

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.

| Grant Recipient Details | | | | |
|-------------------------|---|--|--|--|
| Your name | Vestine Ingabire | | | |
| Project title | Assessment of abundance, distribution and threats on Prunus africana in Rwanda. | | | |
| RSG reference | 24104-1 | | | |
| Reporting period | Final Report | | | |
| Amount of grant | £4,883 | | | |
| Your email address | Ingabirevestine1@gmail.com | | | |
| Date of this report | 26 February 2019 | | | |

Josh Cole, Grants Director



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 determine the distribution and abundance of <i>Prunus</i> <i>africana</i> in Gishwati- Mukura, and Nyungwe national parks | | | | Four belt transects, each measuring 50 m width and 340 m length, were established for each site and 64 plots of 25 x2 5m were provided from four belt transects. Eight belt transects and 128 plots have been designed in this study. Fifty-two <i>P.africana</i> have been recorded; 50 in Nyungwe and two in Gishwati - Mukura National Park. |
| To identify threats to distribution of <i>P.africana</i> in the Nyungwe and Gishwati- Mukura National parks | | | | Through direct observation the wild honey collection, fired wood, Sericostachys scandens, have been observed as threats to Prunus africana in NNP whereas agriculture impacts have been observed in GMNP. In addition to that, 100 questionnaires were distributed to the rangers, farmers and traditional healers; respondents showed that the agriculture and timber as serious threats to Prunus africana in NNP and GMNP. |
| To Map out distribution of Prunus africana in the Nyungwe and Gishwati - Mukura National parks. | | | | GIS10.2.2 was used to produce a map of distribution of <i>P</i> . <i>Africana</i> . Two maps were produced, one showed how <i>Prunus africana</i> was distributed in Nyungwe National park and the second showed the how this species was also distributed in Gishwati-Mukura National Park. |



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

The first round survey was expected to start by February 2018, the research permit from Rwanda development Board (RDB) took a little longer than expected, and the project started March 2018. This didn't affect project activities as the implementation plan was adjusted and all activities were implemented. Secondly, the rain was too much during the first round survey; it was raining from early morning up to the evening, it took minutes to wait for the GPS network due to high clouds and rain falling which changed the speed of the team; however we tackled this through reducing the number of transects and their length in order to complete the survey.

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

- 1. Baseline information on abundance and distribution of *Prunus africana* were provided: A total of 52 trees of *P. africana* were recorded; 50 in Nyungwe and two in Gishwati Mukura National Park with three seedlings also found in NNP. *P. africana* is concentrated along the northern area of NNP at the edge of this forest. In GMNP there is lower density of *Prunus africana* with only mature trees.
- 2. Threats to Prunus africana were identified: Through direct observation, wild honey collection, Sericostachys scandens, fire wood has been observed. In addition to that, threats were identified through questionnaires, where respondents reported agriculture and harvesting Prunus africana for timber as the main threats to this species in NNP and GMNP.
- 3. Map showing the distribution of *Prunus africana in* Gishwati-Mukura, and Nyungwe National parks were produced: Two maps were produced: one showed how *Prunus africana was* distributed in Nyungwe National Park, and the second showed the how this species was also distributed in Gishwati-Mukura National Park.

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

In the first round survey, we worked with rangers and trackers; they were aware about the role of *Prunus africana* but didn't recognise that this species has been listed as Vulnerable by IUCN. We shared with them the all crucial information on *Prunus africana*. They were involved in identifying threats through direct observation because they understood well how local communities adjacent to this parks benefited from Prunus africana.

In the second round survey during the assessment of the threats by using questionnaires, we interviewed 100 people, 50 adjacent to NNP and 50 to GMNP. We shared with them the findings of first round survey and other information related to *Prunus africana* role, threats and its status at global level. Moreover, all of them participated in providing recommendations through questionnaires where they all mentioned that the best practices can be done are ex-situ and in-situ conservation of *P. africana* and also training the other local communities in order to help them to understand the role of conservation of *Prunus africana*.



5. Are there any plans to continue this work?

Yes, we plan to establish in situ and ex-situ conservation project for *P. africana* in Rwanda. We talked to the local communities and they were willing to work together to make it happen and also we have a plan to talk with Rwanda Development Board after sharing the findings, and we hope they will agree with the next project. We want to apply for another Rufford grant to support this project.

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

This is the first study in Rwanda which provides information on *P. africana* abundance and distribution in Nyungwe and Gishwati-Mukura National Parks. We plan to share the results on ACNR website and other social medias including Facebook and Twitter. We plan also to share the findings with local authorities especially those in charge of forests, non-governmental organisations, Institutions including RDB, REMA, MOE, FHA, WCS, ARCOS, COEB and also individual researchers. Moreover we plan to share findings to the whole country through radio.

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

In project proposal, the project implementation was expected to start in January to December 2018, but the grant was received on 15 February 2018 and this led us to change the timescale as it was proposed and the project implementation started from the end of February 2018 to February 2019. It didn't affected the length of project (12months).

| Item | Budgeted Amount | Actual Amount | Difference | Comments |
|-----------------------|--------------------|------------------|------------|---|
| Contingency costs | 200 | 200 | | |
| Results Dissemination | 200 | 100 | 100 | 100 remain will be used for final results dissemination. |
| Meal | 407 | 405 | 2 | We found cheaper restaurants |
| Local guides | 362 | 400 | -38 | We were expected 2 local guides only, however we needed 6trackers who helped us to sampled plots and transects. |

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.



| Accommodation | 1,086 | 1000 | 86 | We found cheaper |
|--|---------|------|------|--|
| Subsistence stipends | 1,630 | 1630 | | |
| Car hire | 362 | 900 | -538 | We underestimated |
| Tape measures | 10 | 7 | 3 | We found cheaper Tape measure |
| Boots | 34 | 34 | | |
| File binder | 18 | 10 | 8 | We found cheaper file binder than expected |
| Notebooks, Pens, markers, Lame of papers and Pencils | 336 | 50 | 286 | Some items were cheaper than expected |
| Data sheet | 38 | 0 | 38 | We used ACNR Printer |
| Research permits | 55 | 70 | -15 | Research permit application process changed, compare with before processes, the |
| Banners | 45 | 25 | 20 | Costs were cheaper |
| Communication | 100 | 100 | | |
| Total | £ 4,883 | 4931 | -48 | 48 were Contributed by |

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

The establishing in situ and ex- situ conservation for the Prunus africana, reducing the human disturbance including harvesting for firewood, timber, medicine, fodder for animals and wild honey collection. The law enforcement particularly ministerial order n°007/2008 of 15/08/2008 which established the list of protected animal and plant species that need protection. More research to understand regeneration of Prunus africana, and the impacts of Sericostachys scandens on regeneration of Prunus africana

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

Yes, I used the Rufford Foundation logo on questionnaires, banner during the field survey and also on the final report.

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

Vestine Ingabire: I had overall responsibility as project leader for the planning, design, data collection, analysis, report writing and closure of the project.

Aimée Grâce Musabwamana: Has contributed in data collection, analysis, and



report writing.

Sylvie Isange: has contributed in data collection, mapping, analysis and reporting.



Diameter breast height measured, in Nyungwe National park. ©ACNR.



Took in first round survey, before the seeds and seedlings of *P.africana* cleared in T3, Nyungwe national park, 2018 March. ©ACNR.





Took in second round survey, seedlings of *P.africana* after cleared in T3 Nyungwe national park, January 2019. ©ACNR.



Stem of *P.africana* showing a scar caused by people, collecting honey in the tree hollow, in Nyungwe National park. ©ACNR.





Terminal bud of young Prunus africana destroyed by Sericostachys scandens in Nyungwe National park. ©ACNR.



The tree of *P.afircana* found in Gishwati- Mukura National park, its height has been affected by agricultural activities. ©ACNR.





People cleared grasses for livestock in this transect in GMNP



Interview with ranger



