

Darwin Initiative Main and Post Project Annual Report

To be completed with reference to the “Writing a Darwin Report” guidance: (<http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms>). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2019

Darwin Project Information

Project reference	24-003
Project title	Conservation and poverty alleviation through scalable agro-biodiversity practice in Laos
Host country/ies	Lao PDR
Lead organisation	Wildlife Conservation Society (WCS)
Partner institution(s)	Village Focus International (VFI) Nam Et Phou Louey Management Unit (NEPL MU), Provincial Agriculture and Forestry Office (PAFO)
Darwin grant value	£ 433,478
Start/end dates of project	1 April 2017
Reporting period (e.g., Apr 2018 – Mar 2019) and number (e.g., Annual Report 1, 2, 3)	1 April 2017 – 31 March 2018 Annual report 2
Project Leader name	Ben Swanepoel
Project website/blog/Twitter	http://www.wcs.org/ https://laos.wcs.org/
Report author(s) and date	Ben Swanepoel, 28 April 2019

Please see attached Google drive folder for all supporting documentation
<https://drive.google.com/drive/folders/11Pw2Lbnr4ozv2wapew1AgwiGhNt7H6CG?usp=sharing>

1. Project rationale

Since the approval of the NW extension area by Decree in 2017, Nam Et Phou Louey (NEPL) is now Laos' largest, and most biodiverse protected area. The NPA is largely situated in the northeast province of Houaphan, which has the country's highest poverty rate. Over 30,000 people inhabiting 98 villages rely in large part on the NPA, being fully dependent on NEPL's agro-biodiversity resources for their subsistence and income. In addition to weak governance of these resources, these communities lack the means for effective stewardship and access to improved production systems. This has resulted in unchecked agricultural encroachment, wildlife hunting, and overexploitation of NEPL's resources, leading to increasing deforestation and subsequent destabilization of local livelihoods.

This reliance of forest-dependent populations on agro-biodiversity for subsistence and income introduces opportunities to improve and diversify livelihoods by mainstreaming climate-smart

agro-biodiversity approaches into formal governance instruments to create community-focused incentives that enable sustainable resource management linked to biodiversity conservation.

Through this project, climate-smart agro-biodiversity will be promoted and mechanised through community conservation agreements linked with improved conservation practice. We will employ a phased approach that builds on established participatory land use planning (PLUP) carried out by WCS.

Project location

The project is located within and around the villages associated with NEPL NPA which covers three provinces in the Northern uplands of Lao PDR, Houaphan, Luang Prabang and Xiengkouang Provinces.

Activities presented in this annual report focused on the 5 villages of the Boumfat cluster in Xone district.

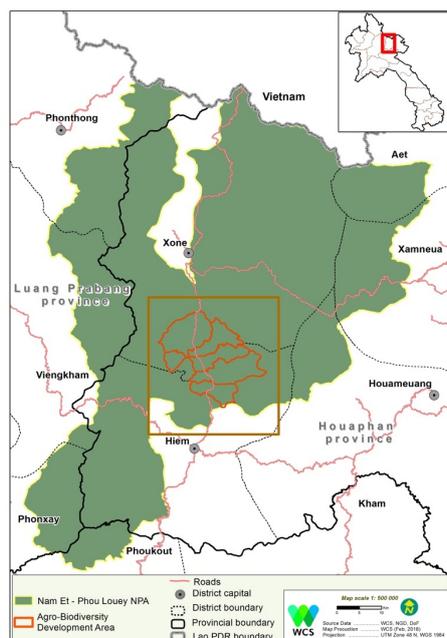


Figure 1: NEPL NPA in relation to Lao PDR with the Boumfat cluster highlighted in red.

2. Project partnerships

Nam Et Phou Louey Management Unit, Provincial Agriculture and Forestry Office (PAFO)

This constitutes our primary partnership governed through a formal MOU approval process. A new MOU for the period ending December 2021 was signed during an official ceremony in August 2017. *(See document 01)*

Village Focus International (VFI) VFI are our technical partners in developing the process that will lead to the signing of the Village Conservation Agreements. (CCA) The terms of this partnership are formally captured in the TOR of the consultancy contract between WCS and VFI. *(See document 02)*

SAFFRON coffee company Saffron coffee company are our technical partner and buyer of the coffee that will be produced through the organic wildlife friendly coffee enterprise developed in NEPL through this grant. They are based in Luang Prabang and provide training, coffee seedlings and technical support relating to production aspects. (<https://saffroncoffee.com/our-people/>)

AFD RECOSEL (Reinforcement and Expansion of Coffee Sector in Laos)

WCS successfully applied for and received a small grant as part of our match funding commitment to this grant. The grant will provide for the construction of a cluster level coffee processing facility which will provide the household coffee growers funded through this DARWIN grant to increase the value of the coffee through conducting some level of processing within the cluster before selling to SAFFRON, thus earning a higher price for their coffee. (See document 03)

3. Project progress

3.1 Progress in carrying out project Activities

Output 1 - Model community conservation agreements (CCAs) are developed and implemented in forest-dependent communities.

Activity 1.1 - Conduct CCA development process.

1. June 2018 – Verification of village socio-economic survey. (See document 04)

A District level meeting was held to present the findings and of baseline socioeconomic data collected through surveys from 5 villages of the Boumfat cluster. During the survey, information was gathered on socio economic data, economic challenges, community livelihood needs and challenges. This information was gathered to assist in the development of a village action plan (VAP) and to develop incentives for the CCA's. The activity was led by 2 VFI staff and included 1 NEPL management staff, and 1 WCS technical advisor. Participants of the meeting were a total of 3 woman and 13 men, they comprised 12 district officials, local police, military, village cluster officials and DAFO staff.

The outcome of the activity was that district officials agreed with the inputs provided by the 5 villages during the surveys.

2. June 2018 – Community approval of socio-economic survey results (See photo records 05)

Following the district meeting, a meeting was held in the 5 villages of the Boumfat cluster in order to provide feedback to the community on the results of the survey and to obtain approvals for the contents which included details of their livelihood support needs. The activity was led by the VFI team of 2 people who were supported by 1 NEPL management staff, 1 District official, 4 DAFO staff and a military officer. A total of 248 people attended the meetings consisting of 49 Woman and 199 men.

The outcome of the meetings were that all 5 communities agreed, after discussion and some revisions to the final version of their village development plans.

3. October 2018 – District consultation to develop the terms of the CCA's

A district level meeting was held to jointly discuss and expand on the key elements of the CCA's. Key elements include; Community needs, incentives provided, conditions and agreements imposed, rules and sanctions, methods of monitoring. The activity was led by 2 VFI staff and included 1 NEPL management staff, and 1 WCS technical advisor. Participants of the meeting were a total of 17 people, 2 woman and 15 men, they comprised mainly district officials, local police, military, village cluster officials, DAFO staff and officials from the administration department.

The outcome of the meeting was that the district agreed to the main framework and key elements of the CCA's and agreed on the way forward in the consultation process with the 5 local communities.

4. October 2018 – Community consultation to develop the CCA's (See Folder 06)

Meetings were held in each of the 5 villages to negotiate the key elements and terms of the CCA's. The activity was led by 2 VFI staff and included 1 NEPL management staff, 1 WCS technical advisor, 1 Military officer and 4 DAFO officials. A total of 180 people attended the meetings consisting of 93 Woman and 87 men.

The outcome of the consultation process was the development of a draft CCA for each of the 5 villages.

5. November 2018 - January 2019 – Internal development of the CCA's (WCS, VFI and NEPL MU

A series of meetings and a workshop in Vientiane was held between WCS, VFI and NEPL MU staff in order to develop the final version of the CCA's in each of the five villages. Challenges in terms of actual incentives available, the nature of sanctions to be applied and the monitoring methods to be used were discussed and debated among all parties.

The outcome of the discussions as a final draft of the CCA's that was consistent with village action plans, conservation objectives and practicality on implementation.

6. March 2018 – Signing of CCA's (See folder 07)

Meetings were held in each of the 5 villages during which the final CCA's were presented to the community. Final discussions and revisions were made after which the CCA's were approved and signed by villages, NEPL MU and district officials. The activity was led by 2 VFI staff and supported by 3 NEPL MU staff, 2 WCS staff, 2 DAFO staff, police, military, and village cluster officials. A total of 272 community members comprising 80 women and 192 men participated in the meetings.

The outcome of the meeting was that all 5 CCA's were signed.

Activity 1.2 - Carry out participatory mapping, zonation for appropriate use and establish management regulations for all forest lands within village boundaries.

Previous – Revisions of current village Land use plans

During the socio-economic data collection surveys, current village LUP boundaries and their regulations were discussed, and any revisions proposed.

June 2018 – Final review of current PLUP's in 5 villages. (See document 08)

PLUP revisions were discussed with both district officials and communities as part of the baseline verification activities reported under activity 1 and 2 in the section above.

The outcome of the activity is that all 5 villages have a PLUP that is understood and agreed to by the community.

July 2018 – Additional PLUP review of 5 villages in the Boumfat cluster.

The German Society for International Cooperation (GIZ) conducted an independent PLUP with all 5 communities as part of their broader program of work. NEPL and WCS staff supported their activity to ensure continuity between the VFI led activities already conducted.

The outcome of this activity was the confirmation of current PLUP boundaries.

Activity 1.3 - Provide direct support and management for priority agro-biodiversity village forest lands.

Direct support and management for priority village forest lands was provided during this report period through:

1. The revision of 5 current village land use plans in the Boumfat cluster which includes zonation and boundary verification and revision of rules and regulations pertaining to village forest lands. (Activity 1.2)
2. The signing of CCA's in 5 villages which promoted the adherence to PLUP boundaries and agreements in exchange for incentives provided through this grant and other livelihood initiatives. (Activity 1.1)
3. The development of a shade grown organic wildlife friendly coffee enterprise in 5 villages which provide incentives to communities and direct benefit to 36 households (currently) to protect key village forest areas and abide by both the PLUP agreements and household conservation agreements (coffee producers) (Output 3)

Output 2: Forest-dependent communities bordering NEPL have improved livelihoods through sustainable use of non-timber agro-biodiversity resources in managed village forests and diversified agro-biodiversity production systems in agricultural land.

Activity 2.1 - Conduct training in sustainable NTFP collection and processing.

All training and capacity building events related to development of the shade grown coffee enterprise. (Output 3)

Activity 2.2 - Establish demonstration plots.

Demonstration plots related to development of the shade grown coffee enterprise. (Output 3)

Activity 2.3 - Establish women's associations.

December 2018 – January 2019 – Development of women's associations

Ongoing discussions with NEPL Management Unit, district and village officials established an unwillingness to establish a woman's association within the Boumfat cluster related to the current coffee enterprise.

The outcome of these discussions were to focus instead on establishing village coffee associations on which woman would be encouraged to participate. To encourage woman to participate as coffee growers in the enterprise.

February 2019 – Development of village coffee growers' group

WVS and NEPL staff jointly developed a draft concept for establishing a village coffee growers' group. The groups primary roles and responsibility would be to: Protect the village coffee enterprise from external threats (unauthorised coffee seedlings with the risk of contamination), to select new coffee growers into the enterprise, co-ordinate capacity building activities and participate in conflict resolution.

The outcome of this activity was the development of a draft village coffee growers group TOR.

March 2019 – Establishment of 5 village coffee grower groups. . (See folder 09)

Once the groups TOR had been approved by the district officials, meetings were held in each of the 5 villages to explain the concept of the village coffee group, to discuss the TOR and to gain approval through consultation at the village level. Following this, the village authorities voted in the members of the group and signed the TOR. The activity was led by 2 WCS and 1 NEPL MU staff. The meetings were attended by 68 community members, of which 17 were woman and 51 men.

The outcome of the activity is that 5 village coffee grower groups were established.

March 2019 – Promoting the coffee enterprise within the broader community. (See photo record 05)

5 Large coffee enterprise project boards were designed, printed and erected in each of the 5 villages to provide basic information on the coffee enterprise, its main objectives and current activities. In addition, each coffee grower who signed the household coffee conservation agreement, was provided with a coffee plot sign board to erect at the entrance to his/her coffee plot. The sign acknowledges his/her name, and that the coffee plot is part of an organic wildlife friendly shade grown coffee enterprise.

The outcome of this activity is 5 village information boards and 36 coffee plot markers.

Output 3: Local income-generating activities that are climate smart and innovative, including environment-friendly sustainable agriculture through the Conservation Enterprise Development Program (CEDP) are set up and expanded in the forest-dependent communities bordering NEPL.

Activity 3.1 - Investigate feasibility of NTFP and agro-biodiversity products for conservation enterprise development.

Coffee – WCS continue to peruse the expansion of the current coffee enterprise through potential development partners such as SAFFRON and. "Slow Coffee"

<https://www.slowforestcoffee.com/> approached WCS as a potential buyer of large quantities of organic coffee in the future. We have engaged the services of our WCS conservation enterprise

consultant Nic Spencer in assisting us in this potential expansion based on the current WCS Ibis Rice conservation enterprise operating in Cambodia.

Cardamom – Through the WCS conservation enterprise consultant Mr Nic Spencer, we are investigating the current market demands and working to establish the cardamom species currently grown around NEPL.

Bamboo – WCS is currently developing a partnership with the NGO Professionals For Fair Development (GRET) for technical assistance mainly around the production and marketing of bamboo. This relationship will provide the necessary technical and professional support for the development of bamboo in the remaining 5 grant villages during this next phase

NTFP's general – WCS have held meetings with The Agro-Biodiversity Initiative (TABI) who currently have developed fact sheets and technical aids for 20 NTFP products used by local communities within and around NEPL NP. We will source these documents and TABI staff to assist during the next phase of this grant in the next 5 grant villages.

Tea – On 19 November WCS staff attended a workshop in Xone district led by Lao Uplands Rural Advisory Services to discuss a potential tea enterprise project. The workshop was attended by 1 WCS, NEPL 6 DAFO staff and officials. The outcome of the workshop was that the District Governor agreed to conduct surveys in order to evaluate the potential of the project. Work should begin in June 2019.

Activity 3.2 - Conservation enterprise development process.

There are currently 60 households from 5 villages with signed grower contracts, totalling 40,000 coffee plants and seedlings in 56 coffee plots covering 14,75ha. (See map 10)

Key activities that took place around the development of the coffee enterprise include:

April 2018 – Maintenance of coffee seedlings in nursery. (See photo records 05)
The NEPL livelihoods team consisting of 1 WCS, 2 NEPL staff and 4 Xone DAFO officials, assisted 35 households (18 Women and 17 Men) in 5 villages in providing equipment, organic fertiliser and technical services in maintaining the 40,146 seedlings planted out in March.

- 27 April – Grass clearance from seedling beds and provision of organic fertiliser.
- 11 May – Deal with maintenance issues regarding the village of Ban Pongsong involving 8 households (5 Women and 3 Men). 162 seedlings had died due to a lack of regular maintenance. Additional inputs were provided by the team to these households.

May 2018 – UXO clearance of new coffee plots (See document 11)

The Government led Unexploded Ordinance clearance unit (UXO) were unable to clear the coffee areas to be planted later this year and so WCS contracted a private UXO clearance team Phanvila UXO Clearance Sole CO,Ltd to conduct this process. The clearance operations took place from 26th to 29th May 2018. A total of 3ha coffee plots belonging to 9 households were surveyed and 1,5kg of UXO bomb and bomb fragments were discovered, made safe and removed from the area.

June 2018 – Planting season activities

SAFFRON Coffee company provided a technical advisor to remain in the Boumfat cluster for the duration of the coffee planting season of June and July. WCS and NEPL livelihoods team provided support to the 35 coffee growers during this time.

9 June – Training for planting (See photo records 05)

A team consisting of 2 SAFFRON staff supported by 1 WCS, and 1 NEPL staff provided in field practical training and support to 29 households (17 Women and 12 Men) from 4 villages in field preparation, planting out maintaining the coffee seedlings in 29 coffee plots. Equipment such as spades were supplied.

- **10 – 26 June** – Planting operations

The team above continued to support the 29 households from 4 villages in the process of planting out of coffee seedlings in these 29 coffee plots.

July 2018 – Planting season continued

The team of SAFFRON, WCS and NEPL continued to support the Boumfat cluster with the planting process, providing day to day support in terms of transportation of seedlings to villages, providing equipment and technical advice.

Outcomes of the planting season were 35 households from 5 villages planted out as total of just over 40,100 coffee seedlings in 14,75ha of village forest land using shade grown, organic methodologies.

August 2018 – Organic farm practices training (See Photo records 05)

SAFFRON staff provided TOT training on organic pest control to 1 WCS and 1 NEPL staff during a one-day training.

After this TOT training, 1 WCS and 2 NEPL staff delivered training on organic pest control to a representative group from the 5 villages consisting of 6 Woman and 8 Men.

The outcome of this training was that coffee growers in 5 villages have the capacity and skills to control plant disease such as coffee green scale and other common plant diseases.

August – September 2018 – Monitoring of planted out seedlings. (See photo records 05)

The NEPL livelihoods team conducted monitoring and support visits to all 5 villages offering advice and support to 35 households.

The outcome of the activity was that all 35 coffee plots are well maintained, with efforts been made to keep domestic cattle out of the plots, ensure that seedlings are mulched and cleared of weeds and larger seedlings supported by sticks.

October 2018 – Develop household coffee grower contracts

A workshop was held on NEPL consisting of WCS NEPL landscape director and project manager, WCS livelihoods team, NEPL Management team to develop the household coffee growers' agreements. The agreement is 2-fold in its objective. Firstly, binding the grower to the production rules of organic farming and secondly, binding the grower to conservation and land management conditions such as not expanding into the NEPL conservation area, and abiding by the NEPL NP regulations. As per standard conservation agreements of this nature, rules, sanctions and monitoring methods are prescribed.

The outcome of the workshop was the development of a draft household coffee grower agreement.

November 2018 – Consultation and signing of household coffee grower contracts (See folder 12) (See photo records 05)

Led by WCS, the implementation team consisted of 2 WCS and 2 NEPL staff and 1 DAFO official. Meetings were held in all 5 villages with a total of 229 people attending (52 Woman and 177 Men).

During this meeting, communities identified new household wishing to participate in the conservation coffee enterprise. They were selected based on admission requirements set up by the village authorities and also screened by NEPL for any current violations of NEPL regulations. The content of the agreements were then explained and discussed after which the agreements were signed. There were 2 groups of growers who signed these agreements.

- 35 Current households from 2017 and 2018 growing season.
- 25 New households that will be participating from this 2019 growing season.

The outcome of the activity was the expansion of the participating households from 35 – 60, and the signing of 60 household coffee grower agreements.

December 2018 – Coffee enterprise study tour. (See document 13)

A study tour was conducted to visit SAFFRON coffee plantations, village processing facilities and final roasting and packaging facilities. The aim was to expose current farmers to the entire production process and to experience first-hand the village coffee industry in areas at a more advanced stage of development. The study tour was led by WCS with the assistance of SAFFRON staff. The participants consisted of 19 household growers consisting of 9 woman

and 11 Men, 2 WCS, 3 NEPL and 1 DAFO officials making a total of 25 persons. The tour was held over 6 days from 22 to 27 December.

The outcome of the activity was that 25 people from the NEPL coffee enterprise were exposed to all aspects of the village coffee enterprise and gained insight into production, processing, roasting, packaging and marketing.

January 2019 – UXO clearance survey for 2019 (See photo records 05)

WCS initiated a UXO survey of new coffee areas to be included in the 2019 planting season to determine the risk and scope of any UXO clearance activities. The Government led UXO organisation consisting of 3 staff were accompanied by 1 WCS, 1 NEPL and 1 DAFO official to the coffee sites. A total of 60 plots were surveyed for size and WCS staff provided GPS co-ordinates of all areas to the UXO team.

The outcome of the activity is that the UXO organisation now has the scope of the clearing operations to be conducted and will provide us with a quotation prior to clearing later in the year.

January to February 2019 – Seed and nursery preparation (See photo records 05)

WCS, NEPL and DAFO staff provided technical services, all equipment and materials and in field support for the building of shade cloth nurseries in all 5 villages as well as the planting out of coffee seeds in these 5 villages.

The outcome of this activity was the completion of 5 village nurseries.

February 2019 – Planting over into seed bags (See photo records 05)

The NEPL livelihoods team lead the growers in the technical aspects of planting over the seedlings into the plastic bags at the 5 village nurseries. 49,300 seedlings were bagged representing 58 household coffee growers.

The outcome of this activity was the bagging of 49,300 seedlings in preparation of the 2019 planting season.

March 2019 – Training in preparation of organic liquid fertiliser (See document 14)

Members of the Northern Upland Coffee Enterprise Development organisation joined with WCS and NEPL staff in conducting a site visit to the Boumfat villages. During this visit the members offered technical advice on nursery and seedling management and tips for planting out. More detailed training was provided to a group of Houtyern village growers, (5 men) on how to prepare organic liquid fertilisers. Manuals on this preparation were provided to the NEPL livelihoods team.

March 2019 – Provide tools and equipment for 2019 planting season.

WCS procured and provided tools and equipment in preparation for the 2019 planting season. Spades, Organic fertiliser, spray bottles and fencing materials were provided.

Output 4: Species and forest habitat protection is significantly increased in the total protection and controlled use forests of NEPL adjacent to target communities.

A. Conduct land-use monitoring.

Deforestation monitoring (See document 15)

When clear satellite images (no cloud cover) were obtained, the WCS GIS data manager generated a monthly deforestation report. These reports show new areas of land clearance and they inform adaptive management strategies and serve as baseline information for future monitoring of CCA's compliance.

Enforcement ranger patrols (See document 16)

Monthly ranger patrols were conducted where threats and changes relating to the PA land use boundaries and zones were reported and captured in the SMART data management system.

NEPL Boundary management monitoring

WCS /NEPL team continues to engage with the district and village authorities to consolidate the biodiversity corridor between the Boumafata cluster and Xone district capital.

B. Conduct community monitoring related to CCA.

Activities relating to the dissemination of the baseline community data through the CCA process are described under activity 1.1.

C. Conduct outreach campaigns.

Campaigns are due after the signing of the conservation agreements in response to issues identified through the monitoring processes.

D. Conduct law enforcement monitoring including community-led monitoring.

Law enforcement activities took place during this report period focusing on key areas of biodiversity aimed at reducing threats in the landscape. Detailed enforcement of the area within the limitations of the project are not conducted as a separate activity but form part of the integrated approach to protection on NEPL NPA.

During this report period, 109 patrols were conducted covering more than 7,077 km of foot, boat and vehicle patrols. As a result of these efforts, 343 threats were uncovered and eliminated, and 37 people were caught and received some form of sanction. In addition, 64 guns were confiscated, 136 hunting camps / shelters destroyed, and 551 snares removed from the field. A total of 135 cases are still pending at the local courts. (See document 16)

E. Conduct biodiversity monitoring.

Biodiversity monitoring during this report period was conducted through ranger biodiversity observations which are entered into the SMART data management program on a monthly basis.

During this report period, 63 individual biodiversity observations of key species such as; Serow and Sambar, Hornbill and Gibbon sp. were recorded. A special effort is currently underway to increase the effectiveness of gibbon monitoring through providing each ranger team with a specially training gibbon monitor. As a result, the number of gibbon groups recorded during this report period is 29, substantially higher than the previous report period. (See document 16)

Additional biodiversity monitoring information is provided through the eco-tourism livelihoods activity using camera traps and sign observations.

Output 5: A scalable model of sustainable, climate-smart agro-biodiversity is established and incorporated into forest resource use practices by forest-dependent communities.

A. Develop guidelines

This is currently in progress as the implementation of the project unfolds.

B. Conduct cross-village exchange and demonstration visits.

Cross-village exchange visits and networking is integrated into the village cluster approach to the implementation of this project. This can be seen through the activities taken place during this report period which include the meetings, workshops and training sessions that took place during this report period. The establishment of village level coffee groups (Activity 2.3) open the opportunity to develop a cluster association which will further bind together the individual villages of the project.

Local study tour

See activity 3.2 – December 2018.

C. Produce working papers.

Will be developed as part of the lessons learned during the various implementation activities.

3.2 Progress towards project Outputs

Output 1 – Model community conservation agreements (CCAs) are developed and implemented in forest-dependent communities.

1.1 – 10 village CCA's signed. A CCA model has been developed and 5 village CCA's have been signed. The project should be able to meet the target within the time period of 3 years. See activity 1.1 for details.

1.2 - 74,000HA managed under CCA's. Currently there are 27,195 HA managed under CCA's. The project should be able to meet the target within the time period of 3 years. See activity 1.1 for details.

1.3 Exclusive agro-biodiversity use rights over 7,000 hectares.
NA at this point

Output 2 – Forest-dependent communities bordering NEPL have improved livelihoods through sustainable use of non-timber agro-biodiversity resources in managed village forests and diversified agro-biodiversity production systems in agricultural land.

2.1- 500 farmers trained – Training of 60 households in coffee nursery management, seedling planning and care, coffee production, organic pest control and organic fertilisation. Indicators can still be achieved through large scale training workshops, although total number of training days is a better indicator.

2.2 15 Demonstration plots established – 35 coffee demonstration plots established in 5 villages. Each coffee grower starts with a 50mX50m demonstration plot to test the area for suitability and evaluate the grower's motivation and performance before expanding. Indicator should possibly refer to separate agro-biodiversity products.

2.3 - Woman's associations established – 5 Village coffee growers' groups have been established in each of the 5 coffee growing villages as part of the coffee enterprise structure. Village and district officials do not accept the development of woman's associations within this enterprise context. These will be developed within the second village cluster during year 3.

Output 3: Local income-generating activities that are climate smart and innovative, including environment-friendly sustainable agriculture through the Conservation Enterprise Development Program (CEDP) are set up and expanded in the forest-dependent communities bordering NEPL.

3.1- 1 Agro-biodiversity conservation enterprise – Shade grown, organic wildlife friendly coffee enterprise established and currently under expansion

Output 4: Species and forest habitat protection is significantly increased in the total protection and controlled use forests of NEPL adjacent to target communities.

4.1 - Illegal extraction of timber reduced by 50% against a 2017 baseline. – To be determined through monitoring post signing of CCA's which took place in March 2019. Indicator could be achieved, although many external factors exist unrelated to project activities that could impact on this.

4.2 - At least 90% of community members aware of hunting laws by 2019 against a 2014 baseline = 30% - 272 community members from 5 villages participated in the development of the CCA's during which time laws and regulations were explained and discussed. This will be reinforced and measured during formal outreach campaigns in 2019. The indicator is achievable during the project period

4.3 - 50% reduction in hunting and poaching in the NEPL total protection zone adjacent to target villages. - To be determined through monitoring post signing of CCA's which took place in March 2019. Indicator could be achieved, although very difficult to attribute directly to project activities due to the widespread hunting from people not associated to the villages of the project.

Output 5: A scalable model of sustainable, climate-smart agro-biodiversity is established and incorporated into forest resource use practices by forest-dependent communities.

5.1 Impacts and lessons learned published. – Records been kept for later in the project time frame.

5.2 By the end of the project, at least 4 exchanges are held. – One study tour conducted focusing on organic coffee enterprise. Indicator is realistic and achievable.

5.3 At least 2 working papers produced and shared. - Records been kept for later in the project time frame.

3.3 Progress towards the project Outcome

OUTCOME - *Reduced deforestation and improved conservation practice through implementation of scalable agro-biodiversity practice in village forestland and agricultural land that protects biodiversity while improving incomes and welfare for forest-dependent populations.*

A. Local Livelihoods:

By the end of the project, at least 100 households in 10 forest-dependent communities bordering NEPL will benefit from an increase in household revenue (> 15% compared to 2017 baseline) as a result of improved forest resource stewardship.

60 Households from 5 villages are receiving direct benefits through support for developing a coffee enterprise. Increased household revenue will occur once coffee production reaches the harvesting phase. The indicator remains relevant and should be achievable within the grant period, although in terms of the coffee enterprise, real benefit will gradually increase after a period of 3 – 5 years.

B. Biodiversity:

Populations of target species: northern white-cheeked gibbon, large predators (Asian golden cats, clouded leopards, dholes) and large and medium sized ungulate prey species (sambar deer, muntjac, serow, gaur and wild pigs) will be stable or increasing compared to a 2015 baseline.

Improved land management through the reviewed PLUP and the signing of CCA's in 5 villages as well as the 60 household conservation agreements should reduce illegal activities and thus provide a favourable environment for the recovery of key species. Measurement of this outcome will be determined after a longer time period, towards the end of the project activities.

C. Forest Cover:

By the end of the project, rate of deforestation in the NEPL total protection zone adjacent to target communities is reduced by 60% from 2016 baseline.

Similar to the above indicator, improved land management through the reviewed PLUP and the signing of CCA's in 5 villages as well as the 60 household conservation agreements should reduce illegal land clearing activities and reduce the rate of deforestation. Measurement of this outcome will be closely monitored within the 5 CCA villages.

D. Policy:

By the end of the project, a scalable model of sustainable, climate-smart agro-biodiversity is established and available for replication in forest resource use practices by forest-dependent communities in other protected areas in Laos.

Ongoing, to be measured later in the life of the project.

3.4 Monitoring of assumptions

All assumptions remain relevant and positive or are yet untested through project activities.

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

What contribution is your project making to this higher impact?

Biodiversity impact

Improved management of 27,195 ha of key habitat through improvement of land use planning around 5 villages inside the NEPL which has now been declared one of only 2 National Parks in Lao PDR.

Improved boundary demarcation between the NEPL NP management zones (Controlled use zone and total protection zone) and between Village land areas and NEPL NP boundary through reviewed PLUP's in 5 villages.

Improving levels of biodiversity awareness and laws and regulations within 5 villages inside the NEPL NP through the CCA agreement process which impacts on 316 households.

Human development and wellbeing (poverty alleviation) impact.

Capacity building and training opportunities provided to 60 households with regards to coffee planting, disease control and nursery management.

Development of a new conservation enterprise in 5 villages that will provide increasing economic benefit beyond the life of the project.

Direct support to 60 household to develop a new income stream that will create increasing economic benefit beyond the life of the project.

Establishment of a model enterprise that can be expanded into other regions in Laos.

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

No Significant contribution at this current stage of the project implementation

5. Project support to the Conventions, Treaties or Agreements

No Significant contribution at this current stage of the project implementation

6. Project support to poverty alleviation

- What evidence is there that the project is working to alleviate poverty?

The establishment of 1 new enterprise not previously present in the area.

Technically and financially supporting the start-up process for coffee farming for 60 households in 5 villages.

Securing a buyer for all coffee produced in the 5 villages at guaranteed higher prices than the official national annual rates on condition of organic farming methods as stipulated in the coffee grower agreements.

- Who are the expected beneficiaries of this work?

Direct beneficiaries – At least 100 local village households in 10 villages but should extend beyond this due to high demand for participation in this coffee industry and other NTFP production and value chain improvements during the next phase of this project. (Year 3 and 4)

- Are there any notable achievements this year?

Finally developing the model for a CCA that can be broadly applied to any village situation.

7. Project support to gender equality issues

- Is there evidence that the project is working to address gender equality?

The 60 Household coffee agreements are jointly managed by couples (Husband and wife) with a split of 59 Men and 61 women.

Village Coffee Grower associations are represented by 17 woman which is 24% of the total membership.

- Are there expected to be any direct gender equality impacts from this project? If not direct, please comment on any indirect impacts.

Woman and men (Husband and wife) teams jointly hold the coffee grower contracts. This will still only impact indirectly on households, as traditionally, the men in the household still take most of the financial decision-making roles. In terms of capacity building however, this will be a direct positive impact of woman involved in the project.

- Are there any notable achievements this year?

Only those mentioned above.

8. Monitoring and evaluation

- How can you demonstrate that the Outputs and Activities of the project actually contribute to the project Outcome?

Indicators such as the number of households currently involved, people received training number of CCA and PLUP are easily measured and evaluated against the outputs.

Outcomes are far more difficult to measure, especially during this time frame of the project. However, we continue to measure and gather baseline information such as:

- Monthly deforestation reports
- Threat monitoring through SMART
- Biodiversity monitoring through ranger patrols using SMART

- Land use through the process of data collection in the CCA development process
- Village socio-economic data through surveys conducted as part of the CCA process.

It is only as the benefits of the project activities begin to take affect later in the delivery of the activities that any conclusions can be made.

- What are the indicators of achievements (both qualitative and quantitative) and how are you measuring these?

Indicators for each output, outcome and activity have been captured within the log frame and are reported in detail under each of these sections, both in the log frame and activity section.

- Have there been any changes made to the M&E plan over the reporting period?

9. Lessons learnt

- What worked well, and what didn't work well, this past year?

SAFFRON technical partnership has proved invaluable support to the technical development of the coffee enterprise, even providing permanent onsite technical support in the cluster during the planting season.

The WCS and NEPL livelihoods team on site provided excellent direct almost weekly support to the household coffee growers ensuring an excellent quality of activity and support provided. Main challenges revolved around the development of the CCA's with has taken far too long, delaying many of the activities during this year. This is largely as a result of using a partner organisation with no personal resources located with the project area. Delays and time between the different stages of the CCA development were excessive.

- If you had to do it again, what would you do differently?

Undertake the CCA process internally.

Develop partnership with a local agro-biodiversity development NGO / organisation with a strong link to these communities around NEPL and an institutional framework already established within the provinces related to NEPL NP.

- What recommendations would you make to others doing similar projects?

Still too early to be offering advice to other projects, other than the above points. Let's wait for more progress and results first.

- How are you going to build this learning into the project and future plans?

As part of a broader program of work WCS are involved in on NEPL NP, we will be using the CCA model in an additional 40 villages in and around NEPL NP.

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

NA

11. Other comments on progress not covered elsewhere

No additional

12. Sustainability and legacy

WCS successfully applied for and received a small grant as part of our match funding commitment to this grant. The grant will provide for the construction of a cluster level coffee

processing facility which will provide the household coffee growers funded through this DARWIN grant to increase the value of the coffee through conducting some level of processing within the cluster before selling to SAFFRON, thus earning a higher price for their coffee.

The large World bank funded grant to improve capacity of NEPL NP and improve the management of NEPL NP has finally been approved but for a reduced period of 2 years. This grant will provide NEPL management the opportunity to supplement or expand livelihood activities in another 40 villages around the park.

In January 2019, the NEPL PA was declared by Decree of the Prime Minister to the status of a National park, the first of only 2 in Lao PDR.

13. Darwin identity

July 2018 - 2nd Biodiversity Conference in Laos (See document 17)

WCS technical staff delivered a presentation entitled: Leveraging conservation outcomes for NEPL NPA through a climate smart, wildlife friendly local coffee production during this conference which was attended by all major government agencies related to conservation, agriculture and forestry as well as all leading academics of the region. A poster of the presentation was also displayed which included DARWIN name, logo and a description of activities.

October 2018 – 1st UK Festival in Laos (See document 18)

WCS was invited to exhibit at this festival in order to showcase UK funded projects operating in Laos. WCS sent 2 staff from NEPL to man an exhibition booth which we filled with DARWIN coffee project posters, and specially developed photo exhibition.

March 2018 - Signage boards – (See photo records 05)

Large village project signboards were erected in each of the 5 coffee enterprise villages. Coffee plot sign boards were developed and erected at the entrance to each coffee plot.

High level visit to the coffee enterprise in Boumfat village cluster.

14 November - Dr Souvanpheng Bouphanouvong, Minister to Prime Minister Office and a high level GoL delegation visited the coffee enterprise, spoke to coffee growers and visited some of the plots. WCS presented the details of the project and DARWIN was highlighted as the donor.

Social media mentions of the Darwin project mainly through the current coffee enterprise include:

- NEPL Facebook: <https://web.facebook.com/NamNernNightSafariLaos/>
- Saffron Facebook: <https://web.facebook.com/SaffronCoffee/>
- NEPL Instagram: https://www.instagram.com/p/Bqbm_fqn1jx/
- Saffron Instagram: <https://www.instagram.com/p/BkP-vDQjBjV/>

Video as part of general NEPL program of work.

- AFD video competition - Not posted public as yet while waiting for contest result announcement in June.

Darwin mentioned as part of NEPL NP livelihoods development program alongside our eco-tourism products:

- Sustainable Tourism Solutions Expo on 14-15th September 2018, Luang Prabang,
- YSEALI Ecotourism Workshop on 4-8 March 2019, Luang Prabang,

Was the Darwin Initiative funding recognised as a distinct project with a clear identity or did it form part of a larger programme?

- Our partners understand the Darwin project as a unique entity, but also where and how it is integrated into the broader program of work on NEPL NP.
- The project currently sits within the “Livelihoods development” component of the management unit of NEPL NP.

14. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2018 – 31 March 2019)

Project spend (indicative) since last annual report	2018/19 Grant (£)	2018/19 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Monitoring & Evaluation (M&E)				
Others (see below)				
ICR				
TOTAL				

Annex 1 - Report on log-frame (See in supporting documents folder)

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2018-2019

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
<p>Impact</p> <p>Sustainable, climate-smart forest resource use practices are successfully adopted by local communities bordering NEPL and modelled for PAs across Laos, leading to biodiversity protection and improved welfare of vulnerable communities</p>		<p>One new sustainable climate-smart forest resources enterprise has been established in 5 communities living inside the NEPL NP. Other impacts such as modelling across Laos and improved welfare and biodiversity protection remain to be measured.</p>	
<p>Outcome Reduced deforestation and improved conservation practice through implementation of scalable agro-biodiversity practice in village forestland and agricultural land that protects biodiversity while improving incomes and welfare for forest-dependent populations.</p>	<p>0.1 Local Livelihoods: By the end of the project, at least 100 households in 10 forest-dependent communities bordering NEPL will benefit from an increase in household revenue (> 15% compared to 2017 baseline) as a result of improved forest resource stewardship.</p> <p>0.2 Biodiversity: Populations of target species: northern white-cheeked gibbon, large predators (Asian golden cats, clouded leopards, dholes) and large and medium sized ungulate prey species (sambar deer, muntjac, serow, gaur and wild pigs) will be stable or increasing compared to a 2015 baseline.</p> <p>0.3 Forest Cover: By the end of the project, rate of deforestation in the NEPL total protection zone adjacent to target communities is reduced by 60% from 2016 baseline.</p> <p>0.4 Policy: By the end of the project, a scalable model of sustainable, climate-smart agro-biodiversity is established and available for replication in forest resource use practices by forest-dependent communities in other protected areas in Laos.</p>	<p>0.1 60 households participating in coffee enterprise 5 participating villages. Increased household revenue still to be measured.</p> <p>0.2 Improvements still to become evident through longer term monitoring.</p> <p>0.3 Improvements still to become evident through longer term monitoring.</p> <p>0.4 Not due.</p>	<p>0.1 Continue to develop and expand the coffee industry activities.</p> <p>Develop and sign conservation agreements in additional 5 villages</p> <p>Identify 2 – 3 NTFP improvement activities and develop market chain in 5 villages</p> <p>0.2, 0.3, 0.4 Continue to collect monthly baseline data.</p> <p>End of the year compare current indicators to baselines in 5 coffee village areas.</p>
<p>Output 1 ; Model community conservation agreements (CCA) are developed and implemented in forest-dependent communities.</p>	<p>1.1 At least 10 villages have village forests under community conservation agreements (CCAs) signed off by the District Governor and neighboring villages by the 3rd year of the project (baseline = 0 in 2016);</p> <p>1.2 By year 4 of the project, 74,000 Hectares of targeted landscapes are managed under CCAs (baseline = 0 hectares in 2016);</p> <p>1.3 Forest-dependent communities gain exclusive agro-biodiversity use rights over 7,000 hectares of land during the course of the project</p>	<p>1.1 – 5 villages have CCA's signed</p> <p>1,2 – 27,195 ha managed under CCA's.</p> <p>1.3 - NA</p>	

	(baseline = 0 hectares managed exclusively for agro-biodiversity forest 2015).	
Activity 1.1 Conduct CCA development process		CCA model developed. 5 villages signed CCA's CCA's in 10 villages will be signed by the end of Y3
Activity 1.2, Carry out participatory mapping, zonation for appropriate use and establish management regulations for all forest lands within village boundaries.		PLUP's are available in 5 villagers CCA's signed in 5 villages CCA's in 10 villages signed by the end of Y3
Activity 1.3 Provide direct support and management for priority agro-biodiversity village forest lands.		CCA's signed in 5 villages CCA's in 10 villages signed by the end of Y3
Output 2. Forest-dependent communities bordering NEPL have improved livelihoods through sustainable use of non-timber agro-biodiversity resources in managed village forests and diversified agro-biodiversity production systems in agricultural land.	<p>2.1 By year 4 of the project, at least 500 farmers trained in collection and processing of agro-biodiversity resources in managed village forests (i.e. coffee, red mushrooms, bamboo shoots, honey and bees wax,) with at least 25% being women (baseline = 0 farmers training in 2016);</p> <p>2.2 By quarter 2 of year 3 of the project, at least 15 demonstration agro-biodiversity production systems established in village agricultural land (baseline = 0 demonstration systems in 2016);</p> <p>2.3 By year 3 of the project, at least 4 women's associations focussed on collection and processing of products established (baseline = 0 NTFP associations in 2016);</p>	<p>2.1 – 60 households trained in coffee production 61 women and 59 men – (Couples)</p> <p>2.2 – 35 coffee demonstration plots established</p> <p>2.3 – 5 Village coffee growers groups established with 24%-woman participation.</p>
Activity 2.1. Conduct training in sustainable NTFP collection and processing.		60 households trained in: <ul style="list-style-type: none"> • Coffee nursery establishment and management • Plant disease management • Preparation and planting of coffee seedlings • Care and management of coffee plants
Activity 2.2. Establish demonstration plots.		35 Coffee demonstration plots have been established in 5 villages
Activity 2.3 Establish women's associations.		5 Village coffee growers groups established with 24%-woman participation.
Output 3. Local income-generating activities that are climate smart and innovative, including environment-friendly sustainable agriculture through the Conservation Enterprise Development Program (CEDP) are set up and expanded in the forest-dependent communities bordering NEPL.	3.1 By the end of the project, at least 1 Agro-biodiversity / conservation enterprise is established, and linked to national / regional markets (baseline = 0 conservation enterprise in 2016);	3.1 – Coffee enterprise established in 5 villages currently involving 60 households. Demonstration plots established and expansion stage well in progress. Linked to national and regional market through SAFFRON partnership.
Activity 2.1. Investigate feasibility of NTFP and agro-biodiversity products for conservation enterprise development		Feasibility studies conducted for: <ul style="list-style-type: none"> • Coffee • Cardamom

		<ul style="list-style-type: none"> Red mushrooms <p>Y3 - Once additional products have been identified by communities through the CCA process in the next 5 villages, we will select 2 – 3 NTFP products and begin with the development or improvement process. If additional feasibility studies are needed, then they will be conducted.</p>
Activity 2.2. Conduct conservation enterprise development process		One conservation enterprise developed in 5 villages. (Organic shade-grown coffee)
Output 4. Species and forest habitat protection is significantly increased in the total protection and controlled use forests of NEPL adjacent to target communities	<p>4.1 Illegal extraction of timber and non-timber natural resources in NEPL total protection zone adjacent to at least 10 village areas is reduced by 50% against a 2017 baseline (to be established);</p> <p>4.2 At least 90% of community members in the target villages are aware of hunting laws and the impacts of illegal hunting by 2019 against a 2014 baseline = 30%;</p> <p>4.3 By the end of project there will be a 50% reduction in hunting and poaching in the NEPL total protection zone adjacent to target villages (compared to a 2017 baseline to be established).</p>	<p>4.1 – Collection of baseline data through monthly deforestation and fire reports collected. Information on illegal logging activities collected through SMART enforcement data.</p> <p>Monitoring measurements to take place by the end of Y3 on 5 coffee villages.</p> <p>4.2 – Communities in 5 villages received inputs on NEPL legislation and regulations during the CCA consultation and signing process. Measurement of awareness to follow in Y3.</p> <p>4.3 – Baseline information collected on a monthly basis through SMART enforcement data.</p> <p>Monitoring measurements to take place by the end of Y3 on 5 coffee villages.</p>
Activity 4.1 Conduct land-use monitoring.		<p>Monitoring through monthly deforestation reporting, fire maps and SMART enforcement data.</p> <p>Monitoring measurements to take place by the end of Y3 on 5 coffee villages.</p>
Activity 4.2 Conduct community monitoring related to CCA.		<p>Baseline established through CCA socio economic surveys.</p> <p>Monitoring measurements to take place by the end of Y3 on 5 coffee villages.</p>
Activity 4.3 Conduct outreach campaigns		<p>Activity to commence once CCA's have been signed.</p> <p>Y2 – Outreach campaign conducted.</p>
Activity 4.4 Conduct law enforcement monitoring including community-led monitoring		<p>Baseline information collected on a monthly basis through SMART enforcement data collection.</p> <p>Monitoring measurements to take place by the end of Y3 on 5 coffee villages.</p>
Activity 4.5 Conduct biodiversity monitoring		<p>Baseline information collected on a monthly basis through SMART enforcement data collection.</p> <p>Monitoring measurements to take place by the end of Y3 on 5 coffee villages.</p>
Output 5 A scalable model of sustainable, climate-smart agro-biodiversity is established and available for replication in forest resource use practices by forest-dependent communities in other protected areas in Laos.	<p>5.1 By the end of the project, an evaluation of impacts and lessons learned guidelines from this project is published and disseminated to all stakeholders including local government agencies, CSOs, development and technical partners;</p>	<p>5.1 – Not yet due</p> <p>5.1 – One study tour conducted in the province.</p>

	<p>5.2 By the end of the project, at least 4 exchanges are held with other forest-dependent communities bordering NEPL to expose them to sustainable agro-biodiversity concepts and practices in a participatory fashion promote wider adoption;</p> <p>5.3 By the end of the project, at least 2 working papers outlining the effectiveness of sustainable climate-smart agro-biodiversity are produced and shared at national, regional or international events.</p>	<p>5.1 – Not yet due</p>
Activity 5.1. Develop guidelines.		Not yet due
Activity 5.2 Conduct cross-village exchange and demonstration visits.		Occurring throughout the current 5 coffee villages as a result of the cluster development strategy.
Activity 5.3 Produce working papers.		Not yet due.

Annex 2 – Original Log-frame – (See in supporting documents folder)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Impact: Sustainable, climate-smart forest resource use practices are successfully adopted by local communities bordering NEPL and modelled for PAs across Laos, leading to biodiversity protection and improved welfare of vulnerable communities.</p> <p>(Max 30 words)</p>			
<p>Outcome: Reduced deforestation and improved conservation practice through implementation of scalable agro-biodiversity practice in village forestland and agricultural land that protects biodiversity while improving incomes and welfare for forest-dependent populations.</p>	<p>0.1 Local Livelihoods: By the end of the project, at least 100 households in 10 forest-dependent communities bordering NEPL will benefit from an increase in household revenue (> 15% compared to 2017 baseline) as a result of improved forest resource stewardship.</p> <p>0.2 Biodiversity: Populations of target species: northern white-cheeked gibbon, large predators (Asian golden cats, clouded leopards, dholes) and large and medium sized ungulate prey species (sambar deer, muntjac, serow, gaur and wild pigs) will be stable or increasing compared to a 2015 baseline.</p> <p>0.3 Forest Cover: By the end of the project, rate of deforestation in the NEPL total protection zone adjacent to target communities is reduced by 60% from 2016 baseline.</p> <p>0.4 Policy: By the end of the project, a scalable model of sustainable, climate-smart agro-biodiversity is established and available for replication in forest resource use practices by forest-dependent communities in other protected areas in Laos.</p>	<p>0.1 Local Livelihoods: Number of Community Conservation Agreements finalized and endorsed by government; number of conservation enterprises established, and linked to national / regional markets; results of participatory rural appraisals</p> <p>0.2 Biodiversity: Quantitative data from camera trap arrays and gibbon surveys in forests near target communities;</p> <p>0.3 Forest Cover: Results of satellite imagery analysis; Forest cover monitoring reports;</p> <p>0.4 Policy: Guidelines produced and disseminated; number national, regional and international conference attendance.</p>	<p>Rates of habitat and species loss will respond to changes in local land use practices;</p> <p>Local communities continue to be willing to participate in innovative activities;</p> <p>Local authorities continue to be supportive and engaged;</p> <p>Other policy initiatives will prioritize local innovative models of benefit-sharing that empower local forest-dependent communities;</p> <p>Climatic events and/or disease do not impact wildlife populations in such a way that may reduce our ability to reach wildlife targets.</p>

<p>Outputs:</p> <p>1. Model community conservation agreements (CCA) are developed and implemented in forest-dependent communities.</p>	<p>1.1 At least 10 villages have village forests under community conservation agreements (CCAs) signed off by the District Governor and neighboring villages by the 3rd year of the project (baseline = 0 in 2016);</p> <p>1.2 By year 4 of the project, 74,000 Hectares of targeted landscapes are managed under CCAs (baseline = 0 hectares in 2016);</p> <p>1.3 Forest-dependent communities gain exclusive agro-biodiversity use rights over 7,000 hectares of land during the course of the project (baseline = 0 hectares managed exclusively for agro-biodiversity forest 2015).</p>	<p>1.1 Signed CCAs;</p> <p>1.2 Maps of areas covered by approved CCAs;</p> <p>1.3 Maps of demarcated agro-biodiversity forest areas covered by approved CCAs.</p>	<p>Appropriate forest and land governance policies, which recognize the community-empowered resource use rights are in place or in review;</p> <p>Political climate and decentralization process continues to support community-focussed land use planning and improved stewardship.</p>
<p>2. Forest-dependent communities bordering NEPL have improved livelihoods through sustainable use of non-timber agro-biodiversity resources in managed village forests and diversified agro-biodiversity production systems in agricultural land.</p>	<p>2.1 By year 4 of the project, at least 500 famers trained in collection and processing of agro-biodiversity resources in managed village forests (i.e. coffee, red mushrooms, bamboo shoots, honey and bees wax,) with at least 25% being women (baseline = 0 farmers training in 2016);</p> <p>2.2 By quarter 2 of year 3 of the project, at least 15 demonstration agro-biodiversity production systems established in village agricultural land (baseline = 0 demonstration systems in 2016);</p> <p>2.3 By year 3 of the project, at least 4 women's associations focussed on collection and processing of products established (baseline = 0 NTFP associations in 2016);</p>	<p>2.1 Attendance and summary reports from village-level trainings;</p> <p>2.2 Demonstration systems established and mapped;</p> <p>2.3 Records of women's associations established;</p>	<p>Pilot studies and feasibility assessments carried out indicate that sufficient benefits and feasible enterprise opportunities exist to provide additional income to villages;</p> <p>Local communities continue to be willing to participate in innovative activities;</p> <p>Local authorities continue to be supportive and engaged;</p>

<p>3. Local income-generating activities that are climate smart and innovative, including environment-friendly sustainable agriculture through the Conservation Enterprise Development Program (CEDP) are set up and expanded in the forest-dependent communities bordering NEPL.</p>	<p>3.1 By the end of the project, at least 1 Agro-biodiversity / conservation enterprise is established, and linked to national / regional markets (baseline = 0 conservation enterprise in 2016);</p>	<p>3.1 Formalized pilot village-based enterprise agreements; Activity and sale reports from the model enterprise(s).</p>	<p>Pilot studies and feasibility assessments carried out indicate that sufficient benefits and feasible enterprise opportunities exist to provide additional income to villages;</p> <p>Local communities continue to be willing to participate in innovative activities;</p> <p>Local authorities continue to be supportive and engaged;</p>
<p>4. Species and forest habitat protection is significantly increased in the total protection and controlled use forests of NEPL adjacent to target communities.</p>	<p>4.1 Illegal extraction of timber and non-timber natural resources in NEPL total protection zone adjacent to at least 10 village areas is reduced by 50% against a 2017 baseline (to be established);</p> <p>4.2 At least 90% of community members in the target villages are aware of hunting laws and the impacts of illegal hunting by 2019 against a 2014 baseline = 30%;</p> <p>4.3 By the end of project there will be a 50% reduction in hunting and poaching in the NEPL total protection zone adjacent to target villages (compared to a 2017 baseline to be established).</p>	<p>4.1 Household surveys and community monitoring reports; results from ranger-based monitoring tool SMART (Spatial Monitoring and Reporting Tool);</p> <p>4.2 Community outreach campaign reports and household surveys;</p> <p>4.3 SMART reports quantifying prevalence of biodiversity threat as measured by threat encounter per kilometre walked inside the NEPL total protection zone.</p>	<p>Over a decade of direct implementation support to management of NEPL supports that there will be adequate and available relevant imagery and practical feasibility of field-based monitoring programs at the site level;</p> <p>Link between rates of habitat and species loss and encroachment;</p> <p>Local authorities are supportive and engaged;</p> <p>Climatic events and/or disease do not impact wildlife populations in a way that will prohibit us from successfully reaching wildlife targets.</p>
<p>5. A scalable model of sustainable, climate-smart agro-biodiversity is established and available for replication in forest resource use practices by forest-dependent communities in other protected areas in Laos.</p>	<p>5.1 By the end of the project, an evaluation of impacts and lessons learned guidelines from this project is published and disseminated to all stakeholders including local government agencies, CSOs, development and technical partners;</p>	<p>5.1 Guidelines produced and disseminated;</p> <p>5.2 Reports of exchanges held between local communities;</p> <p>5.3 Working papers produced; attendance and presentations of project results at national, regional and international events attended.</p>	<p>Results from this project will be applicable and scalable to other similar contexts in Laos;</p> <p>Local authorities are supportive and engaged;</p> <p>Local communities outside of our project focal area are willing to participate in innovative activities;</p>

	<p>5.2 By the end of the project, at least 4 exchanges are held with other forest-dependent communities bordering NEPL to expose them to sustainable agro-biodiversity concepts and practices in a participatory fashion promote wider adoption;</p> <p>5.3 By the end of the project, at least 2 working papers outlining the effectiveness of sustainable climate-smart agro-biodiversity are produced and shared at national, regional or international events.</p>		<p>Other policy initiatives are in place to support and empower improved resource stewardship by local forest-dependent communities.</p>
<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)</p> <p><i>Output 1: Model community conservation agreements (CCAs) are developed and implemented in forest-dependent communities.</i></p> <p>1.1 Conduct CCA development process. With technical support from VFI, WCS will deliver 10 CCAs prior to Year 3 through a process that includes updating Participatory Rural Appraisals (PRAs) and Land Use Plan (LUPs), as well as the production of Community Action Plans (CAPs). CCAs will provide zoning, management rules, indicate agro-biodiversity support within village boundaries, and outline community commitments regarding access, protection, and prohibitions for adjacent Total Protection Zones of the protected area, the area in which agricultural and extractive activities are prohibited.</p> <p>1.2 Carry out participatory mapping, zonation for appropriate use and establish management regulations for all forest lands within village boundaries. We will ensure that over 74,000 ha of village forest lands within village boundaries in the controlled use zone of the NPA are clearly mapped, zoned for appropriate use, and managed under community developed regulations according to the CCAs. We will carry out practical training with community members and provide guidance related to monitoring approaches and will ensure that these village forest lands will be clearly demarcated on village maps, and be informed by specific regulations regarding broad scale clearing and use of various agricultural activities.</p> <p>1.3 Provide direct support and management for priority agro-biodiversity village forest lands. Under the CCA process, WCS will support the identification of over 7,000 ha of priority agro-biodiversity village forest lands in the controlled use zones. These priority agro-biodiversity village forest lands are a subset of the overall 74,000 ha village forest lands, and through the CCAs will be under exclusive community use rights and management regulations by the beginning of year 4 of the project. We will carry out practical training and provide guidance for community members using these areas, in order to support development of NTFP-specific management plans and regulations for these priority agro-biodiversity areas. Regulations will focus on the use of and access to these areas for NTFP collection, NTFP enrichment planting, and sustainable harvesting rates.</p> <p><i>Output 2: Forest-dependent communities bordering NEPL have improved livelihoods through sustainable use of non-timber agro-biodiversity resources in managed village forests and diversified agro-biodiversity production systems in agricultural land.</i></p> <p>2.1 Conduct training in sustainable NTFP collection and processing. We will train more than 500 farmers in sustainable collection and processing of NTFPs from village forest. This training will include extension and support by the WCS team, training workshops, and cross-farm and village demonstration training exchanges.</p>			

2.2 Establish demonstration plots. We will conduct site-based assessments to determine ideal locations for establishment of 15 demonstration agro-biodiversity production systems. Once locations are selected, we will then coordinate with 'lead farmers' who will serve as community trainers, and provide them with training, equipment, and improved planting material where appropriate to support demonstration site establishment. Training will focus on processes for out-planting of NTFPs, combining NTFPs and recognised crops, and improving cropping systems to involve more permanent land cover.

2.3 Establish women's associations. We will conduct focus group surveys and targeted training programs to establish four women's associations to support the management, collection and processing of NTFPs. These women's associations will be product- or location-based depending on the outcome of the CCA processes.

Output 3: Local income-generating activities that are climate smart and innovative, including environment-friendly sustainable agriculture through the Conservation Enterprise Development Program (CEDP) are set up and expanded in the forest-dependent communities bordering NEPL.

3.1 Investigate feasibility of NTFP and agro-biodiversity products for conservation enterprise development. WCS, with support from our CEDP, and based on the results of the CCA process, will investigate the feasibility of smallholder agricultural / forest product enterprise development, including investigating product certification.

3.2 Conduct conservation enterprise development process. Based on the results of the feasibility studies, we will complete targeted village-level capacity building exercises, hold technical trainings in enterprise development, and work with CEDP to establish additional support for enterprise development.

Output 4: Species and forest habitat protection is significantly increased in the total protection and controlled use forests of NEPL adjacent to target communities.

4.1 Conduct land-use monitoring. WCS will complete annual assessments of CCA implementation including delivery of benefits and adherence to conservation commitments as related to agricultural encroachment along the boundary between the village and the total protection zone, and appropriate use in village forest zones. We will also conduct quarterly professional ranger patrols through the TPZ adjacent to villages, and support community participation in regular boundary patrolling and monitoring.

4.2 Conduct community monitoring related to CCA. We will complete annual assessments of CCA implementation including assessing: household incomes against indicator target values; the number of women's associations established and functioning; the area of priority agro-biodiversity village forest land under management rules; and adherence to conservation commitments as related to illegal NTFP and timber extraction.

4.3 Conduct outreach campaigns. We will design and conduct comprehensive outreach campaigns in all 10 villages in the first 2 years including regulation awareness, wildlife theatre outreach, and on-going support and engagement by the WCS and Nam Et – Phou Louey management unit outreach team.

4.4 Conduct law enforcement monitoring including community-led monitoring. We will complete annual assessment of CCA implementation related to law enforcement, including adherence to conservation commitments as relates to illegal hunting pressure. We will realize targeted illegal gun handover meetings, quarterly ranger patrols to address poaching in the total protection zone, and community led snare sweeps of forest areas in the TPZ adjacent to villages.

4.5 Conduct biodiversity monitoring. We will conduct camera trap monitoring in year 4, and combine this information with long term monitoring conducted in the protected area to determine the status and progress towards the biodiversity indicators. The stabilisation or improvements to the status and populations of these species will be supported through the activities under 4.1 – 4.4 such as reducing hunting threats including the presence of

poachers and snares, and reducing habitat loss through deforestation. We will produce quarterly status reports through analysis of ranger-based SMART data collection.

Output 5: A scalable model of sustainable, climate-smart agro-biodiversity is established and incorporated into forest resource use practices by forest-dependent communities.

5.1. Develop guidelines. We will develop guidelines for the development of agro-biodiversity enterprise, and for agro-biodiversity based sustainable agricultural systems and practices, and disseminate them through national technical working groups, community-focussed knowledge sharing campaigns, and national and regional conservation / development forums.

5.2 Conduct cross-village exchange and demonstration visits. After successful commencement of the planned activities and demonstrations, we will support annual cross-village visits to demonstration sites to foster collaboration and cooperation between participating villages, and extension to villages outside the scope of this project.

5.3 Produce working papers. We will produce working papers outlining the effectiveness of sustainable climate-smart agro-biodiversity approaches. We will present these findings at national, regional and international forums.

Annex 3: Standard Measures

Table 1 Project Standard Output Measures

Cod e No.	Description	Gender of people (if relevant)	Nationalit y of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Tota l to date	Total planne d during the project
6A	Training and capacity building around NTFP /AB enterprise management and development	Mixed	Lao Nationals	36	60	214	50	96	500
6B	Practical skills training and capacity building activities. Max of 3 days per session	Mixed	Lao Nationals	3 days	9 Days	6 days	6 days	12 days	24 Days
13B	Camera trap survey results, SMART enforcement database,	NA	NA	1 (SMART)	1 (SMART)	1	2	1	2
14B	Conferences attended	NA	NA	1	4	1	1	5	4
20	Motorcycle	NA	NA	0					
23	US Fish and Wildlife services, AFD , FFEM, KFW,								

Table 2 Publications

Nil

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

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.	NO
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.	YES
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.	YES
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. However, we would expect that most material will now be electronic.	NO
Have you involved your partners in preparation of the report and named the main contributors	YES
Have you completed the Project Expenditure table fully?	YES
Do not include claim forms or other communications with this report.	