

CEPF FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	Foundation for Ecological Research, Advocacy and Learning (FERAL)
Project Title:	Exploring Sustainable Landuse Practices in Rubber Plantations in a Critical Wildlife Corridor
Date of Report:	30 th September 2015
Report Author and Contact Information	Sunita Ram and Srinivas Vaidyanathan sunitaram@feralindia.org srinivasv@feralindia.org

CEPF Region:

Western Ghats & Sri Lanka

Strategic Direction:

Strategic Direction 1: “Enable action by diverse communities and partnerships to ensure conservation of key biodiversity areas and enhance connectivity in the corridors.”

Grant Amount: US \$ 39833.00

Project Dates:

Start Date: 2012/1/1 **End Date:** 2015/6/30

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

The Rainforest Alliance whose global expertise in setting ecologically sustainable standards and successfully implementing several market based projects was required. The persons from Rainforest Alliance who were involved were Ms. Joke Aerts and Mr. Harkirat Singh Sidhu. They were involved in training FERAL project staff in certification, undertaking diagnostics of rubber plantations and their inputs during field visits helped in developing ecological indicators for certification of rubber plantations under the SAN standards.

Conservation Impacts

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

We identified critical wildlife corridors within the Agastyamalai-Periyar landscape as part of another project supported by CEPF (Bridging the Shencottah Gap: How payments for ecosystem services can restore biodiversity outside protected areas in India), some areas of the corridor fell within the boundaries of large plantations of rubber. To involve these plantations in conservation initiatives in the Shencottah Gap, the current project explored eco-certification as a possible approach. The project has created awareness, sensitized the plantation management, and provided proper guidance about SAN standards and certification to the plantation management in addition to providing inputs on ecologically sustainable landuse practices that can be adopted.

Long term impacts of implementing more ecologically sustainable landuse practices either through a certification scheme or otherwise is likely to have a positive impact on biodiversity conservation, and wildlife movement in this landscape.

Please summarize the overall results/impact of your project.

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

1. Large rubber plantations in the Shencottah Gap, if not on the whole but parts of their properties in ecologically sensitive areas become more ecologically friendly
2. Tolerance of movement and migration by important landscape species like elephants and tigers through plantations that occupy large areas in critical corridor landscapes
3. Restoration of ecosystem services in the landscape

Actual Progress Toward Long-term Impacts at Completion:

1. Large rubber plantations in the Shencottah Gap were sensitized to the importance of biodiversity and conservation. Some have taken the initiative to make parts of their property more ecologically friendly. For example, by exploring

organic agriculture for some additional crops, and planting of species other than their primary crop. Also, they have expressed an interest in implementing some of the suggestions for sustainable practices suggested in our booklet on sustainable practices in rubber plantations. (http://feralindia.org/ecoag/wp-content/uploads/2015/07/final_Ecol_sustain_practices_rubber.pdf).

2. It is too early to comment on tolerance of movement of landscape species through production areas.
3. It is too early to comment on restoration of ecosystem services in the landscape. However, measures to improve movements as well as restore ecosystem services (including soil management, intercropping, increase of biodiversity within plantation, better water management) are being implemented.

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

1. If the project succeeds, it will pave way to a higher awareness among the plantation management and staff of the benefits of certification to their products as well as staff health and performance.
2. Better management of soil and water resources and better environmental performance within rubber plantations will leads to improved productivity
3. An understanding of the importance of corridor connectivity, which can lead to modification in plantation management, can lead to allocation of plantation land in the wildlife corridor and its ecological restoration, thus increasing the biodiversity of rubber plantations.

Consequently these should lead to a win-win situation.

Actual Progress Toward Short-term Impacts at Completion:

1. The managements and some staff of large plantations in this landscape have been made aware of the benefits of certification and the importance of adopting sustainable approaches in their plantations. This has been achieved through direct interactions, as well as by sharing with them various materials that have been developed by the project. These materials have been made available to rubber plantations and the public through the website that has been created as part of this project. The website will be updated at regular intervals with more current information.
2. Some positive initiative towards soil and water management is being put in place by the plantations. This includes, increasing organic content of soil, allowing soft weeds to grow while removing hard weeds, terracing, pits, crop cover are other practices that are being followed. Some of these were already being followed by the plantations, and they continue to do these.

3. The management of these plantations have been made aware of certain areas within their boundary that are key for wildlife movement between forest patches. In one such area, tree species other than *Hevea* have been planted. In another area, the plantation plans to ensure minimal disturbance to a forest patch, to ensure the endangered Lion tailed macaque continues to use this patch as part of their plans for eco-tourism.

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.

1. The Rubber Board of India does not support conservation outside designated and existing protected areas¹. The Board has developed guidelines for various aspects of rubber growing and these are followed by all rubber growers, irrespective of size of their plantation. Although their guidelines include some aspects of soil and water conservation, it does not include protecting or improving biological diversity within the plantations, nor is there any guideline on conservation of ecosystems and restoration of services. As per their guidelines², definition of multi-species is five varieties (strains) of rubber, thus in effect, plantations remain monocultures. Also, the guidelines are geared to maximize production, emphasizing on intensive cultivation, with no details on the possible impact on the environment or suggested mitigation measures that farmers can take up to manage their natural resources sustainably without irreversibly impacting them. This is the case with the Sustainable Natural Rubber Initiative also. Findings from this project are being shared with them so that, in the future, it can assist in formulation of guidelines for these aspects as well.
2. To gain the trust of the companies was difficult, with the current socio-political, legal and management issues in the landscape, there was an initial reluctance and resistance to even hearing about eco-certification. The project was mistakenly perceived as playing an activist role in conservation. We managed to make in-roads with the help of our partners in convincing the companies that our intentions were to work with them rather than against them.

¹ Thomas, Sheela, and James Jacob. 2013. "The Gadgil-Kasturirangan Reports on Western Ghats and Concerns of the Plantation Sector." *Rubber Science* 26 (2): 167–74.

² Rubber Board of India. 2013. "Rubber Grower's Guide 2013". Kottayam: Rubber Board of India.

3. The plantations have been taking other initiatives to plant non-crop tree species within their estates. They are also considering promoting their estates for eco-tourism and wildlife tourism as many endangered fauna are present within the limits of their estates. They are keen on using the biodiversity posters that were prepared by this and other CEPF funded projects in the landscape as part of their educational material for visitors.
4. The plantations are keen on taking up some of the suggested sustainable practices including better waste management strategy on their plantations. This will help towards achieving a more wildlife friendly region.

Were there any unexpected impacts (positive or negative)?

Other certification systems that the industry has been considering also require some environmental standards to be met. An example of this is the ISO certification. In addition to our project, these have also positively contributed in putting certain ecologically friendly measures in place.

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 (as stated in the approved proposal):

Local indicators developed for certifying rubber products in India, that complies with the criteria of the Sustainable Agriculture Network (SAN) Standard / SmartWood Program, and respects local tradition and law.

Component 1 Actual at Completion:

To help develop local indicators for certifying rubber/rubber products in India we first undertook to understand the current ecological and social status of rubber estates in the Shencottah gap. We then explored and compiled information on existing guidelines for rubber under various relevant certification systems including the Forest Stewardship Council (FSC) under which a few plantations are already certified, and included the SNR-i a new certification initiative specific to rubber at a later date.

(http://feralindia.org/ecoag/wp-content/uploads/2015/10/existing_guidelines.pdf).

Training materials on the ten principles and the critical criteria of the SAN standard were prepared focusing on rubber and the Shencottah gap, (<http://www.feralindia.org/ecoag/training>). The SAN was chosen over FSC as we felt it covered the environmental aspects more exhaustively than the FSC and the Rubber plantations in the Western Ghats are primarily monocultures and less of a typical agro-forestry set up. Also, FSC deals primarily with wood and wood based products - rubber

wood was the raw material that most of the FSC certified organizations dealt with rather than latex. A rubber tree is harvested for wood only when it becomes less economical for latex, (about 25-30 years). Awareness materials in the form of brochures on eco-certification and its advantages were prepared for producers and manufacturer.

A website (<http://www.feralindia.org/ecoag>) has been prepared with the objective of sharing as much information on eco-certification, sustainable practices and about the wildlife and biodiversity in the southern Western Ghats region as possible with the rubber industry and the public.

A document on key ecological indicators for certifying rubber in the landscape has been compiled and published for use as a best practices manual as well as to interpret global standards in the Indian context for certification preparation and auditing (http://feralindia.org/ecoag/wp-content/uploads/2015/10/ecol_indicators.pdf). A booklet on ecologically sustainable practices for rubber plantations has been compiled, printed, and shared with the large plantations in the region. This is also available on the FERAL ecoag website for download.

Component 2 Planned (as stated in the approved proposal):

Guidance provided to large Rubber Plantation managers about SAN/SmartWood Standard.

Component 2 Actual at Completion:

To be able to provide proper guidance about SAN certification to the plantation managers, the project team members underwent training. Along with our project partner, we then provided the plantation managers in the landscape guidance about eco-certification and more specifically on SAN standard.

Component 3 Planned (as stated in the approved proposal):

Market linkages developed for certified rubber products, linking producers to markets inside and/or outside India, with support from Rainforest Alliance and developing local indicators

Component 3 Actual at Completion:

A market research for eco-certified rubber has been completed and the report is available at (<http://feralindia.org/ecoag/wp-content/uploads/2015/10/market.pdf>). As part of this we undertook market surveys to understand the level of awareness and the market for eco-certified rubber and rubber wood and products derived from them. Awareness about eco-certification across all sectors of the rubber industry was poor. There was a keen interest amongst the consumers to learn more about eco-certified products and they expressed a willingness to pay a slight premium for such products as a way to contribute towards protecting the environment. A smaller proportion of the industry was also interested in learning more about eco-certification and all relevant materials that have been developed by this project is being shared with them.

Our research also showed that the number of entities dealing with rubber and rubber wood who were certified by the FSC has been increasing both in India and globally, with a majority of them dealing with rubber wood. By and large the market for eco-certified rubber wood seems to be larger, while the market for eco-certified rubber and rubber products is emerging.

As part of this component, we have also identified existing markets in India and globally which are dealing with certified rubber/latex, rubber wood and products derived from these. A note on potential markets that can be tapped into has also been prepared.

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

All components that the project set out to undertake were completed.

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

The following materials have been prepared as part of the project:

1. Existing guidelines for eco-certification of natural rubber
<http://feralindia.org/ecoag/wp-content/uploads/2015/10/existing_guidelines.pdf>
2. A website developed to educate and give more information on eco-certification with special reference to Natural Rubber: <www.feralindia.org/ecoag>
3. General awareness material including material on the eco-certification process and requirements to get certified under the SAN and FSC Standards and posters on biodiversity richness of the landscape available on the ecoag website.
4. Presentations on the SAN standard criteria with emphasis on guidelines for rubber plantations. This could be used for education as well as for training purposes
<<http://www.feralindia.org/ecoag/training>>
5. Ecologically sustainable practices for rubber plantations: A handbook
<http://feralindia.org/ecoag/wp-content/uploads/2015/07/final_Ecol_sustain_practices_rubber.pdf>
6. Guide to establish a natural wind barrier <<http://feralindia.org/ecoag/wp-content/uploads/2015/10/windbarrier.pdf>>
7. Key ecological indicators for developing standards for certification of Natural Rubber
<http://feralindia.org/ecoag/wp-content/uploads/2015/10/ecol_indicators.pdf>
8. Market for eco-certified natural rubber and rubber wood
<<http://feralindia.org/ecoag/wp-content/uploads/2015/10/market.pdf>>

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)

- The project was designed to explore how land management in large rubber plantations in Shencottah landscape could be made more ecologically sustainable. Eco-certification was thought of as a possible approach to incentivise the initiative. Given that there were few priors for eco-certification of rubber in India when the project was started, the project was designed to contribute to developing local ecological indicators with reference to this landscape.
- In addition, the research that went into developing this, also helped us in bringing out a booklet on sustainable practices that could be practiced in both small and large rubber plantations. The stakeholders have been keen on using this as a guide to improve their existing practices.
- The objective of the project was also to focus on the large plantations in the gap area, which were important as corridors for wildlife. While designing the project, this was taken into account and specific activities to provide guidance to these stakeholders was included.
- Understanding the market potential for eco-certified rubber and rubber wood was important for stakeholders to commit to market-driven initiative such as eco-certification which although does not promise a premium, suggests the potential for it. The project design envisaged this, and included a component focusing on the market. Although, at the start of the project the market for certified rubber and rubber wood was practically non-existent, by the end, there had been a substantial increase in the number of organisations who were certified who are dealing with rubber wood largely and a smaller number dealing with rubber.
- Awareness material about sustainable rubber production and eco-certification for rubber was planned as part of the project. This along with a dedicated website to promoting ecologically sustainable land practices for rubber and to decimate information on eco-certification, has been an important part of this project, which will take the efforts of this project further than the current projects' duration.

- One shortcoming in the project design is possibly the lack of any exposure visits for the stakeholders to successfully established eco-certified rubber plantations. This would have facilitated learning and a clearer understanding of the advantages.

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

- Capacity building: FERAL staff working on this project have become trained in eco-agriculture, eco-certification and relevant standards. This was achieved by interactions with representatives of the partner organization and hands on training in the field, and through online training courses and attending workshops organized by the Rainforest Alliance. This was critical in understanding the scope, in implementation, and in preparing many of the materials as part of the project. It was also key for interactions with the various stakeholders in the landscape.
- An understanding of the rubber industry was also crucial for dialogues with the stakeholders. This was achieved through information available online and through interactions with stakeholders in the landscape, the staff of the rubber research institute of India, and other members of the rubber industry during various conferences that the project staff participated in.
- A key learning for the organization in implementation was identifying a suitable project manager. For a project of this nature to even start off, let alone be successful, the manager requires not just a background in ecology, but also in depth knowledge of the landscape, wildlife presence and socio-economic issues relevant to conservation in this landscape which comes from several years of working in the landscape. Also, the person requires to believe in the project approach that it is possible to work with companies and achieve conservation goals. This might require finding innovative solutions and approaches which does not dilute the conservation objectives of the project, yet be acceptable to the plantation managers. These issues contributed to the delays in the progress of the project and we had to request for an extension and required our senior researchers to step in to manage the project.
- An important lesson that the team learnt in executing this project is that the company management need to be convinced about the importance and advantage of such pro-environment actions. To be able to convince them, it was important to have an industry insider on the team. This role was played by the representative of the partner organization in this project.

Other lessons learned relevant to conservation community:

- Lack of awareness of eco-certification across all sectors of the industry
- Currently the market demand for certified rubber is poor in India and is not an incentive to get certified. However, in the global scenario, there seems to be an increased interest especially for FSC certified rubber wood.
- Quality and required quantity of eco-certified rubber latex or rubber wood need to be assured for more manufacturers to shift away from non-certified material.
- No sustainability standards for rubber industry in place. Both National bodies and international rubber groups continue to promote intensive farming of rubber monocultures. With the current negative trend in the rubber market, intercropping in larger stretches with crops such as cocoa and banana has only recently begun in the study area.
- Parallel certifications that do not have strong environmental criteria can work against the effort. Also, within the current certification standards, in some crops such as coffee in the Western Ghats, it has been shown that in spite of biodiversity loss, farmers still meet certification requirements³ (Bose, 2014). Thus, universal standards for eco-certification need not address biodiversity loss and there needs to be some mechanism by which local conditions should be taken into account.
- There are no guidelines for protection of habitats and ecosystems, biodiversity conservation, natural resource management for rubber plantations.
- Also, no incentive to take up habitat restoration or planting of native trees due to existing policy (EFL and timber transit rules)
- Some policy level changes required to ensure that there is minimum impact to the environment. The Rubber Board has recently announced that they back the 100% Foreign Direct Investment proposal in rubber plantations as it would help in increasing natural rubber production to meet the growing demand (<http://mybs.in/2S0aYSf>). Without proper environmental safeguards at the policy level, there is a possibility of such initiatives resulting in negative impacts on the environment and becoming unsustainable in the long term.
- More importantly, to sustain such ecologically friendly land management practices, the drive should come from the farmer and the industry and cannot be driven and sustained by market forces.

³ Bose, Arshiya. 2014. "From Ficus to Filter: The Political Ecology of Market Incentives for Biodiversity Conservation in Coffee Landscapes in India." Ph. D. Thesis, Cambridge: University of Cambridge.

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
Foundation for Ecological Research, Advocacy and Learning (FERAL), India	Project co-financing:	\$ 6666	Human resources: Time contributed by other FERAL staff towards this project, Field transportation: field vehicle to enable transportation on field was made available to the project by FERAL.
IDEX Accelerator (IDEX)	Project co-financing	\$ 3500	An IDEX fellow was placed with FERAL for a six month period to help with this project.

**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.

Summarize any unplanned sustainability or replicability achieved.

This project has developed various materials that are useful in promoting sustainable land use practices in any rubber plantations and for creating awareness about sustainable agriculture and eco-certification of rubber plantations. These have been made available on the website that has been developed for this purpose and is accessible to all interested stakeholders and the public. The key ecological indicators identified can be used as a guideline for developing standards for rubber plantations in India, with some alterations to address locality specific requirements.

Safeguard Policy Assessment

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

None were required

Additional Comments/Recommendations

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:

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

Not Applicable

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.

Project Results	Is 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, 2013 to May 30, 2014. (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.				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?				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.				
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.				
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1 below.				

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

