding and lodging but not course fee.	2	20%
Partly. I'd be willing to cover my travel but not my boarding and lodging or course fee.	4	40%
Yes. I'd be willing to cover all costs of such a course.	3	30%

**Number of daily responses**

