

## Darwin Initiative Main/Post/D+ Project Half Year Report (due 31<sup>st</sup> October 2017)

<b>Project reference</b>	23 009
<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>	Ministry of Agriculture and Forests (MOAF), WWF Bhutan, Red Panda Network, Australian Landcare International
<b>Project leader</b>	<i>Dr Joanne Millar</i>
<b>Report date and number (e.g., HYR3)</b>	<i>HYR2</i>
<b>Project website/blog/social media etc.</b>	<a href="https://redpandabhutan.wordpress.com/">https://redpandabhutan.wordpress.com/</a>

### 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).

#### **Output 1: Restoration of eroded gullies, regeneration and zoning of critical red panda habitat, and red panda research conducted**

1.2/1.3 The first gully at Drana (20ha) was fenced off and planted with 10,000 bamboo, acer, fir, salix and few other fodder species by local herders and park staff over 10 days. Heavy monsoon rains in August washed away some of the plantings and created more side erosion. However, cuttings on flatter areas are shooting and fences are stable. A signboard installed by the main feeder road to Merak above Drana provides details of plantation area and type of tree species planted in the landslide area. Check dams and drainage pipes will be installed in coming months to prevent further erosion.

1.4 Red panda monitoring continued with a second finding of scats on a Rhododendron tree on 12th September 2017 at 3132m. However, no pictures of red pandas have emerged yet. After a mass bamboo flowering event, bamboo regrowth is only slowly coming back so it is thought that the Red Panda population might have shifted to bamboo forest elsewhere. However, during summer months, there was evidence of Red Panda across the park feeding on fruits of wild kiwi, *Rosa* spp, *Sorbus* spp, *Holboellia latifolia*, and *Agapetes* sp. Most of these wild fruit are available in project area so park staff are planning to keep the five cameras fixed with the hope of capturing a red panda (or two!). A few herders mentioned recently that they have seen red pandas at Nugteng (one day walk south-west of our project area) so a camera will be installed there also.

1.5 Establishment of the tree nursery was delayed due to finding a suitable location under existing land tenure leases. A site and manager (herder) have now been determined and trained in basic tree nursery raising method and technique. Collection of wild seeds has already begun. Fencing posts and barbed wire are already at site. The nursery will be established over the next 6 months.

Stories on activities 1.2/1.3/1.4/2.1/4.2/5.4 can be found at <https://redpandabhutan.wordpress.com/>

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

2.1 The baseline household survey report was completed in April 2017 and shared online with partners and Darwin Fund. Findings on red panda awareness and knowledge amongst the community were shared on the wordpress blog site in May 2017.

2.2/2.4 Permission to allow herders to improve pasture on rangeland leases had to be sought from government administration which took several months. Fencing and wire was procured for pasture plots but it was too late to sow pasture seed so this will now occur in April/May 2018. Farmers will erect fencing between December, 2017 and February, 2018. Herders will be trained in pasture preparation, sowing and management over winter and early spring. Cadastral survey and mapping of pasture plots will be conducted between December, 2017 and February, 2018

2.3 A study tour on pasture management will be conducted in the coming months.

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

3.1 At the annual meeting in August, the issue was raised of herders being away from winter camps for several months, and biogas units remaining idle which is not recommended. Suggestions were to trial a portable biogas digester and/or establish a fixed dome type biogas plant in Merak where people are present for most of the year. The trial will be incorporated into the next funding period.

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

4.2 Dr Karma Tenzing (CSU research officer) and Dr Kuenga Namgay (Chief of Animal Nutrition, Dept of Livestock and our focal DOL person) visited Merak in August 2017 to train herder families how to set up saving schemes. Two staff from RLDC, Khangma and three from the Dzongkhag Livestock sector, Tashigang assisted with facilitating the training. About 98 herders attended the two day training program. At the end of the second day, two women groups (Merak and Gengu) were officially launched by the Merak Gup (mayor). We handed over two iron safes along with main ledgers and members savings passbooks. Each group has appointed office bearers and they are managing the record keeping. Twenty five and 12 founding members initially came forward to join Merak and Gengu savings groups respectively. The founding members from both the savings groups agreed to deposit Nu.500 as membership fee. Merak members decided to save Nu.100 monthly whereas Gengu group decided to save Nu. 150.00 monthly.. Over the last month, more members have enrolled with Gengu now at 81 members with savings of Nu.40,000 (about \$600US), and Merak is up to 30 members. So they are getting ready to start lending funds to members with a set interest rate.

## **Output 5 Project results and lessons learned from the landcare approach and red panda conservation documented and disseminated.**

5.4 The Annual Review and Planning Workshop for 2016-17 and 2017-18 was conducted on 4th and 5th August 2017 at Tashigang. A total of 30 participants participated in the workshop including herders from Merak (n=12), Gup, Gewog Administration, Merak (n=1), staff from Department of Livestock (n=1), Regional Livestock Development Centre, Khangma (n=4), Sakteng Wildlife Sanctuary, Phongmey (n=6), Dzongkhag Livestock Sector (n=4) and Land Record Officer (n=1), Dzongkhag Administration, Tashigang and research officer, Charles Sturt University. WWF Bhutan and Red Panda Network partners were unable to attend. A report is available and summary is on the project website.

5.3 The Bhutan Broadcasting Service did a segment about the project on August 15<sup>th</sup> 2017. Go to <https://www.youtube.com/watch?v=TOxkX4fN3u0> Segment starts at 1.30 mins.

A news clip on the Annual Review and Planning Workshop for 2016-17 for the project featured on Ministry of Agriculture and Forests website which can be found at <http://www.moaf.gov.bt/page/44/> posted on 8<sup>th</sup> August, 2017

**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.**

Inclement weather, necessary land use approvals and slow budget transfers within Bhutan have put back land restoration activities by 6 months and pasture development by 12 months. Uncertainty over biogas feasibility has delayed implementation. However, the aim is to catch up over the next 6-12 months by finishing off work on the first gully, start work on the second gully, complete pasture establishment and trial a portable biogas unit. No changes are needed to the overall budget or original agreement.

**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: No

Formal change request submitted: No

Received confirmation of change acceptance 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. Additionally, if you were funded under R23 and asked to provide further information by your first half year report, please attach your response as a separate 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**