

The Rufford Foundation Final Report

Congratulations on the completion of your project that was supported by The Rufford 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	Karim Eissa
Project title	Community-based conservation of threatened plants <i>Silene schimperiana</i> , and <i>Polygala sinaica</i> in South Sinai, Egypt
RSG reference	21271-2
Reporting period	01/02/2017 to date
Amount of grant	£5000
Your email address	kariemomar@gmail.com
Date of this report	20/12/2017

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
1- To assess the conservation status of the target species within SCPA boundaries using IUCN Red List guidelines.				Geographical distribution, population characteristics, habitat and ecology, threats, conservation actions and research needed, and red list category and criteria were Identified.
2- To carry out a morphological, reproductive, and demographic for variation detection.				
3- Identify and rank threats that affect the distribution of these species, and try to identify their underlying root causes and barriers to solutions.				
4- Clearly identify conservation priorities, suitable habitats for growth and suggest appropriate strategies for the target species conservation by in situ and ex situ techniques.				
5- Predict suitable habitat distribution for the target species.				
6- Clearly identify the socio-cultural environment interaction, conflicts and participation.				
7- Improve the capacity of rangers and researchers of PA about extinction risk assessment.				
8- To raise the public awareness about species importance and conservation programs.				
9- Setting strategies and management plans for the conservation of target species accepted from different parties.				

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

Up to this point we have never had any real problems in the implementation of the objectives and activities of the project. Incorporating of many stakeholders in the implementation stage and discussion process (workshops and meetings) was sometimes difficult in terms of arrangement, timing and simplicity of dialogue resulting from the conflicts between different parties especially between local community (land owners) and management team of St. Catherine Protected area.

By the end of these events we got a good impression and feedback from all parties as a result of our use of simple ways and clear methodology to explain the problem and its causes and impediments solutions. This persuaded many of them.

Given the current conditions in Egypt, especially Sinai (the study area) that cause activities restrictions (especially outreach activities), the team work had set strategies to address these limitations as follow:

- We divided the activities into several small parts.
- We've integrated some of the activities in subsidiaries of nature reserves activities in South Sinai.
- We used every available opportunity to present the goals and results of our project to stakeholders in the study area.

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

From January 2017 to date the team success to determine the following:

1. Geographical distributions of the target species (number of locations, distribution range, extent of occurrence, area of occupancy) were determined and distribution maps were produced. Preferable suitable habitat and microhabitat for growth of this species were extracted. Eco-geographical characteristics (topographic, ecological, and climatic attributes) that control the distribution of our target species were extracted and analysed.
2. Population characteristics of *R. arabica* (Number of populations, number of subpopulations, population dynamics, population size, number of mature individuals, fluctuation and decline status were determined. Morphological and reproductive characteristics of this species were recorded.
3. With the help of local community field experiences and our field observations the major threats on target species were Identified and ranked based on the score of threat timing, severity, scope, and urgency, and their underlying root causes and barriers to solutions were also identified.
4. Former conservation actions for this species were recorded and future needed actions, and researches were suggested.

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

Local community, park rangers, and decision makers were involved directly in the project preparation and implementation stages and better awareness towards plant conservation were strengthened.

All these achievements directly support our project aim "With the help of local community and other stakeholders, we will assess the ecological and conservation status of *Rosa arabica* within SKP as a first step for entire conservation program."

The project had a powerful positive impact especially within the implementation stage (fieldwork, training, and workshops) on participants (local community, park rangers, undergraduate students, and decision makers) in the form of raising awareness, conflict solving, management modifications, and capacity building.

5. Are there any plans to continue this work?

The outcome of the undertaken study; A general model is presented describing ecosystem degradation to help decide when restoration, rehabilitation, or reallocation should be the preferred response.

- There is an urgent need to carry out annual monitoring on species population and habitat trend, habitat trend, fluctuations, and reduction probability to follow up its situation.
- It is recommend using this study specially this species as a base line to detect the effect of global warming on species distribution by annual monitoring.
- It's very urgent to carry out detailed study about endemic species in such PA to clearly identify their distributions, interactions, dynamics, threats level and mapping as well as conservation assessment in order to have a clear vision about the situation in such place for complete conservation programme.
- It is essential to carry out such study to cover all threatened species and all Protected Areas of Egypt and the priority must be directed to the most threatening PAs.

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

Report will be sent to Ministry of Environment the main responsible body in Egypt for conserving biodiversity. One to two scientific articles will be published very soon and will be available for public.

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

All project activities were distributed to cover most periods from 1st February 2017 to date.

We worked hard to decrease the project period and we think that 10 months were enough to do such activities.

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
Post-Fieldwork Expenses: Report production and results dissemination	500	600	-100	
Project Implementation: Outreach/education activities and materials: Drawing tools. Printed brochures and posters will distribute through relevant stakeholders	365	450	-85	
Project Implementation: Workshops: Printed materials, invitations, food, snakes and transport	340	320	20	
Project Implementation: Travel and local transportation (including fuel): We need to cover the costs of travel for young researchers and university students	160	100	60	
Project Implementation: Food for team members and local guides	1100	1350	-250	
Soil chemical and physical analysis will need to process in a laboratory outside the SCPA	600	500	100	
Engine/truck (including car hire): we will have to cover this gap by rent a suitable car	125	100	25	
Camping equipment: we have to pay to land owner to use their gardens as place for camping	110	100	10	
Equipment: to record all project steps and translate it to a powerful short movie presented as an achievement for this sector we need a video camera.	250	160	90	
Equipment: For topography, location dimensions and distances we need Nikon ProStaff 3 Laser Rangefinder	300	00	300	
Equipment: field data recording, we urgently need flexible Tablet for more flexibility in explanation areas and in time problems detection	300	500	-200	
Equipment: From RSG we require Garmin GPS Monterra for recording species coordinates	400	420	-20	
Project preparation: Team training: SCPA will provide us by place and the RSG request to cover printed materials, invitations, food, transport and	340	270	70	

lodging				
Project preparation: Field guide books, maps, journal articles and other printed materials	110	120	-10	

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

Assess of the current conservation status of threatened species within the whole Egypt.

In order to help decision makers to develop an efficient and effective conservation strategy using complementary *in situ* and *ex situ* techniques, it is important to have a clear understanding of endemic species geographical distribution, population characteristics, and its habitat preferences and requirements. However, conservation of such globally threatened plant resources is a critical ecological, cultural and economic issue. The undertaking of ecological study focusing on the distribution, abundance and population structures of target species is fundamental to the assessment of the conservation status of wild populations. Therefore, we are willing to evaluate the most appropriate conservation strategies using estimates of population size, reproductive potential, distribution and threats. In addition, we will try to develop long-term conservation plans with proposed management actions.

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

- I didn't you use the Rufford Foundation logo in any materials produced in relation to this project.
- The RSGF will receive publicity through scientific articles that will be produce shortly.

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

Karim Eissa:

Team leader and he succeeded to manage the project and participate in most of the activities; his work was concentrates on the conservation of threatened species in arid ecosystem, GIS analysis, and IUCN Red List Assessment.

Ibrahim Elgamal:

He was responsible for field data collection and data entry; he helped in identifying the suitable habitat for the growth of the target species within the field.

Amir Shalouf:

Data Collection

Fatma Abdelbaset:

Documentation

Seleim Mehana:

Local guide responsible for guiding the team to the target species sites

Mohamed Hemeid:

Bedouin Manger of the St. Catherin Protected Area; he is from the local community and he facilitated the process of local community involvement.

Ahmed Abd Allah:

Botanist in the protected areas of Egypt with extensive experience in monitoring plant species in mountain ecosystem, he taken apart in the field survey.

Gamal Elgohary:

Public awareness specialist in Southern Sinai protected areas from 2010 to date. English translator at many tourist sites in Cairo from 2007 to 2010 and he helped in tourism and public awareness

12. Any other comments?

To understand trends in extinction risk, the conservation status of an entire species group must be assessed at regular intervals. No comprehensive national assessments of the status of biodiversity at the species level were undertaken at regular intervals. Attempts of evaluating Egypt's biodiversity conservation status are meagre and patchy. Several attempts have been made to provide a conservation assessment for different taxonomic groups in Egypt and in protected areas. However, most of these did not apply or acknowledge the appropriate international criteria used to evaluate species conservation status.

We are planning to submit an application to complete our work on the conservation status assessment of endemic plants of Egypt with the help of Rufford Foundation