

## The Rufford Small Grants Foundation

### Final Report

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Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to [jane@rufford.org](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

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#### Grant Recipient Details

|                            |  |
|----------------------------|--|
| <b>Your name</b>           | Arshiya Bose   |
| <b>Project title</b>       | Exploring Incentives for Conserving Biodiversity in Coffee Landscapes in India |
| <b>RSG reference</b>       | 12910-1  |
| <b>Reporting period</b>    | April 2013-May 2014  |
| <b>Amount of grant</b>     | £6000  |
| <b>Your email address</b>  | <a href="mailto:arshiyabose@gmail.com">arshiyabose@gmail.com</a>               |
| <b>Date of this report</b> | June 2014  |

**1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.**

| Objective  | Not achieved | Partially achieved | Fully achieved | Comments  |
|--|--------------|--------------------|----------------|---|
| To understand perceptions of coffee growers towards the environment    |              |                    | ✓              | This objective was the core focus of this project. In this respect, the project outcomes exceeded our expectations. Detailed open-ended interviews and semi-structured surveys were carried out with over 150 coffee growers in Kodagu district. In particular, considerable time and effort was spent trying to understand how coffee producers engage with market-based incentives for conservation. The project explored conservation and social impacts of shade-grown certification for coffee. An interdisciplinary approach was used to qualitatively and quantitatively analyse the perceptions of coffee producers.  |
| Developing conservation-friendly/sustainable farming guidelines        |              |                    | ✓              | The grounded or 'research' element of this project led to the very successful development of farming guidelines. These guidelines were developed through a participatory process. This process involved many rounds of discussions and debates with coffee producers about which aspects of the farming guidelines would be acceptable and which would not. In this sense, we were also able to develop a thorough and detailed understanding of the trade-offs for conserving biodiversity on coffee farms. More specifically, these farming guidelines included detailed sections on: (a) shade tree cover, diversity of tree species; (b) use of chemical pesticides; (c) use of chemical fertilisers; (d) water and soil conservation; (e) protection of natural vegetation and potential wildlife habitats on farms; (f) strict labour welfare guidelines. |
| Production of an incentives framework for conservation of coffee farms |              |                    | ✓              | We were able to develop a really detailed understanding of what kinds of incentive mechanisms would be needed to support producers to maintain a rich diversity of native tree species. The incentives framework that we developed includes a complex of economic and non-economic incentives. This is a very critical component of our strategy because we concluded that cash incentives were not the strongest catalysts of land-use change. A price premium, such as proposed through shade-grown certification programmes was not  |

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|--|--|---|--|---|
|  |  |   |  | sufficient enough to switch unsustainable farming practices to sustainable farming practices. Hence the range of incentives that we engage in includes: (a) promoting single-estate coffee, i.e. building on social marketing and pride; (b) long-term contracts with producers rather than short-term transactions; (c) incorporating producers as shareholders in the initiative; (d) promoting ways to enhance coffee quality; (e) securing a niche market and price differentiation; (f) promoting specialty coffee; and (g) an equal or competitive market price i.e. price premium.   |
| 'Coffee and Conservation Strategy' to be adopted by coffee growers in Kodagu |  | ✓ |  | During the course of this project, we realised the immense complexity of local realities. In particular, we felt the need to invest time in building a comprehensive understanding of peoples' motivations, incentives, and decision-making patterns in order to be able to design the most effective and locally/culturally sensitive conservation strategy. Given this, we were able to enlist seven coffee producers (and about 15 additional coffee growers in an adjacent district – finalisation in process). We identified good potential areas on these seven farms and set aside these areas to pilot our farming guidelines. We also carried out detailed ecological surveys of these 'conservation blocks' to identify which tree species could be planted. These conservation blocks were also monitored throughout the year. |

**2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).**

Unforeseen personal circumstances faced by the primary researcher of this project led to some minor delays. However, overall, the project achieved considerably more in its research scope and findings as well as conservation implications than currently proposed.

**3. Briefly describe the three most important outcomes of your project.**

This project has numerous outcomes that have very important implications from a research as well as practical conservation perspective. These are as follows: (a) better understanding of the motivations of coffee producers and the strength of cash incentives as catalysts of land-use change; (b) evaluating the conservation and social impacts of global certification programmes to develop a better understanding of the limitations of global certification programmes; and (c) the foundation design of locally meaningful conservation strategy.

**(a) Cash incentives as catalysts of land-use change:**

In recent years, discourses concerning coffee markets and conservation have merged considerably to produce market-based strategies for biodiversity in coffee landscapes. A prevalent example is certification for shade-grown and sustainable coffee. Current debates on market-based strategies and the use of monetary incentives centre on their effectiveness and potential social benefits for local communities. There is little empirical evidence on people's motivations to participate in such initiatives and the particularities of their engagement. This project addressed this empirical gap by carrying out field-level research carried out on Rainforest Alliance and UTZ-Certified certifications in Coorg district, India, jointly referred to as 'shade-grown certification'.

Data collected through semi-structured and open-ended interviews in Coorg shows that coffee growers conceptualise and therefore choose to engage with market-based incentives in ways that differ considerably from inbuilt assumptions in policy discourses and scholarship. For example, coffee growers are seen to participate in shade-grown certification rooted in a range of motivations. Farmers' motivations include: (a) an expectation of improved knowledge and eventually enhanced coffee quality; (b) expectation of improved economic benefits in the future, partially as a result of improved quality and secure market access; (c) promotion of local identity through a geographically exclusive coffee brand; (d) inculcation of a financially streamlined and overall systematic cultivation practice; (e) expectation; (f) belief in environmental and social merits of shade-grown certification; and (g) receipt of the immediate price premium. In fact, a quantitative survey showed that majority of coffee growers who had participated in shade-grown certification had done so to gain knowledge and improve coffee quality (28.57%, n=35) and to develop a farm management system (22.85%, n=35).

These findings respond to theoretical assumptions about the power of direct incentives in four related ways. Firstly, coffee growers are incentivised to adopt shade-grown standards based on a number of motivations that would be termed in theoretical literature as 'indirect' incentives. These include improved knowledge, enhanced coffee quality, recognition of identity, development of systematic farm management and belief in social and environmental merits. Secondly, as coffee growers engage with market-based incentives with diverse motivations, they use market incentives as stepping stones to achieve a wider set of goals more aligned to their vision than the immediate objectives of shade-grown certification. These broader goals comprise substantial and meaningful participation in the governance of coffee value chains and the elevation of the status of Coorg coffee. These goals also includes greater power in the negotiation with the Indian state regarding resource use rights, particularly with relevance to trees on coffee farms. For example, a coffee grower is quoted as saying,

*"Certification makes sense. We need to get ahead of the rest of the growers. Other growers take time to realise it is necessary" (CF-17).*

Thirdly, related to the pursuit of broader goals, includes desires to strengthen economic security. The important distinction between empirical observations and theoretical discourses about market-based incentives is that coffee growers in Coorg believe that economic security should be achieved through long-term mechanisms, such as enhanced quality, guaranteed buyers and geographically exclusive speciality brand, rather than a short-term financial arrangement in the form of a price premium or one-off conservation payments.

In this way, the experience of coffee growers in Coorg and the ways in which they have engaged with market-based incentive programmes highlights the disconnects between theoretical assumptions about direct incentives and field-level realities of how and why natural-resource users choose to engage with market-based conservation initiatives. These research findings also reinforce the importance of indirect incentives, including long-term economic security and socio-cultural well-being as powerful motivators of land-use change.

### **(b) Evaluating the conservation and social impacts of global certification programmes**

This project also sought to understand how the reality of market-based incentives was different from that set out in policy and theoretical ideas? The crux of academic and policy narratives on market-based incentives is 'effectiveness'. The arguments for implementation are heavily premised on the belief that positive monetary incentives will bring about change. In comparison to ICDP or other forms of indirect incentives, direct incentives do not claim a space for uncertainty of outcomes. The conditionality of payments and design of performance-based rewards are argued to strengthen such mechanisms as institutions for change. Market incentives are posited to offset costs of conservation, in this case increased costs of cultivation or income lost through decreased coffee yields as a result of maintaining native shade trees and practicing environmentally sustainable agriculture. In this project, outcomes of shade-grown certification have been researched through exploring farmers' lived experiences. The value of understanding change through the lived realities of farmers, by studying how people conceptualise changes was preferred as a research approach rather than evaluating change from an external perspective.

At one level, data collected through this project provides strong arguments that shade-grown certification has very limited environmental and livelihood outcomes. Coffee growers explained their experience of change as a result of shade-grown certification on a number of parameters. For example, these parameters included experienced changes in production costs, coffee yields, shade tree abundance, income and ability to access higher market prices. Farmers also commented on changes in their thinking as a direct result of following certification standards or indirectly through interacting with people associated in the certification process. The overarching story of change was that of 'business as usual' where coffee growers claimed to have experienced negligible changes in their farm management and cultivation practice, pricing and marketing of coffee and attitudes towards the environment. These findings were consistent both in the quantitative data collected on farmers' self-estimates of income, production costs, selling prices and tree density as well qualitative data on experiences or narratives of change. In addition to 'business as usual', coffee growers also experience increased bookkeeping as an outcome of shade-grown certification. Finally, some farmers had experiences the objective of shade-grown certification to be solely the improvement of labour welfare rather than an integrated environmental and social welfare.

This comment by a certified coffee grower reflects a fairly widespread shared belief about the limited change in land-use and farm management practices as a result of shade-grown certification:

*"Madam but my estate has always been eco-friendly. I didn't have to do anything new to get it certified" (CF-10).*

Although shade-grown certification has had limited environmental and social outcomes, it has had significant imprints. The key difference between outcome and imprints is that the latter are unintended and indirect impressions created by the experience of participating in shade-grown certification. In the case of Coorg, coffee growers are intensely disenchanted with conservation

initiatives, despite technically not having experienced project outcomes. In fact, this research shows how lack of tangible conservation impacts can significantly influence how people perceive conservation. Coffee growers in Coorg have participated in shade-grown certification, a process which has taken place with much fanfare and visibility in the public domain. They have been recruited by the certified buyer of coffee, pre-audited, audited, approved and rewarded through price incentives all to carry on business as usual. The fact that a publicly conservation project has not forced a change in farm management practices has been received as mysterious and with scepticism. This comment by a certified coffee grower provides evidence to this effect:

*“Ayyo we have not done anything only. I’m thinking this certification is not at all concerned with shade conservation” (CF-13).*

In this case, shade-grown certification had not been perceived as a market-based tool for conservation. It had been understood as an entirely market tool intended to serve the business objectives of coffee traders and exporters worldwide. The majority view of coffee farmers is that the lack of tangible changes to farm management incurred despite participating in a very public conservation project is indicative of an underlying purpose that has not been openly communicated.

The conclusions of this project also contribute to existing academic and policy debates on the role of additionality, opportunity costs and prioritisation of conservation efforts. The lack of additionality in Coorg implies that the environmental (and social) requirements of the projects are lower than the existing land-use and livelihood practices. In the case of shade-grown certification, this disparity is clearest when comparing the shade requirements specified by Rainforest Alliance certification (e.g. 12 species per ha) compared to existing tree diversity of over 22 tree species per ha (as estimated by this project).

### **(c) The foundation design of locally meaningful conservation strategy**

The ‘research’ aspect of this project has contributed a great deal of knowledge regarding the fundamental weakness of global blueprints, such as global social and environmental standards for coffee production. These initiatives are disembodied and therefore neither address local context drivers of environmental problems nor enable any local support. This project has also questioned assumptions about the catalytic potential of market-based incentives to elicit land-use changes. A critical flaw in theoretical rationales about direct incentives is the notion that natural-resource users will respond to market-incentives as rational actors driven by the perusal of short-term economic gains. In this respect, this project highlights the limitations of conservation projects that are centred singularly on economic incentives. A simple tweaking of financial returns does not necessarily catalyse biodiversity-friendly land-use practices. In this regard, the core outcome of this project is the urgent need to search for for ‘farmer friendly’ incentives that include a complex of direct and indirect incentives (or multi-dimensional incentives) but are more importantly, connected to local perceptions of ‘incentives’.

In this regard, this project has led to the foundation design of a strong ‘farmer-friendly’ incentives framework that includes a range of different possible arrangements with Urveeja Conservation in the future. More importantly, the fact that these incentives have been proposed by coffee growers rather than prescribed by us is the biggest strength of our project. Coffee producers are not simply participants but stakeholders and shareholders in this Coffee and Conservation Strategy.

**4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).**

Given that this entire project was conducted as a participatory project, local community members have been indispensable partners in this project. As mentioned above, the design of our conservation strategy has co-evolved with local community members. The coffee producers who have chosen to engage with us have done so on their own account and with the optimism that this project will eventually result in sustainability of coffee production as well as livelihood security. Because this project is premised on a 'land-sharing' rather than 'land-sparing' approach, it has been critical to approach conservation on these private farms as a partnership with coffee producers rather than as an externally designed initiative.

**5. Are there any plans to continue this work?**

We have done so already! The response and momentum from local community members has been overwhelming. We are confident that we will be able to partner with many more coffee farms across some of the critical biodiversity corridors within Coorg to be able to put in place sustainable farming guidelines. We have also been approached by indigenous community members from other regions of the Western Ghats landscape to design and implement similar strategies on homestead gardens. This would be a major next step in order to strengthen livelihood security of forest-dwelling communities and enable them to practice shade-grown and strong agroforestry practices. An additional area of future work is to build in a strong conservation prioritisation of coffee farms across the entire coffee landscape in India. We are keen to build a prioritisation model including parameters such as biodiversity presence on farms, threats as well as a range of socioeconomic factors such as farmer willingness to engage with conservation.

**6. How do you plan to share the results of your work with others?**

The outcomes of this project will be shared at the following three levels-

- The project outcomes are in the process of being shared with the local community – coffee planters, civil society as well as the NGOs, local conservationists and academicians. We plan to disseminate the results in a non-technical format through easy-to-understand presentations and awareness sessions.
- The project report with the results and recommendations will be shared with the Karnataka Forest Department with the hope that the understandings from the research will aid (EHC relevant) policy formulation and implementation.
- We seek to publish results from this study in peer-reviewed science journals to not only get inputs on the technical aspects of the work but to also reach out to a wider scientific audience. The findings have also been presented in conferences as oral and/or poster presentations as and when the opportunities arise, such as the annual meeting of Royal Geographical Society (2013) and the Student Conference on Conservation Science, Cambridge (2013).
- A suggestion from the local communities has been to make a brief documentary showcasing the value of shade-grown coffee. If time and funds permit, we may produce a documentary highlighting various aspects of growing coffee in sustainable ways.

**7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?**

This is a long-term project with no clear end date! However, the first phase of this project was from 2011-2014, of which the Rufford funding was used for a period of 1.5 years from April 2013 to May 2014. The second phase of this project is under progress and we plan to seek financial support from Rufford and/or other funding agencies to continue the project for another 1.5 years.

**8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.**

| Item                         | Budgeted Amount | Actual Amount | Difference  | Comments   |
|------------------------------|-----------------|---------------|-------------|--|
| Vehicle hire & fuel costs    | 2421            | 3000          | +579        | Given that we expanded the scope of interactions with coffee producers, additional expenditures were incurred. These were covered through the Philip Lake II Fund, UK. |
| Maintenance                  | 720             | 720           | 0           |  |
| Project co-ordinator stipend | 1256            | 2256          | +1000       | This was anticipated for and therefore fundraising efforts and donations from individuals were able to cover these costs.  |
| Stipend for experts          | 835             | 500           | -335        | We were able to request expert advice pro-bono from colleagues and friends.  |
| Travel costs for experts     | 330             | 450           | +120        | We sought assistance on more occasions than initially anticipated.   |
| Room hire for workshops      | 80              | 20            | -60         | We were able to organise some workshops in the local college premises and therefore were able to save funds.   |
| Food expenses for workshops  | 250             | 80            | -170        | We were able to arrange food at greater subsidised rates than initially anticipated.   |
| Ecological survey            | 50              | 50            | 0           |  |
| Documentation                | 58              | 58            |             |  |
| <b>TOTAL</b>                 | <b>6000</b>     | <b>7216</b>   | <b>1108</b> |  |

**9. Looking ahead, what do you feel are the important next steps?**

We really need to find ways to extend the scope and scale of this project. We are currently debating the issue of scale through either larger recruitment of coffee producers and therefore an increased area under sustainable agroforestry or many small/medium scale replications of this model in other coffee regions in the country. Whichever we feel is more appropriate, the momentum is growing from coffee producers to engage in a bottom-up conservation effort that showcases their coffee production. We plan to initiate a prioritisation study of coffee farms as well as explore a greater focus on small-scale, homestead gardens owned by indigenous forest-dwelling communities (as mentioned in Q.5).



**10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?**

The results from this project have been shared on numerous occasions with a wide variety of audiences. For example, presentations were made at the Society for Conservation Biology's International Congress for Conservation Biology (2013) in Baltimore; annual meeting of the Association of American Geographers 2014, Student Conference on Conservation Science Cambridge and Bangalore (2013) and the Kinship Conservation Fellowship 2013. Rufford's support was very explicitly acknowledged both orally as well as through display of the logo.

**11. Any other comments?**

Urveeja Conservation was an idea that has snowballed into a mini-conservation movement in coffee landscapes in India. As an idea that had no backbone, initial seed capital and relied entirely on adrenaline-charged people, this support from Rufford was critical to not only enabling us materialise our ideas but also motivate us to think about this project as a long-term body of work. We want to be permanent residents in these landscapes or stay only as long as the conservation problems persist. We are therefore, immensely grateful to Rufford Small Grants Foundation for the inspiring the first phase of a long journey to sustainability!