Darwin Initiative Main Project Annual Report

Important note: *To be completed with reference to the Reporting Guidance Notes for Project Leaders:*

it is expected that this report will be no more than 10 pages in length, excluding annexes

Submission Deadline: 30th April 2017

Darwin Project Information

Project reference	22-004
Project title	Collaborative Conflict Management for Community Livelihoods and Conservation
Host country/ies	Mongolia, Kyrgyzstan, Pakistan
Contract holder institution	University of Aberdeen
Partner institution(s)	Snow Leopard Trust, Centre for Ecology and Hydrology, Snow Leopard Conservation Foundation (Mongolia), Snow Leopard Foundation (Pakistan), Snow Leopard Foundation in Kyrgyzstan
Darwin grant value	265,914
Start/end dates of project	1 April 2015-31 March 2018
Reporting period (e.g., Apr 2016 – Mar 2017) and number (e.g., Annual Report 1, 2, 3)	Apr 2016-Mar 2017, Annual Report 2
Project Leader name	Stephen Redpath
Project website/blog/Twitter	https://www.snowleopard.org/darwin-initiative/
Report author(s) and date	Stephen Redpath, Jennifer Snell Rullman, Siri Okamoto, Juliette Young, 30 April 2016

1.   Project rationale

Effective strategies that resolve conflicts between human livelihoods and biodiversity conservation are urgently sought. Large predators are particularly problematic as they are of high conservation interest but often have severe impacts on human livelihood. The endangered snow leopard of Central Asia exemplifies this problem. Across their 12-country range, snow leopards co-occur with herding communities inside and outside of protected areas. Annual per capita GDP varies from $1155 - $3673 and >40% of these rural herders live below national poverty lines. Average annual livestock depredation rates range from 3-13%, and >50% of these losses occur when animals are in poorly constructed corrals. Losses are often equivalent to up to one month's income.

Unsurprisingly, retribution killing of snow leopards is widespread, sometimes involving the illegal selling of snow leopard parts, and this killing represents a critical threat. In addition, wild ungulates, on which snow leopards depend, compete with livestock and are also killed. Previous work has shown that the abundance of snow leopards is strongly correlated with wild ungulates, which are therefore critical to the long-term conservation of snow leopards.

Finding cost effective ways of supporting the coexistence of rural communities with large predators is extremely challenging. The value of community involvement for effective nature conservation is often emphasized in conservation policies and environmental rhetoric. Yet, in large parts of Asia, wildlife conservation and management continues to be coercive and involve top-down state control, which is both morally questionable and often unsustainable over the longer term. There are limited field examples of robust, bottom-up models of wildlife conservation and conflict management that are based on deep community involvement.

This project seeks to tackle these problems by empowering rural pastoralist communities in central Asia to develop multi-pronged conservation schemes to support the sustainable coexistence of herding communities with wild ungulates and predators. Through this project we are working with herder households in Altay Mountains, Mongolia; Hindu Kush-Pamir, Pakistan, and Tien Shan Mountains, Kyrgyzstan, to:
1) Reduce livestock losses through improved corrals. We provide designs and materials not available locally, communities provide labour.
2) Offset economic losses via insurance programmes. Households pay premiums into a community-managed fund for livestock they want to insure; elected committees investigate livestock kills and pay out claims.
3) Improve livelihoods via conservation-linked handicrafts. Building on women's wool/felting skills and traditional artistry, we train them to meet international market standards. We set mutually-agreed base prices, guarantee to purchase bulk orders and provide access to US markets.

To implement these programmes, we are developing toolkits for field implementers, and recruiting 'Champions' from within communities. We are testing the effectiveness of individual programmes vs. combined programme approaches, and active 'representative' communities vs. control communities (no interventions) on income and attitudes of herders. We are also looking at biological indicators in representative vs. control communities.

This project is taking place in Central Asia: specifically Altay Mountains & Tost, Mongolia; Hindu Kush-Pamir, Pakistan, and Tien Shan Mountains, Kyrgyzstan.

2.   Project partnerships

Over the last year, the partnership has flourished. We have held regular skype meetings to discuss the project: 28th Mar, 22nd Apr, 24th May, 20th Sept, 22nd Sept, 28th Sept, 12th Oct, 7th Dec, 15th Dec & 22nd Mar 2017. Redpath spent time with Mishra and others in SLT in India (24/07/16 – 14/08/16) to discuss project planning, initial development of questionnaires and data management. These issues were then developed in a team workshop in Ulaanbaatar, Mongolia 4-11th March 2017 (Annex 3.4). The project leaders in each country (Mongolia, Kyrgyzstan & Pakistan) were present for the whole workshop, along with Young (CEH, Edinburgh) to discuss, provide feedback and finalise the questionnaires and the planning for the coming year. During meetings, we reviewed progress against the logframe, collaborated on

the protocols, training agenda, toolkit development and implementation plan and reviewed milestones and next steps. SLCF, SLF, and SLFK are very engaged in the project and have been inspiring to work with. As a result of this Darwin project, Redpath hosted 3 members of the Pakistan team at Aberdeen (Hussain Ali 25/03/16 – 22/04-16; Kabir Mohammed & Shoaib Sardar 02/05/16 – 18-10-16).

Strengths. The partnership has gone from strength to strength. There is a shared vision and an excellent rapport between the partners, and the project has had a smooth year. It was notable that in our March workshop in Mongolia, we were also joined by field teams from China and India, who were keen to extend the work of Darwin to high mountain communities in those countries. This will provide considerable added benefit to our understanding of the effectiveness of the interventions.

Challenges: Working across very diverse cultures within and between the different countries has proved a challenge. This was especially so in year 1, when we had to redefine "community". The result of this challenge was much greater understanding and appreciation for the unique human environments each team works in. These challenges again arose when we discussed the design of our questionnaire, with which we needed to capture the attitudes of local people in these different settings. We had a very fruitful discussion of our survey forms and how certain questions could be asked in different settings and as a result we feel we have come up with a stronger, more robust questionnaire and more insight into cultural variation. These discussions will strengthen our long-term ability to affect positive change.

3. Project progress

3.1 Progress in carrying out project Activities

Towards Output 1--*Conservation contracts signed with 47 communities through participatory methods, with >20 communities engaged in multiple programmes:* field staff met with communities throughout YR2 to discuss programmes and signs contracts. As of the end of YR2, we have contracts signed with 47 communities (10 Pakistan, 34 Mongolia, 3 Kyrgyzstan). Seven new communities (2 Mongolia, 5 Pakistan) started conservation schemes in YR2 and signed Conservation Contracts (Annex 1.2. a-c-Conservation Contract samples for new communities). The remaining 40 communities maintained/renewed contracts. As of the end of YR2, 36 communities are taking part in handicraft schemes (30Mongolia, 3 Pakistan, 3 Kyrgyzstan); 12 are taking part in insurance programmes (6 Mongolia, 6 Pakistan); and 12 communities have corrals (6 Mongolia, 6 Pakistan). We have 10 communities engaged in multiple programmes, compared to 7 at end of YR1. Summary of communities participating in the various schemes, by country, is attached under Annex 1.1. Project Dataset--Summary Tab. In Annex 1.1., country-specific tabs show lists of communities participating in schemes/country; all communities listed have contracts.

During YR2, we provided all 47 communities with financial and logistical support for livestock corrals, conservation handicrafts and/or livestock insurance. For corrals, we secured materials (communities provided labour) for construction of 12 new predator-proof corrals (10 new corrals built in YR2 in Mongolia, 2 new corrals built in YR2 in Pakistan). We now have a total of 26 corrals at the end of YR2 (6 Pakistan, 20 Mongolia), up from 14 at baseline. (Annex 1.3. Corral Construction Photos). In Kyrgyzstan, we have discussed corral-building schemes with 2 villages, and construction will begin in YR3 for up to 14 additional corrals.

During YR2, 4 new communities (1 Mongolia, 3 Pakistan) initiated livestock insurance programmes. In Mongolia, overall household participation in insurance schemes went up from 35 to 48. We attended two insurance committee meetings—one in July 2016 and one in December 2016 (Annex 1.4.a-page 30). During the July meeting it was agreed that our partner, Snow Leopard Conservation Foundation (SLCF) would cover 60% of herder premiums for new members. At the December meeting, premiums from herders were gathered and SLCF distributed MNT 4,150,590 in seed monies into the insurance fund (Annex 1.4a Annual report SLFK 2016). In Pakistan, 3 new communities (Kuju, Sor Laspur, and Balim) joined the programme and overall membership increased from 66 to 111 households. Our partner in

Pakistan, Snow Leopard Foundation (SLF), provided a total of 300,000 PKR to 4 insurance communities (75,000 PKR each) (Annex 1.4.b. Annual Report SLF 2016-page 3-8).

During YR2, 4 new communities (2 Mongolia, 2 Pakistan) initiated handicraft programmes. We have a total of 36 communities (30 Mongolia, 3 Pakistan, 3 Kyrgyzstan) where we placed orders for and collected handicrafts. We collected a total of 46,660 handicrafts (32,316 Mongolia, 2,344 Pakistan, 12,000 Kyrgyzstan--Annex 1.4a page 9, 1.4b page 3-9. 3.1 page 2) from 385 households (235 Mongolia, 108 Pakistan, 42 Kyrgyzstan—Annex 1.1), which were then sent from field offices to SLT headquarters in the US for distribution. Herders received c.£46,000 ($59,651) directly from sales of handicrafts, and an additional c.£8,980 ($11,590) in bonus monies for maintaining conservation contracts in 2016 (Annex 1.5. Sample of SLE purchase data from Mongolia, Annex 1.6a-h. Purchase sheets Pakistan, Annex 1.7a-b Purchase Sheet Kyrgyzstan (Enilchek and Ak Shirak)—all show proof of purchase).

Evidence for Output 1:
- Annex 1.1. Project dataset for YR2
- Annex 1.2a. Conservation contract Mongolia-1
- Annex 1.2b Conservation contract Mongolia-2
- Annex 1.2c Rakaposhi (Pakistan) Contract pages 1-3
- Annex 1.3a. Mongolia corral construction photo
- Annex 1.3b Pakistan corral construction photo
- Annex 1.3c Corral construction design Pakistan
- Annex 1.4.a Annual Report SLCF 2016
- Annex 1.4.b. Annual Report SLF 2016
- Annex 1.5. Sample of SLE purchase data from Mongolia
- Annex 1.6 a-h Purchase sheets Pakistan 2016
- Annex 1.7a Purchase Sheet Kyrgyzstan (Enilchek)
- Annex 1.7b Purchase Sheet Kyrgyzstan (Ak Shirak)

Towards Output 2--*An assessment of the effectiveness of conservation initiatives on livestock losses, household income and attitudes towards interventions, predators and ungulates, including regional and gender effects.* In YR2 we finished collecting baseline survey data from Mongolia and Kyrgyzstan (Pakistan finished in YR1); as of this annual report, all baseline data has been collected, collated and digitized (Annex 2.1a-b- Sample baseline socio-eco data Kyrgyzstan and Pakistan). We are just starting to analyze data and have hired a PhD student to assist. In March 2017, we also finalised the new questionnaires for the YR3 surveys in all countries (see Annex 3.5 below).

Evidence for Output 2:
- Annex 2.1a Sample baseline socio-eco data Kyrgyzstan
- Annex 2.1b Sample baseline socio-eco data Pakistan

Towards Output 3--*Training delivered for field implementers and meetings held with community champions. W*e continued skills/capacity building for communities in programme management and implementation, and we held meetings with local champions to provide toolkits and sensitize to conservation.

In Mongolia, there have been multiple meetings to convey skills to programme leaders. In order to build confidence of community members to manage and run livestock insurance programs, in July 2016 SLCF held a livestock insurance meeting to review the program. They provided a financial accounting and budgeting training for 6 livestock insurance leaders and township community leaders. Between July 1-3, an exposure and skills-sharing trip was held for community leaders from Tost, South Gobi, Mongolia to Khishigtkhairkhan community, Bayangobi, Bayankhongor Province, which is 300 km from Tost. The Khishigtkhairkhan community was established in 2006 and has spent 10 years running successfully as a Herder Organization. A total of 21 herders from Tost participated in the trip representing 6 herder groups from South Gobi. Objectives of the trip were to: i) Learn more about how formal Herder Organizations function (e.g. norms, regulations, role of steering committee); ii) Share skills for

working as a conservation community; iii) Discuss partnership building with local government and other organizations; iv) Discuss how to run a community fund. The Tost herders felt this was an informative exposure trip that helped them better understand how a financially independent community group functions. Also, during YR2, we held 11 handicraft skills training workshops for 141 women (topics included new craft designs, improved wool processing techniques). Training reports from Mongolia included in Annex 1.4a Annual Report SLCF 2016.

In Pakistan: field teams met with all programme communities on a monthly basis (applying community engagement skills they learned from their Darwin YR1 training, through the PARTNERS Principle module) in order to check accounts, and support financial management. For example, just in relation to the handicrafts programme, SLF staff made 31 visits to 3 community-managed skill centers to monitor the production process and hold meeting with the community (average participants per visit=21) and interacted with 637 community members & artisans in total in 2016 (Annex 1.4b. SLF Annual Report 2016). Field teams also have walked through some of the PARTNERS Principles skills with community leadership, e.g. how to improve working relations with their community members.

In Kyrgyzstan: The field team has used handicraft purchasing trips to review programme management and implementation with 3 communities. Additionally, local leaders and handicrafts participants have helped new program participants to learn how to make products. Feedback from SLT, to local handicraft makers, has helped to improve the quality of the products (Annex 3.1 SLFK Annual Report 2016).

In addition to these above trainings, one of our aims was to sensitize and provide toolkits to local champions—community members who could advocate for snow leopard conservation. At the end of YR1, 32 local champions had been identified. As of the end of YR2, this is now up to 37. During the first half of the year, all partners worked on developing and translating a tracking sheet to document champion interactions. Partners also set strategies for ways to engage with champions (e.g. prioritizing what information to share and how best to share it). In Mongolia, in YR2 they finished translating the toolkit for Champions; they are printing them now and plan to distribute in summer 2017 (Annex 3.2d Toolkit Update Mongolia). In Kyrgyzstan, the toolkits have been translated and shared with 5 Champions (Annex 3.2c-Column O). In Pakistan, toolkits have not yet been shared with Champions (Annex 1.1 Project Dataset, Pakistan Tab, Column E). We are still working to translate the toolkit for champions into local languages for dissemination. The SLCF team has been using visits to handicraft communities to meet with champions, introduce them to the conservation programs active in the local area, make sure they understand these programs, and introduce them to local governors so they can collaborate in the future. In total, the SLCF team has held/recorded 19 meetings with Champions during the year (Annex 3.2a—Champion tracking sheet—Mongolia). In Pakistan, SLF has recorded 47 meetings with Champions (Annex 3.2b). In Kyrgyzstan, SLFK had multiple phone calls with Champions, and 25 site visits (Annex 3.2c). (TOTAL-91 meetings with Champions).

Finally, from March 6-10, 2017, a special meeting of project partners was held in Ulaanbaatar, Mongolia with 15 participants (including PL Redpath, CEH lead Juliette Young and country leads from Pakistan, Kyrgyzstan and Mongolia, together with leads from China and India). The primary aim of the workshop was to refine and finalise the YR3 socio-economic household questionnaires and discuss the challenges and sensitivities around applying the questionnaire in the different cultural contexts. In line with this, we provided training in the theory of planned behavior that underpinned the questionnaire, as well as training in asking sensitive questions, interview techniques, data management, data analysis, reporting, and ethics. Finally we discussed changes to the training manual, following feedback from the different country teams. (Complete meeting minutes under Annex 3.4. Meeting Minutes Final). As a result of the meeting we successfully finalized the questionnaires and discussed the sensitivities related to asking these questions in the different cultural contexts and are confident that there is a shared understanding of the questions, sampling strategies and data management needs of this project. (Annex 3.5. Final questionnaires).

Evidence for Output 3:
- Annex 3.1—SLFK Annual Report 2016

- Annex 3.2a—Champion tracking sheets-Mongolia
- Annex 3.2b—Champion tracking sheets-Pakistan
- Annex 3.2c—Champion tracking sheets-Kyrgyzstan
- Annex 3.2d—Toolkit Update Mongolia
- Annex 3.3a-b—Champion meeting–Pakistan photos
- Annex 3.4a—Minutes of UB workshop for Darwin March 2017
- Annex 3.4b—UB meeting photos
- Annex 3.5—Final Questionnaires

Toward output 4-- *An assessment of the impact of conservation initiatives on abundance of wild ungulates and snow leopards,* we have monitored poaching incidents, completed snow leopard abundance surveys in control and representative sites, and completed wild ungulate surveys in control and representative sites. No records of poaching were recorded from representative communities in Mongolia (reports are current through December 2016) (Annex 4.1.a and b samples of monitoring reports from Mongolia). In Kyrgyzstan, there was no case of officially registered poaching in our active communities. There was a case of killing snow leopard in 2016 in a valley called Molo, which is part of Koiluu valley (our control landscape).(Annex 4.1.c. Kyrgyzstan poaching report blog post). In Pakistan, there was no snow leopard poaching. We had one reported case of wild prey poaching from December 2016 from representative communities in Chitral, Pakistan. The poacher killed an ibex and was fined 110,000 PKR (Annex 4.1d Poaching report Pakistan).

Snow leopard abundance surveys were completed in Mongolia, Pakistan and Kyrgyzstan. Cameras for the representative sites were placed in August16, September16 and March17 for a total of 95 days (Annex 4.2 Sample map of cameras placement in Tost, Mongolia—Representative site). Cameras were placed in control landscapes in November, May and December/January for a total of 115 days. Data is still being analyzed, but preliminary estimates available for some sites show: 4 images of snow leopard in control sites in Kyrgyzstan and 6 in Pakistan; 562 snow leopard images were taken in representative site in Pakistan. Actual abundance for sites still has to be calculated. (Summary data from trap camera surveys in Annex 4.3 Survey Data, more proof of placement in Pakistan Annex 4.2b-c).

Baseline ungulate surveys were completed in control sites in Mongolia in November, and in Pakistan in January for a total of 17 survey days. Representative sites were surveyed in Mongolia in November and Pakistan in December for a total of 16 survey day. Ungulate surveys have not yet been completed in Kyrgyzstan (see discussion under section 9). Ibex abundance baselines were established for 2 control sites (1303 Mongolia, 54 Pakistan), and for 2 representative sites in Mongolia and Pakistan (636 and 480 respectively). Summary data from ungulate surveys in Annex 4.3 Survey Data.

Evidence for Output 4:
- Annex 4.1.a and b Sample monitoring report-Mongolia
- Annex 4.1.c-d. Kyrgyzstan poaching reports (one from Hunting Dept)
- Annex 4.1.ed. Poaching report from Pakistan
- Annex 4.2a Sample map of cameras placement in Tost, Mongolia
- Annex 4.2.b Sample map of cameras placement in Terich, Pakistan
- Annex 4.2 c. Sample map of cameras placement in Hoper-Hisper, Pakistan
- Annex 4.3. Survey Data

3.2   Progress towards project Outputs

	Baseline condition	Change to Date	Notes, Evidence
Output 1 Conservation contracts signed with 47 communities through participatory	End of YR1: contracts with 40 communities, 7 engaged in multiple programmes	End of YR2: contracts with 47 communities, 10 engaged in multiple programmes	Likelihood of achieving Output: We have reached our goal for total # of communities

	methods, with >20 communities engaged in multiple programmes.			with contracts. We anticipate # of communities engaged in multiple programmes will increase a little more in YR3 (we know of at least 2). However we likely will not meet our goal of >20. Noted in Change Request.
Indicator 1	>25 additional corrals predator-proofed, protecting up to 9,000 additional livestock by yr 3,	Baseline of 14 corrals protecting 5,400 livestock	End of YR2: 12 additional corrals built—now currently 26 corrals. (14 more corrals anticipated in YR3.) In Mongolia, 6693 livestock protected by corrals. In Pakistan, 1031 livestock protected by corrals	Evidence: Annex 1.1. Project Dataset Annex A-Livestock covered by corrals, Mongolia Pakistan data just in – so report available in yr 3
Indicator 2	>4 additional communities insure up to 6,500 additional livestock by yr 3,	Baseline of 8 communities insuring 5000 livestock	End of YR2: 4 additional communities insuring livestock In Mongolia, 9,292 livestock insured in 2016. In Pakistan, 872 livestock insured	Evidence: Annex 1.1. Project Dataset Annex 1.4a Annual Report SLCF 2016 Pakistan data just in – so report available in yr 3
Indicator 3	433 households in 38 communities expected to engage in handicrafts by yr 3	Baseline of 315 households in 35 communities	End of YR2: 385 households in 36 communities	Evidence: Annex 1.1. Project Dataset
Indicator 4	Nine new and 38 updated conservation contracts signed for 47 communities, by yr 2	End of YR1: 40 existing conservation contracts	End of YR2: 7 new contracts signed and 40 contracts renewed/maintained for total of 47 communities	Evidence: Annex 1.1. Project Dataset
Indicator 5	>20 communities expected to be engaged in multiple programmes by 2018	End of YR1: 7 communities engaged in multiple programmes	End of YR2: 10 communities engaged in multiple programmes	Evidence: Annex 1.1. Project Dataset

	Baseline condition	Change to Date	Notes, Evidence
Output 2 An assessment of the effectiveness of conservation initiatives on livestock losses, household income and attitudes towards interventions, predators and ungulates, including regional			Confident we will reach Output. Baselines collected, and being analysed. Follow-up surveys planned for YR3.

		Baseline condition	Change to Date	Notes, Evidence
	and gender effects.			
Indicator 1	Effectiveness of predator-proofed corrals on livestock losses analysed in yr 3.	Baseline predation rates collected as part of community socio-economic surveys in YR 1.	Baselines predation rates collected as part of community socio-economic surveys in YR2.	To be analysed. Annex 2.1a-b Sample baseline socio-eco data Kyrgyzstan, Pakistan
Indicator 2	Effectiveness of livestock insurance programmes on payouts and household income analysed in yr 3.	Baseline socio-economic data collected. Claims paid in Mongolia in YR1.	Claims paid in YR2: Mongolia—In 2016 a total of 40 livestock were lost; a total of MNT 1,330,000 paid to herders in compensation. (Pakistan—claims not processed yet) (No insurance programmes in Kyrgyzstan)	Annex 1.4.a Annual Report SLCF 2016
Indicator 3	Effectiveness of handicraft scheme on household income analysed in yr 3.	Baseline socio-economic data collected. Handicrafts payments made in YR1.	Handicraft payments in YR2: Mongolia: $38,638 in direct sales to 235 households, avg income $164/participant. $11,590 paid in bonus monies, avg $49/participant. Total paid to herders: $213 Kyrgyzstan: $19,930 in direct sales to 46 herders, avg $433/participant (bonuses not paid yet). Pakistan: $1,083, direct sales to 108 herders, avg income $10/participant. (bonuses not part of model)	Annex 1.6. Sample of SLE purchase data from Mongolia Annex 1.4.b. Annual Report SLF 2016 Annex 3.1—SLFK Annual Report 2016
Indicator 4	Effectiveness of interventions on attitudes towards interventions, wild ungulates and snow leopards by men and women in communities analysed in yr 3	Baseline attitude survey data collected and collated for 40 communities	Baseline attitude surveys completed, collated, and digitized. Data currently being analysed.	Annex 2.1a Sample baseline socio-eco data Kyrgyzstan Annex 2.1b Sample baseline socio-eco data Pakistan

Output 3 Training delivered for field	Baseline condition	Change to Date	Notes, Evidence Confident we will reach

implementers and meetings held with community champions			Output. Training held in YR1 for field implementers. Follow-up meeting held in YR2. Community champions identified and engagement is being tracked by field teams.
Indicator 1.1 Training of 13 field implementers from SLCF, SLFP and SLFK in negotiation and community engagement skills increased sensitivity towards respectful community engagement and retention of information in yr 3	YR1: 18 field implementers introduced to Partners Principles and trained in best practices for community engagement and community-based conservation based on Partners Principles. Field implements report	YR2: Training of 8 field implementers from SLCF, SLFK, SLF on how to ask sensitive questions, improve community survey questionnaires and interview techniques, data management, etc.	Annex 3.4— Meeting Agenda
Indicator 1.2 47 respected community conservation champions are actively engaged in dialogue with communities by end of yr 2	YR1: 32 total champions identified	YR2: 5 additional champions identified—total of 37 champions. 91 meetings held with community champions.	Annex 1.1. Project Dataset; Annex 3.2a-c Champion tracking sheets Mongolia, Pakistan, Kyrgyzstan

Output 4 An assessment of the impact of conservation initiatives on abundance of wild ungulates and snow leopards.	Baseline condition	Change to Date	Notes, Evidence Baseline abundance surveys are complete for snow leopard. Baseline surveys completed for ungulates in Mongolia and Pakistan; challenges in Kyrgyzstan being addressed (see section 9). Follow-up surveys are planned for YR3.
Indicator 1.1 Attitudes towards predators and wild herbivores will be more positive in participating households and communities by yr 3	Baseline attitude survey data collected and collated for 40 communities	No change to date; follow-up assessments planned for YR3	NA
Indicator 1.2 Triangulated reports indicate that killing of wild ungulates and snow leopards stops in communities with conservation contracts by yr 3.	Poaching reports monitored/collected annually in Mongolia, Pakistan, Kyrgyzstan	YR2: Mongolia-no killing Kyrgyzstan-no killing of snow leopard or wild ungulate in active sites; but killing of snow leopard reported in control. Pakistan-no snow leopard poaching, 1 case of wild ungulate poaching in representative site	Annex 4.1 a-e Poaching reports Mongolia, Pakistan, Kyrgyzstan
Indicator 1.3 Indices of abundance of snow leopards in the sampled programme landscapes are stable or higher in yr 3 than yr1 and higher compared to estimates from control	In YR1, initiated collection of baseline data.	Baseline snow leopard abundance surveys completed for all countries; baseline ungulate surveys completed in Pakistan	Annex 4.3 Survey Data

| landscapes in yr 3 | | and Mongolia. Ungulate survey data collected for possible representative site in Kyrgyzstan, control site survey pending. | |

Output 5 Communication with Snow Leopard network, CBD and GSLEP representatives and the wider conservation community.	**Baseline condition**	**Change to Date**	**Notes, Evidence** Confident we will reach Output. Data collection proceeding as planned. We have had regular communication with CBD and GSLEP representatives (see section 5 below).
Indicator 1.1 Working paper outlining effectiveness of interventions on losses, income and attitudes incorporated into SLCF, SLFP, SLFK strategic planning and distributed to Snow Leopard Network and appropriate CBD and GLSEP contacts by yr 3	Data collection in progress. To be completed in YR 3.	Data collection and analysis in progress. To be completed in YR 3	
Indicator 1.2 Peer review paper on effectiveness of interventions on losses, income and attitudes submitted for publication by yr 3	Data collection in progress. To be completed in YR 3.	Data collection and analysis in progress. To be completed in YR 3	
Indicator 1.3 Best practice in conservation interventions shared with international field teams yr 3	Data collection in progress. To be completed in YR 3.	Data collection and analysis in progress. To be completed in YR 3	

3.3 Progress towards the project Outcome

Project Outcome:

Participatory interventions in 47 communities reduce livestock losses, insure against predation, increase household income and improve attitudes, leading to stable/increased snow leopard abundance and improved understanding for conflict management.

Progress towards Outcome:

Overall, we are making good progress towards our project Outcome, and have reached our intent of having participatory interventions in 47 communities. These interventions, as planned, reduce livestock losses, insure livestock, and increase household income. We have baselines against which to assess change in attitudes and biological indicators. We believe by the end of this project we will have improved understanding of conflict management. One concern at this stage is that we may not reach our target for communities with multiple interventions – target >20, current number 10, expected number by end YR3 >11. See section 9 for discussion of this.

Progress towards Outcome Indicators:

		Baseline Condition	Progress to Date
Indicator 1	By 2018, at least 25 new corrals will be predator-proofed, protecting up to 9,000 additional livestock from predation for a total of at least 39 corrals and up to 14,400 livestock protected.	14 corrals	12 new corrals (Total to date: 26 of 39 anticipated)
Indicator 2	By 2018, at least 4 new insurance	8 insurance	4 new insurance

	programmes will insure up to 6,500 additional livestock to compensate for losses to carnivore predation, for a total of 12 insurance programmes.	programme communities	programs (Total to date: 12 of 12 anticipated)
Indicator 3	By 2018, at least 3 new community handicraft schemes will be developed, increasing average income of up to 118 new participating households by up to US$440 pa for a total of 38 communities.	315 households in 35 handicrafts scheme communities	4 new communities added, with 70 new households involved
Indicator 4	By 2018, attitudinal surveys will indicate that both men and women will be more positive towards interventions, predators and wild ungulates in communities with conservation contracts compared to communities with no interventions, and in communities with multiple interventions compared to single ones.	Baseline data being collected	Baselines completed
Indicator 5	By 2018, evidence will indicate that illegal killing of wild ungulates and snow leopards in communities with interventions will stop.	Ongoing monitoring taking place	Ongoing monitoring taking place
Indicator 6	By 2018, abundance of wild ungulates and snow leopards will be higher in 3 landscapes with participating communities relative to 3 paired control landscapes.	Baseline data being collected	Baseline data completed in 2 countries. Pending completion in 1 country.
Indicator 7	By 2018, the impact of conservation interventions on income, attitudes and snow leopards will be assessed and shared the wider community.	Baseline data being collected	Baseline data completed

3.4   Monitoring of assumptions

Assumption 1: Communities remain willing to engage in collaborative, multi-pronged conservation management initiatives

Communities remain enthusiastic about engagement. We currently have less multi-scheme initiatives in place than initially anticipated and are looking at final numbers of 11-12 communities rather than >20. See comments in section 9.

Assumption 2: US and online markets for handicrafts and livestock products remain sustainable Comments: Still holds true. Number of retailers has remained relatively stable; SLT maintained distribution channels across 205 outlets (compared to 204 retail outlets at this time in 2015) and an online store to support sales income to herders (Annex B, retail outlet list for YR2). SLT handicraft sales in 2016 estimated at $102,000 USD (audit still pending). This was slightly below anticipated revenue for SLE handicrafts in 2016, due to a moth infestation that compromised our product quality. This issue has since been resolved and overall retails sales in 2017 Q1 are up 28% over Q1 2016 (Annex E-SLT Sales 2017 Q1 results).

Assumption 3: There is no severe socio-political unrest that prevents work with communities in the host countries. In our experience, access to some of the communities in Pakistan can get restricted for varying periods. Based on experience and our sustained field presence, we expect occasional delays but not a cessation of our work. We don't anticipate such issues in the other two countries.

Comments: Still holds true. Work in partner host countries was not stopped or restricted by political unrest in YR2.

Assumption 4: There are no new external threats to pastoral livelihoods and environments, such as damaging land uses (e.g. mining). In Mongolia where this is an issue, as a separate initiative with independent funding, we have been assisting the communities to negotiate with local governments to protect their areas from large-scale and illegal mining.

Comments: This assumption should be amended to account for severe weather as an external threat. In 2015 and now again in 2016 communities in host countries (particularly Pakistan) have experienced severe flooding, avalanche, and concomitant destruction to power, communication and travel

infrastructure. In 2015 program operations in Gilgit-Baltistan were overshadowed by flooding and post-flooding recovery; and Khyber-Pakhtunkwa had heavy flooding in 2016. Example: http://floodlist.com/asia/pakistan-100-killed-heavy-rain-floods-march-2016

Annex D.--December 2016 SLT Board Meeting Financials

Annex E--SLT Sales 2017 Q1 results

3.5   Impact: achievement of positive impact on biodiversity and poverty alleviation

Our impact to poverty alleviation is achieved through provision of livestock insurance programmes (financial repayment for livestock lost to predation), predator-proof corrals (reduction of livestock losses), and conservation handicraft schemes (payment for sales of wool products). In YR2 we provided these programs to 47 communities (Annex 1.1—Project Initiation Dataset). Earnings and compensation rates are clearly outlined above under Output indicators 2 and 3. These show the direct cash amounts paid out as part of programme participation.

SLT provided training to women in the handicraft program to ensure high quality wool processing to maintain sales and profitability (Annex 1.4.a Annual Report SLCF 2016-page 11). In addition, partner SLCF provided $4600 in low-interest micro-credit loans to 15 herders for equipment and other privations to boost production capacity and livelihood stability (Annex 1.4a).

The third conservation initiative under this project—predator-proof corrals—also has impacts towards poverty alleviation, namely reducing loss of livestock. In YR2, 10 new corrals were constructed (Annex 1.1 Project Dataset). More are slated for YR3. SLT has completed an initial survey of herders in Mongolia who had corrals built prior to Darwin project initiation; our report shows herders with corrals report no livestock losses when in use Annex C.

Towards biodiversity conservation, one significant impact of our project in YR2 is continued adherence to conservation contracts, including cessation of poaching and retribution killing, by majority of communities engaged in conservation initiatives—refer to Output 4 Indicator 1.2. Additionally, SLT completed an attitude survey of herders who built corrals prior to Darwin project initiation; survey of treatment households (those with corrals) compared to controls (those without corrals) showed that herders with predator-proof corrals have more positive attitudes towards snow leopards—positive attitudes being an important foundation for tolerance towards predation and reduction of predator persecution (Annex C).

We have also established baselines against which to measure significant social and biological threat indicators. More significant impact will be achieved later in this project once we can analyse comparative results and make conclusions/recommendations for improving community-based conservation programs to better protect snow leopards and associated biodiversity.

Annex B – Retail outlet list for YR2, link to SLT online list: http://www.snowleopard.org/give/partners/retail-partners

Annex C-Post-Corral Surveys Mongolia

4.   Contribution to the Global Goals for Sustainable Development (SDGs)

-SDG 1-End poverty in all its forms everywhere
See section 3.5 above.

-SDG-5-Achieve gender equality and empower all women and girls
See section 7 below. An external review was performed on SLCF's handicraft model as it was developing. The review showed it contributes to female empowerment in numerous ways including increasing women's sense of pride, well-being, and status within family and community. See Section 7. This model is also being applied in Pakistan and Kyrgyzstan.

-SDG-15-Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably managed forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. Specifically targets 15.4 and 15.5. We have completed first steps towards understanding drivers of poaching and retribution killing that lead to biodiversity loss.

5.   Project support to the Conventions, Treaties or Agreements

Our project relates most directly to Articles 8 & 11 within the CBD (In-situ conservation & Incentive measure). We seek to support CBD through: (i) the protection of viable populations of snow leopard and

wild ungulates (blue sheep, argali, ibex); (ii) the promotion of environmentally sound sustainable development through livelihood incentive programmes for managing snow leopard-human conflicts, and (iii) the development of conservation objectives and initiatives that are informed by science, and within the context of existing social frameworks, thereby being locally relevant and socially acceptable.

Through GSLEP, SLT (key technical advisor to GSLEP) is in regular contact with CBD focal points in each country: Bariushaa Munkhtsog in Mongolia, Syed Mehmood Nasir in Pakistan, and Abdykalyk Rustamov in Kyrgyzstan. Partners are also engaged with CBD focal points, e.g. SLFK works closely with Mr. Rustamov, Director, State Agency on Environment Protection and Forestry through multiple initiatives. In Pakistan, SLF is key technical advisor to Ministry of Climate Change, which is focal point for GSLEP in Pakistan; all CBD focal points are within Ministry of Climate Change. Although it is too early for us to formally share any findings with them directly related to this Darwin project, their close association with SLT and partners means they are attuned to the various community-based programs we are working on.

In Mongolia, general elections were held last year and many officials changed. SLCF worked with previous CBD focal point, who has now shifted. They are still in process of getting acquainted with new representatives.

The following links show examples of the ways in which SLT and partners regularly interact with CBD focal points:

SLFK and CBD contact Mr. Abdykalyk Rustamov hosted an award ceremony to honour rangers in Kyrgyzstan: https://www.snowleopard.org/world-wildlife-day-anti-poaching-heroes-honored/, and Mr. Rustamov attended a GSLEP meeting in January 2017 (Bishkek will host a GSLEP Presidential Summit in August 2017) http://www.globalsnowleopard.org/blog/2017/01/25/ministers-uphold-their-support-for-snow-leopard-conservation/. In Pakistan, CBD Focal Point, Mr. Syed Mahmood Nasir, attended a 2016 World Wildlife Day event by SLF: https://www.snowleopard.org/an-unforgettable-day/

6. Project support to poverty alleviation

As discussed in Section 3.5. Our project aims to improve livelihoods of c16,000 people in 47 pastoralist communities in Mongolia, Kyrgyzstan and Pakistan. We have achieved working with 21,876 people in 47 communities (Annex 1.1) to build corrals, insure livestock or support handicrafts and these schemes reduce loses of livestock and improve levels of income. We fully expect our partnership approach to have long-lasting effects on poverty alleviation and well being.

7.   Project support to gender equality issues

Direct beneficiaries of the handicraft program are currently 100% female in Mongolia, 100% female in Pakistan, and 98% female in Kyrgyzstan. A total of 13 women Champions have been identified, 6 in Mongolia, 3 in Kyrgyzstan and 4 in Pakistan (Annex 1.1. Project Initiation Dataset).

7 of 15 field implementers received training in YR2 under Section 3.1 Output 3 were women.

Also during YR2, 141 women in Mongolia received handicrafts skill-building training (Annex 1.4.a Annual Report SLCF 2016). This training enables them to have better earning potential through handicraft programs. In turn, this earning potential is important towards their overall feelings of empowerment and social equality (2006 review of handicraft program shared with YR1 reporting, showing programme contributions to female empowerment, income generation, higher level training, and environmental decision-making).

8.   Monitoring and evaluation

We continue to adhere to the M+E plan, which is working well, and have made no significant changes. Numerous international meetings were held in person and online (see section 2), to bring all project partners together to develop project plans, refine understanding and agreement towards project objectives/methods, discuss progress, agree sampling and survey procedures and review data. UoA, CEH and SLT have met more frequently to track progress and address logistical issues.

Field reports have been provided by all partners. We have a dedicated database to house all project data to allow for robust analysis. We also collect and store survey data online. Surveys, risk assessments and ethics agreements have been finalised.

9.   Lessons learnt

During year 2, management and collaboration on the project continued to work well between all partners. There was a good level of communication, discussion and consensus. That said, time has been the most limiting factor. Working across three counties with very different cultures and geographic factors has necessitated more time for proper discussion, execution of activities, and collation of data than anticipated. While SLT has worked closely with SLCF, SLF and SLFK on multiple projects, this is the first discrete project where all three have been so intimately involved in planning and implementation on such a large scale.

This challenge has been reflected in our definition of community (see 2016 report). This affected how we determined baseline numbers for the number of communities in Mongolia engaged with handicraft schemes. We initially overestimated the baseline number. The Darwin project has forced us to deal with these cross-cultural differences in definitions and we have now agreed definitions and numbers.

We also learned that one challenge when working collaboratively with communities is predicting exactly what will happen and the timescale of change. An example of this is the issue of multiple interventions. Our approach is to support the communities to select the interventions that are suitable for them, within a timescale that is appropriate to their needs and resources, and not to impose or force interventions. That said, we underestimated number of corrals people wanted/needed, and overestimated number of households able to join insurance or handicrafts.

Currently we have 10 communities with >1 interventions and we anticipate this will be 11 or 12 by end YR3. By itself this would weaken the strength of our statistical analysis in comparing 0 v 1 v 1+ interventions, but we are proposing to add more data from the communities SLT work with in India and China where these interventions also apply. These country teams have been part of the questionnaire planning and will be building on the Darwin project to collect the same data, which will make our sample size and our analysis more robust (e.g. in India, there are communities with 1, 2 and 3 schemes running).

An interesting challenge that arose in YR2 was that the methods for ungulate surveys, which have been successful in Mongolia and Pakistan, were not working as anticipated in Kyrgyzstan. This was a reflection of a lack of relevant training in the Kyrgyzstan team. We plan to address this by providing training and support for ungulate surveys in 2017. We have raised separate funds to support this.

Another new learning point has been an emphasis on making our approach context dependent. This is very important when working across different cultures and countries. For example, in Mongolia and Pakistan, the partners have wanted to name and celebrate community champions. This is not so in KG— where they actually feel that they cannot make them publicly known. They cannot single them out, or it will look like favouritism. So e.g. instead of having a special meeting with a champion, they have a wider community meeting, and make sure champion is there, and give info to everyone (with hopes champion will utilize it most). This helps maintain the social fabric of the communities.

Based on these learnings, we are confident that the partnership is in a strong position as a result of this Darwin Initiative project. We understand how each other works, how to be adaptive to changing community needs across different cultures and how to record change. We are therefore in a stronger position to make a positive impact in these remote mountainous areas.

10.   Actions taken in response to previous reviews (if applicable)

Ten queries were raised in response to last year's review. We respond to each below:

1. <u>The project notes delays to activity 1.4, disbursement of seeds, which will now be carried out in year 2. Does this have any knock on effects to the project?</u>

In last year's report we stated "*Activity 1.4, disbursement of seed funding, is delayed as our partner SLCF is waiting on information from insurance communities prior to releasing funds into community accounts; this is now expected to happen in April 2016.*" Seed disbursement has

now happened as anticipated in last year's report, with only a small delay and no unforeseen knock-on effects to the project. The delay was necessary to ensure accounting integrity, which is of utmost importance to the insurance committees and SLCF. Therefore, small delays like this often help rather than hinder programs.

2. <u>It would be useful for the purposes of the review if the project could provide its gantt chart to indicate future timings</u>

Gannt chart now included (see Annex 5).When reporting indicators, it would be useful for the project to document the stated baseline for each indicator in order to allow the review to gauge levels of progress to date.

Baseline numbers now included for each indicator.

3. <u>Is the project able to reflect on how it has used feedback to increase the quality of trainings? Is the project able to develop indicators specifically for training and meetings in order to gauge this aspect of the project?</u>

In YR1 of this project, we developed training for field implementers. These trainings have since been shared with field implementers in Mongolia, Kyrgyzstan, Pakistan (as part of this project) and expanded to collaborators in India and China. We have received feedback on multiple trainings, and used feedback to improve the overall training programme moving forward. A summary of responses/feedback (including feedback samples) and ways we have increased training quality is summarized thoroughly under Annex F.

Annex F. Training for field implementers and champions_process and responses_April 2017

4. <u>The projects documents extenuating circumstances as having delayed camera trap activities. Are there any implications to the project and its activities moving forward due to this delay? Are there any lessons that can be learned from this? It would be useful for the project to reflect on aspects such as this in its next AR.</u>

Camera trap data have now been collected in our 3 programme and 3 control landscapes, so we will have two estimates for each by the end of the project, as originally planned. The fact that the two sets of surveys will be a year apart makes temporal patterns hard to ascertain, but we will still be able to compare places with and without our interventions and we will use all 6 surveys as baselines for our longer term work beyond the timescale of this Darwin Initiative project.

Surveys were largely delayed due to a combination of weather and logistics—i.e. often, original survey dates had to be cancelled due to severe weather, and then trying to fit them back into busy field schedules meant significant delay. In Mongolia, some surveys were also delayed due to loss of one of SLCF's field implementers.

5. <u>In Mongolia 'no poaching was found in 2015'. Is this attributable to the project alone? Potentially comment on other work being done if appropriate.</u>

It is always difficult to ascertain causality exactly in this situation. All we can do is to gain as much information as possible from different sources to understand poaching events. We are also going to be using the theory of planned behaviour to understand how attitudes towards snow leopards and poaching vary between communities with and without interventions.

6. <u>In Pakistan, two cases of poaching of wild prey were reported during year 1, with the project noting that it is 'highly likely this will impact the communities involved in the project'. It would be useful if the project could elaborate on how this is likely to impact, linking back to project activities where appropriate.</u>

Our wording was misleading—our intention was to indicate that as a result of SLF interventions in this area, the communities are watching wildlife. It has recently come to light that the communities informed the concerned department and helped catch the poachers.

7. <u>Some assumptions have not held true. How can the project mitigate against the risks this presents? Will this impact project outputs?</u>

The following assumptions did not hold true:

Outcome assumption 4. *There are no new external threats to pastoral livelihoods and environments, such as damaging land uses (e.g. mining). In Mongolia where this is an issue, as a separate initiative with independent funding, we have been assisting the communities to negotiate with local governments to protect their areas from large-scale and illegal mining.*

We realised that severe weather should be included as an external threat. In 2015 and now again in 2016 communities in host countries (particularly Pakistan) have experienced severe flooding, avalanche, and concomitant destruction to power, communication and travel infrastructure. In 2015 program operations in Gilgit-Baltistan were overshadowed by flooding and post-flooding recovery. The same is currently true in Gilgit-Baltistan due to similar weather. Such events can have profound impacts on communities and consequently delay the project timetable. However, events have not been so extreme as to have an impact on project outputs. Our approach of long-term engagement is the best way of supporting communities in the event of extreme weather events. As a result of extreme weather we do lose time but usually accomplish our activities – we just need to stay attuned to changes and adjust the time schedule accordingly.

Output assumption 4. *Communities remain interested in corrals, handicrafts and insurance as good options for mitigating conflicts and leadership within community remains cohesive enough to manage multi-pronged programmes.*

See comments in section 9.

8. Assumptions have not been put forward for the project impact statement in the AR or the project application. Are there assumptions the project can consider here? Can these be incorporated into the projects logframe? Similarly, is there an indicator that can be developed to judge progress towards impact?

Project impact statement: "*Poverty of rural herders and threats to biodiversity are reduced in snow leopard regions of Mongolia, Pakistan and Kyrgyzstan through collaborative conservation programmes.*" If the assumptions of our outcomes and outputs are met then the project is focused on collecting the data and indicators to show how our approach reduces poverty and threats to biodiversity. We don't see any need to add new assumptions or indicators.

9. Indicators specifically to highlight gender and capacity building may benefit the project moving forward.

Although we did not include specific indicators in the application, our focus is on supporting both men and women in the country teams and in the communities. We have developed different types of interventions with some aimed at men (corrals and insurance) and handicrafts aimed at women. Likewise our whole philosophy is to increase capacity within communities to make them more resilient to future change. See sections that deal with gender and capacity. As we have collected field data, we are recording gender of interviewees, with a goal of sampling equal numbers, where possible. We will therefore be able to canlyse changes by gender. We do not feel that adding new indicators is necessary.

11.   Other comments on progress not covered elsewhere

Our NGO partner in Mongolia, SLCF, recently partnered with the local parks administration, which in turn has funding from the German government, to support expansion of community-based conservation schemes. One of the goals of the collaboration is to start livestock insurance programmes by the end of 2018. Although an action plan is still pending, if successful this new collaboration could potentially contribute towards our Darwin project—additional communities could uptake insurance schemes, and there may be additional communities moving from 1 scheme (handicrafts) to 2 schemes (handicrafts and insurance). We still need to learn more about SLCF's new collaboration, its timeframe, and its estimated outcomes, to see if it will have impact on our Darwin project.

12.   Sustainability and legacy

Community-based conservation schemes remain a high-priority under the Global Snow Leopard and Ecosystem Protection Program (GSLEP) as developed in 2014,

http://www.globalsnowleopard.org/who-we-are/gslep-program/. In Pakistan, Ministry for Climate Change, which is the nodal contact for GSLEP, endorsed a GEF6 proposal with SLF as implementing partner that has community-based conservation as a prime component. Government of Kyrgyzstan has a 10-year MoU with SLFK and SLT for snow leopard conservation projects that include community-based conservation. Mongolia's national snow leopard strategy, facilitated and informed by SLCF, ratified under GSLEP, prioritizes community-based conservation. This shows high-level recognition and interest for community-based conservation, as well as reliance on SLCF, SLFK, and SLF for continuation and expansion of programs and activities. Through ongoing contact, SLCF, SLFK and SLF have kept officials in Government informed about significant progress of community-based conservation programmes.

As stated above, we have not yet formally shared Darwin findings with respective government contacts—as shown in our timetable, most dissemination activities (publications, working papers, meetings) are scheduled for YR3.

Towards our exit strategy, to achieve a stable end point during the life of our project, we aimed to developing a sustainable legacy by i) training staff to support communities, ii) training champions, and iii) empowering communities to take ownership of their corrals, insurance and handicraft programmes. Towards these goals, in YR2 advanced concepts in community engagement were shared with field staff during our March 2017 meeting. Dr. Charudutt Mishra, SLT, published a book called PARTNERS Principles, which codifies methods for community engagement; this book has been shared with all field staff. Additionally, Dr. Mishra and PL Redpath have published a paper based on these principles, which will be shared with field implementers.

We are preparing toolkits to share with Community Champions (some Champions already received), and in YR2 over 90 meetings occurred with champions to improve their capacity to support snow leopard conservation. Finally, as noted in Section 3.2 Outputs 1 and 3, multiple trainings and meetings were held with communities to sign contracts and support programme ownership. In the case of corrals, contracts require herders to maintain corrals and pay back costs of materials.

Our partner organizations will continue to have a long-term presence and support the communities in the delivery of these schemes into the foreseeable future. This strategy remains valid, and we will continue our monitoring of these efforts in YR3.

13.   Darwin identity

Among our partner NGOs in Mongolia, Pakistan and Kyrgyzstan, directors and their staff have all been briefed and made aware of Darwin Initiative, and this has been reinforced via informal conversations and discussions while reviewing project progress during the year.

During the year, we have publicized this project in the following ways:

- We maintained a webpage on SLT's website, specifically about this project: https://www.snowleopard.org/darwin-initiative/

- Darwin Initiative was recognized in SLT print newsletter:

  https://drive.google.com/file/d/0B6lpgEYpqeypZkM3RGJrSWJiX1E/view

- UK AID logo and Darwin Initiative were recognized during March 2017 workshop in Mongolia (Section 3.1 Output 3) on the PowerPoint slides and in the final meeting minutes, shared with attendees.

- Darwin Initiative logo used on Training On Community Engagement (Annex G)—used during trainings for field staff

- We also continued to share toolkits with Community Champions, which will have Darwin logo. These toolkits share awareness and recognition of Darwin Initiative among community leaders.

- Darwin Initiative of the UK Government is recognized in the Acknowledgement section of a forthcoming publication by Dr. Charudutt Mishra (SLT) and PL Redpath:

Citation: Mishra, C., Young, J.C., Fiechter, M., Rutherford, B. and Redpath, S.M., (2017) Building partnerships with communities for biodiversity conservation: lessons from Asian mountains. Journal of Applied Ecology. In Press.

Annex G. Training on Community Engagement

14. Project expenditure

Table 1: Project expenditure <u>during the reporting period</u> (1 April 2016 – 31 March 2017)

Project spend (indicative) since last annual report	2016/17 Grant (£)	2016/17 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)			4%	Redpath spent more time on project than anticipated
Consultancy costs	0.0	0.0	0	
Overhead Costs			11%	Redpath spent more time on project than anticipated
Travel and subsistence			21%	Cost of two international field trip was less than anticipated
Operating Costs			2%	
Capital items (see below)	0.0	0.0	0	
Others (see below)			0	
TOTAL				

Changes highlighted in change request.

Annex 1:   Report of progress and achievements against Logical Framework for Financial Year 2016-2017

Project summary	Measurable Indicators	Progress and Achievements April 2016 - March 2017	Actions required/planned for next period
Impact *Poverty of rural herders and threats to biodiversity are reduced in snow leopard regions of Mongolia, Pakistan and Kyrgyzstan through collaborative conservation programmes.*		Through our project we are working towards improving the livelihoods of households in 47 communities, and supporting them to coexist with large predators, so that threats to snow leopards decrease.	██████████████████████
Outcome Participatory interventions in 47 communities reduce livestock losses, insure against predation, increase household income and improve attitudes, leading to stable/increased snow leopard abundance and improved understanding for conflict management.	Indicator 1 By 2018, at least 25 new corrals will be predator-proofed, protecting up to 9,000 additional livestock from predation for a total of at least 39 corrals and up to 14,400 livestock protected. Indicator 2 By 2018, at least 4 new insurance programmes will insure up to 6,500 additional livestock to compensate for losses to carnivore predation, for a total of 12 insurance programmes. Indicator 3 By 2018, at least 3 new community handicraft schemes will be developed, increasing average income of up to 118 new participating households by up to US$440 pa for a total of 38 communities. Indicator 4 By 2018, attitudinal surveys will indicate that both men and women will be more positive towards interventions, predators and wild ungulates in communities with conservation contracts compared to communities with no interventions, and in communities with multiple interventions compared to single ones.	Currently 26 active corrals protecting 7742 livestock. Currently 12 communities insuring 10164 livestock. Four new communities added with 385 households involved Baseline surveys completed, new surveys to be initiated in yr 3. In YR2, no reported killing of snow	Monitor existing corrals and supply new ones as requested by our communities. 14 more corrals anticipated in yr 3. Continue discussions with communities to develop new insurance programmes Continue discussions with communities to develop new insurance programmes Analyse and write-up existing data in yr 3 and complete collection of new data and analysis by end yr 3 Continue collecting annual reports on

	Indicator 5 By 2018, evidence will indicate that illegal killing of wild ungulates and snow leopards in communities with interventions will stop.	leopards, but 1 case of wild ungulate poaching by outsiders in representative site. Villagers reported poaching to authorities.	illegal activity
	Indicator 6 By 2018, abundance of wild ungulates and snow leopards will be higher in 3 landscapes with participating communities relative to 3 paired control landscapes.	Baseline data on snow leopards completed but not yet analysed. Baseline data for ungulates completed in 2 countries. 3rd to be complete in yr 3.	Collect repeat data for snow leopards in yr3 and complete final country for ungulate assessments in yr 3. Analyse and write-up in Yr3
	Indicator 7 By 2018, the impact of conservation interventions on income, attitudes and snow leopards will be assessed and shared the wider community.	Ongoing	Assessments complete and shared by end yr3
Output 1. Conservation contracts signed with 47 communities through participatory methods, with >20 communities engaged in multiple programmes	1.1. >25 additional corrals predator-proofed, protecting up to 9,000 additional livestock by yr 3, over baseline of 14 corrals protecting 5,400 livestock	No. corrals and no. livestock expected to be achieved by end yr3	
	1.2. >4 additional communities insure up to 6,500 additional livestock by yr 3, over baseline of 8 insuring 5000 livestock	Target met.	
	1.3. 433 households in 38 communities expected to engage in handicrafts by yr 3, over baseline of 315 households in 35 communities	Change. Expected to achieve 390 households in 36 communities engaged in handicrafts by yr 3	
	1.4. Nine new and 38 updated conservation contracts signed for 47 communities, by yr 2	Target met	
	1.5. >20 communities expected to be engaged in multiple programmes by 2018	Change. >11 communities expected to be engaged in multiple programmes by 2018	
Activity 1.2. *Field implementers work with community leaders to agree suite of conservation programmes, sign new/update existing conservation contracts*	Field implementers agreed programmes and signed or continued current contracts with 40 communities.		
Activity 1.3. *Field implementers secure materials, communities secure labour and corrals constructed in relevant communities*	12 new corrals built		

(extension approved Oct2016)		
Activity 1.4 *SLCF, SLFK and SLGP distribute seed money into community fund to jumpstart insurance schemes in relevant communities*		Seed money distributed into 4 new schemes in yr2
Activity 1.5 *Orders (O) for handicrafts placed by SLT via field implementers; field implementers collect products twice/yr and bring to SLCF, SLFK, SLFP headquarters to ship (S) to SLT for distribution*		We collected 46,660 handicrafts from 385 households
Output 2. An assessment of the effectiveness of conservation initiatives on livestock losses, household income and attitudes towards interventions, predators and ungulates, including regional and gender effects.	2.1. Effectiveness of predator-proofed corrals on livestock losses analysed in yr 3. 2.2. Effectiveness of livestock insurance programmes on payouts and household income analysed in yr 3. 2.3. Effectiveness of handicraft scheme on household income analysed in yr 3. 2.4. Effectiveness of interventions on attitudes towards interventions, wild ungulates and snow leopards by men and women in communities analysed in yr 3	On track. For each of these four indicators we have collected baseline data and we will complete analysis and write-up in YR3. Claims and claims payments reviewed and distributed for insurance programs in Mongolia; no livestock predation/claims paid in Pakistan. Herders paid for handicraft orders in Mongolia, Kyrgyzstan, Pakistan. Baseline data collected that will contribute to the analyses in YR3.
Activity 2.3. *Baseline (yr 1) and final yr (yr 3) survey data collected in sample of communities on livestock losses, income and attitudes*		Baseline completed and yr3 surveys to be completed
Output 3. Training delivered for field implementers and meetings held with community champions	3.1. Training of 13 field implementers from SLCF, SLFP and SLFK in negotiation and community engagement skills increased sensitivity towards respectful community engagement and retention of information in yr 3 3.2. 47 respected community conservation champions are actively engaged in dialogue with communities by end of yr 3	On track. We have now trained 26 field implementers in appropriate skills and published a report and paper on how to engage with communities. On track. We currently have 37 champions identified and actively engaged.
Activity 3.3 *Field implementers hold meetings for community representatives to convey skills in and discuss programme management/implementation skills*		Field implementers have held 91 meetings with our community champions to discuss skills and programme management.
Activity 3.5 *Local champions are identified and sensitized in programme communities through meetings with SLCF, SLFK and SLFP field implementers and toolkit*		Field implementers have held 91 meetings with our community champions to discuss skills and programme management.
Activity 3.6 *Sustained interaction with local champions, including documentation by SLCF, SLFK, SLFP field implementers of their conservation awareness*		Interactions with champions now recorded and tracked.

Output 4. An assessment of the impact of conservation initiatives on abundance of wild ungulates and snow leopards.	4.1. Attitudes towards predators and wild herbivores will be more positive in participating households and communities by yr 3.	On track. Baseline data collected and additional survey to be completed, analysed and written-up in 2017
	4.2.Triangulated reports indicate that killing of wild ungulates and snow leopards stops in communities with conservation contracts by yr 3.	Reports ongoing.
	4.3 .Indices of abundance of snow leopards in the sampled programme landscapes are stable or higher in yr 3 than yr1 and higher compared to estimates from control landscapes in yr 3	Baseline data collected. Additional data to be collected and analysed and written-up in yr3
Activity 4.1 *Any killing of snow leopards and wild ungulates recorded Yrs 1-3*		We have triangulated reports from each community
Activity 4.2 *Snow leopard abundance surveys in representative programme and control landscapes undertaken in Yr 1 and Yr 3 through camera trapping*		Baseline surveys complete, and yr3 surveys to be completed.
Activity 4.3 *Wild ungulate surveys undertaken in representative habitats in programme and control landscapes in Yrs 2&3 through double observer techniques*		Ungulate surveys complete for 2 countries and 3rd country to be complete in yr3
Activity 4.4 *Photo-identification, data compilation and analyses by partners*		To do completed in yr3
Output 5. Communication with Snow Leopard network, CBD and GSLEP representatives and the wider conservation community.	5.1. Working paper outlining effectiveness of interventions on losses, income and attitudes incorporated into SLCF, SLFP, SLFK strategic planning and distributed to Snow Leopard Network and appropriate CBD and GLSEP contacts by yr 3	To be completed in yr3.
	5.2. Peer review paper on effectiveness of interventions on losses, income and attitudes submitted for publication by yr 3	Peer review paper will be prepared by end yr3
	5.3. Best practice in conservation interventions shared with international field teams yr 3	To be completed in yr3
Activities		NA—planned for YR3

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: *Poverty of rural herders and threats to biodiversity are reduced in snow leopard regions of Mongolia, Pakistan and Kyrgyzstan through collaborative conservation programmes.*			
Outcome: Participatory interventions in 47 communities reduce livestock losses, insure against predation, increase household income and improve attitudes, leading to stable/increased snow leopard abundance and improved understanding for conflict management.	Indicator 1 By 2018, at least 25 new corrals will be predator-proofed, protecting up to 9,000 additional livestock from predation for a total of at least 39 corrals and up to 14,400 livestock protected. Indicator 2 By 2018, at least 4 new insurance programmes will insure up to 6,500 additional livestock to compensate for losses to carnivore predation, for a total of 12 insurance programmes. Indicator 3 By 2018, at least 3 new community handicraft schemes will be developed, increasing average income of up to 118 new participating households by up to US$440 pa for a total of 38 communities. Indicator 4 By 2018, attitudinal surveys will indicate that both men and women will be more positive towards interventions, predators and wild ungulates in communities with conservation contracts compared to communities with no interventions, and in communities with multiple interventions compared to single ones. Indicator 5 By 2018, evidence will indicate that illegal killing of wild ungulates and snow leopards in communities with interventions will stop. Indicator 6 By 2018, abundance of wild ungulates and snow leopards will be higher in 3 landscapes with participating communities relative to 3	Indicator 1 Annual report summary indicating the numbers of livestock killed at each household with predator proof corrals. Indicator 2 Annual reports from each country reporting on premium and pay out rates and the value of different livestock for all communities in insurance programmes. Indicator 3 Reports on handicraft programme from each country, reporting on numbers of participants, household income, handicraft sales and price received. Indicator 4 Reports of baseline and final surveys for sample households in sample communities measuring attitudes towards interventions, snow leopards and wild ungulates. Indicator 5 Annual reports from each country summarising evidence of illegal activity in all communties as estimated from various reports and interviews. Indicator 6 Reports from six landscape-scale, wildlife surveys of wild ungulate and snow leopard abundance. Indicator 7 Evidence of communication with Snow Leopard Network, CBD representatives and GSLEP officials via emails, reports and talks; and articles submitted to conservation journals.	Assumption 1 Communities remain willing to engage in collaborative, multi-pronged conservation management initiatives Assumption 2 US and online markets for handicrafts and livestock products remain sustainable Assumption 3 There is no severe socio-political unrest that prevents work with communities in the host countries. In our experience, access to some of the communities in Pakistan can get restricted for varying periods. Based on experience and our sustained field presence, we expect occasional delays but not a cessation of our work. We don't anticipate such issues in the other two countries. Assumption 4 There are no new external threats to pastoral livelihoods and environments, such as damaging land uses (e.g. mining). In Mongolia where this is an issue, as a separate initiative with independent funding, we have been assisting the communities to negotiate with local governments to protect their areas from large-scale and illegal mining.

	paired control landscapes. Indicator 7 By 2018, the impact of conservation interventions on income, attitudes and snow leopards will be assessed and shared the wider community.		
Output 1 Conservation contracts signed with 47 communities through participatory methods, with >20 communities engaged in multiple programmes.	1.1. >25 additional corrals predator-proofed, protecting up to 9,000 additional livestock by yr 3, over baseline of 14 corrals protecting 5,400 livestock 1.2. >4 additional communities insure up to 6,500 additional livestock by yr 3, over baseline of 8 insuring 5000 livestock 1.3. 433 households in 38 communities expected to engage in handicrafts by yr 3, over baseline of 315 households in 35 communities 1.4. Nine new and 38 updated conservation contracts signed for 47 communities, by yr 2 1.5. >20 communities expected to be engaged in multiple programmes by 2018	Indicator 1 Project notes of training delivered to field implementation teams Indicator 2 Programme data, stories, field reports and receipts collected by SLCF, SLFP, SLFK to monitor corral building, insurance scheme progress and handicraft production and purchases. Indicator 3 Field implementer meetings with conservation champions to keep record of their involvement in community discussions Indicator 4 Surveys of losses, household income, attitudes and killing of snow leopards and wild ungulates Indicator 5 Reports from wild ungulate and snow leopard surveys by partner organisation staff/researchers. Indicator 6 Snow Leopard Network, GSLEP & CBD contact communications and submitted manuscripts. Indicator 7 SLCF, SLFP, SLFK Strategic Plans	Assumption 1 Results of project are clear and incorporated into policies/strategies Assumption 2 Field implementers will remain with their respective organizations for long enough to make training worthwhile Assumption 3 We will be able to find effective community champions within a reasonable amount of time Assumption 4 Communities remain interested in corrals, handicrafts and insurance as good options for mitigating conflicts and leadership within community remains cohesive enough to manage multi-pronged programmes
Output 2 An assessment of the effectiveness of conservation initiatives on livestock losses, household income and attitudes towards interventions, predators and ungulates, including regional and gender effects.	2.1. Effectiveness of predator-proofed corrals on livestock losses analysed in yr 3. 2.2. Effectiveness of livestock insurance programmes on payouts and household income analysed in yr 3. 2.3. Effectiveness of handicraft scheme on household income analysed in yr 3. 2.4. Effectiveness of interventions on attitudes towards interventions, wild ungulates and snow leopards by men and women in communities analysed in yr 3		
Output 3 Training delivered for field implementers and meetings held with community champions	3.1. Training of 13 field implementers from SLCF, SLFP and SLFK in negotiation and community engagement skills increased sensitivity towards respectful community engagement and retention of information in yr 3		

	3.2. 47 respected community conservation champions are actively engaged in dialogue with communities by end of yr 2	Indicator 8 Post-training response forms from field staff	
Output 4 An assessment of the impact of conservation initiatives on abundance of wild ungulates and snow leopards.	4.1. Attitudes towards predators and wild herbivores will be more positive in participating households and communities by yr 3. 4.2.Triangulated reports indicate that killing of wild ungulates and snow leopards stops in communities with conservation contracts by yr 3. 4.3 .Indices of abundance of snow leopards in the sampled programme landscapes are stable or higher in yr 3 than yr1 and higher compared to estimates from control landscapes in yr 3		
Output 5 Communication with Snow Leopard network, CBD and GSLEP representatives and the wider conservation community.	5.1. Working paper outlining effectiveness of interventions on losses, income and attitudes incorporated into SLCF, SLFP, SLFK strategic planning and distributed to Snow Leopard Network and appropriate CBD and GLSEP contacts by yr 3 5.2. Peer review paper on effectiveness of interventions on losses, income and attitudes submitted for publication by yr 3 5.3. Best practice in conservation interventions shared with international field teams yr 3		

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

Activity 1.1   Field implementers attend council meetings in each community
Activity 1.2   Field implementers work with community leaders to agree on suite of conservation programmes, sign new/update existing conservation contracts
Activity 1.3   Field implementers secure materials, communities secure labour and corrals constructed in relevant communities
Activity 1.4   SLCF, SLFK and SLGP distribute seed money into community fund to jumpstart insurance schemes in relevant communities
Activity 1.5   Orders for handicrafts placed by SLT via field implementers; field implementers collect products twice/yr and bring to SLCF, SLFK, SLFP headquarters to ship to SLT for distribution

Activity 2.1   UoA and SLT collate and review existing information
Activity 2.2   UoA, SLT and CEH agree protocols for surveys at partner start-up meetings
Activity 2.3   Baseline (yr 1) and final yr (yr 3) survey data collected in sample of communities on livestock losses, income and attitudes

Activity 3.1   Toolkits prepared for field implementers by UoA, SLT and CEH
Activity 3.2   Training workshop for field implementers delivered, based on negotiation theory and PARTNERS Principles, and SLT's field monitoring manual
Activity 3.3   Field implementers hold meetings for community representatives to convey skills in and discuss programme management/implementation (accounting, wool processing, sales and marketing)
Activity 3.4   Toolkits for local champions developed by UoA, SLT and CEH
Activity 3.5   Local champions are identified and sensitized in programme communities through meetings with SLCF, SLFK and SLFP field implementers and toolkit
Activity 3.6   Sustained interaction with local champions, including documentation by SLCF, SLFK, SLFP field implementers of their conservation awareness activities.

Activity 4.1   Any killing of snow leopards and wild ungulates recorded Yrs1-3
Activity 4.2   Snow leopard abundance surveys in representative programme and control landscapes undertaken in Yr 1 and Yr 3 through camera trapping
Activity 4.3   Wild ungulate surveys undertaken in representative habitats in programme and control landscapes in Yrs 2 & 3 through double observer techniques
Activity 4.4   Photo-identification, data compilation and analyses by partners

Activity 5.1   Working paper outlining effectiveness of interventions on losses, income and attitudes completed and shared with partners, Snow Leopard Network and appropriate CBD and GLSEP contacts
Activity 5.2   Peer review paper on effectiveness of interventions on losses, income and attitudes submitted for publication
Activity 5.3   Meeting with international field teams to discuss 3 best practice in conservation interventions

Annex 3: Standard Measures

Table 1   Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
Established codes								
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above) *	18 women	Mongolia, Pakistan, Kyrgyzstan	18	12		30	13
7	Number of (e.g., different types - not volume - of material produced) training materials to be produced for use by host country		N/A	2			2	2
11b	Number of papers to be submitted to peer reviewed journals				1	1	1	1
12a	Number of computer based databases to be **established** and handed over to the host country			1			1	1
23	Value of resources raised from other sources (e.g., in addition to Darwin funding) for project work			£93,659	£99,897	£103233		£296,789

Table 2   Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Building partnerships with communities for	journal	Mishra, C., Young, J.C., Fiechter, M., Rutherford, B. and Redpath,	M	Indian	Journal of Applied Ecology	(British Ecological Society in press)

biodiversity conservation: lessons from Asian mountains		S.M., 2017				
			29			

Annex 4 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

See material in additional annexes in Google drive:

https://drive.google.com/drive/folders/0B8OliLqDZuBTYXFtN3Vob0dZbUU?usp=sharing

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	x
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	x
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	
Have you involved your partners in preparation of the report and named the main contributors	x
Have you completed the Project Expenditure table fully?	x
Do not include claim forms or other communications with this report.	