

### 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	Uttam Babu Shrestha						
Project title	Tragedy to Triumph: Understanding the role of community institutions for sustainable management of Chinese Caterpillar fungus						
RSG reference	16795-В						
Reporting period	2014-2016						
Amount of grant	£ 10,000						
Your email address	ubshrestha@yahoo.com						
Date of this report	May 18, 2016						



1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

literaturesinstitutions, SES, and CPR will be Conducted.related to the socio-ecological framework and common pool resources pertinent to the objectives of this study.Datacollectionstrategy and analytical frameworkYesI developed an analytical framework and questionnaire and followed that to conduct this study.DataconsultationYesI developed an analytical framework and questionnaire and followed that to conduct this study.Tradeand harvest survey: Interviews with different actors involved in harvesting, and retailing will be conducted.YesA paper based on this has recently been submitted to a peer-reviewed journal. It is currently under review.Workshopand meeting: and a national level workshop will be organized with the stakeholders to discuss social, economic, ecological, policy, institutional aspects of the fungus.Three workshops in three different district (Bajhang, Darchula, and Jumla) and a consultation meeting With stakeholders in Gorkha district was carried out. Due to the earthquake, while I was visiting Nepal for my field visit (April-May 2015), I was unable to conduct a national level workshop. Nevertheless, I was able to conduct bar with the help of research assistants. Despite this unintended circumstance, necessary data about the economic, ecological, policy and institutional aspects of the fungus were collected by contacting key personals from the	Objective	Not achieved	Partially achieved	Fully achieved	Comments
and analytical framework will be developed after a review of literature and consultation with social scientists and statistician.framework and questionnaire and followed that to conduct this study.Trade and harvest survey: Interviews with different actors involved in harvesting, and retailing will 	SES, and CPR will be			Yes	framework and common pool resources pertinent to the
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Interviews: Personal Yes I have had phone conversations, interviews, formal and Personal meetings with key				Yes	I have had phone conversations,



informal discussions will be done with policy makers, government and non- governmental officials, experts, and community leaders Field visit for case study	Yes	Yes	respondents that include policy makers, representatives from governmental and nongovernmental organizations, and community based organizations. I and a research assistant personally visited three districts (Bajhang, Darchula and Gorkha) and two research assistants visited Jumla district and gathered information. I am analysing the data with a
Collection of Media reports		Yes	help of a research assistant. Although this activity was not included in the proposal, it was done to gather information about local institutions, existing conflicts related to caterpillar fungus and the impacts of caterpillar fungus- harvesting on the local livelihoods. As I could not organize a national level workshop, I have utilized some spare money allocated for the workshop to collect published reports in different media about caterpillar fungus from 2008 to 2015. We (including two research assistants) systematically searched news published in all daily newspapers (Kantipur, Gorkhapatra, Nagarik, Samachar Patra, NayaPatrika, Annapurna Post, Karobar daily, Rajdhani Daily) of Nepal in last eight year period. Total 361 news about Caterpillar fungus (Yarsagumba) were identified and the news
Publication of three peer review research articles	Yes		cuttings were photographed for further use. This data is being analysed. We aim to publish a research paper. One paper has been submitted. Other two papers are under preparation. I have published a feature article in the Nepal magazine.



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

I was traveling to Nepal for my field visit. Thirty minutes after I landed at the Tribhuvan International Airport, Kathmandu on April 25, 2015, and the earthquake stroke Nepal. Due to this unpredicted disaster, my plans for this project such as conduction a national level workshop were completely side tracked. It was impossible to conduct a national level workshop for months in this chaotic situation. The workshop cannot be conducted on later dates as my travel budget is limited. Therefore, personal communication, meeting, telephone and skype conversations with the key stakeholders were carried out to gather information. Nevertheless, district level workshops in the Bajhang and Darchula were successfully conducted as those districts were unaffected by the earthquake.

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

- <u>Data for socio-ecological framework:</u> We have collected data on the social, ecological, institutional attributes of the caterpillar fungus harvesting to analyse the role of local emerging institutions on the socio-ecological outcomes of the caterpillar fungus harvesting. Each district has unique management practice, governance system, and a separate history on caterpillar fungus harvesting. It allows us to perform a comparative study among six major districts of Nepal where caterpillar fungus is harvested.
- 2. <u>Strengthen the capacity of local stakeholders:</u> We conducted three workshops/trainings in three different remote districts (Bajhang, Darchula and Jumla). We provided information on the various aspects of the fungus to the local participants. We discussed about the harvesting techniques to minimize the ecological costs. Life cycle, the ecological costs of harvesting market, utility of the fungus and government policy related to Yarsagumba. A documentary on the caterpillar fungus was also shown in the workshops. We also published 5000 brochures (3000 colour and 2000 photocopied) to distribute among the harvesters. Those publicizing materials were distributed in four different districts (Bajhang, Darchula, Jumla and Gorkha). Furthermore, we also discussed local journalists about the on-going decline of the fungus and importance of conserving it. The photographs of the workshops/trainings are given below.





Training/Workshop in Bajhang District. Nepal





Training/Workshop in Darchula District, Nepal





Training/Workshop in Drachula District, Nepal.



Training/Workshop in Jumla District, Nepal





Training/Workshop in Jumla District, Nepal

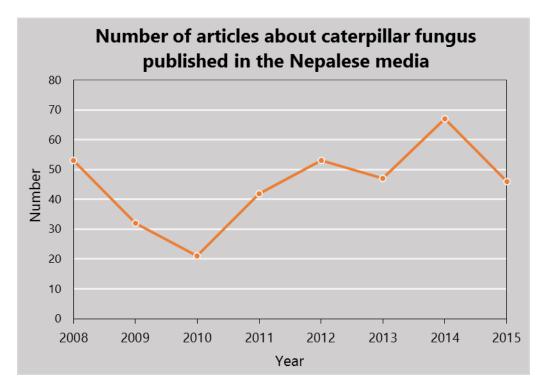






Training/Workshop in Jumla District, Nepal.

3. <u>Compilation of media reports:</u> We have compiled 361 news reporting about caterpillar fungus published the major daily newspaper (Kantipur, Gorkhapatra, Nagarik, Samachar Patra, NayaPatrika, Annapurna) from 2008-2015. This is an extremely important aspect of information that allows us to understand the cause and consequence of conflicts related to caterpillar fungus, the role of local institutions in managing caterpillar fungus, and the positive and negative impacts of caterpillar fungus harvesting on local livelihoods. The figure below shows the number of news reporting in different years. We are analysing the data and preparing a manuscript.





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

Local communities were involved in this project both as beneficiaries and contributors. They were trained on the various aspects of the caterpillar fungus. We provided knowledge about ecology, natural history, regeneration process and distribution of the fungus in Nepal as well as market information. Participants in the training were also aware of the negative impacts of the fungus harvesting and ways to reduce ecological costs of harvesting. Trainers provided successful management cases from the other countries such as Bhutan and China. We also showed a short video clip about the life history of Caterpillar fungus. We distributed 3000+ copies of the brochure in four districts to raise awareness and local capacity. The brochure has information about life history, ecology, use, market, distribution and the negative consequences of fungus harvesting. It also has means of reducing ecological costs and sustainable harvesting guidelines.

The local communities also supported the project by providing information about the habitats, collection locations, the role of local institutions in managing the fungus, governance system, history of the collection, resource availability in their nearby pastures. That information will be analysed for the research purpose. Therefore, they not only contributed to the project but also benefited from the project.

### 5. Are there any plans to continue this work?

Yes, I am planning to conduct a research on the ecological costs of caterpillar fungus harvesting using remote sensing data and field data.

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

I have shared the results of this and other previous project supported by Rufford foundation through publishing research articles in the peer reviewed journals, op-ed articles in newspapers and magazines, public presentations. I published a featured article on the Nepal Magazine. It is the most widely read magazine in Nepal. One scientific paper is under review.

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



# 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
Personal	3950	5000	-650	PI and research assistants were heavily involved in collecting data on the media reports.
Bus and Taxies	150	450	-300	We had to use hired vehicle (Jeep) during our trip to Darchula, Bajhang and Gorkha that increased the cost.
Domestic Air travel	600	520	+80	
Food and Accommodation	1800	1200	600	Only two people flew initially from Kathmandu that reduced costs of Accommodation and Food.
District level training	2100	1950	+150	
National workshop	1100	0	1100	Could not accomplish this task due to the earthquake.
Communication	0	300	-300	We have to use international calls to communicate with local stakeholders, traders and others.
Boucher and poster printing	0	350	-300	This was not included in the budget
Stationary and field materials	300	310	20	~
Total	10000	9980	+20	

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

The next steps are:

- a) Analysing the data on media report and prepare a manuscript.
- b) Preparing a manuscript on the role of local institutions on managing caterpillar fungus.
- c) Planning for further research on the ecological costs of fungus harvesting.



# 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?

Yes, I used logo of Rufford foundation in banner, brochure and acknowledgement slide of my presentation as well as in the published articles. Rufford foundation is also mentioned in the article published in Nepal Magazine.



Logo of Rufford Foundation in brochure.





Logo of Rufford Foundation in Poster.





वरिवलंगको करण पहिले में उत्त्य जोंद्रामचा प्रेफा हिमानी मेगका वसम्पति र परित्विकीय इत्तावीमा वकारात्मक अलग परितंको मॉजनी अनुमान गर्न मॉडन्ड्र । र, यमको मृत्य दीप्रेकार्तन रूपमा चर्को हुन संबद्द ।

#### दिगो व्यवस्थापनका चुनौती

रूगरे वयांवरणीय मुग्य थुवाएर वावलव गाँग्वे यात्रांको रिक्षे व्यवस्थारक अल्वादवरक अद्रमार्थको छ.। तात्रांको रिक्षो प्रावस्थारक बल्लाने उाक्तिक रूपमा दिवी उपसथात, आर्थिक रूपमा सरिय अल्लाक्ष्या देवे मुनाचा र वात्रात्रिक रूपम विद्यां माण वाँकण्डा। वार्त्यांको नीवल्यक र पत्रको पुन-उत्पान विधिका वारे रहेको बैजनिक जरित्या पूर्व जीवको संपुन रूप सप्रवाने त्रर्य बेववलमा मार्ग, उम्मरे जानेजलना संरथक विधि प्रमाप्त किर्यान प्रायं व्यवको संरथा पुनेतिपूर्या वंगेको छ। वार्त्रा नेविका वार्ट्या संकलक सएकाले सरकाल कर्मे निरित्र कर्वाचा साम्येको संरथा अस्वल हुने में बांको नक्षतन का नैविक योत है। नाव्यकि संरथा असलक हुने में बांको नुननात्रक रूपका सरका व्यवि प्रायं माम्येको संरथा असलक हुने में बांको नुननात्रक रूपका सहन उद्योग पहुने दुता वावलका त्रावस्तानेन तरेवाच वार्टी पायस्थारक प्रमु मुननो किंडीकर पाय स्वयंको प्रसान दे तरेवाचा वारित प्रवस्थान छ। प्रायंको सिंडाय हुन्त संरथको कार्या साहन्द्री त्रं स्वयं प्रति क्रेस्ट गर्न् स्वयाना किंडीकर पाय स्वयंको प्रति व्यवस्थापत्रा जुटानको उद्यहत्य त्वरीपी वाक्तिस्था व्यवस्थी प्रायं प्रकृत्व क्रे त्रिये प्रायंक्ष स्वाय कार्ट्या व्यवस्था क्रं होडन त्वर्य प्रायंक्ष क्रं त्र स्वयंक्ष स्वाय स्वीत्वेवस्थ स्वाको हिंगी व्यवस्थापत्रा स्वाया स्वाया विद्यित्य या प्रयाप्त स्वायक्ष संरक्ष कर्या सार्य्या स्वयन्त व्ययी स्वीत्वेवस्थ स्वाकोकी दियी व्यवस्थापत्रा स्वायन्त्व स्वायी व्यत्वराप्त या प्रायं क्षेत्र त्वर्य पुष्ठ संर होडन त्वर्य्या व्यत्वप्र स्वायों क्यां त्वावस्थापत्रा ।

प्रायांत्रमाई प्रावृत्तिक रूपमा लोगाउन र वापिक दिमावने नारमामूलक उत्ताय वसको कृषिम उत्पादन पनि हुन मक्स। वृत्तिम उत्तादनका मागि वैवासिक अनुमन्धान र इत्यावरल जारी मए लापनि प्रकृतिका पाइनेजरूमी पार्वा (तामा र दुर्गाया रुपना रूपमा कृषिय उत्पादनमा वले जन्मे बारकतत्ता पाउन सब्लिएको धैम । नेगानमा च्याउ धेनी गरेकसी पीन, जायान र धनेरिकामा वसको दुनी अग्राव्ये वृत्तिम उत्यादन हुन धालेखो छ, । वसनी उत्पादित वार्ताका दुनी व्याव्येक जवाप्रमा किल्य पहुन्छ।

विभाग्न सांप्रवंभुद र भिरदेषित्रका प्रमानाई विषय्हापूर्व हुन्छ । सांसांको कृषित्र उत्पादनमा मर्वेभन्दा पुनीली प्रमुखन लागि पालिने लाभोको दुनो नरवामा उत्पादन गर्नु तो । केली महिलपलि मार्च जायनको एक कम्पनीले त्वम सीलाको लाभोमा पालांको च्याउ संत उगारिर प्रमुखो प्यायसाहिक इत्यादन मुरु गर्नुब स्वार आएको पियो । वीनमा पनि पुलबीखाई फलेर नामां उत्पादन सुरु गरिएवी छ । तर, ठूलो मात्रामा पत्रको बहिस इत्यवतन व्यतपत्रा आठन्द मनिपत्रीय वास्त्रीने बहिलेको कवार माग र मूल्य घट्स मळडू रुमसे यदी हिमानी केफा प्रार्थमनाको मां अधित वीर्षणक प्रत्यास कर संकल्प । त्यस कारक ठूलो पर्याक्षरणीय मूल्य पुकाएर तकलत मीत्रावी मार्थाने त्याएवी सर्विक व्यवसको सङ्ग्रामीन क्षेत्र मंत्री पुरुन हुँदिन । मार्वाने स्वर्जन केवको गरिवी निवारक र वीदमन्द्रसमा परिकांन की मले मांचेन भर्जन अजवनगरिक वीदमर्थ अधिक जन्वसरम्पन्न पूरेन्व वारण ॥ ।

#### के गर्द छ सरकार ?

नेपालयो विजयमा उद्दीपट्टिको सम्मावण येरै उठाइने विषय गे। अर्थिव, मार्माठकः । बालवरण्ठेव विणवके पानांगहे कथेम्लय येरे मध्यावनाओ जडीव्यूटी मान्न तकिन्छ। तर, और मान्मावल यॉक्सो यातांकी दिगो व्यवस्थापना भरपरकारी तरारादा सामै काम भएको हैल। स्थानीय जनताको चेतना ऑमसुदि गर्ने, अध्यपन-अन्सर्व्यालयाई रूपांगा गर्ने, मार्श्वांग साब्वयित तावरवक नीति-निषव र कार्यका बनाएर कावान्यवन गर्ने कुरामा मरकराते खाने काम तर्न मर्वको दिन। पत्र नेद्रमा कैलापाको <mark>कर्यादे प्रवाहनेवनकी साहर्यतामा</mark> कर्प्यायात्रका लागि इज़ायता र नार्वित्रमा बन्धाव र वार्ड्वता पुत्रा त्यांका स्थानीव लागेवारवानाने प्रयानिकबली कलो ततित्व किल्पना पतिर्थायदक साली वनाएक विष्टा वकाड र वार्जुना वाहेत्र प्रतुत्मन्वतको स्थानीया साम्य, मयाइ, मुल्लाइ, गोरखा, तोवर्खा एना पति बरकार्य सार्वावाट राज्य तहेवलन पत्रेवांक वल्य काम गरेको धोटेएको देल ।

ধান নামজা খাঁ, হালো ঘটনা গাঁহৰ জলাবহিয়ে কৰাজাঁ নিময় বনগাঁৱ মাৰ্চি নামানা মাৰামান বা খিলা-বিধালবোৰ্ছ আৰমিজা কা আহঁৱৰ বৰাজাই বিধাঁ, হালা আইকাৰ হৈ বৃত্তৰ মাই বিবিৰদ খনি বুজাহোঁ বিধাঁ, মালয় নাজনাই আ ৰাম্যানা বয়বৈদা মুক বন্দ, ব্যৱস্থাবেলা ঘূৰবোজাইজন খন, ব্ৰাজ আইকাৰ মুক মাইছেল মুনাজ্যক মাইছেলা হবে। বা, ব্ৰাজ আইকাৰ ঘ্ৰবিদ মুক মাইছ আজা আইকাৰা ঘলি লগাকাঁ নিৰখনে বোগাঁৱনা অভনবাদনা বালেঁ ভাৰী ঘালা গঢ়াৱা হিব । যা বুনাযাযুক হা । \*

(अश्टेनिकको सुनिर्भावे) अत्र माउदर्ग निर्माणमाउद्यो होन्द्रापुर फर एप्रिकम्पर एस द सम्प्राणमेग्वया बाह्य कालकाणा रिवर्ष जेले तंत्रप्र माठ्यस्य सार्वाक्रम्पनी एक त्रवंत्र्याते विस्थित सेक र भेरावस्य समुद् निर्माह कर किस्नाह सर्ग विक्रमा' नामक प्रमान व्यवस्थित छर्

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Article published in Nepal Magazine. The name of Rufford foundation is highlighted.



### 11. Any other comments?

The support of RSGF is very helpful for this project. Locals were very happy to attend the training program. They mentioned that they heard this type of training for the first time that is quite encouraging.