# **CEPF FINAL PROJECT COMPLETION REPORT**

Organization Legal Name:	KEYSTONE FOUNDATION
Project Title:	Mainstreaming Conservation Action in District Public Policy
Date of Report:	31 <sup>st</sup> October 2013
Report Author and Contact Information	Snehlata Nath (sneh@keystone-foundation.org)

#### **CEPF Region: Western Ghats, India**

**Strategic Direction:** 1. 1. Enable action by diverse communities and partnerships to ensure conservation of key biodiversity areas and enhance connectivity in the corridors and 1.3 Support civil societies to establish partnerships with state agencies to implement science-based management and conservation of priority sites in the Mysore-Nilgiri corridor of the CEPF Investment Strategies.

**Grant Amount:** US\$ 41825.00

Project Dates: 2011/12/01 to 2013/6/30 including extension of two months.

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

INREM Foundation, Anand, Gujarat – Dr. Sunderrajan is a hydrologist who has been a consultant for the project and has guided the development of the simulation model.

#### **Conservation Impacts**

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

The project is directly linked to the Strategic Direction 1. 1. Enable action by diverse communities and partnerships to ensure conservation of key biodiversity areas and enhance connectivity in the corridors and 1.3 Support civil societies to establish partnerships with state agencies to implement science-based management and conservation of priority sites in the Mysore-Nilgiri corridor of the CEPF Investment Strategies.

The project addressed SD 1.1 by engaging with and informing village communities, town populace, elected representatives, private sector, government officials etc. towards water conservation and appropriate land use. It had also planned to address SD 1.3 by strengthening the District Environmental Governance Initiative (DEGI) that has been started by Keystone that includes all the line departments in the Nilgiris District and where the attempt is to facilitate the departments mainstreaming environmental concerns in their respective work. However, the leadership at the district administration was not amenable to the forum's continued meeting and we were unable to move

forward on this. However, the district administration and relevant line departments were met with and appraised of the project findings.

Through provision of appropriate information as well as an enabling methodology that can be replicated in other locations in the region, the project has contributed to the ecosystem profile.

#### Please summarize the overall results/impact of your project.

The overall impact of the project has been to generate awareness among the district administration, line departments and other institutions in the district regarding the need to manage water resources sustainably. It has created a space at the district administration level to work towards innovative mechanisms to address the water crisis, including mechanisms such as Payment for Ecosystem Services.

### Planned Long-term Impacts - 3+ years (as stated in the approved proposal):

a. Favourable change in policies in the Nilgiris district resulting from improved knowledge of impacts of land use changes provided by the model.
b. Improved water services for communities in the Nilgiris district, and
c. Demonstration of functional payments for ecosystem services between downstream water users and upstream stewards of natural ecosystems.

## Actual Progress Toward Long-term Impacts at Completion:

a. Created a platform for favourable change in policies in the Nilgiris district resulting from improved knowledge of impacts of land use changes provided by the model.
b. Brought together different role players in the district and created a consensus,

particularly in the district administration, towards provision of Improved water services for communities in the Nilgiris district, and

c. Laying the ground for demonstration of functional payments for ecosystem services between downstream

water users and upstream stewards of natural ecosystems. The new project supported by CEPF is building on the work done in this project and move towards solutions to address the issues highlighted by the model.

### Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal):

a. Understanding of hydrological services provided by natural ecosystems in the Nilgiris gained and widely accessible to government, communities, industry and civil society.

b. Model for integration of hydrological services of natural ecosystems into district government planning and policy developed, as a basis for wider replication.

c. Observable changes in government policies and funding flows in the Nilgiris district, with regard to safeguards and financial flows for the conservation of natural ecosystems.

#### Actual Progress Toward Short-term Impacts at Completion:

a. Understanding of hydrological services provided by natural ecosystems in the Nilgiris gained and widely

accessible to government, communities, industry and civil society.

b. Model for integration of hydrological services of natural ecosystems into district government planning and

policy developed, as a basis for wider replication.

c. District administration is open to implementing activities and programmes for the conservation of natural ecosystems as highlighted by the simulation model. The detailed operational planning for the same was beyond the scope of this project and would be done as part of the new project on PES.

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

Hectares Protected: NA Species Conserved: NA Corridors Created: NA

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

The major success of this project has been in developing a simulation model of the water resources in the Coonoor region integrating various sectors such as domestic, tourism, tea plantations, farming and forestry. This has helped in developing scenarios of likely policy measures and individually demonstrating the potential impact they would have on the quantity and quality of water in the Coonoor river. Bringing together cross-sectoral impacts and presenting an integrated picture is a challenge not only in technical terms but also in terms of communication. The project has succeeded in both balancing and enabling the various stakeholders to appreciate and discuss the issues involved. The project has also gained credibility by being transparent about the data collected, assumptions made and the methods used.

The Simulation model approach is a novel one in the Nilgiris and it managed to present a complex situation without confusing the stakeholders. The group was able to understand the implications and move towards examining the recommendations. The District Collector recognised the importance of the Waste Management issue and shared that the sewerage system is being improved in Ooty on a priority basis, and that the same would be done for Coonoor as well. This is one of the important recommendations of the project and it is a significant intervention from the district administration. We will be following this up to implementation in the post-project period as well.

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

We realized that the Needle Industries (a private firm) and the Cordite Factory of the Government are potentially major contributors to the Pollution. However, assessing their contribution to the pollution as well as following up was beyond the scope of the project particularly since the latter falls under the Defence set up and we were not optimistic of engaging them in an open dialogue. Establishing the pollution caused by industrial processes requires testing of water samples for a number of chemical parameters which also required knowledge of the processes, apart from being quite expensive.

The Environment Resource Center (ERC), a partner organisation located at Kotagiri has the mandate to identify such cases by filing Right to Information requests among other methods and follow a judicial route to tackling such situations. We have shared these concerns with them and they are looking at polluting industries in the Nilgiris and their compliance with environmental laws and rules.

# **Project Components**

**Project Components**: Please report on results by project component. Reporting should reference specific products/deliverables from the approved project design and other relevant information.

#### **Component 1 Planned:**

Downstream impacts on livelihoods and ecology of land-use patterns and environmental management in upstream ecosystems of the Coonoor River demonstrated.

#### **Component 1 Actual at Completion:**

By using the simulation model and through supporting data collection, we have demonstrated impacts on livelihoods and ecology of land-use patterns and environmental management in unstream ecosystems of the Coopeer River.

management in upstream ecosystems of the Coonoor River.

#### **Component 2 Planned:**

Proactive measures to protect water resources through conservation of natural ecosystems adopted by local municipalities and other relevant line departments in the Nilgiris district administration.

### **Component 2 Actual at Completion:**

District administration is open to implementing activities and programmes for the conservation of natural ecosystems as highlighted by the simulation model. The detailed operational planning for the same was beyond the scope of this project and would be done as part of the new project on PES, wherein the Coonoor Municipality is expected to be a key role player.

#### **Component 3 Planned:**

Raised public awareness about the hydrological service values of natural ecosystems among the general public in Nilgiris district.

### **Component 3 Actual at Completion:**

The project has raised public awareness about the hydrological service values of natural ecosystems among the general public in Nilgiris district, through the modelling of the hydrological effects of land use changes and meetings held with general public to disseminate the same.

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

Due to the delay in finalising the model, we could not mobilise the citizen's group as planned to come up with an agenda. We have instead built on earlier such work done

around water and wetlands and the citizen's declaration there to give our recommendations to the DEGI. We have instead engaged with citizens through talks and discussions on related topics\_through the NNHS.

# Please describe and submit (electronically if possible) any tools, products, or methodologies that resulted from this project or contributed to the results.

The project has resulted in generation of intellectual property in the form of a simulation model and its attendant documentation. These are available online under a Creative Commons Attribution License at http://nilgiriswaterportal.in.

Specific outputs are

- Model code and supporting files (http://nilgiriswaterportal.in/?wpdmact=process&did=Ni5ob3RsaW5r) This requires Freemat (http://freemat.sourceforge.net/), which is a free and open source software that runs on all the popular operating systems.
- 2. Poster on the simulation model and inferences (http://nilgiriswaterportal.in/?wpdmact=process&did=Ny5ob3RsaW5r)
- 3. Landuse map of the Coonoor region (http://nilgiriswaterportal.in/shapefiles-for-coonoor-landuse-layer-2)
- 4. Methodology document for developing the model (http://nilgiriswaterportal.in/?wpdmact=process&did=MTAuaG90bGluaw==)

## 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.

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

In terms of project design, one area that could be improved in future was the reliance to a great extent on a consultant for the main component of the project, which was the building of the simulation model. Since we did not have experts in hydrology and modeling within our staff, the pace of the project depended on the availability of the consultant and this resulted in delays towards the end of the project. Learning from this, we have incorporated a staff capacity building component in the new project so that we have the necessary capacities within the team.

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

In the advocacy part, we had presented the simulation model, the scenarios and its implications in the workshop with the District Administration, line departments and other institutions. We had hoped to generate the action plan in a participatory manner so that there is greater buy-in from them. However, the government officials were reluctant to brainstorm and though they agreed to our recommendations and are already doing some of these actions, it still remains that we need to provide them with a plan to implement. We are therefore dovetailing this with the newly initiated PES project also supported by CEPF wherein we have one of the sites as the Coonoor town and surrounding areas.

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

Simulation modeling can be a useful and cost-effective tool for policy advocacy. Rather than undertaking long term research to build a case for advocacy, in cases such as water resources, developing a model for a large area (basin, district etc.), developing a simulation model could enable us to convince policy makers and practitioners of the outcomes of multi-dimensional processes. By building on the work already done in an area, modeling allows us to focus on the questions of our interest and lends credibility to the model as the sources of data are established sources such as journals, official records etc.

By being open about the workings of the model, the assumptions and sources of data, we not only invite constructive criticism and review, but also support from other experts. Finally, being funded by public sources, all the data and documentation should be shared in the public domain for maximum impact.

### Additional Funding

Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of the CEPF investment in this project.

Donor	Type of Funding*	Amount	Notes
Ecosystem Alliance	С	18,080	
Capita Trustees	С	5,988	
Own funds of the Nilgiri Natural History Society	A	4,868	
		28,935	5,900 - Additionally in-kind support from Keystone Foundation in the form of salaries of administration and accounts staff and office rent.

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

- A Project co-financing (Other donors or your organization contribute to the direct costs of this 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 funded 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.

The main thrust of the project has been to create awareness among stakeholders regarding the impact of various sectors on the water resources of the region. As such

maintaining the concern and level of awareness would require that the key messages be repeatedly shared with the stakeholders through a variety of media. The NNHS outreach programmes continue to discuss water related issues in Ooty and Coonoor to keep the momentum going. The poster produced from this project has been added to "Where the Kurinji Blooms", the conservation education module developed in the earlier CEPF-supported project.

To enable replicability the model methodology has been documented and shared online via the website http://nilgiriswaterportal.in under a Creative Commons Attribution License, so that anyone interested can download, modify and run the model as per their specific needs. We are committed to share any future work on this model, particularly under the new CEPF-supported Payment for Ecosystem Services Project, through this website for continued updates to interested people/institutions.

# *Summarize any unplanned sustainability or replicability achieved. None*

# Safeguard Policy Assessment

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

During the design stage of the project, discussions were held with members of the Kurumba community and in the meeting of the Tribal Advisory Council (TAC) issues related to encroachment along the Barliar stretch of the Coonoor River discussed. The Environmental Governance programme in Keystone has been striving to work towards developing a forum for the indigenous communities to interface with the district administration. The project does not have a field implementation component directly impacting the natural resources.

Our interactions with indigenous people as part of the project was mainly at the data collection stage. We obtained free, prior and informed consent from the people before collecting the data. Members from the indigenous communities were involved in data collection and other interactions to ensure that their sensibilities are respected and cultural nuances appreciated fully. We have also not made the raw data public through our website in order to protect their privacy.

### Additional Comments/Recommendations

The concept of using simulation modeling in creating a consensus among stakeholders is a novel one in the Nilgiri Biosphere Reserve region. Rather than viewing this as an output of a project, we see it as an important first step in the longer term process of working towards the conservation of natural resources in the Nilgiris. In the ongoing Payment for Ecosystem Services project, we are planning to refine this model further targeting the Coonoor town and its water resource requirement so that a case for PES may be made and impacts of PES implementation simulated.

# 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, and publicized in our newsletter and other communications.

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

Name: Snehlata Nath Organization name: Keystone Foundation Mailing address: Post Box 35, Groves Hill Road, Kotagiri, The Nilgiris, Tamil Nadu, India 643217 Tel: +91 4266 272277, 272977 Fax: +91 4266 272277 E-mail: sneh@keystone-foundation.org

# \*\*\*If your grant has an end date other than JUNE 30, please complete the tables on the following pages\*\*\*

Performance Tracking Report Addendum										
	С	EPF Global	Targets							
	1 <sup>st</sup> Dec	cember 2011 -	- 30 <sup>th</sup> May 20	13						
				sults achieved by your grant. levant to your project.						
Project Results	ls this question relevant?	If yes, provide your numerical response for results achieved during the annual period.	Provide your numerical response for project from inception of CEPF support to date.	Describe the principal results achieved from July 1, 2012 to May 30, 2013. (Attach annexes if necessary)						
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	No			Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one.						
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	No			Please also include name of the protected area. If more than one, please include the number of hectares strengthened for each one.						
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.	No	-	-	The results are in the form of improved knowledge outputs that strengthen biodiversity conservation. There is no numerical response for the area.						
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	Yes	-	-	The project has an advocacy focus and while it has managed to convince the District administration on the need act towards managing water resources holistically it has not yet resulted in results on the ground that can be quantified. The results are in the form of improved knowledge outputs that strengthen biodiversity conservation. There is no numerical response for the area.						
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1below.	No	-	-	The project has advocated for the sustainable use of natural resources, but has not resulted in any tangible socio-economic benefits for the local communities.						

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

Please complete this table if your under Community Charac	project p teristics	orovi and	ded o Natu	oncr re of	ete s Soci	socio oeco	econom nomic E	nic be Bene	enefits to loo fit, place an	cal co X in a	mmuni all relev	ities. L vant bo	ist the name kes. In the b	of eac	h commu row, provi	nity in co de the to	lumn o tals of t	ne. In the he Xs for	e subseq each co	uent colu lumn.	mns		
Name of Community	c	Community Characteristics								Nature of Socioeconomic Benefit													
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	Small landowners	Subsistence economy	Indigenous/ ethnic peoples	Pastoralists/nomadic peoples	Recent migrants	Urban communities			Adoption of sustainable natural resources management practices	Ecotourism revenues	Park management activities	Payment for environmental services	Increased food security due to the adoption of sustainable fishing, hunting, or agricultural practices	More secure access to water resources	Improved tenure in land or other natural resource due to titling, reduction of colonization, etc.	Reduced risk of natural disasters (fires, landslides, flooding, etc)	More secure sources of energy	Increased access to public services, such as education, health, or credit	Improved use of traditional knowledge for environmental management	More participatory decision- making due to strengthened civil society and governance	Other		
NA																							
			-																				
Total						<u> </u>																	