



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:

30<sup>th</sup> April 2017

Darwin Project Information

Project reference	23-013
Project title	Living with Tigers in Nepal: poverty reduction for human-wildlife coexistence
Host country/ies	Nepal
Contract holder institution	North of England Zoological Society (Chester Zoo)
Partner institution(s)	Green Governance Nepal Wildlife Conservation Research Unit, Oxford University Department of National Parks and Wildlife Conservation, Government of Nepal Buffer Zone Management Committee, Chitwan National Park Buffer Zone Management Committee, Bardia National Park Swarnim Academy of Community Development National Trust for Nature Conservation
Darwin grant value	£189,000
Start/end dates of project	1 <sup>st</sup> of April 2016 – 31 <sup>st</sup> of March 2019
Reporting period (e.g., Apr 2016 – Mar 2017) and number (e.g., Annual Report 1, 2, 3)	1 <sup>st</sup> of April 2016 – 31 <sup>st</sup> of March 2017 Annual report 1
Project Leader name	Alexandra Zimmermann
Project website/blog/Twitter	<a href="http://www.chesterzoo.org/conservation-and-science/where-we-work/south-asia/living-with-tigers">http://www.chesterzoo.org/conservation-and-science/where-we-work/south-asia/living-with-tigers</a>
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1. Project rationale

In Nepal, 44% of people live in multidimensional poverty and, in the Terai lowlands, subsistence livelihoods are closely connected to the regions' protected areas. Over the past 20 years the Terai's human population has increased by as much as 81% (the area is now the most densely populated region of Nepal), significantly increasing consumption of forest resources. Simultaneously, tiger populations in the Terai are reported to have recovered by as much as 63% through control of poaching. Consequently, dangerous encounters between people and tigers have increased and human-tiger conflicts are rising, particularly in the buffer zone forest areas around the Chitwan and Bardia National Parks.

Not only are the welfare and socio-economic impacts of tiger attacks on people and livestock unacceptable, retaliatory killing of tigers also seriously undermines wider efforts for conservation. In cases like these, edges of protected areas become ecological traps, decimating local populations, and undoing efforts to protect tigers inside the parks. Over the past two years, the problems and needs were identified during many consultations with our partner organisations, including the Nepal Government, as well as communities and stakeholders in the field. Action to alleviate poverty by diversifying livelihoods and reducing the costs of living near tiger habitats is urgently needed to improve wellbeing and ensure longterm support for tiger conservation.

Most buffer zone households collect and use forest resources but certain ethnic groups (e.g. the poorest or landless such as Dalits and Magi) tend to have the greatest dependence on forest resources. Furthermore, approximately 70% of households own large livestock that increase household dependence on forest resources for fodder. Traditionally, in the Terai women are responsible for collecting the majority of forest resources, particularly fodder, and are therefore at greatest risk from tigers.

The project works in two national parks, Bardia and Chitwan, see maps below for details.

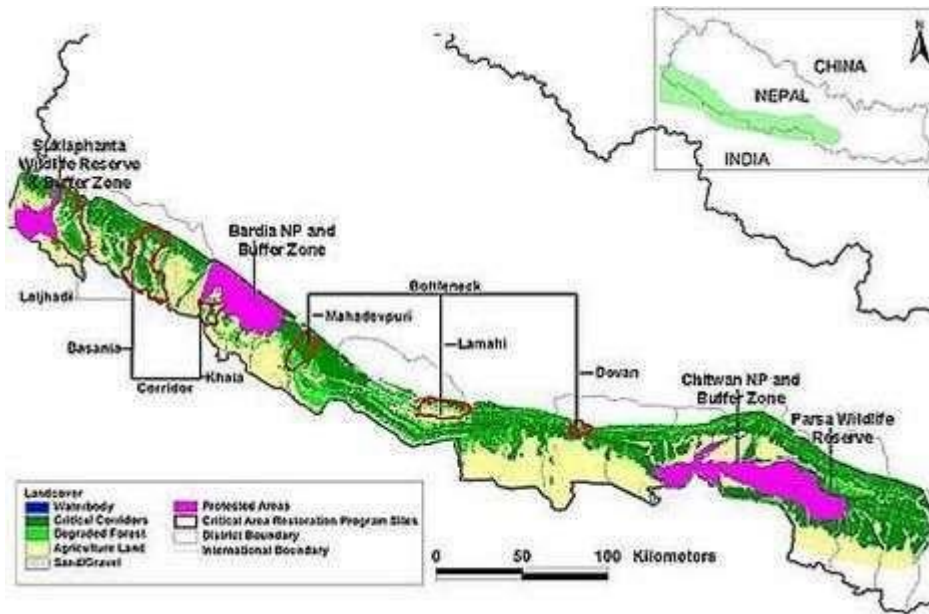


Figure 1. Terai region showing both national parks.

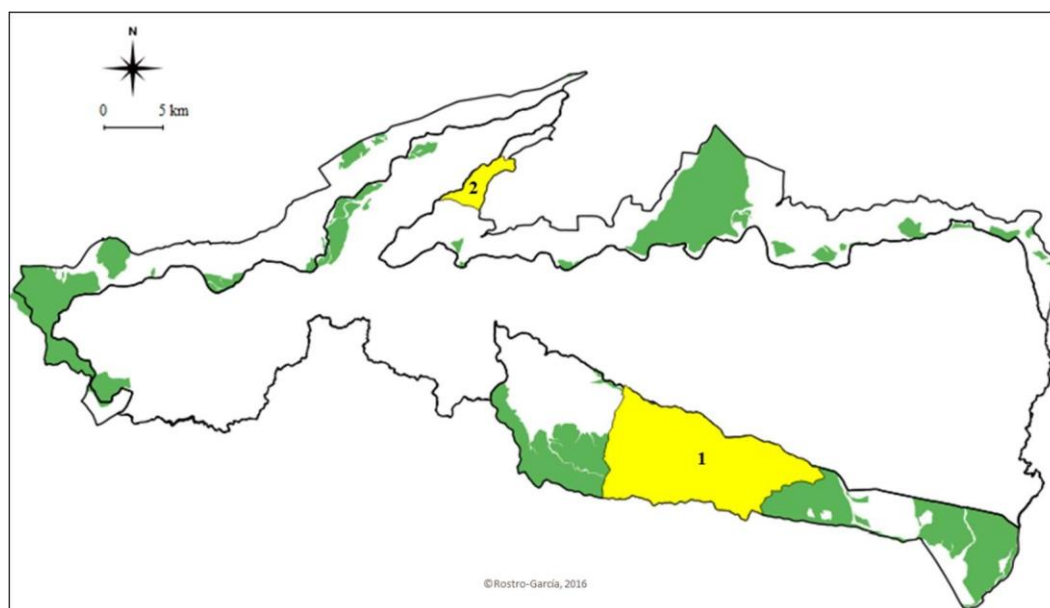


Figure 2. Map of Chitwan National Park indicating the two project focal sites: (1) Ayodhyapuri BZUC, and (2) Kalabanjar BZUC (©Rostro-Garcia 2016).

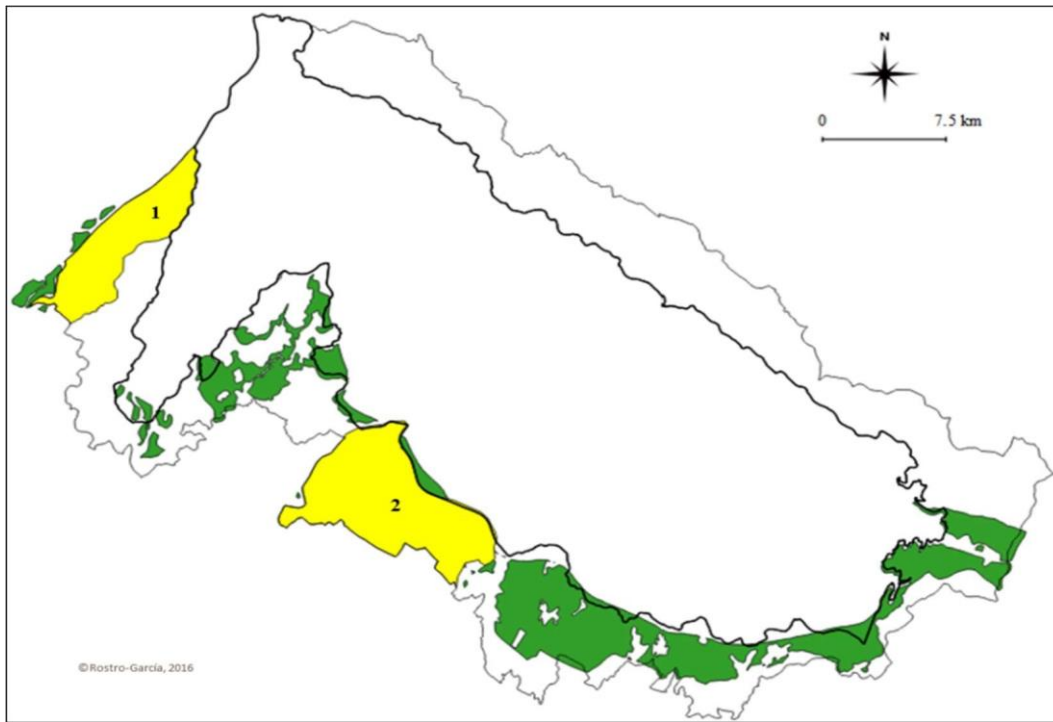


Figure 3. Map of Bardia National Park indicating two project focal sites: (1) Pathabar BZUC, and (2) Kareliya BZUC (©Rostro-Garcia 2016).

## 2. Project partnerships

The project partners include Department of National Parks and Wildlife Conservation (DNPWC), Chitwan National Park (CNP), Bardia National Park (BNP), National Trust for Nature Conservation (NTNC), Pathabar Buffer Zone User Committee, Kareliya Buffer Zone User Committee, Ayodhayapuri Buffer Zone User Committee, and Kalabanjar Buffer Zone User Committee.

DNPWC, CNP, and BNP are the governmental partners whereas others are non-governmental organizations. DNPWC has provided the project with necessary permissions and permits to conduct ecological research at project sites and played an advisory role. While CNP and BNP are major stakeholders directly involved in project site selection, field monitoring and providing research permission in the respective national parks and have provided constructive advice at every stage of the project activity implementation.

NTNC have trained staff in camera trapping who were mobilized during the ecological research phase of the project and provided technical advice. Buffer Zone User Committees are key community based partners of the project that were engaged in identifying and planning, implementation and monitoring of the project interventions. To date the project has funded predator proof pen construction and biogas installation with User Committees assistance and management, and with Living with Tigers (LWT) technical support.

## 3. Project progress

### 3.1 Progress in carrying out project Activities

Year 1's priority was to design and conduct a quantitative and qualitative survey (Activities 1.1, 1.2, 2.1, 2.2, 3.1, 3.2 4.1, & 4.2 under outputs 1-4) see survey attached.



Social\_Survey\_English\_Version\_2016.pdf

The survey was successfully conducted in 882 households, and 17 focus group interviews were held to help us to identify the drivers resulting in human wildlife conflict (HWC) in our target communities. In the Bardia area, 237 women and 203 men were interviewed while in Chitwan 233 women and 209 men were interviewed.

The following activities for year 1 have been completed as part of outputs 1, 2, 3, and 4.

Activities 1.2, 2.2, 3.2 & 4.2 Baseline quantitative survey was developed, piloted and administered in project and comparison community focal sites.

Activities 1.1, 2.1, 3.1 & 4.1 Baseline qualitative data collection was completed through focus groups, and semi-structured interviews in project communities.

Activity 1.5 Trial safe working and livestock husbandry practices implemented in project communities.

On the 31<sup>st</sup> of December 2016 the project contributed towards a Free Medicine Camp for Goats in CNP, this was also replicated in BNP on the 10<sup>th</sup> of January 2017.

Altogether, 58 predator proof pens and 36 Biogas plants in 4 Buffer Zone User Committees across Chitwan and Bardia National park were installed.



Photo 1: Building of predator proof pen in Pathabar, October 2016.



Photo 2: Biogas plant built in Ayodhyapuri, October 2016.



Photo 3: Predator proof pen in Kalabanjar UC, CNP.



Photo 4: Biogas plant installed in Kalabanjar UC, CNP



Photo 5: Inauguration of the LWT Bardia office the 13<sup>th</sup> of May 2016.



Photo 6 & 7: Capacity building of GGN teams on Theory of Change.



Photo 8: One day improved goat farming training conducted in CNP.

Activities 1.7, 2.7, & 3.7 Training and information-sharing events, to which neighbouring communities are invited, held to encourage replication of ideas.

A one-day first aid training course for UCs, LWT staff and stakeholders was conducted in both sites (BNP and CNP). A one-day human-tiger conflict awareness session was conducted in both sites of CNP, which was attended by 72 participants.

In BNP, interaction programs were held in Pathabar and Kareliya Buffer Zone User Committees involving 111 and 26 participants respectively.

Total of 65 and 46 individuals participated in project intervention information sharing events in both project sites of BNP and CNP respectively.



Photo 9: Training on Human Tiger Conflict (HTC), Photo 10: CNP meeting amongst NGOs tiger behaviour, tiger hotspot areas, and HTC working on tiger projects. in other South Asian Countries, October 2016.



Photo 11: 1st aid training in Kalabanjar, CNP.



Photo 12: 1st aid training in Ayodhyapuri, CNP.



Photos 13 & 14: Awareness program on HTC at Ayodhyapuri and Kalabanjar UC, CNP.

Activity 2.3 Viable alternatives to, or practices for the more efficient use of, natural resources identified and interest in these assessed.

The project held community group meetings in each focal site during November 2016 to assess interest and demand for viable livelihood alternatives. A list of potential livelihood options was created; the next phase in year 2 is to have the livelihoods assessed for viability, practicality, and distance to market by a livelihoods expert.



Photo 15: Capacity building in Kareliya, May 2015.

Activity 4.3 Camera trapping and line transect study completed in forest areas adjacent to project and comparison communities.

Camera trapping in year 1 was completed for Bardia, see DNPWC summary report attached.



LWT\_BardiaNationalPark\_2017\_DNPWC\_report.pdf



Photo 16: Male tiger in Bardia National Park.

5.1. Baseline qualitative and quantitative data collection completed to explore the economic and social drivers of natural resource use behaviours and to assess prevalence of these behaviours and likelihood of change in these behaviours.

Completed 1<sup>st</sup> year survey, see preliminary summary findings for baseline household social surveys for both Bardia and Chitwan.



Social survey data analysis Report Bardia2016.pdf



Social survey data analysis Report Chitwan2016.pdf

We also organised the first Introductory Social Marketing Workshop in Kathmandu, Nepal for our national partner (GGN).



Photo 17: 1<sup>st</sup> Social Marketing workshop on Oct 27 & 28, 2016 at Alpha House, Kathmandu, Nepal.

### 3.2 Progress towards project Outputs

Output 1. Safe working practices in the buffer zone and community forests established, and predatorsafe livestock husbandry methods adopted by project villages.

Fifty-seven households owning livestock thus far have received support to build predator proof pens in CNP and BNP (37 and 20 respectively). Forty-two livestock-owning households from project sites and neighbouring communities received free veterinary services camp in Ayodhyapuri in CNP, while 49 individuals participated in one day improved goat farming training in BNP. Forty-three individuals from project sites in CNP and BNP (19 and 24 respectively) attended first aid training courses.

Output 2. Household consumption of natural resources reduced by identifying, and building capacity for the uptake of resource alternatives or more efficient use practices.

In CNP (16) and BNP (20), altogether 36 natural resource user households received biogas plants as alternative source of energy for cooking. Sixteen households attended training on biogas plant handling and maintenance in BNP.

Output 3. Capacity for, and new sources of, alternative livelihoods and income generation established in project villages.

Data was collected regarding potential livelihood options that communities were interested in learning and developing. No trainings for this output have been conducted in the first year of the project, but it has been planned for the second year.

Output 4. Social and ecological conditions favourable to continued or increasing tiger presence in project area are achieved in project focal areas

First phase camera-trapping data and transect survey data collection in BNP and around its buffer zone has been completed for understanding ecological factors affecting human-tiger conflict, please refer to [LWT\\_BardiaNationalPark\\_2017\\_DNPWC\\_report.pdf](#).

Seventy-two individuals participated in a human-tiger conflict awareness camp in CNP.

Output 5. The social marketing (SM) campaign will be used as necessary to enhance adoption rates of certain alternative behaviours (i.e. those for which the associated current behaviour is entrenched or particularly challenging to address as identified during the initial learning phase in project communities). As with all project activities, it will be tailored to each of the project communities.



Baseline qualitative and quantitative data collection was completed in September-October 2016 to explore the economic and social drivers of natural resource use behaviours and to assess prevalence of these behaviours and likelihood of change in these behaviours refer to preliminary summary findings attached (social survey data analysis report for Bardia 2016, and for Chitwan 2016).

3.3 Progress towards the project Outcome

Outcome	In project sites around Chitwan and Bardia, the safety of people and tigers is secured and poverty reduced by changing behaviours, building capacity, improving livelihoods, and reducing humantiger conflict.			
Indicator	Baseline	Change by 2016	Source of evidence	Comments (if necessary)
0.1 The number of people attacked by tigers is reduced by 80% in focal communities around Chitwan and Bardia by project end compared to pre-project levels.	In Kalabajar, a tiger killed a man, but no killing or harming of tigers and leopards in Chitwan occurred. There were no attacks or deaths of humans caused by tigers or leopards in Bardia, and no killing or harming of leopards and tigers.		a) Regional human-tiger conflict monitoring system & official records by partners (DNPWC, NTNC). b) Local reports to project staff and verification of attacks.	
0.2 50% fewer livestock attacked by tigers or leopards in focal communities by the end of yr 3 compared to pre-project levels.	For our Bardia focal communities, out of those households that owned livestock, on average 17.9% stated they had lost livestock in the last 3 years by tiger, leopard, or other. This equates to 12 cattle, 3 oxen, 47 goats, 11 sheep, 34 pig, and 128 poultry. For our Chitwan focal communities, out of those households that owned livestock, on average 6.9% stated they had lost livestock in the last 3 years by tiger, leopard, or other. This equates to 1 cattle, 6 buffalo, 5 oxen, 41 goats, 1 pig, and 204 poultry.		c) Baseline and evaluation panel questionnaire surveys (i.e. surveying same people before & after interventions) carried out in project sites and matched comparison sites. d) Baseline and monitoring participant observation & focus groups.	
0.3 No tigers are killed by people from focal communities throughout project period, and number of 'problem tigers' removed by officials is reduced compared with pre-project levels and compared to comparison sites.	0			

0.4 Levels of poverty reduced and wellbeing improved in ca. 375	238 Households (HHs) are under poverty line in Janaknagar (treat site)			
(20-60%*) focal CFUG households per park by yr 3. (Indicators to be developed as part of the initial learning to understand what wellbeing means to the beneficiaries. (* N.B. % ranges are broad due to number of households per CFUG (project site) varying from ca. 450 – 1,500).	<p>and 121 HHs in Saljhundi (control site) in Pathabar UC; and 187 HHs are under poverty line in Rammapur (treat site) and 326 HHs in Dangpur (control site) in Kareliya UC.</p> <p>In Bardia 66% of households stated having landholdings was the most important aspect for their well-being, and then 10% stated their children having education.</p> <p>206 Households (HHs) are under poverty line in Kalabajar (Treat – 135, Control – 71) and 569 HHs in Ayodhyapuri (Treat – 182, Control 387).</p> <p>In Chitwan 49% of households stated having landholdings was the most important aspect for their well-being, and then 20% stated their children having education.</p>			
1. Safe working practices in the buffer zone and community forests established, and predator-safe livestock husbandry methods adopted by project villages				
1.1 Ca. 600 (40-80%) relevant target natural resource user households per park have had at least one member attend training sessions on safe working practices by end of yr 2.		N/A	a) Verifying indicators will be attendance records, feedback surveys/discussions with participants.	
1.2 Ca. 450 (30-60%) relevant natural resource user households per park have members involved in safe working practice schemes by end of yr 3.		N/A	a) Baseline & evaluation panel questionnaire surveys in project sites and matched comparison sites to explore working practices &	

1.3 Participating households' perceived ability to protect themselves from tigers increased compared to baseline levels by end of yr 3.	In Bardia National Park, the majority of households responded either low or medium to level of ability to protect themselves/family from tigers and leopards. In Chitwan National Park, the majority of	N/A	livestock keeping, knowledge, attitudes and behaviour (quantitative). b) Participant observation &	
	households responded either low or medium to level of ability to protect themselves/family from tigers and leopards.		focus groups in project sites (by project staff and at project end by independent evaluator) on perceptions, social norms, and behaviours (qualitative).	
1.4 Ca. 450 (30-60%) of livestock-owning households per park have built & maintain tiger proof pens by end of yr 3.	Baseline data is from LWT 2016 household surveys. In Bardia NP, of those who owned livestock, 97.4% have a livestock shed. In Chitwan NP, of those who owned livestock, 78.2% have a livestock shed.	N/A		
1.5 Participating livestock-owning households' perceived ability to protect livestock from tigers improved compared to baseline by end of yr 3.	In Bardia National Park, the majority of households responded either low or medium to level of ability to protect their livestock from tigers and leopards. In Chitwan National Park, the majority of households responded either low or medium to level of ability to protect their livestock from tigers and leopards.	N/A		
2. Household consumption of natural resources reduced by identifying, and building capacity for the uptake of, resource alternatives or more efficient use practices.				
2.1 Ca. 600 (40-80%) target natural resource user households per park have at least one member attend training on alternative/efficient resource use by end of yr 2.	For Bardia NP, out of all households, 83% had not received any training. For Chitwan NP, out of all households, 80% had not received any training.	N/A	a) Verifying indicators will be attendance records, and feedback surveys/discussions with participants.	

<p>2.2 Ca. 450 (30-60%) relevant natural resource user households per park adopt at least one alternative natural resource use behaviour by end of yr 3.</p>	<p>N/A</p>	<p>N/A</p>	<p>Verifying indicators will be baseline &amp; monitoring data (as above) using:</p> <p>a) Interview surveys on natural resource use, knowledge, attitude and behaviour (quantitative).</p>	
<p>2.3 Participating households' natural resource use (for fodder, household consumption) decreased by 50% relative to baseline at end of yr 3.</p>	<p>In Bardia NP, 341 out of 440 households collect natural resources for fodder (livestock feed), of these 341 households, 85% have not received any training in the last 3 years (from LWT, 2016 households survey data). In Chitwan NP, 393 out of 442 households collect</p>	<p>N/A</p>	<p>b) Participant observation &amp; focus groups in project sites (by project staff and at project end by independent</p>	

	natural resources for fodder (livestock feed), of these 341 households, 79% have not received any training in the last 3 years (from LWT, 2016 households survey data).		evaluator) on perceptions, social norms, and behaviours (qualitative).	
2.4 Time spent collecting natural resources has decreased by 50% in participating households compared to baseline by end of yr 3.	For Bardia NP on average, household spend 4.2, 3.5, 2.8 hours per day in National Park, community forest and private land respectively. For Chitwan NP on average, household spend 2.9, 2.3, 1 hour(s) per day in National Park, community forest and private land respectively. (Information from LWT 2016 household survey.)	N/A		
3. Capacity for, and new sources of, alternative livelihoods and income generation established in project villages				
3.1 Ca. 600 (40-80%) target households per park have at least one member who has attended livelihoods training events by end yr 2.	In Bardia NP, 29 households have received livelihood training (agriculture/livestock husbandry/both) in the last 3 years (from LWT 2016 household survey data). In Chitwan NP, 33 households have received livelihood training (agriculture/livestock husbandry/both) in the last 3 years (from LWT 2016 household survey data).	N/A	a) Verifying indicators will be attendance records, and feedback surveys/discussions with participants.	
3.2 Number of cooperatives / self-help groups (SHGs) increasing in villages compared to baseline by end of yr 3.	In Bardia NP, 89% of all households surveyed are involved in a cooperative. In Chitwan, 62% of all households surveyed are involved in a cooperative.	N/A	Baseline & monitoring data collected (as above) using following methods of data collection and observation:	
3.3 Ca. 450 (30-60%) target households per park have at least one member who has taken up an alternative livelihood by end of yr 2.	N/A	N/A	a) Interview surveys on household economics, knowledge, attitude, and behaviour	

3.4 Participating households' natural resource use (for income) decreases by	In Bardia NP, 221 households out of 440 surveyed stated they collect NR for additional income. Of these 221,	N/A	(quantitative). b) Participant observation &	
50% relative to baseline by end of yr 3.	89% have not received any training in the last 3 years (from LWT 2016 survey data). In Chitwan NP, 5 households out of 442 surveyed stated they collect NR for additional income. Of these 5, 80% have not received any training in the last 3 years (from LWT 2016 survey data).		focus groups in project sites (by project staff and at project end by independent evaluator) on perceptions, social norms, and behaviours (qualitative).	
3.5 Time spent by participating households collecting resources for income has decreased by 50% compared to baseline by end of yr 3.	See 3.4	N/A		
3.6 Participating households' perceived ability to generate income from alternative livelihoods increased compared to baseline by end yr 3.	In Bardia NP, 77% of surveyed households stated there were no new livelihood opportunities in the last 5 years. In Chitwan NP, 56% of surveyed households stated there were no new livelihood opportunities in the last 5 years. (Data from LWT 2016 survey)	N/A		
4. Social and ecological conditions favourable to continued or increasing tiger presence in project area are achieved in project focal areas.				
4.1 More people in project communities willing to tolerate tiger populations in their neighbouring forest compared to baseline and comparison sites by end of yr 3.	In Bardia NP, 80% and 77% agreed that tigers and leopards respectively should be protected. In Chitwan NP, 86% and 85% agreed that tigers and leopards respectively should be protected. In Bardia NP, 51% and 51% agreed that tigers and leopards respectively could live alongside people. In Chitwan NP, 30% and 30% agreed that tigers and leopards respectively could live alongside people.	N/A	a) Verifying indicator means are baseline survey and subsequent surveys, monitoring and evaluation assessments of tolerance via focus groups, and direct field observations	

4.2 In project sites, attitudes towards tigers have improved compared to baseline and comparison sites by end of yr 3.	See 4.1 above	N/A	a) Baseline data, monitoring, and evaluation assessments of attitudes, and opinions about life in the proximity of tiger	
			populations via focus groups, observations, and surveys.	
4.3 In project sites, support for tiger conservation has increased compared to baseline and comparison sites by end of yr 3.	See 4.1 above	N/A	a) Baseline data, monitoring, and evaluation assessments of perceptions, social norms, and behavioural intent via focus groups, observations, and surveys.	
4.4 Empirical data gathered, leading to a better understanding of ecological factors affecting human-tiger encounters in the buffer zones of CNP & BNP by end of yr 3	The LWT project collected ecological data in 2017 (Bardia NP so far) using camera traps and transect surveys (scats, tracks and prey), which can be used to map human-tiger-leopard overlaps and conflict hot spots.	N/A	a) Transects, camera trapping and scat surveys to assess the distribution of tigers and leopards in the buffer zones and park edges.	
5. Social Marketing Activities: The SM campaign will be used as necessary to enhance adoption rates of certain alternative behaviours (i.e. those for which the associated current behaviour is entrenched or particularly challenging to address as identified during the initial learning phase in project communities). As with all project activities, it will be tailored to each of the project communities.				
5.1. Baseline qualitative and quantitative data collection completed to explore the economic and social drivers of natural resource use behaviours and to assess prevalence of these behaviours and likelihood of change in these behaviours).	882 households interviewed, approximately 440 in each national park. Baseline data for social and economic drivers of behaviours that link to human-felid conflicts collected through household surveys and focus groups in 2016, 2017 and 2018.	Baseline data for social and economic drivers of behaviours that link to human-felid conflicts will be collected through household surveys and focus groups in household surveys in 2017.		



<p>5.2. Situation-specific and culturally relevant social marketing campaign developed in close collaboration with community members (target behaviours and influential community members identified; relevant campaign messages finalised and best means of communicating messages within target</p>	<p>No social marketing in Nepal has taken place.</p>	<p>Held first workshop in October 2016.</p>		<p>Held second follow on workshop in April 2017</p>
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communities established				
5.3. Campaign activities rolled-out in time to support the rollout of relevant project activities;	N/A	To start in year 2.		
5.4. Campaign monitored (with communities) and adapted as necessary;	N/A	To start in year 2.		
5.5. Campaign evaluated (with communities) through mixed-methods M&E.	N/A			Will have a midproject review in October 2017.

### 3.4 Monitoring of assumptions

Indicator	Assumptions	Comments
0.1-0.4	<p>Nepal's implementation of strict protection measures for tigers continues - no sudden, drastic changes in tiger numbers.</p> <p>No further major disasters (e.g. earthquakes) in project areas to hinder activities for longer than two months.</p> <p>No significant civil unrest in project areas to hinder activities for longer than two months.</p> <p>Communities willing and able to engage in project activities such as training events, discussions, and trials of solutions or new ideas.</p> <p>Productive working relationships with partner organisations, advisors, and stakeholders.</p> <p>Partner (DNPWC/NTNC) tiger conflict monitoring system remains in place for project duration.</p>	<p>No change in government's protection of tigers.</p> <p>To date no major earthquake or other natural disaster has occurred.</p> <p>No civil unrest has led to hindrance of activities for longer than two months.</p> <p>Communities have been willing to engage and assist with project activities and being interviewed.</p> <p>All partners are working together and finding ways to collaborate and assist with project activities.</p> <p>DNPWC/NTNC tiger monitoring is ongoing.</p>
1.1-1.5	<p>Villagers willing and able to attend training events.</p> <p>Villagers willing to try new methods, modify their habits in working practices and livestock keeping.</p> <p>Ongoing productive working relationships with partner organisations, advisors, and stakeholders.</p>	<p>Yes</p> <p>Yes, for things such as administering better livestock husbandry, will see when it comes time for them to change their own behaviour.</p> <p>Yes to date</p>
2.1-2.4	<p>Villagers able to attend demonstration and training events, and willing to engage with suggestions and try new livelihoods.</p> <p>Productive working relationships with partner organisations, advisors, and stakeholders.</p>	<p>Yes to date</p> <p>To date yes, they have requested more funds and interventions from us.</p>

3.1-3.6	Villagers able to attend demonstration and training events, and willing to try new livelihoods.	Yes
	No local disasters (e.g. flooding) damages cropland or pasture for prolonged periods, making non-forest based alternatives unviable.  Markets for alternatives remain accessible and stable.	No major disasters of late.  Will be assessing markets and their accessibility and long-term viability with the help of a livelihoods expert during year 2.
4.1-4.4	Villagers communicate openly about their concerns, opinions, and ideas with project staff.  Conditions favourable to camera trapping (not stolen/damaged by villagers/wildlife); sufficient tiger/leopard scat can be found for analysis.	Yes  We have had some cameras destroyed, SD cards stolen but are working with communities to reduce the losses.
5.1-5.5	Need to create the assumptions for the 5 activities with the Social Marketing adviser.	Assumptions have been recorded (in April 2017) and thus will be reported in year 2 mid-term report.

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

It is still too early in the 1st phase of the project to observe impact of project interventions on biodiversity and poverty alleviation. However, project impacts will be assessed both at mid-term and at the end of the project period.

The project is contributing to biodiversity conservation and will be dealing with poverty alleviation. So far, community member testimonials have stated positive impacts of the project interventions that have been quoted in local newspapers. Ishwori Bote, a local resident of the project focal community was quoted saying, “When I didn’t have a predator proof pen, tiger/leopard used to depredate goats from my shed, but now I am confident that my goats are safe from depredation by tiger/leopard because I have built improved predator proof pen.” Similarly, Shree Maya Bote has been feeling safer because she has an installed biogas plant. She said, “Fuelwood consumption for my household per month was very high and it wasn’t safe collecting fuelwood in the forest because of tigers but I feel safer. A pair of oxen dung suffices for the required gas to cook food for my family and workers with the biogas plant and I have also connected the toilet to the plant.”

In the BNP site, there have been similar impacts reported in national newspapers quoting Hari Bahadur Buda saying, “Earlier I used to enter national park for fuelwood collection secretly hiding from guards, but I have not entered national park for fuelwood collection since last six months after installing biogas plant.” Basanti Tharu was also quoted saying, “I do not need to enter national park for collecting fuelwood after installing biogas plant.” The chief warden of BNP, Ramesh Kumar Thapa, stated that, “Biogas plant installation has been changing the behaviour of illegal fuelwood collection from the park.” Lakhani Tharu said, “Annually more than three dozen cattle, goats, buffalo were depredated by wild animals but after building of predator proof pens our animals are becoming safer.”

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

LWT’s is helping contribute towards ending poverty (SDG 1) by empowering communities to earn income through various different streams. As well as assisting to ensure healthy lives and promote well-being for all ages (SDG 3) by installing biogas plants which reduces the amount of smoke inhalation in the home, as well as decrease carbon emissions and risk of coming into conflict with felids while collecting fuelwood. The project is also focused on achieving gender equality and empowering women and girls (SDG 5) to play a role in community decision making especially concerning natural resource management. Additionally, the project is helping to sustainably manage forest and natural resource use (SDG 15) by working with the Community Buffer User Groups, and enhance global support for efforts to combat poaching and trafficking of protected species, including increasing the capacity of local communities to pursue sustainable livelihood opportunities.

#### 5. Project support to the Conventions, Treaties or Agreements

The project's outcome (of improving the safety and poverty of people affected by tiger conservation) and its approach to achieving this are very relevant to the CBD, in particular the following Articles: 8) In-situ Conservation (8e sustainable development adjacent to protected areas; 8j equitable sharing of benefits; 10) Sustainable Use of Components (10c customary use of biological resources compatible with conservation); 11) Incentive Measures (economically and socially sound measures that act as incentives for conservation); 12) Research and Training (12b encourage research which contributes to conservation); 17) Exchange of Information (facilitate the exchange of information relevant to conservation). Our project also supports Nepal's National Biodiversity Strategy and Action Plan 2014-2020, which specifically mentions human-wildlife conflict as a key challenge, but also its commitment to doubling Nepal's tiger population by 2022, and its obligations to the Global Tiger Forum and Global Tiger Initiatives. Our project also indirectly supports Nepal's commitments to CITES by helping the implementing agency continue to protect the Appendix I listed Bengal tiger (*Panthera tigris tigris*) in the Terai of Nepal.

#### 6. Project support to poverty alleviation

Our focal communities are Community Forest User Groups, (CFUGs), of which there are two in each park. The project will target sub-groups who suffer the greatest levels of poverty, natural resource dependence, and/or marginalisation. Based on our scoping work, working with women and ethnic minorities is necessary as they are typically burdened with the task of grass cutting and have fewer income generating options available to them than do men. The Tharu and Darai people are some of the poorest within Terai communities.

We expect to be able to help directly up to 400 households across each of the Chitwan and Bardia sites, with women from a minimum of 25% of these households being empowered by project activities. However, based on our experience of implementing a similar project in Assam, India, the project will likely result in spill-over of actions from project to other households within project villages and non-project villages, meaning that the number of indirect project beneficiaries will likely increase beyond this number over time. We will use qualitative methods to reduce the negative well-being impacts of tigers on, and address poverty in, project communities. By reducing demand on natural resources and keeping people and livestock safe from tigers, the project will help to safeguard household well-being by preserving or enhancing human material, economic, social, and/or natural resources. Thus allowing households' specific needs to (continue to) be met, their life goals to be achieved (e.g. children attending school) and their resilience to future shocks secured and/or strengthened. The project will build capacity and empower communities to take a sustainable, adaptive, and long-term approach to securing and improving their well-being and, consequently, improving local tiger habitat and fostering tolerance for tigers, the project will have a lasting positive impact on both poverty and conservation. We are also looking at opportunities to create market links with UK companies as well as Chester Zoo's retail team to sell community artisanal products.

#### 7. Project support to gender equality issues

The project has directly promoted the participation of female participants in various project activities resulting in 100 women in BNP and 59 women in CNP benefitting out of 521 and 205 total participants in BNP and CNP respectively. Project is also promoting gender equity indirectly by installing biogas as an alternative source of cooking energy that reduces women's fuel wood collection time.

#### 8. Monitoring and evaluation

Systems and processes employed internally to monitor the project have been the use of the log frame, in addition to adhering to the monthly reporting system and review of the project assumptions.

As the risk mitigation interventions were completed in March 2017 only we have not yet evaluated the efficacy in reducing conflict in terms of decreasing likelihood of humans being attacked by tigers and leopards, and livestock being depredated by felids. This will take place in year two as we collect data from the household survey study and have the project independently reviewed. During year two, a facilitator will be hired to assist GGN in the planning and implementation of the evaluation of the project.

#### 9. Lessons learnt

Installation of biogas and building of predator proof pens are two major activities that were conducted at community level which were completed successfully as planned. The local Buffer Zone User Committees were handed over the responsibility to implement, monitor, and report on the project activity which instilled ownership and created buy in from them, hence intervention activities were successfully completed. As there was shared ownership by the Buffer Zone User Committee, they also supported the interventions with matching funds. For installation of biogas, the biogas installation company contributed match-funding support.

However, the demand from the communities for these interventions is higher than what the project budget can support. Therefore, Green Governance Nepal is looking to collaborate with other organisations in order to increase community interventions support.

Challenges faced have been a) getting partners to coordinate around the issue of sharing raw data; b) coordinating the ecological research (camera trapping and transect studies in the field) with DNPWC; c) the amount of time it has taken to acquire the necessary permits and park authorisations; d) the lack of a clear understanding of each partners deliverables; e) the on the ground reality that human wildlife conflict pressures mostly occur due to elephants, wild boars and deer; and f) communities having had previously disastrous experience with improved efficient cooking stoves resulting in a reluctance to implement this intervention.

We also encountered challenges with the household survey questionnaire when it was translated from English to Nepalese resulting in questions being deleted or altered resulting in changed meaning. This resulted in not having fully captured some important baseline data such as perception of communities being able to live with large felids.

A risk the project faces is not receiving field research permits for year two, or not receiving permission to do research when we planned.

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

Not applicable

11. Other comments on progress not covered elsewhere

As a spill over effect of the project, we can see NTNC has replicated the improved predator proof pen construction in adjoining communities to our project focal communities in BNP. This has the potential of further decreasing HWC.

12. Sustainability and legacy

The biogas plants and predator proof pens if maintained properly, which the communities have given us guarantees they will do, will sustain the project impacts beyond the life cycle of the project, leaving a short, mid and long term legacy. NTNC's contribution to supporting similar interventions to ours will also ensure sustainability and leave a legacy.

13. Darwin identity

List presentations to NTNC, DNPWC, other NGOs at conferences, blogs, websites, articles published can refer them to Table 1 below.

The project has credited Darwin Initiative (DI) funding and used the logo in various program banners, presentations, and intervention branding tags. The Darwin Initiative logo was used on every project update presentation to the Department of National Parks and Wildlife Conservation, Chitwan National Park, Bardia National Park, National Trust for Nature Conservation and general assembly of GGN. The DI logo was also used on the poster tags placed on the biogas and predator proof pens and other program event banners.

Presentations displaying the DI logo were given to DNPWC, CNP, and BNP delivered during different phases of project implementation to share project's objectives, work plans, interventions and updates please refer to Table 1.

Various tweets were done by Diogo Verissimo, Valerie de Liedekerke, and Amy Fitzmaurice using the Darwin Initiative hash tag.

The project has been recognized as a distinct project with a clear identity. Darwin Initiative is widely known among the conservation oriented non-governmental and governmental organisations as well as among the local community of project sites in Nepal.

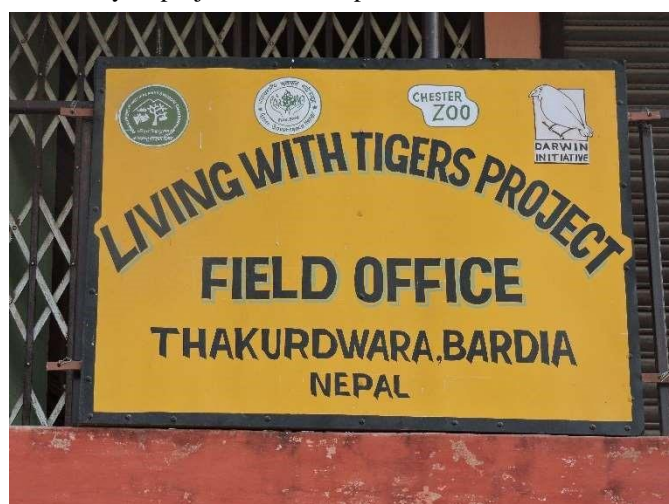


Photo 18: BNP LWT field office board.

Table 1. Presentations, Workshops, Meetings, Communication Outreach, etc.

Title	Purpose of	Present er	Organ isatio n	Type of event	Date	Location	Audie nce	# of Men atten ded	# of Wom en atten ded
Living with Tigers: Poverty Reducti on for HW Coexiste nce	To provide an update to Park Authority and UC member s	Roshan Shrecha n	GGN	Meeting	13/05 /16	Thakurdw era, BNP	User Commi ttee Membe rs		
Living with Tigers: Poverty Reducti on for HW Coexiste nce	To provide an update of the project to DNPWC	Roshan Shrecha n	GGN	Meeting	16/08 /16	Kathmand u	DNPWC staff		
Living with Tigers: Poverty Reducti on for HW Coexiste nce	To provide an update of the project to DNPWC	Roshan Shrecha n	GGN	Meeting	22/08 /16	Sauraha, CNP	DNPWC staff		
HTC Awaren ess day	To raise awaren ess of the plight of tigers and support for their conserva tion, as well as present Humantiger related issues	Prakash Chapag ain & Roshan Shrecha n	GGN	Meeting	23/24/08 /16	Ayodhay apuri User Committ ee and Kalabanj ar User Committ ee, CNP	User Commi ttee membe rs	55	14

Living with Tigers: Poverty Reduction for Human Wildlife Coexistence	To provide an update to Park Authority and UC members	Roshan Shrechan	GGN	Meeting	24/10/16	Kasara, CNP	CNP Park Authorities and UC members		
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One day Training on Improved Goat Farming Practices	The main objective of organising this training was to train the community people on improved methods of goat farming.	Veterinarian doctor, Purna Bahadur Khatri of Shantibazar Livestock Service Centre	GGN	Training	10/01/17	Janaknagar BZCFUG & Pathabar UC	User Committee members	35	15
Orientati on Training on First Aid Practice	The main objective of this training was to train the targeted group on first aid practice.	Mr. Dhan Bahadur Khadka, Health Assistant (HA)	GGN	Training	25/01/17	Rammapur Buffer Zone Community Forest Users Group Kareliya User Committee Bardia National Park	targeted members of CBAPU, Park official, local youth (24 individuals)		
Assessing practical interventions for reducing human large felid conflict in Nepal	Summary update of the first results of field research data collected	Amy Fitzmaurice	WildCRU, Oxford University	Meeting	07/03/17	Bardia National Park Headquarters	BNP park authorities and NTNC		

1 <sup>st</sup> Aid Training	To teach 1 <sup>st</sup> aid to community members and LWT staff	Red Cross	Red Cross	Training	03/02 /17	Ayodhyapuri, CNP	User Committee members		
Free Medicine Camp for Goats	To teach improved goat husbandry to community members		Medivet Pharmaceuticals Lab Pvt. Ltd and Ayodhyapuri User	Training	31/12 /16	Tamta-Anar CFUG & Ayodhyapuri UC CNP	User Committee members		
			Committee						

#### 14. Project expenditure

Table 2: Project expenditure during the reporting period (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)			-6.60	Volatile fluctuating GBP exchange rates caused increased staff costs, plus the increase in the project manager's time from 50% to 75%, approved by DI.
Consultancy costs			-16.76	The social marketing advisor's time needed to do the work was more than originally budgeted. Chester Zoo is funding all extra costs.
Overhead Costs			5.58	Bardia LWT office was opened with a short delay compared to Chitwan LWT Office.
Travel and subsistence			-0.70	Minimal amount difference
Operating Costs			-0.55	Minimal amount difference
Capital items (see below)			-12.09	Required an extra computer for the new LWT project manager that was bought in February 2017. Previous country manager was using his own computer.
Monitoring & Evaluation (M&E)			1.59	Minimal difference




Others (see below)			7.83	Road tax was cheaper than budgeted.
TOTAL	6591 )	68,634.89		

Highlight any agreed changes to the budget and fully explain any variation in expenditure where this is +/- 10% of the budget. Have these changes been discussed with and approved by Darwin? **Yes.**

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	In the Terai of Nepal, poverty is reduced and tiger conservation efforts are strengthened by increasing security and developing sustainable livelihoods to reduce human-tiger conflict.	Cost sharing by UC for construction of predator proof pens in Kalabajar UC, CNP. Matching costs supported in addition to project's budget for installing biogas by VDC, UC, and GoN.	

<p>Outcome</p> <p>In project sites around Chitwan and Bardia, the safety of people and tigers is secured and poverty reduced by changing behaviours, building capacity, improving livelihoods, and reducing human-tiger conflict.</p>	<p>0.1 The number of people attacked by tigers is reduced by 80% in focal communities around Chitwan and Bardia by project end compared to preproject levels.</p> <p>0.2 50% fewer livestock attacked by tigers or leopards in focal communities by the end of year 3 compared to preproject levels.</p> <p>0.3 No tigers are killed by people from focal communities throughout project period, and number of 'problem tigers' removed by officials is reduced compared with pre-project levels and compared to comparison sites.</p> <p>0.4 Levels of poverty reduced and wellbeing improved in ca. 375 (2060%*) focal CFUG households per park by year 3. (Indicators to be developed as part of the initial learning to understand what wellbeing means to the beneficiaries.)</p> <p>(* N.B. % ranges are broad due to number of households per CFUG (project site) varying from ca. 450 – 1,500)</p>	<p>0.1 &amp; 0.2 too early to report</p> <p>0.3 No human casualties or loss occurred in focal communities, however one human loss from adjacent community in CNP.</p> <p>0.4 too early to report if levels of poverty reduced, however indicators have been developed as a result of the baseline household survey done in 2016.</p>	<p>0.4 need to write up the indicators for wellbeing.</p> <p>(Rising female employment, greater reported decision-making power between women, decisions on cooking for the household, decision on personal health, control of earnings, women's land ownership patterns, their social position, their happiness and opportunities.)</p> <p>Activities have been planned to meet the project outcome and outputs according to the log frame.</p>  <p>Year III_Plan.xlsx</p>
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<p>Output 1. Safe working practices in the buffer zone and community forests established, and predator-safe livestock husbandry methods adopted by project villages</p>	<p>1.1 Ca. 600 (40-80%) relevant target natural resource user households per park have had at least one member attend training sessions on safe working practices by end of year 2</p> <p>1.2 Ca. 450 (30-60%) relevant natural resource user households per park have members involved in safe working practice schemes by end of year 3</p> <p>1.3 Participating households' perceived ability to protect themselves from tigers increased compared to baseline levels by end of year 3</p> <p>1.4 Ca. 450 (30-60%) of livestockowning households per park have built &amp; maintain tiger proof pens by end of year 3</p> <p>1.5 Participating livestock-owning households' perceived ability to protect livestock from tigers improved compared to baseline by end of year 3</p>	<p>Reminder: Data will be collected over the three years.</p> <p>Year 1 results:</p> <p>1.1. 6% and 5% of total households in CNP and BNP respectively, evidence provided in section 3.2</p> <p>1.2 Will take place in year 2.</p> <p>1.3 Data will be collected during year 2 household social survey.</p> <p>1.4. 5% and 2% of total households in CNP and BNP respectively, evidence provided in section 3.2</p>
<p>Activity 1.1 Baseline qualitative data collection completed (focus groups, semistructured interviews) in project communities;</p>	<p>Baseline qualitative data collected see survey data summary report attached.</p>	
<p>Activity 1.2 Baseline quantitative survey developed, piloted and administered in project and comparison communities;</p>	<p>Baseline quantitative data collected see survey data summary report attached.</p>	
<p>Activity 1.3 Trial situation-specific and culturally-appropriate safe working and livestock husbandry practices developed and interest in these assessed;</p>	<p>One livestock husbandry practice workshop held in Chitwan and Bardia, see Table 1.</p>	
<p>Activity 1.4 Training schemes developed and workshops held in project communities;</p>	<p>In the process of deciding with country partners and from data collected what would be the most impactful training and workshops to conduct in communities, this will be taking place in year 2.</p>	
<p>Activity 1.5 Trial safe working and livestock husbandry practices implemented in project communities, supported where necessary by SM campaign activities (see 5.1.-5.5.);</p>	<p>Too early to report on will be occurring over year two.</p>	

Activity 1.6 Trial measures monitored, reviewed (with communities) and adapted as necessary;	Too early to report on, will occur primarily in year 3.
Activity 1.7 Training and information-sharing events, to which neighbouring communities are invited, held to encourage replication of ideas;	Too early to report on will happen over year 2 and 3.
Activity 1.8 Mixed methods evaluation (with communities) of trial measures completed and results discussed with communities.	Too early to report on, will be developing this during 1 <sup>st</sup> half of year 2.
Output 2. Household consumption of natural resources reduced by identifying, and building capacity for the uptake of, resource alternatives or more efficient use practices	<p>2.1 Ca. 600 (40-80%) target natural resource user households per park have at least one member attend training on alternative/efficient resource use by end of year 2</p> <p>2.2 Ca. 450 (30-60%) relevant natural resource user households per park adopt at least one alternative natural resource use behaviour by end of year 3</p> <p>2.3 Participating households' natural resource use (for fodder, household consumption) decreased by 50% relative to baseline end of year 3</p> <p>2.4 Time spent collecting natural resources has decreased by 50% in participating households compared to baseline by end of year 3</p> <p>2.1 See table in 3.3 Progress towards the project outcome</p> <p>2.2 To date 2% of total HHs in project sites in both CNP and BNP, more will be conducted in coming years</p> <p>2.3 &amp; 2.4 To be conducted by fuel-efficient wood stove study.</p>
Activity 2.1 Baseline qualitative data collection completed (focus groups, semistructured interviews) in project communities;	Completed see survey summary report attached.
Activity 2.2 Baseline quantitative survey developed, piloted and administered in project and comparison communities;	Completed see survey summary report attached.
Activity 2.3 Viable alternatives to, or practices for the more efficient use of, natural resources identified and interest in these assessed;	Completed through the household survey, but will also be hiring in year 2 a livelihood expert to review and research suggested alternatives and available markets.

Activity 2.4 Training schemes for alternatives/more efficient use practices developed and workshops held in project communities;	Thinking about how home vegetable gardens (soil testing, organic pesticides, composting) and agricultural yield could be improved, and working with a Horticulturalist to design workshops.
Activity 2.5 Alternatives schemes/more efficient use practices implemented in project communities, supported where necessary by SM campaign (see 5.1-5.5);	Have supported the installation of 36 biogas stoves, and presently looking at how to maximise growing fodder for livestock and household purposes without increasing HWC in villages and buffer zones.
Activity 2.6 Schemes and practices monitored, reviewed (with communities) and adapted as necessary;	To take place in year 2 and 3.
Activity 2.7 Training and information-sharing events, to which neighbouring communities are invited, held to encourage replication of ideas;	To take place in year 2 and 3.
Activity 2.8 Mixed methods evaluation (with communities) of schemes and practices completed and results discussed with communities.	To take place in year 3.

<p>Output 3. Capacity for, and new sources of, alternative livelihoods and income generation established in project villages</p>	<p>3.1 Ca. 600 (40-80%) target households per park have at least one member who has attended livelihoods training events by end year 2</p> <p>3.2 Number of cooperatives / self-help groups (SHGs) increasing in villages compared to baseline by end of year 3</p> <p>3.3 Ca. 450 (30-60%) target households per park have at least one member who has taken up an alternative livelihood by end of year 2</p> <p>3.4 Participating households' natural resource use (for income) decreases by 50% relative to baseline by end of year 3</p> <p>3.5 Time spent by participating households collecting resources for income has decreased by 50% compared to baseline by end of year 3</p> <p>3.6 Participating households' perceived ability to generate income from alternative livelihoods increased compared to baseline by end year 3</p>	<p>Too early to report, as interventions scheduled to take place in year 2 and 3.</p>
<p>Activity 3.1 Baseline qualitative data collection completed (focus groups, semistructured interviews) in project communities;</p>		<p>Completed see survey summary report attached.</p>
<p>Activity 3.2 Baseline quantitative survey developed, piloted and administered in project and comparison communities;</p>		<p>Completed see survey summary report attached.</p>
<p>Activity 3.3 Assessment of markets, value chains and micro-finance opportunities completed and viable alternative livelihoods identified;</p>		<p>This will be conducted in year 2.</p>
<p>Activity 3.4 Training schemes for alternative livelihoods developed and workshops held in project communities (e.g. acquisition of start-up equipment or materials, skills training such as book keeping and accessing markets);</p>		<p>This will be conducted in year 2 and continue in year 3.</p>
<p>Activity 3.5 Alternative livelihoods initiatives (including necessary SHGs or cooperatives) established in project communities with supported where necessary</p>		<p>This will be conducted in year 2 and continue in year 3.</p>

by SM campaign (see 5.1-5.5) and continuing guidance for start-up households/groups provided;		
Activity 3.6 Livelihood practices monitored, reviewed (with communities) and adapted as necessary;		This will be conducted in year 2 and continue in year 3
Activity 3.7 Training and information-sharing events, to which neighbouring communities are invited, held to encourage replication of ideas;		
Activity 3.8 Mixed methods evaluation (with communities) of livelihood practices completed and results discussed with communities.		To take place in year 3.
Output 4. Social and ecological conditions favourable to continued or increasing tiger presence in project area are achieved in project focal areas	<p>4.1 More people in project communities willing to tolerate tiger populations in their neighbouring forest compared to baseline and comparison sites by end of year 3</p> <p>4.2 In project sites, attitudes towards tigers have improved compared to baseline and comparison sites by end of year 3</p> <p>4.3 In project sites, support for tiger conservation has increased compared to baseline and comparison sites by end of year 3</p> <p>4.4 Empirical data gathered, leading to a better understanding of ecological factors affecting human-tiger encounters in the buffer zones of CNP &amp; BNP by end of year 3</p>	4.1, 4.2, 4.3, 4.4 Too early to report, will be assessed after year 3.
Activity 4.1 Baseline qualitative data collection completed (focus groups, semistructured interviews) in project communities;		Completed for year 1 see survey summary report attached.
Activity 4.2 Baseline quantitative survey developed, piloted and administered in project and comparison communities;		Completed for year 1 see survey summary report attached.
Activity 4.3 Camera trapping and line transect study completed in forest areas adjacent to project and comparison communities;		First phase camera trapping and transect study completed in BNP and its buffer zone areas and will continue in year 2.



Activity 4.4 Buffer-zone wide HTC rapid assessment survey developed, piloted, and administered with a representative sample of buffer zone inhabitants.	Completed at beginning of project.
Activity 4.5 Monitoring and evaluation of social conditions favourable to tiger presence completed (mixed methods M&E);	To take place in year 3.
Activity 4.6 Data analysis, paper writing, and dissemination of findings.	To take place in year 3.
Output 5. Social Marketing Activities: Following feedback on our Stage 1 application to provide more information on social marketing and, as the SM campaign is potentially applicable to activities associated with several outputs (1-3), we summarise the SM campaign activities here rather than repeating for each of the outputs. The SM campaign will be used as necessary to enhance adoption rates of certain alternative behaviours (i.e. those for which the associated current behaviour is entrenched or particularly challenging to address as identified during the initial learning phase in project communities). As with all project activities, it will be tailored to each of the project communities.	
5.1. Baseline qualitative and quantitative data collection completed to explore the economic and social drivers of natural resource use behaviours and to assess prevalence of these behaviours and likelihood of change in these behaviours);	Completed for year 1 see survey summary report attached
5.2. Situation-specific and culturally relevant social marketing campaign developed in close collaboration with community members (target behaviours and influential community members identified; relevant campaign messages finalised and best means of communicating messages within target communities established	In the process of being identified ongoing.
5.3. Campaign activities rolled-out in time to support the roll-out of relevant project activities;	To take place during year 2.
5.4. Campaign monitored (with communities) and adapted as necessary;	Ongoing
5.5. Campaign evaluated (with communities) through mixed-methods M&E.	To take place mid-project in year 2.

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

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: In the Terai of Nepal, poverty is reduced and tiger conservation efforts are strengthened by increasing security and developing sustainable livelihoods to reduce humantiger conflict.			

<p>Outcome:</p> <p>In project sites around Chitwan and Bardia, the safety of people and tigers is secured and poverty reduced by changing behaviours, building capacity, improving livelihoods, and reducing human-tiger conflict.</p>	<p>0.1 The number of people attacked by tigers is reduced by 80% in focal communities around Chitwan and Bardia by project end compared to preproject levels.</p> <p>0.2 50% fewer livestock attacked by tigers or leopards in focal communities by the end of year 3 compared to preproject levels.</p> <p>0.3 No tigers are killed by people from focal communities throughout project period, and number of 'problem tigers' removed by officials is reduced compared with pre-project levels and compared to comparison sites.</p> <p>0.4 Levels of poverty reduced and wellbeing improved in ca. 375 (2060%*) focal CFUG households per park by year 3. (Indicators to be developed as part of the initial learning to understand what wellbeing means to the beneficiaries.</p> <p>(* N.B. % ranges are broad due to number of households per CFUG (project site) varying from ca. 450 – 1,500.)</p>	<p>0.1- 0.2:</p> <p>a) Regional human-tiger conflict monitoring system &amp; official records by partners (DNPWC, NTNC)</p> <p>b) Local reports to project staff and verification</p> <p>c) Baseline and evaluation panel questionnaire surveys (i.e. surveying same people before &amp; after interventions) carried out in project sites and matched comparison sites.</p> <p>d) Baseline and monitoring participant observation &amp; focus groups</p> <p>0.3. Regional human-tiger conflict monitoring system and official records by partners (DNPWC, NTNC)</p> <p>0.4 Baseline, monitoring and evaluation observations &amp; focus groups to assess the material and subjective poverty and wellbeing (e.g. security, assets, decision-making, ability to cope etc.)</p>	<p>Nepal's implementation of strict protection measures for tigers continues - no sudden, drastic changes in tiger numbers.</p> <p>No further major disasters (e.g. earthquakes) in project areas to hinder activities for longer than two months</p> <p>No significant civil unrest in project areas to hinder activities for longer than two months.</p> <p>Communities willing and able to engage in project activities such as training events, discussions, and trials of solutions or new ideas.</p> <p>Productive working relationships with partner organisations, advisors, and stakeholders.</p> <p>Partner tiger conflict monitoring system remains in place for project duration.</p>
<p>Outputs:</p> <p>1. Safe working practices in the buffer zone and community forests established, and predator-safe livestock</p>	<p>1.1 Ca. 600 (40-80%) relevant target natural resource user households per park have had at least one member</p>	<p>1.1 Attendance records, feedback surveys/discussions</p> <p>1.2 -1.5</p>	<p>Villagers willing and able to attend training events.</p>

<p>husbandry methods adopted by project villages</p>	<p>attend training sessions on safe working practices by end of year 2.</p> <p>1.2 Ca. 450 (30-60%) relevant natural resource user households per park have members involved in safe working practice schemes by end of year 3.</p> <p>1.3 Participating households' perceived ability to protect themselves from tigers increased compared to baseline levels by end of year 3.</p> <p>1.4 Ca. 450 (30-60%) of livestockowning households per park have built &amp; maintain tiger proof pens by end of year 3.</p> <p>1.5 Participating livestock-owning households' perceived ability to protect livestock from tigers improved compared to baseline by end of year 3.</p>	<p>a) Baseline &amp; evaluation panel questionnaire surveys in project sites and matched comparison sites to explore working practices &amp; livestock keeping, knowledge, attitudes and behaviour (quantitative)</p> <p>b) Participant observation &amp; focus groups in project sites (by project staff and at project end by independent evaluator) on perceptions, social norms, and behaviours (qualitative).</p>	<p>Villagers willing to try new methods, modify their habits in working practices and livestock keeping.</p> <p>Productive working relationships with partner organisations, advisors, and stakeholders.</p>
<p>2. Household consumption of natural resources reduced by identifying, and building capacity for the uptake of, resource alternatives or more efficient use practices</p>	<p>2.1 Ca. 600 (40-80%) target natural resource user households per park have at least one member attend training on alternative/efficient resource use by end of year 2.</p> <p>2.2 Ca. 450 (30-60%) relevant natural resource user households per park adopt at least one alternative natural resource use behaviour by end of year 3.</p> <p>2.3 Participating households' natural resource use (for fodder, household consumption) decreased by 50% relative to baseline end of year 3.</p> <p>2.4 Time spent collecting natural resources has decreased by 50% in participating households compared to baseline by end of year 3.</p>	<p>2.1 Attendance records, feedback surveys/discussions</p> <p>2.2 -2.4 Baseline &amp; monitoring data (as above) using:</p> <p>a) Interview surveys on natural resource use, knowledge, attitude and behaviour (quantitative).</p> <p>b) Participant observation &amp; focus groups in project sites (by project staff and at project end by independent evaluator) on perceptions, social norms, and behaviours (qualitative).</p>	<p>Villagers able to attend demonstration and training events, and willing to engage with suggestions and try new livelihoods.</p> <p>Productive working relationships with partner organisations, advisors, and stakeholders.</p>

<p>3. Capacity for, and new sources of, alternative livelihoods and income generation established in project villages</p>	<p>3.1 Ca. 600 (40-80%) target households per park have at least one member who has attended livelihoods training events by end year 2.</p> <p>3.2 Number of cooperatives / self-help groups (SHGs) increasing in villages compared to baseline by end of year 3.</p> <p>3.3 Ca. 450 (30-60%) target households per park have at least one member who has taken up an alternative livelihood by end of year 2.</p> <p>3.4 Participating households' natural resource use (for income) decreases by 50% relative to baseline by end of year 3.</p> <p>3.5 Time spent by participating households collecting resources for income has decreased by 50% compared to baseline by end of year 3.</p> <p>3.6 Participating households' perceived ability to generate income from alternative livelihoods increased compared to baseline by end year 3.</p>	<p>3.1 Attendance records, feedback surveys/discussions</p> <p>3.2 - 3.6 Baseline &amp; monitoring data collected (as above) using following methods of data collection and observation:</p> <p>a) Interview surveys on household economics, knowledge, attitude and behaviour (quantitative)</p> <p>b) Participant observation &amp; focus groups in project sites (by project staff and at project end by independent evaluator) on perceptions, social norms, and behaviours (qualitative).</p>	<p>Villagers able to attend demonstration and training events, and willing to try new livelihoods.</p> <p>No local disasters (e.g. flooding) damages cropland or pasture for prolonged periods, making non-forest based alternatives unviable.</p> <p>Markets for alternatives remain accessible and stable.</p>
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<p>4. Social and ecological conditions favourable to continued or increasing tiger presence in project area are achieved in project focal areas</p>	<p>4.1 More people in project communities willing to tolerate a tiger populations in their neighbouring forest compared to baseline and comparison sites by end of year 3</p> <p>4.2 In project sites, attitudes towards tigers have improved compared to baseline and comparison sites by end of year 3</p> <p>4.3 In project sites, support for tiger conservation has increased compared to baseline and comparison sites by end of year 3</p> <p>4.4 Empirical data gathered, leading to a better understanding of ecological factors affecting human-tiger</p>	<p>4.1 Baseline, monitoring and evaluation assessments of tolerance via focus groups, observations, and surveys (as above).</p> <p>4.2 Baseline, monitoring and evaluation assessments of attitudes, and opinions about life in the vicinity of tiger populations via focus groups, observations, and surveys (as above).</p> <p>4.3 Baseline, monitoring and evaluation assessments of perceptions, social norms, and behavioural intent via focus groups, observations, and surveys (as above).</p> <p>4.4 Transects, camera trapping and scat surveys to assess the distribution</p>	<p>Villagers communicate openly about their concerns, opinions, and ideas with project staff.</p> <p>Conditions favourable to camera trapping (not stolen/damaged by villagers/wildlife); sufficient tiger/leopard scat can be found for analysis.</p>
	<p>encounters in the buffer zones of CNP &amp; BNP by end of year 3.</p>	<p>of tigers and leopards in the buffer zones and park edges.</p>	

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)

- 1.1. Baseline qualitative data collection completed (focus groups, semi-structured interviews) in project communities;
  - 1.2. Baseline quantitative survey developed, piloted and administered in project and comparison communities;
  - 1.3. Trial situation-specific and culturally-appropriate safe working and livestock husbandry practices developed and interest in these assessed; 1.4. Training schemes developed and workshops held in project communities;
  - 1.5. Trial safe working and livestock husbandry practices implemented in project communities, supported where necessary by SM campaign activities (see 5.1.-5.5.); 1.6. Trial measures monitored, reviewed (with communities) and adapted as necessary;
  - 1.7. Training and information-sharing events, to which neighbouring communities are invited, held to encourage replication of ideas;
  - 1.8. Mixed methods evaluation (with communities) of trial measures completed and results discussed with communities.
- 
- 2.1. Baseline qualitative data collection completed (focus groups, semi-structured interviews) in project communities;
  - 2.2. Baseline quantitative survey developed, piloted and administered in project and comparison communities;
  - 2.3. Viable alternatives to, or practices for the more efficient use of, natural resources identified and interest in these assessed;
  - 2.4. Training schemes for alternatives/more efficient use practices developed and workshops held in project communities;
  - 2.5. Alternatives schemes/more efficient use practices implemented in project communities, supported where necessary by SM campaign (see 5.1-5.5);
  - 2.6. Schemes and practices monitored, reviewed (with communities) and adapted as necessary;
  - 2.7. Training and information-sharing events, to which neighbouring communities are invited, held to encourage replication of ideas;
  - 2.8. Mixed methods evaluation (with communities) of schemes and practices completed and results discussed with communities.
- 
- 3.1. Baseline qualitative data collection completed (focus groups, semi-structured interviews) in project communities;
  - 3.2.. Baseline quantitative survey developed, piloted and administered in project and comparison communities;
  - 3.3. Assessment of markets, value chains and micro-finance opportunities completed and viable alternative livelihoods identified;
  - 3.4. Training schemes for alternative livelihoods developed and workshops held in project communities (e.g. acquisition of start-up equipment or materials, skills training such as book keeping and accessing markets);
  - 3.5. Alternative livelihoods initiatives (including necessary SHGs or cooperatives) established in project communities with supported where necessary by SM campaign (see 5.1-5.5) and continuing guidance for start-up households/groups provided;
  - 3.6. Livelihood practices monitored, reviewed (with communities) and adapted as necessary;

- 3.7. Training and information-sharing events, to which neighbouring communities are invited, held to encourage replication of ideas;
- 3.8. Mixed methods evaluation (with communities) of livelihood practices completed and results discussed with communities.

- 4.1. Baseline qualitative data collection completed (focus groups, semi-structured interviews) in project communities;
- 4.2. Baseline quantitative survey developed, piloted and administered in project and comparison communities;
- 4.3. Camera trapping and line transect study completed in forest areas adjacent to project and comparison communities;
- 4.4. Buffer-zone wide HTC rapid assessment survey developed, piloted, and administered with a representative sample of buffer zone inhabitants. 4.5. Monitoring and evaluation of social conditions favourable to tiger presence completed (mixed methods M&E);
- 4.6. Data analysis, paper writing, and dissemination of findings.

Social Marketing Activities: Following feedback on our Stage 1 application to provide more information on social marketing and, as the SM campaign is potentially applicable to activities associated with several outputs (1-3), we summarise the SM campaign activities here rather than repeating for each of the outputs. The SM campaign will be used as necessary to enhance adoption rates of certain alternative behaviours (i.e. those for which the associated current behaviour is entrenched or particularly challenging to address as identified during the initial learning phase in project communities). As with all project activities, it will be tailored to each of the project communities.

- 5.1. Baseline qualitative and quantitative data collection completed to explore the economic and social drivers of natural resource use behaviours and to assess prevalence of these behaviours and likelihood of change in these behaviours);
- 5.2. Situation-specific and culturally relevant social marketing campaign developed in close collaboration with community members (target behaviours and influential community members identified; relevant campaign messages finalised and best means of communicating messages within target communities established (e.g. Butler et al 2013: <http://www.rare.org/sites/default/files/Principles%2520of%2520Pride%25202013%2520lo%2520res.pdf>));
- 5.3. Campaign activities rolled-out in time to support the roll-out of relevant project activities;
- 5.4. Campaign monitored (with communities) and adapted as necessary;
- 5.5. Campaign evaluated (with communities) through mixed-methods M&E.

Annex 3: Standard Measures

Project Standard Output Measures

Code No.	Description (* indicates that the nationality of trainees should be stated)	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
1A 1B	Number of people to submit thesis for PhD qualification * Number of people to attain PhD qualification *	Female	British			1		
2	Number of people to attain Masters qualification (MSc, MPhil etc.) *							
6A 6B	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above) * Number of training weeks to be provided							
7	Number of (e.g., different types - not volume - of material produced) training materials to be produced for use by host country							
10 Only final versions are to be included	Number of individual field guides/manuals to be produced to assist work related to species identification, classification and recording							
11A	Number of papers to be published in peer reviewed journals							
11B	Number of papers to be submitted to peer reviewed journals							



12A	Number of computer based databases to be established and handed over to the host country							
12B	Number of computer based databases to be enhanced and handed over to the host country							
14A	Number of conferences/seminar							
14 B	s/ workshops to be organised to present/disseminate findings Number of conferences/seminar s/ workshops attended at which findings from Darwin project work will be presented/ disseminated.							
20	Estimated value (£'s) of physical assets to be handed over to host country(ies)			£5031.93 (3 motorbike s, 2 cameras, 4 GPS units, 5 laptops, 2 voice records, 2 generators )				
23	Value of resources raised from other sources (e.g., in addition to Darwin funding) for project work							

#### Annex 4: 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. web link or publisher if not available online)

#### Annex 5: Presentations



Living with Tigers\_5  
Feb\_2017.pptx



PhD  
Presentation\_NPs\_20

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

Table 3: Reports

Title	Summary	# Pages
One day awareness program on human tiger	The Living with Tigers Project has conducted dual Awareness Programs on Human Tiger Conflict at Chitwan National Park, Ayodhayapuri User Committee, and Kalabajar User Committee on 23 <sup>rd</sup> and 24 <sup>th</sup> August 2016 respectively. The topics delivered on the Human Tiger Conflict were mainly to raise the awareness about the plight of the tiger and support for their conservation. Similarly, program has emphasized on the main finding of focus group discussions that were held in project sites with various topics. These Awareness program presented human-tiger related issues, i.e. biology of tiger, importance of tiger, threats of tiger, role of local people for conserve them, overall situation of tigers in Nepal, conflict mitigation approach, National and International Strategy of Tiger Conservation, etc.	6
Free medicine camp for goats Tamta-Anar CFUG, Ayodhyapuri UC, CNP	The basic objective of conducting the camp was to gain an understanding of the general goats' health status, management practices, and prevalent diseases/problems in the cluster so that livestock related interventions could be taken up systematically. The program was implemented in tiger conflict affected villages of Ganeshkunjia, Kharikuna, and Tamta where the LWT project has provided support in the way of predator proof pens for goats. In addition, the training camp assisted marginalised families in the area who cannot pay for the medicines and veterinary services.	2
One day training on improved goat farming practices	LWT aims to secure the safety of people, livestock, and tigers/leopards in the buffer zone of Chitwan National Park and Bardia National Park by changing the behaviours, building capacity, and improving livelihoods of local communities ensuring sustainable use of natural resources.	7
Orientation training on 1 <sup>st</sup> aid practice	One day orientation training on first aid was organized for targeted members of CBAPU, park officials, and local youths taught by Health Assistant Mr. Dhan Bahadur Khadka. This training covered 1st aid to victims of bee stings, snakebites, drowning and skin burns.	6

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.	X
Is your report more than 10MB? If so, please discuss with <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> 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.	No sharing electronically only
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.	