The Rufford 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. The Final Report must be sent in **word format** and not PDF format or any other format. 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. Please note that the information may be edited for clarity. 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	Yelena Gambarova
Project title	Increasing Capacity for Biodiversity Conservation: Long-Term Integrated Research and Conservation Education Program, Azerbaijan
RSG reference	17197-B
Reporting period	December 2015 - November 2016
Amount of grant	£5900
Your email address	elenag@risk.az
Date of this report	November 2016

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
Designing conservation education programme			√	Step 1: Choose geographic area of interest. Gobustan State National Park, Azerbaijan
			√	Step 2: Choose habitat and group. Rare vegetation communities: *Alhagi pseudoalhagi*, *Salsola Nodulosa/Artemisia Lerchiana/Salsola Dendroides* communities and *Suaeda Dendroides*
			√	Step 3: Select conservation threats. Habitat loss and degradation – infrastructure development
			√	Step 4: Identify key concepts to be communicated. Rare vegetation response to Industrial development using Space technologies
			√	Step 5: Choose target audience. Special interest groups (students, scientists).
			√	Step 6: Plan the programme and craft messages. Development of a conservation education programme including the implementation of conservation training workshops. Development of Training Program: Practical Remote Sensing Methods for rare vegetation conservation within buffer zones.

			√	Step 7: Create my own targeted resource. Design training materials to support the implementation of the initiative (Lesson plan, manual, user guides) taking into account the features of their applications at any proficiency level - for novice, intermediate and experts).
Development of Training Management Cycle Phase 1: Planning Phase 2: Implementation Phase 3: Evaluation			√	Creation of roadmap for training management cycle
Training materials development			√	For this project I developed a special training programme for students on the use of GIS and RS technologies for rare plant conservation. The aim of the training programme was to provide the students an exposure to recent advances in satellite image analysis, dealing with very high spatial resolution images. The participants have been provided with course materials and demo versions of image analysis software. Suitable laboratory sessions were organized to complement the classroom lectures.
TRAINING WORKSHOP Implementation			√	Conduct training through a 2-day workshop "Open Education Initiative - Space for our young generation".
MONITORING and EVOLUATION PROGRAM				
1. Feedback questionnaires			√	1. The monitoring system of the project outputs included quality control of the outputs through questionnaires.
2. Pre- Testing Pre-		√		2. Using pre- and post- tests to

and Post- Testing				evaluate the achievement of short course has not been achieved fully.
REPORTING, PRESENTATION AND RESULTS			√	

Indicator	Actual Performance
Output 1: STRATEGY and MATERIALS DEVELOPMENT **A common method for reducing or eliminating impacts to rare vegetation from adjacent land uses and other pressures is to maintain "buffers" around the resources.**	Proposed role of a "buffer zones" in the conservation of rare vegetation developed and established. The increasing use of buffer zones in Gobustan National Park in the description rare vegetation communities and their associated recovery plans represents a valuable approach to enhancing rare vegetation conservation at a national scale. a. Design a capacity building strategy; b. Identify target audience; c. Conservation educational programme development tool; d. Design and compile training materials - (manual, user guides, tutorial) taking into account the features of their applications at any proficiency level - for novice, intermediate and experts); e. Design online learning products and services to allow retrieval of training materials;
Output 2: TRAINING WORKSHOP Implementation	Out team conducted training through a 2-day workshop "Open Education Initiative - "Open Education Initiative - Space for our young generation". The aim of the training programme was to provide the students an exposure to recent advances in satellite image analysis, dealing with very high

	spatial resolution images. The participants have been provided with course materials and demo versions of image analysis software. Suitable laboratory sessions were organised to complement the classroom lectures.
Output 3: MONITORING and EVOLUATION PROGRAM	The monitoring system of the project outputs included quality control of the outputs through questionnaires. a. Make a plan for evaluating the programme. b. Feedback and review of the effectiveness of the training. c. Analyse and report results. The results of the training evaluation are reflected in the next phase of training planning to improve future training programmes
Output 4: Collaborating with lecturers of Universities	This programme has been approved by the persons and organisations that have been involved in the project.

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

The major challenge encountered during the implementation of the project was fluctuation in prices of budgeted items. Only this fact forced me wait for such a short period of time for the situation to be clear.

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

The most important outcome is that rare vegetation monitoring using remote sensing approach gave significant results. Proposed role of a "buffer zones" in the conservation of rare vegetation developed and established. "Industry object 1" and "Industry object 2" on satellite imagery were indicated.

Rare vegetation classification within the "Buffer zone 1" and "Buffer zone 2" were implemented. Analysis of rare vegetation distribution within both "buffer zones" was produced.

Vegetation distribution maps were created.

Map production of changes in rare vegetation within both "buffer zones" ("Buffer zone 1" and "Buffer zone 2") over the years was implemented.

Designing conservation education programme

I implemented the task facing me (in previous my project) and I developed the training materials (user guides, lesson plans, training scripts and presentation) for different levels of users (at any proficiency level - for novices, intermediate and experts). These materials have been approved by the stuff that has been involved in the project.

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

The lecturers from Institute Architecture and Construction have been involved in our education program. They used the education materials developed by Yelena Gambarova in his lesson plan. Expert from Azərbaycan Milli Elmlər Akademiyasının Zoologiya İnstitutu was involved for the evaluation of conservation training program.

5. Are there any plans to continue this work?

Yes.
- It is very important evaluating the impact of the education programme on Azerbaijani students' knowledge about and attitudes towards rare vegetation in Gobustan with help of pre-test and post-test.
- The pre-training phase could also be improved. Information sent prior to the commencement of the face-to-face training course could be enhanced and shared with participants at an earlier stage from the workshop, enabling participants to better prepare themselves.
- To add a pre-training survey and to send the training material at least 1 week before the trainings for participants to arrive better prepared.
- Include more information on evaluation policies and documents such as Evaluation policy Evaluation strategy, etc.

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

Training materials - (lesson plan, manual, test scripts taking into account the features of their applications at any proficiency level - for novice, intermediate and experts) will been distributed to teachers of universities.

Engagement with local and international media to share images, and information about rare plant and it's with a wider audience http://www.science-community.org/ru/users/yelenagambarova

Information about our work is published on the website of the UNCCD (http://www.unccd.int/Documents/Success%20Story_UNCCD_2016.pdf) and scientific social community http://www.science-community.org/ru)

Scientific article "Rare Vegetation Degradation within "Buffer Zones" In Gobustan State National Park, Azerbaijan" has been published in the Journal of Earth Science & Climatic Change.
http://www.omicsonline.org/open-access/rare-vegetation-degradation-within-buffer-zones-in-gobustan-statenational-park-azerbaijan-2157-7617-1000344.php?aid=73105

I plan to create website to provide a one-stop resource portal for Azerbaijan students who want to learn more about our sensitive areas and do more for them. The website will features news on rare vegetation in this areas.

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

The project period over which the RSG was used run from December 2015 to November 2016.

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
Medicines and first aid kits 4 Package – Adhesive Tape, 1/2" x 90" Roll; 10 Package – Antiseptic Wipes; 5 Packages – 3" Bandage Compress; Drinking water and protective equipment (Suction instruments), snake-proof boots against snake bites)	300	300	0	Purchased as planned
Field Equipment/Materials **Surveying Equipment** Trimble or Leica System (Geodetic Surveying Equipment)	900	900	0	As budgeted
Software License ArcView v10.3.3: ArcMap, ArcCatalog	1000	1000	0	As budgeted
Satellite imagery of Gobustan	500	0	+500	This expense was covered from another grant awarded to the team. SPOT satellite imageries of Gobustan Area were provided by Planet Action initiative.
Office Equipment				
Computers	400	400	0	Purchased as planned
Printer	100	100	0	Purchased as planned
Digital camera	0	400	-400	Not budget originally for RSG Booster. Main camera out of service
Administrative Cost				

Office rents	800	800	0	As budgeted
Electricity	150	150	0	Purchased as planned
Subscription to internet/email	100	100	0	Purchased as planned
Fax	0	0		
Office telephones	150	150	0	As budgeted
Publication Lesson Plan, Manual, User guides, Presentation Slides and Research papers	700	800	-100	Publication expense was underestimated. Research article was not published free of charge.
Seasonal expeditions: Car hire for field trips; Fuel	800	850	-50	The difference is due to the slight increase in fuel price
Total	**5900**	**5950**		

Exchange rate: 1£ sterling = 2.07 AZM (Azerbaijani Manat)

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

Experiences Gained, Recommendations and Lessons Learnt from the Training Workshop

• In general, the workshop appears to have been highly successful. While some tentative recommendations might be made for future training programmes of this type – the evaluation capacity-building project should include two workshops: the first at the beginning of the project, the other- at the end of the project, 1 year later.

• Using pre- and post- testing - a measurement of the learning received during the class as a result of comparing what the student knew before in a pre-test and after the class experience in a post-test should develop by emphasising environmental factors.

• Results of the training outcome evaluation should be measured on four levels: the event and the participants' immediate reactions, the participants' learning, the participants' job performance, and the organisational performance.

• Creation of evaluation team - a training outcome evaluation requires engagement from several stakeholders (e.g. external evaluator, representative

from the training institution) and ideally they should all be represented in the evaluation team.

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?

I used the RSGF logo in presentation materials, training materials, specially developed by me, for the training course.

11. Any other comments?

We are grateful for the support of RSGF we received, without this support this work would not have been and so results achieved. Without the financial support gained from the grant the research would not be able to be done and completed. All three grants (1st RSG, 2nd RSG and RSG Booster) helped me to develop my career in rare vegetation conservation science.

We look forward to continuing to work with the Rufford Small Grants Foundation to further strengthen the multi-disciplinary conservation education programme.