

The Rufford Small Grants Foundation

Final Report

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.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details

Your name	Habiba Amiri
Project title	Mountain Landscape Community Conservation and Education Centre
RSG reference	10719-1
Reporting period	April 2012 – January 2013
Amount of grant	6000
Your email address	habiba@myafghanmountains.org
Date of this report	April 2013

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 identify areas of particular importance to biodiversity in the Shah Foladi Proposed Protected Area		X		The proposed protected area is comprised of 70,000 km ² therefore the surveys carried out in 2012 were rapid and by no means comprehensive. Further work combining remote sensing is recommended to make these results more complete.
Promotion of sustainable use and consumption of biodiversity in schools and villages. Preparation of plant birds and animal local guides and educational kits.			X	Workshops, field training and school education programmes were conducted. COAM is continuing to develop these education programmes using the Conservation Library and mini-herbarium, developed from this project as an interactive knowledge centre for students, communities and school groups.
Description of threats from invasive alien species			X	Thorough field investigations were conducted and to date no problems associated with invasive alien species have been identified within the Shah Foladi Proposed Protected Area, and none are thought to exist. In order to prevent the invasion of potentially harmful species it is recommended that potentially high risk species be identified and an educational information sheet/posters developed and distributed to government, universities, horticultural nurseries and other NGOs working with natural resource management.
Assessment of habitat degradation				During this project the funding was used to establish over 50 permanent monitoring sites in the upper catchment of the watershed. This enabled gathering of baseline information and training which will lead on to long-term community led land degradation surveys, with support from the Government. These surveys consist of two key objectives: To detect the severity and extent of erosion, which is a direct measure of land degradation. To assess the effectiveness of

				<p>management actions through changes in erosion severity and extent.</p> <p>The habitat types in the areas surveyed are shrublands/grasslands and rain fed agricultural land. Early results indicate that the extent of land degradation in all the upper catchment sites is 'medium to high'.</p>
<p>Identification of direct and indirect pressures on biodiversity.</p>		X		<p>Funding was used to carry out using an integration of social and environmental assessments to identify the main direct impacts on biodiversity. To take this further, the COAM team have developed a number of research proposals assessing some of main direct and indirect pressures on biodiversity that we are currently seeking funds to initiate.</p>
<p>Review of the socio-cultural diversity of indigenous and local communities and ensure their indigenous rights and benefit sharing rights are being upheld.</p>		X		<p>An initial overview of the socio-cultural diversity in the Shah Foladi Proposed Protected Area was carried out and there are plans to conduct more specific ethnobotanical studies that will inform small ethnobotanical exhibitions in Bamyan University and Tourist Office.</p>
<p>Report on the impact of climate change on biodiversity components of the area.</p>		X		<p>The report on the impact of climate change on biodiversity synthesised present knowledge about the consequences that climate change may have in the Shah Foladi Proposed Protected Area. Whilst providing as much detail as is currently possible, it highlighted gaps in our present knowledge of the mountains and of potential climate change effects. A deeper understanding of the potential effects of climate change in the region is essential if mountain people are to take measures that will maintain their livelihoods in the face of future climate change effects; and if we are to be able manage the land in such a way that disruption to ecosystems and to ecological resources are minimised.</p>
<p>To examine the influence on biodiversity of the socio-cultural</p>			X	<p>There are long established natural resource management traditions in the Shah Foladi Proposed Protected Area that can be useful tools in biodiversity</p>

<p>history of local communities.</p>				<p>conservation. However today, because of increased population pressures, traditional knowledge practices cannot alone overcome the conservation challenges faced by the communities. However the ethic specific approaches of the traditional methods, with their time-tested values, should be used as a platform for developing new modifications of traditional methods. A report with suggestions on measures to safeguard this traditional knowledge was completed and is essential as a foundation for natural resource management in the Shah Foladi Proposed Protected Area. It has potential to function as a model for many other mountainous communities across Afghanistan.</p>
<p>Provide advice on appropriate measures to reduce pressures on local livelihoods from e.g. habitat loss, land degradation, and unsustainable water use.</p>		X		<p>In partnership with communities, COAM have begun to develop a series of Village Conservation Management Plans for seven of the 18 villages within the Shah Foladi Proposed Protected Area. Central themes in the Management Plans are rangeland conservation, watershed management, agriculture diversity and conservation education. The ideas in these plans come from the communities and are displayed for the community allowing maximum transparency between the community and the NGO. These management plans will continue to be updated as information on the environment changes.</p>
<p>Propose appropriate economic opportunities for local people based upon sustainable exploitation of natural resources.</p>			X	<p>A number of possibilities have been explored and their feasibility has been assessed by conducting simple value chain analysis. Funding has been sought for a number of initiatives.</p>

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

A few logistical challenges and problems have been encountered and while this is probably not surprising given the current socioeconomic and security situation in Afghanistan, it has nevertheless caused small delays to project schedules. Specifically, travel between Bamyan and Kabul has been problematic. Access to Kabul is necessary for visiting the herbarium, procuring equipment, good quality printing and meetings with government officials and other conservation NGO's. The road is impassable for security reasons meaning the only means of transport is by air, this is expensive and flights are booked-up quickly and this often results in COAM staff being unable to travel between Bamyan and Kabul at convenient times, and spending more time away from Bamyan than expected.

Another difficulty was the lack of a national database for Afghan flora and fauna species. This was overcome by collecting and ordering all available publications on Afghan natural resources and biodiversity and storing them on an online storage space. This is only a temporary measure until a regional data centre is established. Also close partnerships were developed with the Edinburgh Botanical Garden and Centre for Middle Eastern Plants, who provided support with plant identifications.

Getting the correct paper for mounting herbarium specimens was not possible in Afghanistan. So herbarium specimens have been stored between temporary paper until the appropriate herbarium paper is brought from the UK.

Finding suitably scaled maps was another difficulty encountered during the project. This would have helped planning field sites and sampling locations. We overcame this by using aerial photographs on Google maps to identify certain areas.

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

Habitat description

To date the locations of broad habitat types that support high levels of floristic biodiversity or unique areas of biodiversity have been identified, such as; wetlands, high alpine meadows, dry scree slopes and high alpine flood plains. These occur mainly in the following two habitat zones (described for the first time during this project) in the Proposed Protected Area.

High altitude rock and ice dominated areas
High altitude Alpine meadow, lakes and rock areas

This information forms baseline information, which can now be used for 'ground-thruthing' using remote sensing and GIS technology to map the entire Proposed Protected Area.

This however is by no means extensive habitat classification (considering micro-habitats) but broad baseline habitat identification.

School Environmental Education programme

Education of 90 school children from 7-13 years old.

School-based education workshops were conducted in three junior level schools in the Proposed Protected Area. Pupils were given environmental education lessons using interactive tools and traditional lecture techniques, and participated in activities designed to highlight conservation and environmental issues in their local environment. The objective was to enhance the children's appreciation and understanding of wildlife and plant life in their local areas and to introduce them to in a tangible way to concepts of biodiversity and ecology, particularly the interrelated nature of ecological services, agriculture and human wellbeing. Feedback from teachers, school principals and students has been highly positive and to date the initiative is considered a great success. The teaching methods and activities are being developed further and the next steps to finalise an 'education kit' and a 'teacher's pack' which will allow future COAM staff to repeat and to further develop the programme. The aim is to establish a regular and systematic annual programme of school visits to all of the mountain villages and ultimately to provide sufficient teaching resources and training to teachers to allow them to repeat the workshops themselves in future years.

The educational material (posters, booklets, games etc.) can be used as examples for Government bodies to use in other protected areas being developed across Afghanistan.

In addition, the library that COAM set up with books on natural sciences and the environmental and a learning centre with computer access to online journals and papers on biodiversity in Afghanistan was another important outcome of this project and has benefited many students and natural resource management staff.

Propose appropriate economic opportunities for local people based upon sustainable exploitation of natural resources.

Sustainable, environmentally friendly sources of income are essential if communities are to fully engage in environmental conservation in their areas.

The following possibilities have been explored and their feasibility has been assessed by conducting simple value chain analysis. Funding has been sought for some of the below opportunities:

Rose oil production- the cultivation and distilling of rose oil

Sea buckthorn production – the cultivation and pressing of seabuckthorn oil.

Advantage: High value low bulk produce

Beekeeping and bee breeding- the training of communities in beekeeping and establishment of native bee apiaries

Advantage: Native bee *Apis cerena* can survive high altitude conditions of the Koh-e-Baba, low start up investment and provides an additional off-farm source of income (honey, wax, bee breeding etc.). Bees increase crop yield through adequate pollination.

Liquorice cultivation- cultivation of Liquorice in a semi-wild manner along irrigation canals.

Advantage: high market value and low input.

Natural Cosmetics and herbal medicine- making soaps and creams using native plants in a sustainable manner and utilising good marketing tools.

Advantage: good added value on medicinal plants and will promote conservation of medicinal plants through cultivation.

Community nursery production- nurseries which sell good quality locally adapted fruit and forestry trees.

Advantage: creates local employment and skills while promoting food security and native tree cultivation and planting.

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

Communities have been working together with COAM on this project from its inception. The proposed Protected Area is categorised as an IUCN Category V - Protected Landscape. The primary objective of which is 'to protect and sustain important landscapes and the associated nature conservation and other values created by interactions with humans through traditional management practices'. Members from the community were trained in biodiversity fieldwork through workshops and practical field experience. Five young members of each community accompanied our experts into the field and gained training in the use of GPS, cameras and technical fieldwork methodology.

During fieldwork the communities hosted staff, which gave them an opportunity to earn some much-needed income.

Since 2011, one member from each of the communities was given the post of Conservation Officer which involved responsibility for all environmental projects that are proposed for the village area. These community members manage the community conservation centres in each of the villages and maintaining an information board with a map of village natural resources, environmental information, past present and future village environmental and development project as well as information posters.

All of the outcomes of the project go towards building the communities' capacity to make informed management decisions on for the Proposed Protected Area of which they are stewards.

5. Are there any plans to continue this work?

Yes. As mentioned above a number of research proposals arose out of this project. COAM is currently conducting the first mammal survey of the Shah Foladi Proposed Protected Area using camera traps to get a baseline species list for the area. COAM is also looking for funding to set up a regional Conservation Data Centre, the Bamyan Conservation Data Centre (BCDC) data information centre to store biodiversity information for Afghanistan and provide learning, logistics and database support to the nascent environmental conservation movement in Bamyan.

COAM is also planning to continue adding to plant and bird species lists for the area and developing an ethnobotanical database of the uses of the plants in the area.

COAM will continue to assist the community in establishing environmentally sustainable livelihood opportunities for themselves.

Ethnobotanical studies in the area are being carried out.

COAM will continue the environmental education programmes and extend their reach and impact for local communities, in particular the younger generations.

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

COAM plans to publish information on the project on our website www.myafghanmountains.org and also through the educational publications, posters and leaflets which were produced during this project.

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

The fund was spent from April 2012 until January 2013. The project was fully completed in the expected timeline, even though there were unexpected delays.

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
Baseline Survey Team	1000	720	280	The difference was used to facilitate travel requirements needed for meetings in Kabul concerning the project.
Training of local community teams for botanical survey	500	500	-	
Biodiversity centre setup and equipment	1000	1000		
Biodiversity library and herbarium sampling room	1000	1000		
Preparation of plant, birds and animal guides and education kit	1000	1000		
Outreach and training in local schools and communities	500	500		
Communication costs	1000	1000		
Travel		280		This was not budgeted for but because of the issue of security for transporting staff to and from Kabul, a return plane flight was required to ensure safety of staff.
TOTAL		6000		

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

The funding given by RSG was a great opportunity to kick-start activities which are essential for the communities who are stewards of the land to be informed by scientific information and integrate this knowledge into their natural resource management. This will ensure a more sustainable use of the land and encourage self-sufficient land use practices. It is essential that COAM builds immediately on what was done and improves and progresses the facilities that were created and environmental enthusiasm that were instilled through this project.

It will be a great advantage to establish a GIS / remote sensing laboratory in Bamyan and continue field work training with University students, community members, Government and local NGO's working in natural resource management.

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?

Yes, we used the RSGF logo on materials produced during this project.
See posters attached.

11. Any other comments?

COAM would like to express our sincere gratitude for your support. The activities undertaken under this project had far reaching benefits and in particular with the younger generation who will be the future stewards and environmental leaders of this incredible landscape and culture it holds.