



## Darwin Initiative Main/Post/D+ Project Half Year Report (due 31 October 2016)

<b>Project Ref No</b>	<b>23-009</b>
<b>Project Title</b>	Sustainable rangeland management to protect red pandas and herder livelihoods.
<b>Country(ies)/Territory(ies)</b>	Bhutan
<b>Lead Organisation</b>	Charles Sturt University
<b>Partner(s)</b>	Department of Livestock (DOL), Department of Forests and Parks Services (DOFP), World Wildlife Fund Bhutan, Red Panda Network (RPN), Australian Landcare International (ALI).
<b>Project Leader</b>	<i>Dr Joanne Millar</i>
<b>Report date and number (e.g., HYR3)</b>	<i>HR1</i>
<b>Project website/ Twitter/ Blog/ Instagram etc</b>	<i>To be developed</i>
<b>Funder (DFID/Defra)</b>	<i>DEFRA</i>

**1. Outline progress over the last 6 months (April – Sept) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up to end September). Note: The project started in May so we have reported for the period May to October inclusive, as many activities took place in October.**

**Output 1- Restoration of eroded gullies, regeneration and zoning of critical red panda habitat, and red panda research.**

**1.1** Dr Karma Tenzing visited Bhutan in May/June 2016 and held meetings with DOL, DOFP, WWF Bhutan and Merak herders to plan project activities. At the meeting in Chebuling, herders and staff agreed to designate two core red panda conservation zones for research, bamboo planting and restricted access to livestock and people. They also agreed on the first two landslides to be fenced and planted (see map below). Fencing materials were purchased in advance. Herders are keen to trial improved pasture but need to wait for completion of the land allocation process in 2016 which will give them management rights over individual land titles. This tenure allocation process is currently underway so it is anticipated that pasture can be trialled in spring 2017.

During August and September, the project planning team (Director of Sakteng Wildlife Sanctuary, Mr Thinley Wangdi, Director of Regional Livestock Development Centre, Dr Tsering Dorji, and Drs Tenzing and Millar made plans for the project launch, household survey, herder group training and red panda research via emails, phone calls and skype. We organised budgets, logistics, programs and timetable. The project was launched on 23 October in Merak village with support from the newly elected local mayor (Lam Rinchen), councillors, park staff, livestock extension staff and the district governor office. It was a very ceremonial event involving the whole community with blessings, offerings, singing and performance of a sacred yak dance (see photos and newspaper article).

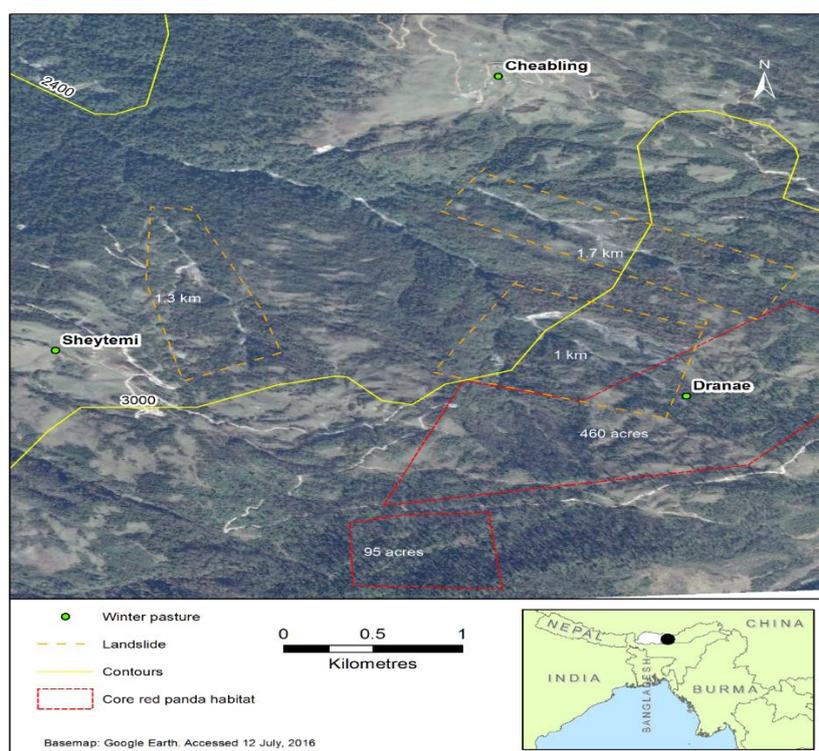
**1.2/1.3** Land management activities will be implemented in the next two quarters when herders are in the winter grazing area (winter/spring).

**1.4** Red panda research for the next six months will focus on determining occupancy in the core zone where herders report regular sightings and less disturbance. Park staff and designated herders will record established latrine sites and roosting trees. Camera traps will be installed at these sites and monitored monthly by herders and staff. We will start with infrared cameras to minimise disturbance. If we find occupied nesting hollows we will install video cameras to record movements

and possibly breeding events. Once we establish occupancy rates in the core zone, we will explore techniques for determining individuals using white flash or acoustic monitoring. In the second half of 2017 and 2018 we will follow the same process for determining occupancy in degraded and rehabilitated areas. This data will provide comparison between the three zones and possibly identify movement of individuals across the zones. Mortality from predation, age and illness will also be recorded if carcasses are found. Mr Kesang Dorji, Senior Ranger (Species Conservation) will lead the research and community involvement.

**1.5** Community tree nursery is under discussion to determine the best options for location and management. For the first landslide planting, native trees and bamboo will be sourced from a commercial nursery. Herders and park staff will then decide if a community nursery can be viable and produce quality seedlings.

**1.6** Discussions concerning declaring the area as a critical watershed have been held with the Minister of Agriculture and Forests, Director of Forests and Parks, and Director of Sakteng Wildlife Sanctuary. The Merak herder community have previously requested declaration to halt logging by outsiders and attract more attention to the severity of the landslides. Dr Karma Tenzing is currently investigating the process for declaration.



**Output 2 Sustainable rangeland management and pasture hay production achieved, with improved livestock management and household income.**

**2.1** The household survey was conducted from 19<sup>th</sup> October to 3<sup>rd</sup> November. Six local parks and livestock staff were trained by Dr Joanne Millar and modifications made to the questionnaire from their suggestions. A total of 100 households (83% of total, 54% women/46% men) were interviewed including 70 from Chebuling, 22 from Sheytemi and 8 from Drana. Some herders had already left for winter pastures so we were unable to interview them. Data will be analysed over the next two months and a report prepared by end of 2016.

**2.4/2.5** Pasture trials and livestock sales will be carried out next spring 2017

**Output 3 Alternative energy technology and vegetable production piloted to reduce firewood consumption and improve family nutrition.**

**3.1 to 3.4** Construction of the two biogas units will start in spring 2017 when the cement can harden. Vegetable production trials over the biogas units will occur over summer 2017.

**Output 4 Competent community-based landcare group established with two women’s savings groups enabling investment in small enterprises, and community education**

**4.1** The herder group training program was conducted in October/early November. A total of 100 herders from Chebuling, Sheytemi and Drana were trained in two groups of 40 and 60 people (55% male, 45% female). Each course ran for five days and covered group formation, group dynamics,

managing conflict, building trust and drafting group constitution and by-laws. Ten parks and livestock staff attended the first training and assisted with activities whilst learning the process. Staff gradually took over the training from Dr Karma Tenzing to build their capacity as group trainers. See program and photos. .

**4.2** Whilst in Merak we met staff and a consultant from The Tarayana Foundation who were conducting training in toy making using sheep and yak wool. They have plans to develop a women’s handicraft enterprise and savings group. To avoid duplication, we will partner with the Foundation so that our activities are complementary (ie, we provide wool processing equipment, they provide training including making toy red pandas to sell in homestays!).

**4.4** Dr Joanne Millar and park ranger (Norbu Yangdon) visited Merak school (140 students) on 20<sup>th</sup> October. Interactive talks were given to each of the six classes about red panda feeding, breeding, habitat, threats and need for protection. Approximately 15 children had seen red pandas whilst herding yaks in summer pastures. Most children knew that red pandas eat bamboo but most were unaware of other foods in the diet, where they nested or how many young they could have. Each child was given a simple fact sheet developed by WWF Bhutan which was also distributed as posters (attached). On 22<sup>nd</sup> October, the BBC documentary “Cherubs of the Mist” was shown to classes 3-6 (see photo). Students were very enthusiastic and interested in following the introduction of captive red pandas and tracking of wild red pandas in Singhalila National Park in Sikkim. We will return to the school next year to show camera trap evidence and conduct educational activities using drama, singing and art. If red pandas are identified in the project area we will run a naming competition. The BBC documentary was also shown to herders during training, creating great excitement and intrigue, particularly the breeding and raising of young in the wild. Posters of red panda were displayed around the community hall during training.

**Output 5 Project results and lessons learned from the landcare approach and red panda conservation**

**5.3** An article was published in the national Kuensel news paper on 25<sup>th</sup> October about the project launch and herder training (see attached). The project launch was announced on national radio on 24<sup>th</sup> October, and displayed on the DOFP website (<http://www.moaf.gov.bt/category/dofps/page/2/>)

**2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.**

The sub-agreement between Charles Sturt University and Government of Bhutan took 3 months to finalise due to administrative requirements by both parties and several requests for clarification and minor wording changes. Hence, funds payment to Bhutan was delayed to October. However, this did not impact on project implementation as herders were in the summer pastures, so on-ground works and training could not commence until October anyway. It gave us time to properly prepare for the project launch, herder group training, household survey, school education and red panda research design. Project activities will be carried out over the winter/spring months as planned, and there is adequate budget to see us through until April 2017.

**2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?**

Discussed with LTS: **Yes/No**

Formal change request submitted: **Yes/No**

Received confirmation of change acceptance **Yes/No**

**3a. Do you currently expect to have any significant (e.g., more than £5,000) underspend in your budget for this year?**

**Yes**  **No**  Estimated underspend: £

**3b. If yes, then you need to consider your project budget needs carefully.** Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project

please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

**4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?**

**If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.**

**Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also** be raised with LTS International through a Change Request.**

Please send your **completed report by email** to Eilidh Young at [Darwin-Projects@ltsi.co.uk](mailto:Darwin-Projects@ltsi.co.uk) . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g., Subject: 22-035 Darwin Half Year Report**