

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 | Nguyen Duc To Luu |
| Project title | Conservation of endangered species of conifers in Xuan Nha Nature Reserve |
| RSG reference | 15387-2 |
| Reporting period | May 2014 to July 2015 |
| Amount of grant | £ 6,000 |
| Your email address | ndtluu@nature.org.vn |
| Date of this report | 15 August 2015 |

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 |
|---|--------------|--------------------|----------------|--|
| Information collected on occurrence, distribution, habitat, ecology and population of three endangered conifer species in Xuan Nha nature reserve (Son La province) and adjacent areas in Muong Lat (Thanh Hoa province). | | | x | Two new subpopulations of <i>Pinus cernua</i> were found in Xuan Nha Nature Reserve. The pine was described and published as a new species for science. Presence of <i>Cunninghamia konishii</i> in the reserve was confirmed. Surveys for more subpopulations of <i>Amentotaxus</i> were conducted but new subpopulations were not found. Instead of survey in Thanh Hoa a search for <i>Cunninghamia konishii</i> was conducted in Ta Sua Nature Reserve (Son La province). However, new occurrence of the species has not been able to be found. |
| Natural and anthropogenic threats to the three conifer species in the sites assessed and measures for conservation action plan proposed. The survey information and assessment will be published in a scientific journal. | | | x | Natural and anthropogenic threats to the three conifers were assessed and updated. Information on <i>Pinus cernua</i> was used in publishing the new species. Information on occurrence, habitats and threats to the three species was compiled in species conservation plans. The plans set conservation objectives for the conifers and propose necessary actions and their implementers. The Species Conservation Plans are discussed among stakeholders at the final workshop and used a common document for coordinating conservation efforts of different stakeholders. |
| A conifer conservation club established in Xuan Nha nature reserve which includes village and district people interested in conifer trees. | | | x | A Conifer conservation Club was established with seven members from Kho Hong village of and three staff of Xuan Nha Nature Reserve, two forestry officers of Chieng Son commune. |

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| Eight thematic training seminars on different aspects of conifer conservation and utilization hold for Conifer Conservation Club in villages as a regular meeting of Club's members. | | | x | <p>1st seminar was on introduction conifers and their conservation.</p> <p>2nd seminar was a field trip and seed collection for <i>Pinus cernua</i>.</p> <p>3rd seminar was on nursery establishment and operation.</p> <p>4th seminar was on seed sowing and germination.</p> <p>5th seminar was on seedling transplanting and care.</p> <p>6th seminar was a study tour to conifer nursery in Moc Chau town.</p> <p>7th seminar was on vegetative propagation of conifers.</p> <p>8th seminar was a field monitoring of conifer populations</p> |
| A small nursery in the village set up and run by the Club's member to propagate the conifers of Xuan Nha area. At least 1000 seedlings of the three conifer species are produced by the people. | | x | | <p>A nursery of 15 m² has been established from local materials (bamboos) for fencing, shading and making beds. 20 kg of cones of <i>Pinus cernua</i> were collected. 1.000 seeds of the pine were sown on the beds in the nursery. 300 cuttings of <i>Fokienia hodginsii</i> and <i>Amentotaxus argotaenia</i> were transplanted in the nursery. Part of the plant materials were taken to the North West University and handled by the staff of the University for propagation studies.</p> <p>Seeds for <i>Cunninghamia konishii</i> and <i>Amentotaxus yunnanensis</i> were not able to be collected since the remaining trees did not produced seeds during the last year.</p> |
| 3-4 articles are published on thiennhien.net and related environment websites. | | | x | <p>One article was published about the first occurrence of <i>Cunninghamia konishii</i> in Son La.</p> <p>A short video news on <i>Pinus cernua</i> in Xuan Nha Nature Reserve was broasted by Son La TV.</p> <p>One article was published in thiennhien.net on the conservation plans for the three conifers.</p> |
| A final workshop is hold in Moc Chau town to | | | x | A workshop was hold in Moc Chau with 25 participants from Xuan Nha NR, Ta Sua |

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| disseminate project results to district and provincial forest authorities. | | | | <p>NR, Hang Kia – Pa Co NR, Xuan Nha Conifer Club, Northwest University, Son La Science and Technology Department and some botany experts. Survey results in Xuan Nha and Ta Sua NR were presented in the workshop. Species conservation plans for three conifers were discussed among the participants.</p> <p>TV crew of Van Hoa district participated in the workshop and made video records.</p> |
|--|--|--|--|--|

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

Remaining populations of *Cunninghamia konishii* and *Amentotaxus yunnanensis* are too small, limited to 1-3 individual trees. That makes propagation by seeds impossible due to infertility of the individuals. Propagation by cuttings was used as an alternative method, but good cutting season passed. Therefore, cuttings were difficult to be rooted.

Capacity of local H'Mong people is limited and difficult to involve them in technical exercises as propagation experiments and in formal collaboration with forest rangers. The series of hands-on training and seminars plus joint field visit helped the people in their engagement.

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

The most important outcomes of the project are:

- Confirmed occurrence and first record of *Cunninghamia konishii* in Xuan Nha Nature Reserve. The conifer is listed as Endangered in IUCN Red List and is one of the most threatened species in Vietnam. Survey in Xuan Nha has confirmed occurrence of the species in Son La province which is a link of other subpopulations in Thanh Hoa – Nghe An with distribution in Ha Giang province.
- Establishment and operation of Conifer Club in Xuan Nha with participation of H'Mong people. It is the first time to have such organization to support specific conservation efforts at community level. The informal interest-based club shown to be a good practice for engaging local people in biodiversity monitoring and sustainable uses.
- Discussed and shared conservation plans for three endangered conifers which creates collaboration among different agencies on conifer conservation and development in Son La province. It is a good practice to have such species conservation plans in nature reserves for consolidating and coordinating conservation efforts of different stakeholders on highly threatened plants.

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

The main target group of the project in the communities is the Xuan Nha Conifer Club. The Club has seven members who are H'Mong people in Kho Hong village of Chieng Son commune. The people participated in eight practical seminars during the project which included topics on conifer conservation, field survey and monitoring for conifer populations, seed collection, cutting propagation techniques, community nursery. The Club also play an important role in compiling and implementing species conservation plans for three endangered conifers in Xuan Nha. Through the Club's activities information on conifers in Xuan Nha is delivered to the communities surrounding the Nature Reserve and the community people actively involved in the conservation and development of the conifer biodiversity in Xuan Nha.

5. Are there any plans to continue this work?

Further work on conservation and development of the three conifers was discussed and defined in the Conservation Plans for these species. The main activities are proposed as:

- Continue surveys to find additional subpopulations and assess status of the three conifers (*Pinus cernua*, *Cunninghamia konishii* and *Amentotaxus yunnanensis*) in Xuan Nha Nature Reserve and other areas in Son La province (including Ta Sua Nature Reserve).
- Increase protection, regular monitoring for the known subpopulations of the conifers in Xuan Nha Nature Reserve. Communication of the issues should be conducted by Management Board of Xuan Nha Nature Reserve through the Xuan Nha Conifer Club in order to raise awareness and involve local people in forest protection.
- Collaborate with research institutes (Northwest University, Son La Centre for Science and Technology Application, Vietnam Forest Academy) to propagate the conifers and set up an area for gene conservation of the three species in Son La province.
- Promote uses of the trees in forest plantation, agroforestry models and in horticulture planting in Xuan Nha. The conifers would be used as a symbol (logo) for Xuan Nha Nature Reserve and Van Ho District contributing to tourism in the area and bringing more income for local people from utilizing the conifer resource.

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

Project activities and results were shared in the websites and media:

<http://www.thiennhien.net/2014/07/13/ghi-nhan-moi-ve-loai-ngoc-o-khu-btt-n-xuan-nha/>
<http://baotainguyenmoitruong.vn/tai-nguyen-va-cuoc-song/201508/phat-hien-loai-thong-moi-tai-khu-bao-ton-thien-nhien-xuan-nha-moc-chau-605319/>

Local TV (Van Ho district) participated in some events of the project and broadcasted news about *Pinus cernua* and Conifer Club in Xuan Nha.

Key information of three targeted species was compiled in the Conservation Plans and is shared with different institutions during the final workshop and on the website:

<http://nature.org.vn/vn/2015/08/tong-ket-du-an-bao-ton-va-phat-trien-cac-loai-cay-la-kim-o-xuan-nha/>

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

The project was implemented from June 2014 to July 2015 with total duration of 15 months. The time is sufficient for field survey, Club's seminars and dissemination of project results. Activities of the project were done in-time.

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 |
|--|-----------------|-----------------|----------------|----------|
| PERSONNEL | | | | |
| Project implementation staff allowance | 1,765 | 2,816.58 | -1,051.87 | |
| Local guide | 588 | 144.93 | 443.30 | |
| Administration personal allowance | 309 | 326.87 | -18.04 | |
| Sub-total | 2,662 | 3,288.37 | -626.61 | |
| EQUIPMENT | | | | |
| Field survey and seed collection equipment (hiring camps, storing bags, etc) | 176 | 10.35 | 166.12 | |
| Nursery tools and materials | 735 | 126.25 | 609.04 | |
| Sub-total | 912 | 136.61 | 775.16 | |
| ADMINISTRATIVE COSTS | | | | |
| Office stationery, communication | 441 | 168.93 | 272.24 | |
| Referent books, maps | 44 | 0.00 | 44.12 | |
| Sub-total | 485 | 168.93 | 316.36 | |
| TRAVEL COSTS | | | | |
| Travel and accommodation for project staff | 676 | 825.73 | -149.26 | |
| Travel and accommodation for project stakeholders | 147 | 38.69 | 108.37 | |
| Sub-total | 824 | 864.42 | -40.89 | |

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|--|--------------|-----------------|----------------|---|
| TRAINING, WORKSHOPS & CONFERENCES | | | | |
| Dissemination workshop | 882 | 672.00 | 210.36 | |
| Thematic seminars and meetings in villages | 235 | 870.71 | -635.42 | |
| Sub-total | 1,118 | 1,542.71 | -425.07 | |
| Grand total | 6,000 | 6,001.04 | -1.04 | PanNature paid for the amount expenditure over budget |

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

The populations of the three conifers are highly threatened and the species have good utilisation potentials. It is important to continue conservation work and use the genetic resource for creating additional income for local people and rehabilitating the forest landscape in Xuan Nha Nature Reserve.

I would like to apply for the Rufford Booster Grant to continue the work.

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?

RSGF logo was used in banners of the seminars and the final workshop. It is also printed and published on the booklet of the previous project. The booklet with RSGF logo was additionally disseminated to news partners of the second project. Management Board of the Ta Sua and Xuan Nha nature reserves, as well as forest services of Son La province acknowledge the support of RSGF.

11. Any other comments?

The fund for the second project working on conifer conservation in Xuan Nha nature reserve has promoted interests of a wide group of stakeholders in Son La provinces including community people, research institutes, forest authorities. A small network on conifer conservation and development is formed in Son La during the project. I would like to express acknowledgement to RSGF for supporting the project.