





Darwin Initiative: Final Report

Darwin Project Information

| Project reference | 23-027 |
|------------------------------|--|
| Project title | Cultural and economic incentives for endangered species conservation in Cambodia |
| Host country(ies) | Cambodia |
| Lead organisation | Fauna & Flora International |
| Partner institution(s) | Promvihearthor (PVT) Organization |
| | The Forestry Administration of the Royal Government of Cambodia |
| | Engineers Without Borders Australia |
| Darwin grant value | £311,177 |
| Start/end dates of project | 01 April 2016 - 30 June 2019 |
| Project leader's name | Tim Bergman |
| Project website/blog/Twitter | www.fauna-flora.org |
| Report author(s) and date | Tim Bergman and Pablo Sinovas |

1 Project Rationale

The project works within Cambodia's Cardamom Mountains, one of Indochina's largest contiguous rainforests and home to endemic and globally threatened species. The Cardamom Mountains contain more than half the world's Siamese Crocodiles, a critically endangered species that is revered as sacred by the Khmer Daeum. This landscape is also a globally significant endangered Asian Elephant conservation landscape and is described by the UNFAO as "one of the most important areas for biodiversity conservation in Asia".



Fauna & Flora International have been working with communities in the Cardamom's since 1997 supporting local populations to protect and conserve their environment. In 2015 and 2016, rigorous socio-economic surveys and community discussions identified key biodiversity threats and poverty challenges which informed the design of this project.

To protect the Critically Endangered Siamese Crocodiles, this project aimed to support locallyled crocodile sanctuaries and crocodile wardens who are able to patrol and protect the crocodile habitats and reduce threats. To reduce threats to Asian Elephants, a village level elephant monitoring and protection programme was established, alongside advocacy for demarcation of key protected areas for elephant conservation. In order to reduce threats to forest cover; forest monitoring, poverty reduction activities and environmental education were also included in the project.

Multi-dimensional poverty and vulnerability, specifically income and food insecurity, are key drivers of unsustainable forest practices and biodiversity loss. Hunger months were common in these communities and led populations to hunt, log and depend on unsustainable forest practices in lean seasons in order to buy rice for their families. This project therefore sought to reduce hunger months and increase income from agriculture and livestock. Ongoing community discussions in have helped to shape the project activities to be context specific and have the highest impact.

2 Project Partnerships

This project began with three partners; the *Cambodian Forestry Administration (FA)* who we work very closely with on all our species and landscape activities; *Promvihearthor (PVT)*, a community development focused local NGO who have been working with FFI on the livelihoods activities; and *Engineers without Boarders* who focused solely on setting up and installing biodigesters. As the life of the project developed, two informal partnerships grew; the first with a private sector company called *Bodia Apothecary and Spa* who work with the communities on the production and sale of lemongrass essential oils; and *Hydrologic*, a Cambodian social enterprise who sell and distribute ceramic water filters.

FFI's relationship with the Cambodian Forestry Administration has been strong throughout the life of the project, with the two teams working closely in all of the crocodile, elephant and forest monitoring activities. FFI hosts FA counterparts in the FFI office and they have been fully incorporated into the wider programme and we will continue to work together for years to come. FA have been involved in preparing this final report, proving information, data and comments.

The partnership with Promvihearthor (PVT) did not start well, with overpromising, low technical capacity and severe management gaps leading to low quality implementation. Through management-level discussions, we decided to work closer than initially planned and FFI undertook a closer management role over their project staff and activity implementation. FFI then hired additional staff to work on the project and we developed an equally balanced FFI/PVT project field team. FFI then spent time developing the capacity of PVT management and slowly reduced their own day to day management as their capacity grew, however have kept monthly management oversight to ensure quality of implementation and approach. This partnership was challenging in the beginning, however after re-structuring the team and outlining clear roles, responsibilities, reporting lines and M&E systems, PVT and FFI have worked well together making joint decisions on project activities. PVT have provided information, data and comments on this final report.

Initially, this project included bio-digesters supplied by Engineers without Boarders, however after the first pilot, it was clear that this technology was not suitable for the landscape and community, and so the activity was stopped. The partnership therefore also ended with both parties learning from the pilot. Engineers with boarders have not contributed to this final report.

Bodia Apothecary and Spa have been an informal partner on this project for about a year and half focusing on lemongrass essential oil. After the initial agricultural and market survey identified lemongrass as a priority product, Bodia were approached as a potential buyer of lemongrass essential oil. This relationship grew naturally with Bodia supplying funding and technical in-kind support to the community enterprise, alongside buying the essential oil, thereby becoming an informal partner of this element of the project. Bodia will continue to buy lemongrass essential oils from the community past the end of this project and will likely work alongside FFI again. Bodia has not contributed to this report.

After the failure of the bio-digesters, the project decided to promote a more affordable technology which also reduces firewood and increases health; water filters. Hydrologic are a social enterprise who produce and sell ceramic water filters in Cambodia. They worked with the project team to provide access to and sell water filters to target communities. They provided technical trainings to our team and sold cost-price water filters to the project participants. If relevant, they would be considered as a strong future partner. Hydrologic have not contributed to this report.

3 Project Achievements

3.1 Outputs

This project achieved all of its intended Outputs

Output 1: <u>Improved capacity among 8 target villages to sustainably increase and diversify food production</u>

The majority of farmers in the target area depend on rice farming to feed their families, and by the end of the project, participating community members across five villages had increased their rice yields by an average of 23%, close to the 25% target (Ind. 1.1) (Ref Annex 7.1). The biggest challenges faced was exceptional drought and flooding across two villages in the second season, a risk which was identified in our assumptions. Project staff attempted to mitigate the negative impact through closer support for these villages, however the drought led to crop destruction and a 48% decrease in yield in this village (Ref Annex 7.1). Moving forward, a climate resilience specialist has been brought in to conduct an assessment to identify mitigating interventions which FFI will look to fund in the future

In terms of diversifying food production, chickens were identified as a priority product to focus on, and by the end of year three, project participants had seen an average increase in chicken production of 67% across nine villages (Ind. 1.3). In real terms, before the project, farmers were producing on average 6 adult chickens every months, and by the end, they were producing over 10 a month which are fatter, quicker to mature and easier to sell (Ref Annex 7.1). In addition, farmers have been increasing their chicken production exponentially and, due to the paravet approach taken (Ref Annex 7.9), the farmers now have access to chicken raising inputs and veterinary knowledge making this increase in food production sustainable.

The project aimed to track the food security impact of increasing and diversifying food production, and through annual analysis, we saw an increase in dietary diversity, a proxy for nutritional status, across 8 village (Ind. 1.2) and an increase in chicken consumption by 156% (Ind. 1.3) (Ref Annex 7.1).

Originally, the project aimed to pilot bio digesters in the upland sites in order to reduce firewood consumption (Ind. 1.4 & 1.5). After installation however, it became clear that this site was not suitable to this technology, as the bio-digesters require a supply of cow dung, however cows and buffalo in this area are free roaming and so there is not easy access to the needed fuel source. This led to the bio-digesters not being used and the project not expanding on the pilot and activities stopping after year 1 (Ref Annex 7.6 & 7.7). The remaining funds were channelled into promoting water filters, a cheaper firewood reducing technology, and moved to output 2 to correlate with the project logic, see Output 2 for more details.

Output 2: By Year 3, women and men in at least 8 target villages adopt measures to promote their sustainable use of forest resources and at least 200 households generate increased revenue from, agricultural activities and sustainable micro-enterprises.

Micro-enterprise development and market system strengthening have been core elements of the project methodology, used to stimulate and perpetuate non-forest dependent income generating activities. The initial issues the communities faced were a lack of access to agricultural inputs and knowledge/expertise of how to use them. To combat this, individual community members were selected to be trained as experts in rice and chicken production, connected to the private sector and then supported to start an agricultural micro-enterprise selling the required inputs. They were then supported to conduct trainings to their wider communities and were thus seen as community-based experts from the beginning. These individuals were therefore incentivised by profit to help their community to produce more chickens and rice, as it would lead to sales from their shop. In these heterogeneous community structures with little cohesion or affinity, motivation through profit rather than the common good worked well. In addition to these enterprises, a lemongrass essential oil enterprise grew from one community where, in partnership with a private sector partner (Bodia), they produced and sold lemongrass essential oil.

In order for the micro-enterprises to become sustainable, business training courses and coaching, spanning several months, were delivered to five enterprises (Ind. 2.1). By the end of the project there were two strong profitable and sustainable enterprises up and running, one chicken input focused and one producing and selling lemongrass essential oil. Three smaller enterprises were also developed, two generated little profit but are continuing, and one failed (Ind. 2.2) (Ref Annex 7.1). The main challenge here was market access to chicken vaccinations and organic agricultural inputs for one of the areas, as the only local supplier was based over 200km away. This made it very challenging to have a consistent supply of inputs, especially chicken vaccinations, and is an issue still remaining in this community.

To strengthen the market system, four market actor connection workshops were conducted focusing on bringing together key market actors for chickens, rice inputs and lemongrass essential oils across nine villages (Ind. 2.3) (Ref Annex 7.1).

The impact of the focused micro-enterprise development and strengthening the market system can be seen in the end line survey, where we found that 38% of the sample had better access to rice and chicken inputs, with 29% and 33% respectively using these recommending inputs more than before. Where the project had supported income generation through lemongrass essential oils, 95% of lemongrass growers found it easier to sell lemongrass than before (Ref Annex 7.1).

Overall, income was generated from all products at different levels, and for those community members who participated in both rice and chicken related activities, they had a 19% average increase in their annual income, close to the 20% target (Ind. 2.4). Chicken members averaged a 273% increase in income gained from chicken sales, an increase of \$3 per month to \$15 per month for chicken sales. Lemongrass Enterprise members generated an average of \$225 per person from wages from the business, and lemongrass growers averaged \$56 per person from selling lemongrass (Ref Annex 7.1).

To promote the sustainable use of forest resources and reduce firewood consumption, this project facilitated the sale of 152 water filters. This led to a 74% increase in water filter use across six villages, a 71% decrease in time spent collecting firewood (a proxy for firewood use) and correlated with a decrease in adult and child diarrhoea (Ind. 2.5) (Ref Annex 7.1).

Output 3: By Y3 enable at least 8 villages (of 13 in the project area) to establish special measures to protect and conserve sacred and culturally important biodiversity including Siamese crocodiles and Asian elephants and their habitats

As part of this project, we have supported seven Community Elephant Wardens from three different villages to patrol critical areas for elephant conservation within the species' core range in the Cardamom Mountains. Support was also provided to 31 Community Crocodile Wardens from 10 villages to protect five crocodile sanctuaries that had been agreed by the local communities in order to protect sites essential for the long-term survival of the Critically Endangered Siamese crocodile. Both Elephant and Crocodile Community Wardens received training in the use of SMART and used this tool to monitor their patrols and to record elephant and crocodile signs and observations, as well as threats (Ref Annexes 7.13-24).

Elephant Community Wardens began patrolling in January 2017 and have patrolled 6,034 km over 379 patrol days in key elephant habitat areas during 2017-2018 (Ind 3.1) (Community Elephant Warden SMART reports). The wardens also worked with our team in the maintenance of our ~50 camera traps for elephant population monitoring (Ref Annexes 7.25-27).

Community Crocodile Wardens patrolled 3,771 km over 311 patrol days in 2018 in 5 Siamese crocodile sanctuaries (Ind 3.3) (Ref Annex 7.13-7.22)). This constitutes a 62% increase over the 2015 baseline of 192 patrol days and a 52% increase of the 2,483 km patrolled in 2015. We also found no crocodiles dead from poaching or in nets. Wardens observed 12 fishing nets in the sanctuaries in 2017 and 5 in 2018, a 72% decrease from the 18 seen in 2016 (baseline) (Ind 3.4) (Ref Annex 7.13-7.22).

We set up a protocol for monitoring land use change across all 12 villages (Ind 3.2). A forest cover analysis of the project area was produced, looking at the period 2016-2017 (Ref Annex 7.28). Overall, we have seen minimal forest clearance into the protected areas. For the covered areas, 8954 ha of forest was lost. Much of this was in community land, although O'Som saw clearance of more forested land in the protected areas.

Two non-government teachers were supported in two villages where children would not get access to school otherwise. This has included salary support, and the provision of textbooks (including environmental educational materials) and stationary to over 80 students in both communities. We also played videos to 50 villagers about nature in Cambodia, and provided each villager with an animal conservation themed fan poster. In addition to this, a communications campaign aiming to increase the understanding of the importance of key target species was rolled out, whereby the evaluation showed an increase in knowledge on Cambodian crocodiles, elephants and conservation (Ref Annex 7.2) (Ind. 3.7) (See output 4 for more details).

FFI contributed to zonation efforts in the Cardamom Mountains (Ind. 3.5), led by partner NGO Wildlife Alliance. A draft zonation map was produced as a result (Ref Annex 7.30), and is currently being considered by the Ministry of Environment.

By the end of year three, Community Guard teams are operating in five villages in HEC mitigation as part of a collaboration between FFI and the Forestry Administration (Ind. 3.6). In two villages Community Elephant Wardens and guarding groups are conducting HEC mitigation, elephant protection patrols and camera trap monitoring. In three villages, the community wardens conduct patrols and Camera trap monitoring. In addition, in five other

villages, FFI and the forestry administration are conducting HEC mitigation and camera trap monitoring (Ref Annex 7.13-7.24).

The number of human-elephant conflict (HEC) incidents we documented was 63 in 2016, 85 in 2017 and 107 in 2018 (Ref Annexes 7.25-27). This is an increase from the 2015 baseline of 74. However, this trend is likely a result of HEC becoming an increasing issue due in part to migration of people into elephant habitat, and also of improved reporting due to our growing relationship with affected communities.

Output 4: <u>Communications campaign to raise awareness of the traditional knowledge</u> and skills of indigenous and marginalized people in the Cardamom Mountains, and their role in protecting Cambodia's sacred and culturally important biodiversity.

In order to be able to promote the traditional knowledge and skills of the indigenous and marginalised communities in the Cardamom Mountains, we first conducted background research to understand what this knowledge is, alongside their cultural values and how these relate to conservation and biodiversity (Ind. 4.1) (Ref Annex 7.4 & 7.5). After this, we partnered with a professional communications agency, Melon Rouge Agency, to conduct a stakeholder analysis and develop a communications strategy and in order to identify and target priority audiences (Ind. 4.2). Informed communications materials aimed at promoting the role of the indigenous communications campaign was rolled out. The communications campaign reached a total of 706,050 Cambodians, averaging 117,675 people per month. There were 57,617 post engagements, averaging 9,603 per month and an average engagement rate of 8.41% (Ind. 4.4) (Ref Annex 7.2). The top posts were a video profile of an Indigenous community member and an educational slide of the Cambodian Crocodiles.

An impact analysis of the campaign was conducted at the end of the campaign and showed an improved knowledge and understanding of the role of indigenous populations in protecting Cambobia's biodiversity, ascertained directly through the Facebook campaign (Ref Annex 7.2).

3.2 Outcome

Outcome: <u>At least 350 households across 8 villages of indigenous and marginalised</u> populations in the Cardamom Mountains, are empowered to strengthen food security, and engage in effective conservation of globally threatened biodiversity.

Project partners are happy to say that this project has achieved its intended outcome; it has empowered over 350 indigenous and marginalised community members across nine villages to strengthen their food security and engage in effective conservation. Hunger months have been reduced by 30% (Ind. 0.1), average annual incomes have risen by 19% (Ind. 0.2) and community members have grown in human, social and material aspects of wellbeing as a result of participating in the project (Ind. 0.3) (Ref Annex 7.10 & 7.1). Culturally important wildlife including the Critically Endangered Siamese Crocodile and Endangered Asian Elephant are under active protection by the local communities across 10 villages, with 38 community wardens conducting regular patrols throughout the project (Ind. 0.4) (Ref Annex 7.13-7.24), and there has been increased national recognition of the role of indigenous and marginalised populations in protecting Cambodia's threatened biodiversity (Ind. 0.5) (Ref Annex 7.2 & 7.1).

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

Impact: <u>Cambodia's Indigenous Khmer Daeum achieve a higher social status and living</u> standards, and contribute effectively to the protection and recovery of Cambodia's Siamese <u>crocodile and Asian Elephant populations.</u>

In truth, it is difficult to know to what extend the Khmer Daeum have achieved a higher social status within society as a whole. We know that within sectors of the population who interacted with our communications campaign, they gained a better understanding of this indigenous population, and the high engagement rate on posts profiling the lives of the Indigenous community members is promising (Ref Section 3.1). However, the complexities of movements within societal strata make it difficult for one Facebook campaign to have wide ranging impact, at best, this project has been a positive contribution to the slow movement of societal change.

In terms of increasing living standards and strengthening human development and wellbeing, this project has achieved direct impact. With increases in food and income security, and positive impacts found on all aspects of wellbeing (Ref Section 3.1 and 3.2), this project is proud to have supported poor community members to strengthen their current and future living standards.

Of the 38 Crocodile and Elephant Community Wardens, 28 are indigenous Khmer Daeum. They have been instrumental in contributing towards the effective protection of Siamese crocodiles and Asian elephants in the project area, through a combination of forest patrols and positive engagement within their village communities.

4 Contribution to Darwin Initiative Programme Objectives

4.1 Contribution to Global Goals for Sustainable Development (SDGs)

SDG 1 – No Poverty

Average annual incomes increased by 15%, and for community members participating in both chicken and rice activities, average annual incomes rose by 19% (Ref Annex 7.1).

SDG 2 – Zero hunger

On average, hunger months were reduced on by 30%, rice yields increased by 23%, and chicken consumption increased by 156% (Ref Annex 7.1).

SDG 3 – Good Health and wellbeing

On average, dietary diversity has increased, water filter use has risen by 74% and child and adult diarrhoea has reduced (Ref Annex 7.1). Project participants showed improvements in the human, social and material dimensions of wellbeing (Ref Annex 7.10).

SDG 5 – Gender equality

For some female project participants, they grew in self-confidence and agency, leading to improved inter-marital relations, improved household decision making and improved economic empowerment and food sovereignty (Ref Annex 7.10).

SDG 6 - Clean water and sanitation

Water Filter use rose by 74% across 6 villages (Ref Annex 7.1).

SDG 8 – Decent work and economic growth.

Two successful micro-enterprises were established, offering fair wages to employees and profit making (Ref Annex 7.1).

SDG 10 - Reduce inequality

Incomes have been increased for poor and marginalised individuals contributing to reducing domestic income inequality (Ref Annex 7.1). Wellbeing indicators signalled improved gender relations, contributing to increased social inclusion of women (Ref Annex 7.10).

SDG 12 – Responsible consumption and production

Organic and Good Agricultural Practices have been promoted and taught to farmers, improving their responsible production techniques and reduced chemical use. In addition, local chicken production has increased on average by 67% for project participants across nine villages.

SDG 15. Life on Land.

We are supporting the reduction of encroachment, logging and hunting through increasing food security and incomes. As people's livelihoods become less dependent on unsustainable levels of natural resources, they can afford to manage them into the long-term. Such reduction in pressures on local natural resources is crucial to stabilise populations of threatened species, including the Endangered Asian elephant and Critically Endangered Siamese crocodile.

4.2 Project support to the Conventions or Treaties (CBD, CITES, Nagoya Protocol, ITPGRFA)

This project contributed to building the capacity of Cambodia to implement the Convention on Biological Diversity primarily through reducing the direct pressures on forests and biodiversity (Aichi Strategic Goal B) and enhancing species and habitat protection (Aichi Strategic Goal C).

The project has supported the protection of the Critically Endangered Siamese crocodile and the Endangered Asian elephant, directly contributing to Aichi target 12. Using local knowledge and respecting customary resource use, capacity has been built for 38 community wardens to patrol and protect these traditionally revered species and habitats using the SMART approach (Aichi targets 2, 5, 11, 12, 14, 18) [see SMART Reports].

Support and local knowledge from Khmer Daeum community wardens has been essential in collecting this ecological data (Aichi targets 17, 18, 19; Indicator 3.1) as has their integral involvement in the successful release of 20 Critically Endangered Siamese crocodiles into sanctuaries in 2016, 2017, and 2018. In addition, a project-level methodology to monitor forest encroachment (Indicator 3.2) for the Cardamom Mountains has been developed to aid protected area management (Aichi Target 11).

Our Facebook media campaign has raised awareness of species protection and biodiversity value within the country (Aichi targets 1, 2) and 116 water filters have been sold which incentivises sustainable resource use (Aichi targets 1, 8). These achievements have helped the project addresses various Aichi targets (3, 4, 6, 8, 10, 11, 14, 17, 20) in Cambodia's National Biodiversity Strategy and Action Plan (NBSAP) including "systematic monitoring", "development and implementation of recovery programmes", and "measures ensuring the protection of critical habitats".

4.3 Project support to poverty alleviation

Recognising the multi-dimensional nature of poverty, this project has led to direct and indirect improvements in human development and wellbeing. Directly, project participants have strengthened their food and income security (Ref. Section 3), thereby increasing their resilience to external shocks and breaking through the poverty cycle. In addition to these direct improvements to human wellbeing, the project has also led to impacts on the human, social and material dimensions of wellbeing.

An end of project wellbeing assessment found that through participating in the project, community members had increased confidence, improved problem-solving abilities and increased clarity and hope about the future. Project participation had also led to positive changes in intimate family relationships, including increased decision making-power with a partner, feelings of pride from a parent, and feelings of pride from oneself in being able to provide for one's family. Increased independence and improved food sovereignty - having independent control over food production - was a notable impact, and one which reduced stress and conflict within families (Ref Annex 7.10).

4.4 Gender equality

Officially, this project was a gender sensitive project, one which took into account gender roles and responsibilities in its implementation, encouraged female participation at all levels, and ended up having an average of 59% female participation across all trainings and coaching (Ref Annex 7.1). However, as seen within the Wellbeing report, impacts of participation for some women have led to gender transformative impacts, including improved inter-marital relations, more equal decision making in the household and increased economic empowerment. Improved self-confidence and agency in women was common to see, especially linked to food sovereignty (Ref Annex 7.10).

Within this project, the most successful micro-entrepreneurs were female and, although not officially captured in data, project staff saw these women grow in status within the communities and become role models for younger girls to aspire towards.

4.5 Programme indicators

Did the project lead to greater representation of local poor people in management structures of biodiversity?

As a result of the project, the elephant community warden programme was set up and the crocodile community warden programme was strengthened. Through the community warden programme, 38 villagers make a valuable, direct contribution to the management of key conservation sites in the Cardamom Mountains. In addition, they play an important role as conservation champions within their communities.

• Were any management plans for biodiversity developed and were these formally accepted?

FFI has developed, in close collaboration with the Ministry of Environment and the Forestry Administration, and as part of an extensive consultative process, a National Elephant Action Plan. The Action Plan is expected to be officially adopted by the Government by the end of the year (Ref Annex 7.29). FFI also contributed to zonation efforts in the Cardamom Mountains, led by partner NGO Wildlife Alliance. A draft zonation map was produced as a result (Ref Annex 7.30), and is currently being consider by the Ministry of Environment.

• Were they participatory in nature or were they 'top-down'? How well represented are the local poor including women, in any proposed management structures?

Local poor community members are an integral part of our warden programme, and selection of wardens (currently all male) involved a participatory process involving the communities themselves.

• How did the project positively influence household (HH) income and how many HHs saw an increase?

With over 350 households participating in different elements of the project, household income was increased in various ways. Within the chicken production element of the project, chicken members generated income from chicken sales, and the Village Poultry Advisor generated income from selling chicken inputs and later on as a chicken trader (Ref Annex 7.1 & 7.9). Within the rice production element of the project, those members who produced a rice surplus would sell the extra as income, and the Village Rice Advisor generated income from selling organic agricultural inputs. Within the Lemongrass Essential oil element of the project, Lemongrass growers generated income from selling lemongrass leaf, and members of the Lemongrass Enterprise would generate income as wages from producing the essential oils and collecting the raw materials for processing (Ref Annex 7.1).

• How much did their HH income increase (e.g. x% above baseline, x% above national average)? How was this measured?

On a household level there was a 15% average increase in annual income from the baseline across all participants, with higher increase in income positively correlating with higher participation in project activities. For example, for those members who participated in both rice and chicken activities, they had an average increase in income of 19% (Ref Annex 7.1). Annual income data was taken on a yearly basis through household surveys.

On a project level, chicken group members experienced a 273% increase in income gained from the sales of chickens (from making \$12 every three months to \$47), while the Village Poultry Advisor (VPA) generated \$3,707 in revenue, making an overall profit of \$1,577 from her chicken focused enterprise. Lemongrass Essential Oil Enterprise (LGE) members made an average of \$225 per person, and lemongrass growers \$56 per person whereas before, there was no income from this source (Ref Annex 7.1).

4.6 Transfer of knowledge

The Lemongrass Essential oil element of this project was presented at the South-East Asian Agroecology Conference in Siem Reap, Cambodia in 2018. It promoted it as an example of integrated conservation and livelihoods, while also promoting conservation agriculture (the lemongrass is intercropped between fruit trees which reduces run off and erosion, acts as a natural integrated pest management technique, and enhances soil biomass flux).

4.7 Capacity building

Fauna & Flora International hosts counterpart staff from the Forestry Administration (FA) and provide regular support and training. During the period of this project, three FA counterpart staff have been promoted. Mr Hang Chandaravuth was promoted from Officer to Deputy Officer. Mr Sam Han was promoted from a Technical Officer to Head of the Research, Education and International Collaboration Office. Mr Hor Leng was promoted from a Technical Officer to Head of the Conservation and Captive Breeding Office.

There has been significant improvements in the capacity of project staff throughout the project, most notably in; facilitations skills; technical agronomy and poultry husbandry; business and enterprise development; MS word and excel; English language; and overall self-confidence. A dedicated fund of 10,000 USD was used for a six month capacity development training course led by a local partner specialising in facilitation, TOT and business development upskilling.

5 Sustainability and Legacy

Fauna & Flora International have been successful in securing funds to continue and expand the project activities in the project area.

For the Species focused work, FFI will this year be focusing on financial sustainability mechanisms for funding the wardens, and will be looking to increasing local capacity and exploring options to move towards full community management and sustainable financing within three years. The National Elephant Action Plan developed by FFI in collaboration with the Government will, once adopted, influence management of the Cardamom Mountains landscape. The same is true of the draft zonation for the Cardamom Mountains which FFI supported.

In terms of rice production, experience in Cambodia shows us that for true sustainability in changes of rice production habits and local pure seed production networks, there needs to be external support for four to seven seasons. FFI has secured funding for at least one more season (totalling three) with the prospect of three more after that still to be confirmed.

In order to support community members to improve chicken production, the project took a paravet approach (Ref Annex 7.9) which prioritises sustainability through the market systems and actors (Ref Annex 7.9). At project end, one paravet has become fully autonomous in her chicken production skill, and runs a profitable chicken input enterprise. Her business opens up access for community members in four villages to buy much needed feed, medicines and vaccinations, and the fact that it is in her best economic interests for them to be successful and produce more chickens, she is motivated to share her expert knowledge on chicken production to them.

In the last two months of the project, without any project interventions, external chicken traders have been travelling to these villages (3 hours through forest by motorbike) twice a month to buy chickens to take back to sell at the provincial markets. This natural extension of the market system marks a cross-road for these communities, identifying them as sustainable suppliers of chickens to the external market.

This project had enabled community members to now have sustainable access to chicken inputs, knowledge on husbandry and a market to sell to, making it an intervention very likely to endure past the end of the project.

For the enterprise producing lemongrass essential oils, they have an agreed contract with the private sector buyer for at least another year, and, operationally, are a financially profitable

enterprise (Ref Annex 7.1). Local community members are expanding their lemongrass leaf production to sell to the enterprise, expanding from 3,580 bushes in the community at the baseline, to 15,970 at project end. This is an increase of an average of 163 bushes per household to 726 (Ref Annex 7.1). With a strong supply of leaf, an operationally financial profitable enterprise and a committed buyer, this community look set to continue for years to come.

6 Lessons learned

In terms of livelihoods development activities, taking a market-based approach has worked very well in this project. Focusing on supporting private micro-enterprises, value chain development and connecting private sector actors has made this project agile, easy to facilitate and sustainable through the market forces. From a management perspective, setting up simple and strong activity monitoring and project management systems from the start was key to working with partners and identifying then resolving issues them before they snowball.

Early on the in the project, there were issues with local partner implementation stemming from mis-representation/understanding of capacity at project initiation. This led to several changes in the Lead-Partner modality of working whereby FFI took on a stronger oversight and management role for about a year, while building up the local capacity and then slowly releasing more autonomy. We would recommend for future projects that there is close communication and management between Lead and Local Partners for at least the first six months to ensure capacity and quality.

6.1 Monitoring and evaluation

This project had a fairly robust activity MEAL system, where information on all implemented activities were recorded on a monthly basis, including the category (e.g. rice, chicken etc.), activity (e.g. training, coach), sex disaggregated participation numbers and then the successes and challenges faced in that activity. This information was inputted into a simple and smart excel file, collated and then discussed at a full team monthly meeting which allowed for all project staff members, Partner and Lead, to discuss successes, issues and to set priorities for the upcoming month or quarter.

For project indicator M&E, annual household surveys collected key information such as rice yields, annual incomes and dietary diversity, and monthly data collection was taken for the enterprise's financial records. For monitoring chicken-based indicators, quarterly data was collected via an app called KOBO Collect, which enabled the quick an efficient collection and analysis of data (Ref Annex 7.1).

LTS international conducted a mid-term review of the project (Ref Annex 7.8) whereby the key findings noted that the initial logframe should be revised to more accurately reflect the project activities and project logic. In agreement with the reviewer, the logframe was adjusted and approved by Darwin via an official change request. The biggest changes made were modifying the indicator targets to make them achievable yet still stretching, and adding qualitative depth, such as wellbeing indicators.

6.2 Actions taken in response to annual report reviews

All comments from last year's annual review have been resolved and included in this report (modified logframe, increase information on rice trainings (Ref Annex 7.1) and training for community wardens on the collection and reporting of SMART data on threats such as snares). In the logframe modifications last year, outcomes and indicators were changed and approved, however several of the related activities and means of verification were not modified. These have therefore been left in the annexed logframe, but do not relate to the updated and approved changes.

The only outstanding comment from last year's annual report not discussed in this report, noted that the indicator target of increasing annual incomes by 20% might be too ambitious and the reviewer wanted to know what the revised target might be. In the end, after discussions with LTS, this target was left as 20%, as it was ambitious and we wanted to be ambitious. In the end, the average annual income of project participants increased by 15% and for those

participating in both chicken and rice activities, it rose by 19%. On reflection, annual incomes are very complex and depend on many external factors outside the projects control, so it might have been more relevant to focus on project specific increases in income as a measure of success.

7 Darwin identity

The Darwin Initiative has been promoted by this project most prominently within the six month Facebook Communications Campaign, where the Darwin Logo was published at the end of every video which were viewed a total of 124,600 times (Ref Annex 7.3). These videos can be found on FFI Cambodia's Facebook Page <u>https://www.facebook.com/FaunaFloraCambodia</u>.

The livelihoods elements of the project have been recognised as a distinct Darwin funded project, and the crocodile and elephant wardens have been seen as co-funded and part of a larger programme. Within Cambodia, conservation organisations, international institutions (UN, World Bank, USAID etc.) and private sector are aware that this is a UK funded project through conversations, discussions and forums throughout the timespan of the project.

8 Finance and administration

8.1 **Project expenditure**

| Project spend (indicative) since last annual report | 2018/19 Grant (£) | 2018/19 Total actual Darwin Costs (£) | Variance % | Comments (please explain significant variances) |
|--|-------------------------|---|---------------|--|
| Staff costs (see below) | | | -6% | |
| Consultancy costs | | | -1% | |
| Overhead Costs | | | 1% | |
| Travel and subsistence | | | 8% | |
| Operating Costs | | | 8% | |
| Capital items (see below) | | | 0% | |
| Monitoring & Evaluation | | | 2% | |
| Others (see below) | | | 9% | |
| Audits Costs | | | 0% | |
| TOTAL | | | 0% | The final total cost for this time period is £7.15 over the budget. This is because in Y1 & Y2 of the project, we underspent by £7.15. With this slight overspend in this project year, we are spending the exact total for the whole project cost. |

| Staff employed (Name and position) | Cost (£) |
|---|-------------|
| FFI Tim Bergman, Project Manager | |
| FFI Pablo Sinovas, Program Manager | |
| FFI Ahab Downer, Country Director | |
| FFI Jenny Daltry, Senior Conservation Biologist | |
| FFI Khiev Va, Senior Project Coordinator | |
| FFI Oung Chan Mony, Finance & Administration Manager | |
| FFI Chheng Tim, Provincial Field Technician | |
| FFI Chhet Socheata, Finance & Admin Assistant | |
| FFI San Sary, Senior Administration Officer | |
| FFI Stephen Browne, Director of Operation, Asia Pacific | |
| FFI Sam Han, Project Manager, CCCP | |
| FFI Hor Leng, National Field Coordinator | |
| FFI Hang Chan Daravuth, Project Officer | |
| PVT Khoun Narin-Executive Director | |
| PVT Khem Ra-Program Manager | |
| PVT Chum Seriewathana-Project Officer | |
| PVT Moeurn Sileng-Finance/Admin Officer | |
| PVT Chheang Phalla-Project Coordinator | |
| TOTAL | |

| | Capital items – description | Capital items – cost (£) |
|-------|-----------------------------|-----------------------------|
| | | |
| | | |
| ΤΟΤΑΙ | | |
| TOTAL | | |

| Other items – description | Other items – cost (£) |
|--|------------------------|
| Communications Cloud Costs Bank Charges Translation, broadcasting & printing Consumables - PVT | |
| TOTAL | |

8.2 Additional funds or in-kind contributions secured

| Source of funding for project lifetime | Total (£) |
|--|--------------|
| Pictet Foundation | |
| Bryan Guinness | |
| The Karl Mayer Foundation | |

| Segre Foundation | |
|---------------------------------------|--|
| Conservation Leadership Programme | |
| People's trust for endangered Species | |
| The Species Fund | |
| TOTAL | |

| Source of funding for additional work after project lifetime | Total (£) |
|--|--------------|
| Cool Earth | |
| The Species Fund | |
| Prince Bernard National Fund | |
| TOTAL | |

8.3 Value for Money

The two main aspects of this project which made it good value for money was its staff and the amount of in-kind contributions. At the start of the project, due to budget constraints we could only hire low capacity staff, however after re-assessing part way through the first year, we decided to use additional funding to cover higher salaries and employ high quality staff who were exponentially more impactful.

Throughout this project we have collaborated closely with non-partner organisations, sharing resources and expertise. For example, the majority of the poultry husbandry training materials were given to us by another NGO, and Bodia and Hydrologic provided their own experts in training on essential oil production and sanitation respectively. These connections saved the project from having to use funds to develop our own materials or hire in external consultants, allowing funds to be directed elsewhere increasing our impact.

Employing local community wardens to monitor important Siamese crocodile and Asian elephant sites has not only ensured that there is strong community engagement in undertaking this conservation work, but also that the salaries required have been relatively low, maximising the value for money provided.

Annex 1 Project's original (or most recently approved) logframe, including indicators, means of verification and assumptions.

Note: Insert your full logframe. If your logframe was changed since your Stage 2 application and was approved by a Change Request the newest approved version should be inserted here, otherwise insert the Stage 2 logframe.

| Project summary | Measurable Indicators | Means of verification | Important Assumptions | | |
|--|---|--|--|--|--|
| Impact: Cambodia's indigenous Khmer Daeum achieve a higher social status and living standards, and contribute effectively to the protection and recovery of Cambodia's Siamese crocodile and Asian elephant populations. | | | | | |
| Outcome: At least 350 households across 8 villages of indigenous and marginalised populations in the Cardamom Mountains, are empowered to strengthen food security, and engage in effective conservation of globally threatened biodiversity. | 0.1 For female and male members of at least 350 households (25% of HH in project area), number of hungry months is reduced by at least 25% by Year 3 from the 2015 baseline. 0.2 At least 200 households experience increase in income as a result of project activities by Year 3, with an average income increase of 20% from project baseline. 0.3 By Y3, project beneficiaries report increased wellbeing from participation in project activities, uncovered through deep dive case studies focusing on at least 6 different project actors and shorter, wellbeing focused questions in the end line survey. 0.4 Culturally and economically important wildlife (specifically including the sacred Siamese crocodiles and Asian elephants) and forest resources are under active protection and management by at least 8 villages by Y3 | 0.1 Baseline and end line household survey reports including no. of hungry months 0.2 Baseline and end line household survey reports 0.3 Qualitative in-depth interviews/wellbeing surveys e.g. WEDC SL Framework Project actors including. VPAs, VRAs, f/m rice group members, f/m chicken group members, enterprise group members 0.4 Patrol and monitoring protocols 0.5 Interactive Facebook Questionnaires At both outcome and output levels, participant lists for all activities disaggregated by sex; household survey instruments and training evaluation tools designed to elicit gendered differences in roles, knowledge and impacts for women and men | Rising living standards in target villages does not lead to influx of immigration and land- grabbing by non-indigenous peoples Willingness of lowland population to overcome prejudice against indigenous peoples in the mountains Political will to uphold laws protecting the rights of indigenous peoples Project team's specific efforts to overcome socio-cultural barriers to the participation of indigenous women and girls are successful | | |

| | 0.5 By end of project, knowledge and recognition of the role of indigenous and marginalised communities in protecting and conserving Cambodia's culturally important/globally threatened biodiversity is increased as reported by a sample of the population in response to a project administered Facebook questionnaire. | | |
|---|--|--|--|
| Output 1. Improved capacity among 8 target villages to sustainably increase and diversify food production | 1.1 Improve average per-hectare yields of rice by 25% in 5 beneficiary villages by Y3 for 2016 baseline 1.2 Improve community level dietary diversity in 8 beneficiary villages by Y3 based on the 2016 baseline 1.3 By Y3 based on the 2016 baseline, produced and consumed farmed animals' increases by 20% in four villages; wild caught animals decrease as a component of diet. 1.4 By end year 2, 14 bio digesters piloted in upland sites and results fed back to inform project implementation 1.5 Where bio-digesters are implemented successfully by the end of Y2 there is at least a 50% reduction in firewood as a household fuel, by the end of Y3 | 1.1 Agricultural records, household survey report 1.2 Baseline and endline household survey measuring UNFAO Dietary Diversity survey through a 30% representative sample size of the communities. 1.3 Baseline and endline household survey monitoring: # farmed chickens produced # farmed chickens consumed % of wild fish in diet 1.4 Physical bio-digester installations 1.5 Physical bio-digester installations, household survey report | No unusual adverse weather/climatic conditions At least some project beneficiaries willing to overcome risk-averseness to try novel techniques |
| Output 2. By Year 3, women and men in at least 8 target villages adopt measures to promote their sustainable use of forest resources and at least 200 households generate increased revenue from, agricultural activities and sustainable micro-enterprises | 2.1 Targeted business and enterprise training courses provided to five enterprises, by the end of end of year 3. 2.2 Four profitable small-scale enterprises created in target villages, supported by the project , two up and running by the end of year two. 2.3 By end of project, key market networks are created or strengthened for 2 key products in at least 6 villages and by end of year 2, two market actor connection workshops successfully implemented. | 2.1 Training materials, attendance records 2.2 Enterprise registration records, commune/village records, household surveys, NTFP/agricultural network records 2.3 Paperwork for set-up of networks and operational protocols/guidelines/ structures; network meeting records 2.4 Household survey report, relevant community institution surveys | |

| | 2.4 By Y3, women and men in at least 200 households generate increased incomes from new enterprises. Overall average annual incomes increase by 20%. 2.5 By end Y3 and based on project baseline, 50% increase in water filter use across 4 villages, resulting in improved household safe water drinking practices and reduced household diarrhoea resulting in improved nutrient absorption, health, productivity and food security. | 2.5 Household survey report | |
|--|---|--|--|
| Outcome 3. By Y3 enable at least 8 villages (of 13 in the project area) to establish special measures to protect and conserve sacred and culturally important biodiversity including Siamese crocodiles and Asian elephants and their habitats | 3.1 By Y3 Asian elephant monitoring and protection programme is established across at least 3 villages, with indigenous communities as skilled custodians 3.2 Project-level methodology established to monitor forest encroachment in at least 8 villages 3.3 By Y3 the number of community patrol days for Siamese crocodile monitoring and protection increases by at least 25% from the 2015 baseline, led by indigenous and marginalised communities across the 5 community-managed sanctuaries 3.4 By Y3, at least a 50% reduction in prevalence of fishing nets in Siamese crocodiles lost to poaching or drowning in nets across 5 community-managed sanctuaries during the project period 3.5 By the end of Y3, recommendations to government made for demarcation of key protected areas for elephant conservation | 3.1 Training materials, monitoring plans and protocols, patrol data sheets 3.2 Methodology protocol, GPS records, remote sensing and ground-truthing data and maps 3.3 Training materials, monitoring plans, patrol data sheets 3.4 Sanctuary monitoring records 3.5 Report with recommendations for demarcation submitted to government 3.6 Records of human-elephant conflict, household survey report 3.7 Community guidelines on land conflict resolution mechanisms | Willingness of younger generation to protect animals that are traditionally sacred to their communities Government approval of new community protected areas is secured without unreasonable delays Political will of government agencies to establish and implement protocols to uphold the lawful rights of indigenous communities |

| | 3.6 By Y3, in at least 5 villages community guard teams successfully reduce the number of incidents of human elephant conflict on cropland using non-lethal methods from 2015 baseline 3.7 By the end of Y3, increased local understanding of the importance of, and human impact on, key target species. | | |
|---|--|--|--|
| Output 4. Communications campaign to raise awareness of the traditional knowledge and skills of indigenous and marginalized people in the Cardamom Mountains, and their role in protecting Cambodia's sacred and culturally important biodiversity. | 4.1 Assessment finalised during Y1 of existing information on indigenous knowledge and cultural values in the project area, to inform subsequent activities 4.2 Stakeholder analysis completed during Y2 to identify priority audiences for messages 4.3 By Y2 communications materials have been designed and developed to specifically targeted priority audiences to promote the role of the indigenous communities in protecting Cambodia's landscapes 4.4 By Y3, social media communications campaign has reached 250,000 Cambodians with at least 7000 individuals engaging directly on posts per month of the campaign. | 4.1 Research report on indigenous knowledge and cultural values 4.2 Stakeholder analysis report 4.3 Training materials, attendance records 4.4 Communications materials (audio/video/print) and facebook analytics reports. | Will of other record-keepers such as radio and other media stations to share data Recent research is correct in identifying the Khmer Daeum culture and traditions as having had a key part in preserving biodiversity in the Cardamom Mountains Increased knowledge leads to improved attitudes and behaviour |

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)

Output 1:

1.1 Conduct surveys to inform agricultural output baselines, community-led identification of additional crops for introduction and harvesting.

- 1.2 Provide agricultural training and ongoing support for rice intensification, support rice-growing techniques, provide technical expertise during cultivation and harvesting
- 1.3 Provide agricultural training and ongoing support for crop diversification, support crop-growing techniques, provide technical expertise during cultivation and harvesting
- 1.4 Pilot use of household-level aquaculture as a protein source alternative, establish baselines on household consumption of farmed vs wild-caught animals
- 1.5 Install pilot bio-digesters, ensure maintenance of units and provide support for production and application of fertiliser, and monitor the impact of bio-digesters at pilot households
- 1.6 Set up frameworks and methods to enable gendered monitoring and evaluation of agricultural indicators

NB Activity 1.1 will be designed and implemented to enable project team to identify the different roles, skills, knowledge and interests of women and men. This gendered analysis will inform which of the other activities under this output are targeted at women, men or both, and ensure that training/support provided is relevant and accessible to each target group.

Output 2:

2.1 Identify existing agricultural and NTFP networks, cooperatives and local harvesting of NTFPs, identify opportunities for creation/strengthening of networks, undertake market analysis for relevant NTFP and agricultural products, and identify different training needs of women and men in business and enterprise skills

2.2 Provide business and enterprise skills training and support to small-scale initiatives that contribute to diversification of sustainable livelihoods, provide education and outreach to link the sustainable use of natural resources and development of sustainable diversified livelihoods

2.3 Provide support to new and existing agricultural and NTFP network operations, sustainability and governance

2.4 Conduct training and provide support on application of bio-digester derived bio-gas as an energy alternative, to women in pilot households, and monitor the impact of biodigesters at pilot households

2.5 Set up frameworks and methods to enable ongoing monitoring and evaluation of forest use and income indicators

NB As for Activity 1.1, analysis of existing networks and capacity building needs will be gendered to ensure subsequent activities under Output 2 are tailored to the different contexts and needs of women and men.

Output 3:

3.1 Establish and support community-led Asian elephant monitoring and protection programme

3.2 Monitor forest encroachment using landscape-level analysis and ground-truthing of forest boundaries

3.3 Support and increase in patrol days for community-led Siamese crocodile monitoring and protection in crocodile sanctuaries

3.4 Undertake outreach and education on effects of fishing and nets on wild crocodiles and awareness raising on illegal fishing laws

3.5 Conduct surveys to identify key areas of elephant habitat connectivity and usage, and present recommendations for protected area demarcation to the government

3.6 Provide support and training for community guard teams on human-elephant conflict mitigation, and maintain communication and data collection methodologies

3.7 Set up frameworks and methods to enable ongoing monitoring and evaluation of forest encroachment and species conservation indicators

Output 4:

4.1 Collate existing data on indigenous knowledge and cultural values of both women and men to inform project activities, and devise appropriate communications messaging

4.2 Develop communications materials and identify key audiences for outreach and awareness on indigenous knowledge and skills and benefits for biodiversity conservation

4.3 Provide specific training to government counterparts on indigenous knowledge and skills and benefits for biodiversity conservation

4.4 Set up frameworks and methods to enable ongoing monitoring and evaluation of communications indicators

Annex 2 Report of progress and achievements against final project logframe for the life of the project

| Project summary | Measurable Indicators | Progress and Achievements |
|---|---|---|
| <i>Impact</i> Cambodia's indigenous Khmer Daeum achie and contribute effectively to the protection an and Asian elephant populations. | ve a higher social status and living standards, d recovery of Cambodia's Siamese crocodile | This project has led to improvements in the living standards and conditions of the indigenous Khmer Daeum and marginalised community members living in Cambodia's Cardamom Mountains. Objective improvements include increases in income, rice yields, chicken production and nutritional intake, alongside positive changes in the human, material and social aspects of wellbeing. Indigenous Khmer Daeum community members have contributed towards the protection of |
| | | biodiversity in the area, by being actively involved in the conservation of Siamese crocodiles and Asian elephants through our community warden's programme. A total of 28 Khmer Daeum community wardens patrolled and protected critical habitats of these threatened species. |
| Outcome. At least 350 households across 8 villages of indigenous and marginalised populations in the Cardamom Mountains, are empowered to strengthen food security, and engage in effective conservation of globally threatened biodiversity | 0.1 For female and male members of at least 350 households (25% of HH in project area), number of hungry months is reduced by at least 25% by Year 3 from the 2015 baseline. 0.2 At least 200 households experience increase in income as a result of project activities by Year 3, with an average income increase of 20% from project baseline. 0.3 By Y3, project beneficiaries report increased wellbeing from participation in project activities, uncovered through deep dive case studies focusing on at least 6 different project actors and shorter, wellbeing focused questions in the end line survey. 0.4 Culturally and economically important wildlife (specifically including the sacred Siamese crocodiles and Asian elephants) and forest resources are under active protection and management by at least 8 villages by Y3 | 0.1 Hunger months were reduced by 30%. The end line sample size was 112 households, a 31% representation the 361 active participants in the project. Evidence found in Annex 7.1. 0.2 With over 350 households participating in different elements of the project, they experienced different increases in income levels. Chicken members experienced a 273% increase in income gained from the sales of chickens (from making \$12 every three months to \$47), while the Village Poultry Advisor (VPA) had a revenue of \$3,707 with a profit of \$1,577 from her chicken focused enterprise. Meanwhile, Lemongrass Essential Oil Enterprise (LGE) members made an average of \$225 per person, and lemongrass growers \$56 per person whereas before, there was no income from this source. There was a 15% average increase in annual income from the baseline across all participants, with higher participation in project activities correlating with higher income. For example, for those members who participated in both rice and chicken activities, they had an average increase in income of 19%. Evidence found in Annex 7.1. 0.3 Project participants reported increases in wellbeing across all three dimensions, human, material and Social. Findings can be found in Annex 7.1 and 7.10. 0.4 Community Wardens conduct monthly SMART patrols in 5 key Siamese crocodile sites (wardens from 10 villages) and in core Asian elephant habitat (wardens from 3 villages), monitoring threats to the species and their habitats and providing the areas with active protection from such threats. Evidence found in Annex 7.13 to 7.22. 0.5 Knowledge and recognition of the role of indigenous and marginalised communities in protecting Cambodia's wildlife was improved through a six month Facebook communications campaign. Evidence of increase in knowledge and recognition can be found in the Annex 7.2. |

| | 0.5 By end of project, knowledge and recognition of the role of indigenous and marginalised communities in protecting and conserving Cambodia's culturally important/globally threatened biodiversity is increased as reported by a sample of the population in response to a project | |
|--|---|---|
| | administered Facebook questionnaire. | |
| Output 1. Improved capacity among 8 target villages to sustainably increase and diversify food production | 1.1 Improve average per-hectare yields of rice by 25% in 5 beneficiary villages by Y3 for 2016 baseline | All indicators are appropriate except for 1.5 which was redundant. 1.1 Rice yields increased on average by 23% across five villages. Evidence provided in Annex 7.1 1.2 Dictory diversity elightly increased on average from 4 to 4.2 across 8 villages as |
| | 1.2 Improve community level dietary | measured by the UNFAO's Dietary diversity Index. Evidence provided in Annex 7.1 |
| | based on the 2016 baseline | 1.3 Chicken production increased on average by 67%, and chicken consumption increased on average by 156% across nine villages. Wild caught animals as a component of diet did not show a significant increase or decrease. Evidence provided |
| | produced and consumed farmed animals' | in Annex 7.1 |
| | increases by 20% in four villages; wild caught animals decrease as a component | 1.4 14 bio-digesters were piloted in December 2016, and due to their failure, this element of the project was stopped in 2016 (Ref Annex 7.6 & 7.7). |
| | | 1.5 There were no successful bio-digesters implemented (Ref Annex 7.7). |
| | 1.4 By end year 2, 14 bio digesters piloted in upland sites and results fed back to inform project implementation | |
| | 1.5 Where bio-digesters are implemented successfully by the end of Y2 there is at least a 50% reduction in firewood as a household fuel, by the end of Y3 | |
| Activity 1.1 Conduct surveys to inform agricu identification of additional crops for introduction | ultural output baselines, community-led on and harvesting. | Completed and reported in Year 1 |
| Activity 1.2. Provide agricultural training and support rice-growing techniques, provide tech harvesting | ongoing support for rice intensification, nnical expertise during cultivation and | Two seasons of rice trainings were conducted, including 44 group training sessions with 562 participants, 103 individual coaching sessions, 2 exchange visits and 2 enterprise development training courses. Evidence provided in Annex 7.1 |
| Activity 1.3 Provide agricultural training and support crop-growing techniques, provide techniquesting | ongoing support for crop diversification, chnical expertise during cultivation and | This activity is no longer relevant to the revised log frame |
| Activity 1.4 Pilot use of household-level aqua establish baselines on household consumption | aculture as a protein source alternative, on of farmed vs wild-caught animals | In Y1, an analysis resulted in an official change to chicken production as it was more effective for the area. 33 group trainings were conducted to 468 participants, 82 individual coaching sessions to 595 participants, 1 exchange visit, 1 enterprise development training course and 1 private sector connections workshop. Evidence provided in Annex 7.1 |

| Activity 1.5 Install pilot bio-digesters, ensure maintenance of units and provide support for production and application of fertiliser, and monitor the impact of bio-digesters at pilot households | | 14 bio-digester were installed in year 1. Evidence provided in Annex 7.6 |
|--|---|--|
| Activity 1.6 Conduct training and provide support on application of bio-digester derived bio-gas as an energy alternative, to women in pilot households, and monitor the impact of bio-digesters at pilot households | | The bio-digesters pilot failed, and so the activities were not continued. Evidence provided in annex 7.6 & 7.7 |
| Activity 1.7 Set up frameworks and methods to enable gendered monitoring and evaluation of agricultural indicators | | Annual data was collected for rice yields, income, hunger months and dietary diversity. Quarterly data was collected for chicken production, consumption, sales and income. Evidence provided in Annex 7.1 |
| Output 2. | 2.1 Targeted business and enterprise | All indicators are appropriate. |
| By Year 3, women and men in at least 8 target villages adopt measures to promote their sustainable use of forest resources and at least 200 households generate increased revenue from, agricultural activities and sustainable micro-enterprises | 2.1 Enterprise development training courses were provided to four enterprises; 2 Agri- businesses and seed purifiers; 2 Village Poultry Advisor (VPA) and the Lemongrass Essential Oil enterprise (LGE). Evidence provided in Annex 7.1 | |
| | 2.2 Two enterprises are up and running as strong profit-making businesses (VPA enterprise and the Lemongrass Essential Oil Enterprise). The two agri-businesses are still in early stages, while profitable, they are not yet sustainable due to market access to provincial goods still an issue. Evidence provided in Annex 7.1 | |
| 2.3 By end of project, key market networks are created or strengthened for 2 key products in at least 6 villages and by end of | 2.3 Market actor connections workshops were successfully implemented for chickens and essential oils, with market networks strengthened for chickens, organic rice inputs and lemongrass essential oils across 9 villages. Evidence provided in Annex 7.1 | |
| | year 2, two market actor connection workshops successfully implemented. | 2.4 The chicken production-focused enterprise serviced 105 households who had an average increase of 273% in income from chicken sales, directly due to the enterprise improving their access to inputs and expertise. The six Lemongrass enterprise members |
| | 2.4 By Y3, women and men in at least 200 households generate increased incomes from new enterprises. Overall average annual incomes increase by 20%. | generated an average of \$225 per person, and 22 official lemongrass growers generated an average of \$56 per person. The lemongrass enterprise bought lemongrass from 50 other households, however the exact figures were not gathered. The agri-businesses and seed purifiers were too small to directly associate increased incomes for community members from. The total number of household's directly generating income from |
| | 2.5 By end Y3 and based on project baseline, 50% increase in water filter use across 4 villages, resulting in improved | enterprises therefore, was 133. The overall average annual income for members who participated in chicken and rice production, rose by 19% from the baseline. Evidence provided in Annex 7.1 |
| | household safe water drinking practices and reduced household diarrhoea resulting in improved nutrient absorption, health, productivity and food security. | 2.5 Water Filter use has risen by 74% across six villages, time spent collecting firewood has reduced by 71% (proxy for firewood use) and there has been a reduction in child and adult Diarrhea. Evidence provided in Annex 7.1 |
| | | |
| Activity 2.1 Identify existing agricultural and harvesting of NTFPs, identify opportunities for undertake market analysis for relevant NTFP different training needs of women and men in | NTFP networks, cooperatives and local or creation/strengthening of networks, and agricultural products, and identify n business and enterprise skills | Agricultural survey completed and reported in Year 1 (Ref Annex 7.11). |

| Activity 2.2 Provide business and enterprise skills training and support to small-scale initiatives that contribute to diversification of sustainable livelihoods, provide education and outreach to link the sustainable use of natural resources and development of sustainable diversified livelihoods | | Four Enterprise development training courses were delivered to key project participant micro-entrepreneurs. See Section 2.1 for details. An environmental education three day training course called <i>Why Conservation Matters</i> training course was delivered to promote the sustainable use of natural resources. Evidence provided in Annex 7.12 A wide range of materials, including promotional materials (stickers, backpacks, and water bottles), brochures and posters on the importance of crocodiles and elephants and about why HEC occurs were produced (Annexes 7.31-7.34). | | |
|---|---|---|--|--|
| Activity 2.3 Provide support to new and existing agricultural and NTFP network operations, sustainability and governance Activity 2.5 Set up frameworks and methods to enable ongoing monitoring and evaluation | | Three private sector connections meetings were conducted in Y3: Chicken micro-entrepreneurs and animal input private sector Rice micro-entrepreneurs and agricultural input suppliers Lemongrass enterprise and Essential oil Private sector Three exchange visits were delivered, one focusing on chicken production, one on rice members and one on lemongrass essential oils (Ref Annex 7.1). Paravet enterprise business data was collected on a monthly basis, Lemongrass Essential | | |
| of forest use and income indicators | | Oil Enterprise financial data was collected on a monthly basis, Agri-business financial data was collected at the end of the season and annual income was collected on an annual basis. Evidence provided in Annex 7.1 | | |
| Outcome 3. By Y3 enable at least 8 villages (of 13 in the project area) to establish special measures to protect and conserve sacred and culturally important biodiversity including Siamese crocodiles and Asian elephants and their habitats | 3.1 By Y3 Asian elephant monitoring and protection programme is established across at least 3 villages, with indigenous communities as skilled custodians 3.2 Project-level methodology established to monitor forest encroachment in at least 8 villages 3.3 By Y3 the number of community patrol days for Siamese crocodile monitoring and protection increases by at least 25% from the 2015 baseline, led by indigenous and marginalised communities across the 5 community-managed sanctuaries 3.4 By Y3, at least a 50% reduction in prevalence of fishing nets in Siamese crocodile sanctuaries compared to 2015 baseline, and not more than 3 crocodiles lost to poaching or drowning in nets across 5 community-managed sanctuaries during the project period | All indicators are appropriate. The baseline data for fishing nets in crocodile sanctuaries is available from 2016. 3.1 Elephant community warden programme to monitor and protect key elephant habitat established, with seven wardens from three different villages. 3.2 Methodology developed to monitor land use change across all 12 villages through a forest cover analysis of the project area (Ref Annex 7.28). 3.3 Community Crocodile Wardens patrolled 311 days in 2018 in 5 Siamese crocodile sanctuaries (Ref Annex 7.17). This constitutes a 38% increase over the 2015 baseline of 192 patrol days (Ref Annex 7.19). 3.4 Wardens observed 5 fishing nets in the sanctuaries in 2018, a 72% decrease from the 18 seen in 2016 (baseline) (Ref Annexes 7.13-22).No incidents of poaching or drowning of crocodiles through accidental capture were recorded during the period. 3.5 We have supported zonation efforts led by Wildlife Alliance, which have resulted in a map demarcating proposed levels of protection within protected areas in the Cardamom Mountains landscape (Ref Annex 7.30). This has been shared with the Ministry of Environment and is under review. 3.6 By the end of year three, Community Guard teams are operating in five villages in HEC mitigation as part of a collaboration between FFI and the Forestry Administration (Ind. 3.6). In two villages Community Elephant Wardens and guarding groups are conducting HEC mitigation, elephant protection patrols and Camera trap monitoring. In addition, in five other villages, FFI and the forestry administration are conducting HEC mitigation and camera trap monitoring (Ref Annex 7.13-7.24). The number of human-elephant conflict (HEC) | | |

| | 3.5 By the end of Y3, recommendations to government made for demarcation of key protected areas for elephant conservation 3.6 By Y3, in at least 5 villages community guard teams successfully reduce the number of incidents of human elephant conflict on cropland using non-lethal methods from 2015 baseline 3.7 By the end of Y3, increased local understanding of the importance of, and human impact on, key target species. | incidents we documented was 63 in 2016, 85 in 2017 and 107 in 2018 (Ref Annexes 7.25-27). This is an increase from the 2015 baseline of 74. However, this trend is likely a result of HEC becoming an increasing issue due in part to migration of people into elephant habitat, and also of improved reporting due to our growing relationship with affected communities 3.7 The Communications campaign evaluation form showed increased knowledge and facts about crocodiles, elephants and conservation in Cambodia (Ref Annex 7.2). |
|---|---|---|
| Activity 3.1 Establish and support communit protection programme | y-led Asian elephant monitoring and | We support seven community elephant wardens from three different villages. They conduct monthly patrols, monitoring elephant presence and threats using SMART. The wardens are also working with our team in the elephant monitoring programme using 42 currently deployed camera traps. |
| Activity 3.2 Monitor forest encroachment using landscape-level analysis and ground-truthing of forest boundaries | | We have developed a protocol for monitoring land use change across all 12 villages, and we are monitoring forest loss annually around the communities in which we work. A forest cover analysis of the project area has been undertaken (Ref Annex 7.28). Overall, we have seen minimal forest clearance into the protected areas. For the covered areas, 8,954 ha of forest was lost. Much of this was in community land, although O'Soam saw clearance of more forested land in the protected areas. |
| Activity 3.3 Support and increase in patrol d monitoring and protection in crocodile sanctu | ays for community-led Siamese crocodile aries | Our 31 crocodile wardens continue to patrol five crocodile sanctuaries monthly (~10 days per month), using SMART to monitor threats and crocodile presence. Community Crocodile Wardens patrolled 3,771 km over 311 patrol days during in 2018 in 5 Siamese crocodile sanctuaries (Ref Annex 7.15). This constitutes a 38% increase over the 2015 baseline of 192 patrol days and a 52% increase of the 2,483 km patrolled in 2015. |
| Activity 3.4 Undertake outreach and educati crocodiles and awareness raising on illegal fi | on on effects of fishing and nets on wild shing laws | Crocodile wardens regularly engage with fishermen and community members concerning fishing impacts and regulations, and this is monitored using SMART. We have had no incidents of poaching or drowning of crocodiles through accidental capture during the period. |
| Activity 3.5 Conduct surveys to identify key usage, and present recommendations for pro | areas of elephant habitat connectivity and otected area demarcation to the government | We have engaged with the Ministry of Environment and local communities concerning protected area zonation and demarcation. In collaboration with the NGO Wildlife Alliance, we have demarcated key parts of the protected areas around the critical elephant habitats, and drafted a proposed zonation scheme for the entire Cardamom Mountain Landscape. The Ministry of Environment is currently reviewing the proposal. |
| Activity 3.6 Provide support and training for conflict mitigation, and maintain communicat | community guard teams on human-elephant ion and data collection methodologies | We supported community members and guarding groups in human-elephant conflict (HEC) mitigation. We also trained Ministry of Environment rangers in HEC mitigation techniques and supported them to take a more proactive role in the communities in response to HEC. We undertook an assessment of HEC to help inform the development of a strategy moving forward. Evidence provided in Annex 7.25. |

| Activity 3.7 Set up frameworks and methods to enable ongoing monitoring and evaluation of forest encroachment and species conservation indicators | | We have developed a protocol for monitoring land use change across all 12 villages (Ref Annex 7.28). | | | | |
|--|---|--|--|--|--|--|
| | | We have frameworks in place to monitor populations of Siamese crocodiles and Asian elephants. For Siamese crocodiles, we undertake regular population surveys, recording any sightings and signs, including measurement and geo-referencing of crocodile tracks and droppings. An array of camera traps in core elephant habitat allows us to monitor elephant populations and threats. For both species, we record data using SMART Ref Annexes 7.13-22, 7.35). | | | | |
| Output 4. | 4.1 Assessment finalised during Y1 of | All indicators are appropriate | | | | |
| Communications campaign to raise | knowledge and cultural values in the project | 4.1 An assessment was completed during Y1, evidence provided in Annex 7.4 & 7.5. | | | | |
| and skills of indigenous and | area, to inform subsequent activities | 4.2 The stakeholder analysis was completed in Y2, evidence provided in Annex 7.2. | | | | |
| marginalized people in the Cardamom Mountains, and their role in protecting Cambodia's sacred and culturally important biodiversity.4.2 Stakeholder analysis completed during Y2 to identify priority audiences for messages4 4 1 messages | 4.3 Communications materials were developed in Y2, evidence provided in Annex 7.2. | | | | | |
| | 4.4 The communications campaign reached a total of 706,050 Cambodians, averaging 117,675 people per month. There were 57,617 post engagements, averaging 9,603 per month and an average engagement rate of 8.41%, evidence provided in Annex 7.2. | | | | | |
| | 4.3 By Y2 communications materials have been designed and developed to specifically targeted priority audiences to promote the role of the indigenous communities in protecting Cambodia's landscapes | | | | | |
| | 4.4 By Y3, social media communications campaign has reached 250,000 Cambodians with at least 7000 individuals engaging directly on posts per month of the campaign. | | | | | |
| Activity 4.1 Collate existing data on indigenous knowledge and cultural values of both women and men to inform project activities, and devise appropriate communications messaging | | Completed in Y1, evidence provided in Annex 7.4 & 7.5 | | | | |
| Activity 4.2 Develop communications materials and identify key audiences for outreach and awareness on indigenous knowledge and skills and benefits for biodiversity conservation | | Completed in Y2, see annex 7.2 for evidence. | | | | |
| Activity 4.3 Provide specific training to gover and skills and benefits for biodiversity conser | rnment counterparts on indigenous knowledge vation | No longer relevant due to change in logframe approved by CR request. | | | | |
| Activity 4.4 Set up frameworks and methods of communications indicators | to enable ongoing monitoring and evaluation | Facebook analytics used to monitor and evaluate the impact of the campaign, evidence provided in the lead form results in Annex 7.3. | | | | |

Annex 3 Standard Measures

| Code | Description | Total | National | Gender | Title or Focus | | Comm |
|--------|--|-------|----------|--------|---|----------|------|
| Traini | ng Measures | lotai | ity | Gender | | Language | ents |
| 1a | Number of people to submit PhD thesis | 0 | - | - | - | - | - |
| 1b | Number of PhD qualifications obtained | 0 | - | - | - | - | - |
| 2 | Number of Masters qualifications obtained | 0 | - | - | - | - | - |
| 3 | Number of other qualifications obtained | 0 | - | - | - | - | - |
| 4a | Number of undergraduate students receiving training | 0 | - | - | - | - | - |
| 4b | Number of training weeks provided to undergraduate students | 0 | - | - | - | - | - |
| 4c | Number of postgraduate students receiving training (not 1-3 above) | 0 | - | - | - | - | - |
| 4d | Number of training weeks for postgraduate students | 0 | - | - | - | - | - |
| 5 | Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification (e.g., not categories 1-4 above) | 6 | Khmer | Male | Field work skills incl. facilitation skill | Khmer | |
| 6a | Number of people receiving other forms of short-term education/training (e.g., not categories 1-5 above) | 367 | Khmer | Mixed | Rice production, Chicken production, Lemongrass Essential oil production, Sanitation and hygiene, Enterprise development, Facilitation skills, SMART and GPS. | Khmer | |
| 6b | Number of training weeks not leading to formal qualification | 90 | Khmer | Mixed | Rice Production training (44) Chicken production training (33) | Khmer | |

| 7 | Number of types of training materials produced for use by host country(s) (describe training materials) | 2 | Khr | ner | - | Lemo Ent SMART Presenta Chicke Rice Pro SMAR | ngrass Essential Oil erprise training (8) cilitation skills (5) and GPS training (38) tions, posters, tool kits, manuals: en production training course duction training course RT and GPS training | Khmer | |
|-----|--|-----|-----|------|---------|--|--|----------|--|
| | Research Measures | Tot | al | Nati | onality | Gender | Title | Language | Comm ents/ Weblin k if availa ble |
| 9 | Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (ies) | 1 | | | - | - | Draft National Elephant Action Plan | Khmer | - |
| 10 | Number of formal documents produced to assist work related to species identification, classification and recording. | 0 | | | - | - | - | - | - |
| 11a | Number of papers published or accepted for publication in peer reviewed journals | 1 | | | - | - | Release of critically endangered crocodiles: Development and application of a food web approach to | English | - |

| | | | | | determine suitability of release habitat | | |
|-----|---|---|---|---|---|---|---|
| 11b | Number of papers published or accepted for publication elsewhere | 0 | - | - | - | - | - |
| 12a | Number of computer-based databases established (containing species/generic information) and handed over to host country | 0 | - | - | - | - | - |
| 12b | Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country | 0 | - | - | - | - | - |
| 13a | Number of species reference collections established and handed over to host country(s) | 0 | - | - | - | - | - |
| 13b | Number of species reference collections enhanced and handed over to host country(s) | 0 | - | - | - | - | - |

| | Dissemination Measures | Total | Nationality | Gender | Theme | Language | Comments |
|-----|--|-------|-------------|--------|---|----------|--|
| 14a | Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work | 1 | UK | Male | Darwin Project learning points | English | A seminar was run at FFI head office discussing disseminating learning points from this project. |
| 14b | Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated. | 1 | UK | Male | Integrated conservation and livelihoods through essential oils | English | Regional Agroecology conference. |

| | Physical Measures | Total | Comments |
|----|--|---------|--------------------------|
| 20 | Estimated value (£s) of physical assets handed over to | 5227.93 | Motorbike x1 |
| | host country(s) | GBP | Laptop x4 |
| | | | Fan x2 |
| | | | GPS x5 |
| | | | Pump x1 |
| | | | Hard drive x1 |
| | | | Screen projector x1 |
| | | | Whiteboard with stand x1 |
| | | | |
| 21 | Number of permanent educational, training, research facilities or organisation established | 0 | - |
| 22 | Number of permanent field plots established | 0 | - |

| | Financial Measures | Total | Nationality | Gender | Theme | Language | Comments |
|----|--|-------------|-------------|--------|-------|----------|--------------------------------|
| 23 | Value of additional resources raised from other sources (e.g., in addition to Darwin funding) for project work | GBP 613,767 | - | - | - | - | See section 8.2 for details |

Annex 4 Aichi Targets

| | Aichi Target | Tick if applicable to your project |
|----|---|---|
| 1 | People are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably. | Х |
| 2 | Biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems. | Х |
| 3 | Incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions. | Х |
| 4 | Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits. | |
| 5 | The rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced. | Х |
| 6 | All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits. | Х |
| 7 | Areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity. | |
| 8 | Pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity. | |
| 9 | Invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment. | |
| 10 | The multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning. | |
| 11 | At least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes. | Х |
| 12 | The extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained. | X |
| 13 | The genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity. | |

| 14 | Ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable. | |
|----|--|---|
| 15 | Ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification. | |
| 16 | The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation. | |
| 17 | Each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan. | |
| 18 | The traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected | Х |
| | in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels. | |
| 19 | in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels. Knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied. | x |

Annex 5 Publications

| Type * (e.g. journals, manual, CDs) | Detail (title, author, year) | Nationality of lead author | Nationality of institution of lead author | Gender of lead author | Publishers (name, city) | Available from (e.g. web link, contact address etc) |
|---|---------------------------------|-------------------------------|---|--------------------------|----------------------------|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Annex 6 Darwin Contacts

| Ref No | 23-027 |
|----------------------------|--|
| Project Title | Cultural and economic incentives for endangered species conservation in Cambodia |
| | |
| Project Leader Details | |
| Name | Tim Bergman |
| Role within Darwin Project | Project Manager |
| Address | |
| Phone | |
| Fax/Skype | |
| Email | |
| Partner 1 | |
| Name | Khoun Narin |
| Organisation | Promvihearthor Organization |
| Role within Darwin Project | Implementing local partner for livelihoods activities |
| Address | |
| Fax/Skype | |
| Email | |
| Partner 2 etc. | |
| Name | Mr Sam Han |
| Organisation | Forestry Administration |
| Role within Darwin Project | FFI Cambodia, |
| Address | |
| Fax/Skype | |
| Email | |
| Partner 3 | |
| Name | Ben Jeffreys |
| Organisation | Engineers without Boarders |
| Role within Darwin Project | Bio-digesters lead |
| Address | |
| Fax/Skype | |
| Email | |
| Partner 4 | |
| Name | Antoine Bancel |
| Organisation | Bodia Spa and Apothecary |
| Role within Darwin Project | Essential Oils Private Sector (informal partner) |

| Address | |
|-----------|--|
| Fax/Skype | |
| Email | |