



Illegal Wildlife Trade (IWT) Challenge Fund Final Report

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

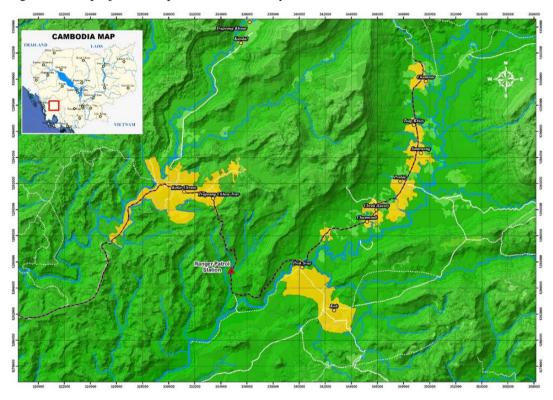
IWT Challenge Fund Project Information

Project reference	IWT-035
Project title	Sustainability through ecotourism: improving livelihoods and disrupting wildlife trade, Cambodia
Country(ies)	Cambodia
Lead organisation	Wildlife Alliance
Partner institution(s)	Areng Valley and Chi Phat Community Based Ecotourism Associations / Department of Terrestrial Protected Areas, Ministry of the Environment, Royal Government of Cambodia
Total IWT grant value	270,310 GBP
Start/end dates of project	1 st April 2017 – 31 March 2020
Project leader's name	Sophany Touch
Project website/blog/social media	www.wildlifealliance.org / https://www.facebook.com/arengecotourism/ http://www.areng-valley.org/en/
Report author(s) and date	Sophany Touch, Thomas Gray, Jessica Knierim, Ollie Roberts
	29 April, 2020

1. Project Summary

Cambodia is at the fulcrum of the global Illegal Wildlife Trade acting as a source, transit, and destination for many of the world's most trafficked species of flora and fauna. The remote Cardamom Rainforest Landscape in South-West Cambodia is a global biodiversity hotspot which supports more than 50 IUCN Threatened species of bird, mammal, and reptile; ~60% of which are significantly impacted by the Illegal Wildlife Trade (Annex 4.1). Limited livelihood opportunities in local communities, combined with institutional corruption and ineffective law enforcement, facilitate the pervasive impacts of illegal trade on the Cardamom's wildlife. This project addressed the dual issues of wildlife trade and rural poverty through an integrated approach of 1) developing sustainable livelihoods for communities dependent on maintaining natural resources (i.e. Community Based Ecotourism) and 2) effective, supervised law enforcement patrolling from one Wildlife Alliance ranger station in the heart of the Cardamom Rainforest Landscape.

Together with our partners (see Section 2) we established a bottom-up and inclusive Community Based Ecotourism (CBET) project across eight forest communities (total population 461 families; ~ 1,900 individuals) with high poverty levels in the remote Areng Valley in the Cardamom Rainforest Landscape. Prior to establishing the project we conducted a Livelihood Assessment in the Areng Valley which indicated that illegal logging and wildlife poaching for commercial trade were substantial sources of revenue for communities. This highlighted the need for developing sustainable alternative livelihood strategies. In 2016 the government of Cambodia committed to improving road access into the Areng Valley which, whilst facilitating economic development and improving access for ecotourism, would likely lead to a concurrent increase in levels of illegal activity including wildlife trade. Poverty is driving the Illegal Wildlife Trade in Areng Valley as villagers traditionally had limited sources of revenue outside hunting and selling wildlife to local middlemen. Additionally, when families need cash they borrow money from these middlemen; when they cannot pay back their loans they are forced to provide in-kind payments by providing hunted wildlife for free. Families are thus entrapped in an endless cycle of poverty and destruction of natural resources, where debt and wildlife trafficking are inextricably linked together. The project attempted to break this cycle.



Map of Project Location including 8 villages of Areng Valley and Chhay Areng Ranger Station

In addition to CBET development (Outputs 1-3) the project also supported effective law enforcement patrolling from the Chhay Areng Ranger Station on the edge of the Areng Valley (Output 4). In the Cardamom Rainforest Landscape Wildlife Alliance implement a uniquely effective boots-on-the-ground law enforcement model focusing on professional, trained, supervised, and equipped law enforcement rangers. Our approach is not that of a traditional conservation NGO and we do not implement the failed model of hands-off 'business as usual conservation'. Instead we are proud that we directly supervise and manage all law enforcement. We ensure our rangers are well paid, receive full health and life insurance, have the equipment and capacity to work safely and effectively, and are motivated and led by inspirational supervisors. We create a culture of excellence in conservation, high performance, and zero tolerance for corruption. Our direct management and supervision of rangers ensures they work effectively and means we exert good governance over all activities. We use intelligence, from confidential informants, to proactively prevent illegal activity, particularly deforestation and illegal logging, and actively work with courts and the judiciary to ensure legal penalties against forest and wildlife offenders.





Siamese crocodile (left) and Sunda pangolin (right) two of the Critically Endangered species impacted by the Illegal Wildlife Trade which project hoped to recover through reduced poaching in the Areng Valley.

Our Project Theory of Change was that increased income from CBET, combined with strong Law Enforcement from multi-agency law enforcement patrolling, would reduce poaching and illegal trade of threatened species in the landscape leading to population recovery.

2. Project Partnerships

The project partners identified in the original proposal were Chi Phat Community Based Ecotourism and the Department of Terrestrial Protected Areas, Ministry of the Environment, Royal Government of Cambodia. A key project Output (1.1) was the creation of a new local civil society partner – the Areng Community Based Ecotourism Association (STAR-CBET). STAR-CBET were the principal implementer of activities under project Output 2 and, through representing the people of Areng – the key project beneficiaries, will become the long-term custodians of the project. Whilst Wildlife Alliance provided technical support and overall project supervision, STAR-CBET implemented and managed all of the activities under Outputs 1-3. This approach ensured strong buy-in for all activities from the local communities and meant we implemented a truly bottom-up project. A letter of appreciation from STAR-CBET is included as Annex 4.2.

Chi Phat Community Based Ecotourism was the model and template for establishing STAR-CBET and many of the by-laws and policies developed in Chi Phat were implemented in Areng. Whilst Chi Phat Community Based Ecotourism had a limited formal role in project implementation the geographical (communities are approximately 35-km apart) and social (similar ethnic groups and considerable intermarriage) ties between the Areng and Chi Phat communities resulted in organic knowledge sharing, capacity and confidence building often outside the formal structure of the project. This was particularly important during the initial establishment of STAR-CBET.

The Department of Terrestrial Protected Areas (DTPA) within the General Department for Administration of Nature Conservation and Protection (GDANCP) of Cambodia's Ministry of Environment had a direct role in implementing project Outcome 4. Eight Ministry of Environment staff were seconded full-time to the project and were based out of the Wildlife Alliance Chhay Areng Ranger Station for the project duration. Ministry of Environment Judicial Police Offices were involved in filing all 27 court cases resulting from enforcement patrolling. Monthly and quarterly law enforcement reports were submitted by the project to the GDANCP head-office in Phnom Penh with regular, formal and informal, communication between Wildlife Alliance and the GDANCP Director General (Excellency Meas Sophal) and the Director of the DTPA for the Cardamoms (Kong Kimsreng). A letter of appreciation from the Ministry of the Environment is included as Annex 4.3.

All project partners will continue strong collaboration through the unifying approach of Wildlife Alliance, within the Cardamom Rainforest Landscape. A new DEFRA-IWT Challenge Fund project involving the same partners (IWTR6S1\100022: Disrupting transboundary orchid trade in the Cardamom Rainforest Landscape, Cambodia) was submitted to Phase 6 and is currently being considered under the Stage 2 review and assessment. The GDANCP remain key partners for the implementation of the Cardamom Rainforest Protection Program (https://www.wildlifealliance.org/cardamom-protection/) of Wildlife Alliance whilst the Areng and Chi Phat Community Based Ecotourism project are critical components of the Southern Cardamom REDD+ Project (https://cardamom.standfortrees.net/ and see also Section 11 of this report). The REDD+ Project has been developed by Wildlife Alliance and the Royal Government of Cambodia to secure long-term sustainable financing for the community and enforcement work required to protect the Cardamom Rainforest.

Outside our formal partners the project benefited from technical support when developing methodologies for collecting data on our conservation impact (Outcome Indicator 0.4) particularly related to robustly and anonymously monitoring levels of illegal poaching. Harriet Ibbett (https://www.iccs.org.uk/person/harriet-ibbett), from the United Kingdom based Interdisciplinary Centre for Conservation Science (https://www.iccs.org.uk/), supported the Wildlife Alliance Director of Science with this aspect of the project.

3. Project Achievements

3.1 Outputs

The project's Outputs were designed to deliver our overall Theory of Change and focussed on: establishing the capacities and systems necessary for developing a successful Community Based Ecotourism (CBET) project (Output 1); revenue generation to communities from ecotourism (Output 2); establishing micro-finance opportunities to support local enterprises and business (Output 3); protected area law enforcement patrolling to deter hunting from outsides (Output 4); and wider dissemination of the CBET model in Cambodia and beyond (Output 5).

Based on the Indicators associated with these Outputs we regard the project as being highly successful and making a significant, long-term, and sustainable contribution to Poverty Alleviation and Disrupting the Illegal Wildlife Trade in the Cardamom Rainforest Landscape (see also sections 5, 6, 7). By June 2018 all of the management structures, capacities, and infrastructure for establishing a successful CBET model in Areng were in place. These included a functioning CBET Association and management committee (Indicator 1.1), the identification and mapping of 65 ecotourism attractions (1.2), a total of 15 training events and 366 community members trained (1.3), and significant ecotourism infrastructure (1.4). See Annex 2 for detailed results and indicators as well as links to appropriate supporting materials. The Areng Valley Community Based Ecotourism project was officially opened by H.E. Mithona Phouthong the Provincial Governor of Koh Kong on 26th January 2018 following a soft opening in mid-2017. Since opening a total of 2,780 tourists (Indicator 2.4) have visited Areng Valley generating \$US 35,983 for the CBET Association and local service providers (2.1). The site has featured in multiple online travel and reviews (2.3)Planet: guides e.g. Lonely https://www.lonelyplanet.com/cambodia/southern-cardamom-national-park/activities/stung-arengcommunity-based-ecotourism/a/poi-act/1631841/1336586_), and five tour operators have signed contracts with the CBET association (2.2).

Areng Valley CBET has had major success in attracting large numbers of Cambodian visitors (2,666 since opening) which addresses one of our original concerns regarding the ecotourism project's ability to attract local tourists. This is hugely positive for the future sustainability of ecotourism in the Areng Valley whilst also allowing us to engage and influence Cambodian youth on environmental issues. As we discuss latter in this report (Section 13) this could be our most significant long-term legacy. However, we have received fewer international visitors that predicted (see Annex 2) and thus not achieving our revenue indicators (largely because foreign tourists generally stay longer and spend more than locals). Whilst we hope and expect that the number of foreign visitors will increase in 2021 and beyond (coronavirus and breakdown of global travel economy notwithstanding) the growth potential for domestic visitors remains high and we are not concerned over the long-term financial benefits which CBET will provide to the villagers of Areng.





Cambodian tourists enjoying nature and the Areng Valley. Connecting the country's future decision-makers and influencers with the environment could be the project's most important long-term legacy.

By Jan 2019 community Credit and Savings Groups were established in the six villages in the Areng Valley (Indicator 3.1) with clear rules and regulations identified and agreed upon (3.2) and 73 women provided with financial training (3.3). By December 2019 a total of 75 members were within the Credit and Savings Groups and 14 loans (totalling ~ \$US 1,800) had been distributed (Annex 4.4). As described below (Outcome) these loans have catalysed the development of small businesses and enterprises across these villages. Credit and Savings Groups were established in six villages. This is lower than the indicator (eight villages) as, due to small populations and social links, we combined two villages (Toapklei and Samroang) together to form a single group whilst an additional village, Koh the most accessible in the valley, had an existing micro-finance group established by the developmental organization CEDAC (the Cambodian Center for Study and Development in Agriculture). Fewer members initially joined the Credit and Saving Groups than we had predicted. This was likely due to a reluctance of some community members to invest into the scheme (minimum investment required as defined in the by-laws is 5,00 Cambodian Riel [~1.25 USD]) possibly due to limited disposable income.





IWT Final Report Template 2019

Harm Thouch (26 years old from Samrong village) obtained a loan of ~ \$US 350 from the Community Credit and Savings Group to open a small grocery and drink shop in her house.



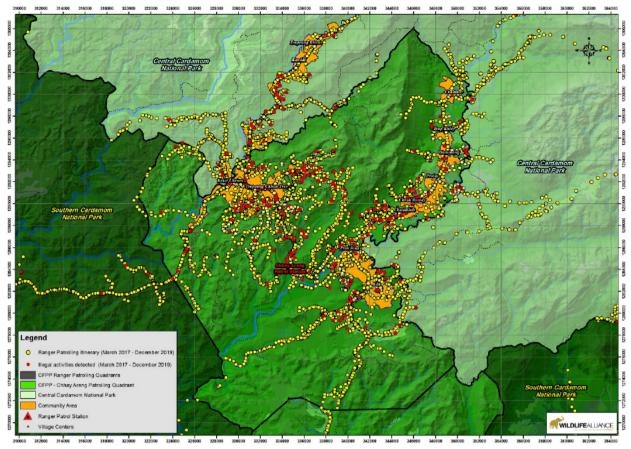


Credit and Saving Groups in action using equipment provided by the project

Output 4 supported effective multi-agency anti-poaching patrols of Wildlife Alliance from the fully equipped Chhay Areng Ranger Station. Across 36 months 1,241 patrols were conducted (mean 34 per month; Indicator 4.1) covering more than 50,000-km. This patrolling had a significant law enforcement impact on the Areng Valley: 223 illegal chainsaws, 25 vehicles, and 14 homemade guns were confiscated by the rangers. A staggering 10,967 lethal hunting snares were removed, 35-m³ of illegally harvested luxury timber confiscated and 68 illegal forest campsites destroyed. Eighty-three live animals (see Section 6) were rescued from illegal wildlife traders and released back into the forest. As a result of this impressive law enforcement effort 27 court cases against forest and wildlife criminals were filed by our project partners at the Ministry of Environment.



Wildlife Alliance Ranger with rope used to make an illegal hunting snare



Law enforcement patrol routes (March 2017 – December 2019) and detections of illegal activity by Chhay Areng rangers. A high-resolution version of this map is provided in <u>Annex 4.5</u>.

Complete quarterly law enforcement results from the Chhay Areng ranger team are provided in <u>Annex 4.6</u>.



Wildlife Alliance rangers on patrol (left) and confiscated illegal chainsaws in a ranger station evidence evidence room.

Throughout the project we have also been proactive in promoting our bottom-up and participatory model of CBET development and implementation. STAR-CBET has been represented at 12 national and regional ecotourism events, two study tours visited Areng (<u>Indicator 5.3</u>) and all the community by-laws and other resources have been disseminated on the Wildlife Alliance website (<u>5.2</u>).

3.2 Outcome

The project has achieved its overall outcome of reducing illegal poaching and commercial trade of threatened mammals through cultural pressure created through an increase in income and a reduction in poverty, combined with effective law enforcement.

The income and poverty rates across the 8 Chhay Areng communities improved slightly, but not to the degree predicted, with 40% of households earning > \$2000 per year (an 8.1% increase, <u>Indicator 0.1</u>) and rates of poverty at 9.52% (a 20.66% decrease, <u>Indicator 0.2</u>). However, whilst both the increase in income and reduction in poverty were not as notable as estimated or hoped, attitudes amongst the communities towards wildlife poaching as an important livelihood activity had changed drastically, resulting in it being perceived as the **least profitable** or worthwhile activity among all 8 communities (<u>Indicator 0.4</u>).

Equally positively, despite many of the respondents surveyed not being members of STAR-CBET, they reported that they were gaining income by selling products and services to tourists, such as NTFPs and handicrafts. The income survey showed a drastic change in income generation activities regardless of CBET membership, with 65% of income being from services that were complimentary to the STAR-CBET, such as labour for construction, taxi work, food vending and so on. Far fewer loans were issued than anticipated (<u>Indicator 0.3</u>), but this is believed to be due to small loan sizes and slow initial uptake. The Credit Groups are still active, and much like the tourism, we expect their effectiveness to increase in the near future.

We believe that the underestimation of the change in the income and poverty levels resulted from an over-estimation of the strength and pace at which tourism would be established in the Areng Valley. The initial results seem very promising, but more time is needed for tourism to increase in the valley, especially in regards to international visitors. In the project's 3 years, a 20% decrease in poverty is a substantial and promising start, and one that is predicted to continue as the STAR-CBET becomes better established, both nationally and internationally. We are also pleased to note that poverty and income levels have not negatively impacted as a result of stronger law enforcement, further substantiates the quick change in attitudes amongst the Chhay Areng communities against the profitability of the Illegal Wildlife Trade. If alternative livelihoods were not effectively supporting local people, we would expect stronger law enforcement to correlate with increased poverty and reduced income.

From our surveys, the recent slowdown in tourism caused by COVID-19 was identified as affecting the perceptions and profitability of the STAR-CBET for the communities, but despite this, sustainable alternative livelihood activities were still shown to be the main income source.

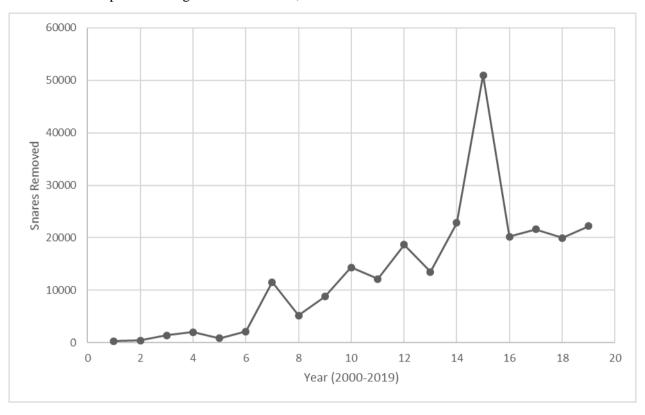
3.3 Impact: achievement of positive impact on illegal wildlife trade and poverty alleviation

The overall Project Impact is:

Globally significant populations of 19 Threatened mammals recover, and Global Goals for Sustainable Development are met by all communities, across 5,000-km² of tropical rainforest of the Cardamom Rainforest Landscape, Cambodia

This highlights the integration of our IWT Challenge Fund project with the wider landscape conservation program of Wildlife Alliance within the Cardamom Rainforest Landscape. This project contributes to our programmatic impact by reducing poaching threats to wildlife due to a combination of enhanced livelihood opportunities ('carrot') and effective law enforcement ('stick'). The project's law enforcement component (Output 4) is part of the comprehensive Cardamom Rainforest Protection Program (https://www.wildlifealliance.org/cardamom-protection/) of Wildlife Alliance. We currently operate across 8,347-km² of the Cardamom Rainforest Landscape with 131 rangers active 24/7 out of nine professionally equipped ranger stations. In 2019 4,139 enforcement patrols prevented 126 cases of illegal land encroachment into Protected Areas, submitted 144 court cases against offenders, and confiscated 967 chainsaws and 706-m³ of illegally harvested luxury timber. A total of 479 vehicles were seized, 494 live animals were rescued from the Illegal Wildlife Trade and a staggering 22,207 snares and 16-km of pangolin net were removed and destroyed. However unambiguous evidence of the impact of this phenomenal enforcement effort on hunting levels is unclear. Whilst we have clearly experienced some high-level successes such as Zero Poaching of Asian elephant in the landscape since 2006 (see

https://www.asesg.org/PDFfiles/2016/Gajah% 2045/45-35-Gray.pdf) the volume of illegal hunting snares set in the landscape remain high with almost 250,000 snares removed since 2001.



Number of illegal hunting snares removed annually by Wildlife Alliance rangers in the Cardamom Rainforest Landscape.

We believe the worrying increase in snares is due to increased demand by outsiders for wildlife products. This increased demand is driven by the massive recent Chinese investment in Cambodia which is part of China's national Belt and Road Initiative. This investment has been associated with land-grabbing and speculation, currently the most significant drivers of deforestation in Cambodia, as well as increased demand for illegal wildlife products. The newly developed coastal Sihanoukville Special Economic Zone, approximately 70-km from the Cardamom Rainforest Landscape, has over 100 Chinese enterprises and companies with a total investment of more than 3 billion US dollars. This Chinese investment both increases the value of land, thus promoting land speculation and illegal deforestation, whilst also stimulating demand for illegal wildlife products for exotic dishes and extraction of body parts for traditional Chinese medicine. Chinese designated Economic Zones in other countries such as Laos have been strongly associated with the illegal wildlife trade. These huge socio-political impacts and changes in Cambodia (which have been widely documented in Western Media e.g. Al Jazeera, The Guardian, CNN, Los Angeles Times, DW, Wall Street Journal) are difficult for Wildlife Alliance to systemically address; instead we must maintain our constant on-the-ground vigilance and have our field teams working hard to limit the impact on the amazing wildlife of the Cardamoms.

This project also contributed significantly to our wider Impact Goals surrounding poverty reduction and the Sustainable Development Goals (SDGs). This project impacted eight villages in the Areng Valley with key SGDs addressed including No Poverty (1), Quality Education (4), Gender Equality (5), Decent Work and Economic Growth (8), and Life on Land (15). In addition to Areng, Wildlife Alliance also supports communities in Chi Phat (4 villages), are developing livelihood work elsewhere and are delivering (with funding from the Southern Cardamom REDD+ Project) an innovative community educational scholarship fund which covers 28 communities across the Cardamoms.

4. Monitoring of assumptions

Inevitably across the course of a three-year project, particularly one located on the forest frontier in a rapidly developing country such as Cambodia, we experienced changes in the social, political, and environmental context in which we were operating. These changes impacted some of the risks and assumptions which had influenced project design and our initial log-frame. Fortunately, the six-monthly and annual reports produced for the IWT Challenge Fund allowed us to assess and monitor our assumptions. The vast majority, particularly concerning the practicality (e.g. sufficient number of attractions for CBET in Areng) and effectiveness (e.g. opportunities for microenterprise exist in the Areng Valley and women sufficiently empowered to engage in Credit and Savings Groups) were met and realistic.

Most fundamental to project success are the Outcome Indicators which in our project were influenced by three important assumptions 1) income to communities from CBET is sufficient to change behaviour and reduce poaching within local communities 2) our monitoring is able to detect such changes and 3) law enforcement patrolling provides an additional deterrent to outsides accessing the forest for poaching. These assumptions (particularly 1 and 2) were integral to our Theory of Change. In Section 9.1 we discuss issues surrounding monitoring and, as illustrated by Outcome Indicator 0.4, we believe there has been evidence of reduction of hunting and wildlife trade by villagers together with a concurrent increase in income from CBET.

The extent to which enforcement patrolling is deterring poaching is more troublesome. The increase in the number of snares detected by Wildlife Alliance law enforcement rangers demonstrates that threats to the landscape's wildlife are not abating and that our current law enforcement response may not be sufficient in the face of increasing threats (see Section 3.3). These threats are largely driven by the massive Chinese investment in Cambodia and which may mean that aspects of our Theory of Change may no longer be valid at current levels of law enforcement. Whilst our project activities are clearly benefiting the communities of the Areng Valley and decreasing their illegal use of natural resources and levels of wildlife poaching, the outside forces impacting the landscape are much larger. And in project design we failed to predict the extent of future Chinese investment into Cambodia and the corresponding impact on the project and threats to biodiversity in the Cardamom Rainforest Landscape. These emerging threats to Cambodia's wildlife were described in a small piece, by Wildlife Alliance, published in the international conservation journal Oryx (https://doi.org/10.1017/S0030605319000899). It is worth noting the DEFRA support for law enforcement (Output 4) was approximately GBP 50,000 over the course of the 3-year project. This represents < 2% of the total budget required by Wildlife Alliance for law enforcement across the Cardamom Rainforest Landscape; and even this is probably not sufficient for effective protected area management given the lack of concurrent resources from the Cambodian government. More funds for law enforcement, combined with strengthening Cambodian legislation to effectively punish snaring and reducing the demand for wildlife products amongst Chinese expatriates and visitors, is critical.

As documented in Section 3 we were not able to achieve our Output goals related to tourist visitors and income. We believe this is more due to over ambitious goals (particularly in terms of foreign visitors and associated income) rather than incorrect assumptions and logic within the project design.

5. Project support to the IWT Challenge Fund Objectives and commitments under the London Declarations and Kasane Statement

Our project directly addressed multiple themes and commitments of the London Declaration on Illegal Wildlife Trade and the objectives of the IWT Challenge Fund. Project Outputs 1, 2, and 3 developed

long-term and sustainable livelihoods benefiting people directly affected by Illegal Wildlife Trade (IWT Challenge Fund Theme 1; London Declaration Commitment XIII). Output 4 focussed on directly strengthening law enforcement to deter wildlife trade and poaching in the Cardamom Rainforest Landscape (IWT Challenge Fund Theme 2; London Declaration Commitment XVIII). Law enforcement is the unique speciality of Wildlife Alliance and there are clear benefits of the Chhay Areng station in strengthening enforcement against the illegal wildlife trade. Over the 36-month project period 1,241 enforcement patrols made a significant impact on illegal activity in the Areng Valley (see Annex 4.6). The project also had significant economic and poverty alleviation benefits as demonstrated by the 366 community members trained, the 2,780 visitors to Areng CBET, and the \$US 1,800 worth of loans issued by the Credit and Savings Groups. Equally important has been the establishment of long-term management structure (Output 1) for ensuring the project delivers sustainable long-term benefits.

Our focus throughout the project was on developing sustainable livelihood opportunities for communities impacted by, and participating in, the Illegal Wildlife Trade. For such interventions to be successful it is critical that financial incentives are created to maintain natural resources. Ecotourism is an important tool for this; tourists visit Areng and the Cardamom Rainforest Landscape because wildlife and nature is present. Economic development *per se* does not equate to reduced Illegal Wildlife Trade. Community livelihood projects which neglect the link with intact natural resources often increase levels of exploitation of wildlife. New money into communities on the forest frontier can be used to buy more snares, hire people to hunt, or allow villagers to become middle-men or traders.

6. Impact on species in focus

The impact of the project on the status of the ~32 IUCN Threatened species of mammals, bird, and reptile present in the Cardamom Rainforest Landscape and which are impacted by the Illegal Wildlife Trade (Annex 4.1) was not directly monitored. No indicators in the project log-frame are linked to the status of threatened species. This is largely because robustly documenting changes in the status of threatened species in dense evergreen forest is extremely difficult (particularly within the duration of a short three-year project) especially when these species rare, elusive, and nocturnal. There is, nevertheless, strong anecdotal evidence of the **project having positive impacts on threatened species impacted by the Illegal Wildlife Trade** in the Areng Valley. Our ranger patrols removed 10,967 lethal hunting snares and 1.8-km of hunting nets (largely set for pangolins and porcupines) from the Areng patrol quadrant during the reporting period. Each snare represents a potential death-trap for threatened species.



Globally Endangered banteng (left) and greater hog badger (right) caught in snares in the Cardamom Rainforest Landscape. The banteng, part of a relict population <50 individuals, died.

Patrol teams also rescued 83 live animals from hunters and wildlife traders in, and around, the Areng Valley. These included Sunda pangolin (IUCN Critically Endangered), Southeast Asian box turtles (uplisted during the project period to IUCN Endangered due to the impacts of the illegal wildlife trade), Burmese python (IUCN Vulnerable). Bengal slow loris (IUCN Vulnerable), and grey-headed parakeet (IUCN Near Threatened). All rescued animals were either returned to the forests or provided world class veterinary care at Phnom Tamao Wildlife Rescue Centre (https://www.wildlifealliance.org/wildlife-care/); a site managed with financial and technical support from Wildlife Alliance. Finally, camera-trapping within the landscape during the reporting period revealed important populations of multiple of our focal, threatened species impacted by the Illegal Wildlife Trade including sunda pangolin, Asian elephant, smooth-coated otter, sambar, sun bear, and mainland clouded leopard.



Camera-trap photographs of sun bear and mainland clouded leopard (above) and Asian elephant and smooth-coated otter (below) from Southern Cardamom National Park during the reporting period.



7. Project support to poverty alleviation

This project was explicitly designed to alleviate poverty within eight remote forest-dependent communities in the Areng Valley at the heart of the Cardamom Rainforest Landscape: a global 200 EcoRegion. The valley is home to approximately 460 families, many of whom are ethnic Chong, of which only just over one-third (37% in pre-project baseline) had annual incomes > \$US 2,000 per year and 12% lived under the Cambodian national poverty level (i.e. <\$0.9 daily income). Our activities and outputs addressed poverty in at least three ways i) providing new livelihood opportunities and income from Community Based Ecotourism ii) providing access to microfinance to support community enterprises and business and iii) building capacity and skills of community members, particularly women. This focus on training and capacity building created additional skills and opportunities for community members thus also allowing them to look for employment and opportunities elsewhere in

Cambodia. CBET is a long-term sustainable poverty alleviation strategy which has the potential to provide long-term and regular financial benefits to the Areng Valley communities. The high number of Cambodian visitors to the project bodes well for future sustainability given that income, and visitor numbers, may be insulated from global tourism factors.

Project Output Indicators specifically measured these contributions to poverty alleviation (see Section 3) which included \$US 35,983 USD in direct income to CBET providers over the course of the project, 366 community members trained, and 14 loans offered from the community credit and savings groups (who have a total of 75 members). The wider socio-economic changes within the communities (and changes to the absolute income and poverty changes) are measured through the Project Outcome Indicators. These showed progress with an increase in the number of households with annual income >\$US 2,000 and a decline in poverty rates (see Section 3). However, given the wider trajectories of economic development across the Cardamom Rainforest Landscape directly attributing improvement in these indicators to our specific project activities is difficult. For example, since the project begun an all-weather road and mobile telephone signal have arrived in the Areng Valley for the first time. And whilst these developments were genuinely partly due to our efforts, they will have also significantly contributed to poverty alleviation above and beyond those caused by our project activities.

8. Consideration of gender equality issues

The project strived to ensure gender and ethnic minority (e.g. non-Khmer) appropriate representation in all activities and decision making in order to reduce gender and ethnic inequality within the Areng Valley. Representative participation of women was a specific focus of six of our project Outcomes and gender disaggregated statistics were collected for all relevant indicators. We are particularly proud of the strong female representation in leadership roles within the Areng Valley Community Based Ecotourism Association (4 members of management committee female) and Credits and Savings Groups (12 members of management committee female; 73% of members female). We did not achieve our Output Indicator 1.3 of ensuring at least 60% of all trainees at ecotourism capacity building events were female. This was because many of the key activities and capacities required for wilderness ecotourism (e.g. forest guides; motorbike taxi drivers) were regarded as 'male' positions. The project (and perhaps society in the Areng Valley?) was not strong enough (yet) to break such gender taboos and challenge these stereotypes.

Project Outcome 3 aimed to develop Women's Savings and Credits Groups as a way to provide access to microfinance within Areng Valley communities and as an approach to reduce gender inequality and financially empower women. However, as the project developed this Outcome evolved, under the guidance of female community leaders, into a gender-neutral participatory Saving and Credit Groups. Whilst the communities acknowledged the critical need for microfinance (through transparent community managed loans) they felt that it was inappropriate to be exclusively for Women – a label they felt was Western donor imposed. Nevertheless, the six Savings and Credit Groups are de-facto largely female (73% of members women) as women usually manage household finances in rural Cambodian communities. Despite our best efforts, the lack of a coherent gender inclusion strategy was highlighted during the Annual Review process and we feel that more specific and practical guidance from the IWT Challenge Fund on this aspect is warranted. This would allow projects to effectively identify and capture their impacts on gender equality. This is likely to be particularly useful for projects led by from small civil society organisations in high biodiversity countries outside the United Kingdom and therefore unable to attend UK based workshops.

Lessons learnt

The project was developed, and implemented, with the benefits of twenty years of experience, and lessons-learnt, by Wildlife Alliance in the Cardamom Rainforest Landscape. Indeed, in January 2020 we celebrated our 20th Anniversary in the landscape with an event in the Areng Valley hosted by the Community Based Ecotourism Association. The most fundamental lesson we have learnt over these 20 years is – **if you want to create change be present in a landscape**. Had we taken the approach, as many conservation and development organisation do, of having our project staff based in the national or provincial capital with 'regular' trips to the 'field' we would have failed. In order to succeed the office needs to be the field.



Wildlife Alliance 20th Anniversary Celebrations in the Areng Valley



Wildlife Alliance staff literally live with the Community Based Ecotourism Association (staying in the CBET Centre) giving us a 24-7 presence for mentoring, monitoring, and trouble-shooting. This was particularly critical during the initial development of the project and the establishment of the regulations, capacities, and infrastructure for the CBET. As such this approach is a strong recommendation for any similar projects. This physical presence in the communities has also been important for establishing trust - particularly important when developing the Credit and Savings Group (see Output Assumption 3.2). Projects with similar goals (e.g. establishing micro-finance mechanisms) from other NGOs in the Cardamom Rainforest Landscape have largely failed as the mechanism is not trusted and there is no clear

grievance policy. As such community members were, understandably, wary of investing into such funds. By being based in the communities, and associating the Credit and Savings Groups with the CBET Management Committee, we were able to assure community members that we will respond promptly if there are any problems or issues and that they know where to find us (often not the case with other NGOs where all staff are based in the capital Phnom Penh and visit project sites monthly).

Similarly, an on-the-ground presence is critical for law enforcement by ensuring accountability, professionalism, and performance. Wildlife Alliance are not like other NGOs (such as Conservation International who also do law enforcement in the Cardamoms) who give money to the government and hope that conservation is achieved. We are the ones there in the landscape and getting our hands dirty doing conservation and community development work. No one knows the landscape like us and no one has the ability to achieve success as much as institutions and NGOs which are embedded on-the-ground.

Another lesson learnt is that robustly monitoring levels of illegal activity is difficult particularly when the project implementer (i.e. Wildlife Alliance) is associated with strong and effective law enforcement. In small communities such as the Areng Valley obtaining sufficient sample size for robustly monitoring illegal activity is also difficult. Given these constraints we were not able to effectively use the Unmatched Count Technique to monitor the impact of the project on the proportion of community members illegally poaching (Outcome 0.4). Such robust social science methodologies are probably only appropriate when large sample sizes of community members can be interviewed and that the interviewers have no relationship with the project implementer. Given these constraints our log-frame was changed during the course of the project (see Section 9.1). In retrospect it would also have been valuable to amend some of our Outcome Indicator targets; these were fairly ambitious particularly with regards to income and poverty alleviation goals.

9.1 Monitoring and evaluation

As mentioned above the project's log-frame was changed (following an approved request to the IWT Challenge Fund) at the end of Year 1 in order to make Outcome Indicator 0.4 (anonymously, monitoring levels of illegal poaching and trade by Areng Valley villagers) easier to monitor. Based on advice from the Interdisciplinary Center for Conservation Science (https://www.iccs.org.uk/) we initially planned to use the Unmatched Count Technique (UCT) methodology to assess prevalence of illegal activity. This methodology safeguards interviewees against giving self-incriminating answers regarding illegal activity and ensures anonymity of respondents. A total of 145 villagers were interviewed in July 2017 (53% males; mean age 39.8: range 19-72; mean household members 4.5: range 1-15; 42% CBET service providers). However due to the combination of the relatively low sample size and evidence of biased responses (even with the robust methodology used), likely due to the known association between Wildlife Alliance and law enforcement, we are not confident that the results accurately represent a robust pre-project baseline of illicit activity levels. However, data was also collected on perceived importance of illegal hunting and wildlife trade as a livelihood activity within each village in comparison with eight other activities. Illegal wildlife trade was ranked as the 5th (± SD 2.8) most important source of village level income (behind the sale of two Non-Timber Forest Products, fish, and illegally harvested timber). Income from Community Based Ecotourism was ranked as the 8th (± SD 2.7) most important income source. Based on this the Outcome Indicator was revised (see log-frame) and data collected in Feb-Mar 2020 using the same methodology to examine changes in community behavior (see Section 3).

Output Indicator 5.1 (producing a peer-reviewed scientific paper) has not yet been possible as it required robust data on the projects impact (e.g. Outcome Indicators 0.1-0.4) which was not available in time for a January 2020 publication. This paper is currently being drafted for submission into a relevant regional

development journal and will be shared with the Wildlife Trade Challenge Fund after the end of the project.

We feel that it would have been beneficial to have built into the projects Monitoring and Evaluation plan a system for monitoring the Outcome Indicators at least once during the course of the 3-year project (as opposed to simply at the beginning and end). This may have facilitated adaptive management if it was demonstrated that some Outcomes were not being met. However, we note this would have required additional financial (and human capacity) resources.

9.2 Actions taken in response to annual report reviews

We were provided with useful comments on a number of aspects of the project during the annual report review process. No significant issues were identified and we have attempted to adapt the project in response to these comments. These are discussed in the appropriate sections throughout this report (e.g. Sections 8 and 12). A reflection on these comments is that projects are likely to benefit from some more specific guidance from DEFRA and the Illegal Wildlife Trade Challenge Fund on incorporating, and measuring, gender impacts and promoting the identity of the Wildlife Trade Challenge Fund.

10. Other comments on achievements not covered elsewhere

An important project Outcome, not captured in then Log-Frame, has been the promotion of traditional ethnic (Chong) culture in the Areng Valley. Preserving cultural diversity is important and the project recorded Chong language names for many of the culturally significant wildlife species in the Areng Valley. We also encouraged a resurgence in traditional Chong music and the unique instrument called a Ploy. Using a single 'old-master' who knew the instrument we have supported training three teenage CBET service providers to construct (from local forest materials) and play the Ploy. This traditional music has become a cultural tourism product for the Areng Valley CBET and is particularly appreciated by Cambodian visitors.





Learning how to blow: a Ploy

The project also benefited from cultivating high level political support for our activities. Three government ministers (for Environment, Tourism, and Post and Telecommunications), together with the provincial Governor of Koh Kong, have visited the project site. Even Cambodia's Prime Minister, Samdech Akka Moha Sena Padey Techo Hun Sen, learnt about our work after visiting the Areng Valley CBET booth at a tourism exposition held in Kep (on the Cambodian coast) in December 2017. This high level political support is particularly important when encountering unexpected obstacles such as when the litigious Thy Sovantha, a Cambodian social media and reality Television Star, threatened to sue IWT Final Report Template 2019

Wildlife Alliance for not invited her to the opening of Areng CBET - https://www.phnompenhpost.com/national/thy-sovantha-threatens-new-suit.





The Cambodian Minister Tourism (H.E. Thong Kon) addresses the CBET Committee and Service Providers during a visit to the project site (left) whilst the country's Prime Minister learns about our work at a tourism exposition in December 2017 (right).

11. Sustainability and legacy

The Areng Valley has a high profile in Cambodia for political and cultural reasons. Whilst our inclusive and bottom-up approach has been integral to our success in establishing CBET we have also strived to create high level political support for the project (see Section 10). This is critical for sustainability in a country like Cambodia where unaccountable decision making and political patronage are widespread.

As a result of the high-level political support for our project, as well as the active role of the Areng Valley Community Based Ecotourism Association in promoting their community-based ecotourism product (Output 5), the project has a relatively high profile in Cambodia and the ASEAN region. The Areng Ecotourism Experience has been promoted at regional and national tourism events, through social media (most notably Facebook which is ubiquitous across Cambodia where it is almost synonymous with the internet) and even, through collaborations with the Ministry of Tourism, in song, dance, and short film. We believe this exposure, as well as the quality and genuine community ownership of the ecotourism project, is influencing the development of similar projects and bottom-up community ecotourism development across Cambodia. The Chief of the Areng Community Based Ecotourism Association, Tith Ly, is young and charismatic and has evolved into a national mentor for developing such projects. The increased interest in developing community ecotourism across Cambodia, and an increased capacity to do so, are direct results of the project's activities. The large number of Cambodian tourists visiting the Areng Valley is particularly pleasing both in terms of securing the future sustainability of the ecotourism but also through helping create a genuine legacy of environmental change and awareness raising. Connecting Cambodian youth to the environment and nature will play a major role in changing behaviours and perceptions and ultimately help tackle aspects of the Illegal Wildlife Trade through reducing demand for wildlife products. In the long-term connecting urban Cambodian youth with the environment may be the project's greatest legacy.



Cambodian Youth in Areng: inspiring the future in Nature

Our plans for exit strategy and the long-term project sustainability of our work across the Cardamom Rainforest Landscape revolve around carbon financing and the Southern Cardamom REDD+ Project one of Asia's largest REDD+ projects (https://standfortrees.org/en/protect-a-forest/southern-cardamom). This was officially validated and verified under the gold standard for voluntary carbon projects (Voluntary Carbon Standards-Community Climate and Biodiversity) in November 2018. This verification produced ~12,000,000 tons of carbon emission reductions (generated from forest protection activities between 2015 and 2017). A number of major sales have been conducted generating significant revenue for the Cambodian Ministry of Environment and natural resource protection and community livelihood activities in the Cardamoms. The project has been designed, with the support of the Royal Government of Cambodia, to be fully aligned with future UNFCCC (United Nations Framework Convention on Climate Change) compliance payment systems and the Cambodian government's National REDD+ Strategy (part of Cambodia's commitments under the Paris Climate Change Agreement). There is no guarantee that carbon financing will become a panacea for forest-based species conservation. However, if REDD+ is going to work anywhere, and become a viable mechanism to protect wild places and wildlife, it will work in the Cardamom Rainforest Landscape given our strong track-record of preventing deforestation through law enforcement and engaging communities, and the flexibility for operating the project, and managing revenues generated, that we have agreed with the Royal Government of Cambodia. Revenues from REDD+ sales have supported the continuation of law enforcement patrolling from the Chhay Areng Ranger Station and ongoing technical support for the Areng Valley Community Based Ecotourism Association into 2020. Both themes are also addressed in the new, submitted, Phase Six IWT Challenge Fund Application which also seeks to diversify ecotourism attractions at Areng and nearby Chi Phat.

12. IWT Challenge Fund Identity

Whilst Community Based Ecotourism at Chi Phat, and Wildlife Alliance's work protecting the wider Cardamom Rainforest Landscape, has a relatively high profile in Cambodia there is probably limited awareness of the support provided by the IWT Challenge Fund and the UK Government. This is partially

due to the fact that this project forms an integral but seamless part of a larger and ongoing programme of Wildlife Alliance in the Cardamoms which has been operating, successfully, since the early 2000s.





Tweet from UK Ambassador to Cambodia following visit to the project site (left) and the Ambassador in the Areng Valley accompanied by Wildlife Alliance project staff (right)

However, we were not particularly proactive in promoting the identity of the IWT Challenge Fund and UK Government support within Cambodia (this issue was also raised during the review of the Year 2 project report). In many ways this is because we were not aware this was a key responsibility of the project; we recommend that the importance of promoting the IWT Challenge Fund should be clearly communicated to project leads and materials provided to assist with this. Nevertheless, we have, through Wildlife Alliance's social media channels (most notably Twitter [@WildlifeRescue] and Facebook [https://www.facebook.com/WildlifeAlliance/) tried to promote the project's links with the Illegal Wildlife Trade Challenge Fund and DEFRA. Our listing in the online Lonely Planet also highlights that the project has been funded by the UK Government. In January 2018 the UK Ambassador to Cambodia (HE Bill Longhurst) visited the project (https://www.wildlifealliance.org/british-ambassador-bill-longhurst-visited-steung-areng-community-based-ecotourism/). The project, particularly Output 4 on law enforcement also, featured prominently in the World Ranger Day issue of the DEFRA-Illegal Wildlife Trade Newsletter: http://www.darwininitiative.org.uk/assets/uploads/2018/07/IWT-Newsletter-July-2018-World-Ranger-Day-FINAL.pdf.

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13. OPTIONAL: Outstanding achievements of your project during the (300-400 words maximum). This section may be used for publicity purposes

I agree for the IWT Secretariat to publish the content of this section

The "Sustainability through ecotourism: improving livelihoods and disrupting wildlife trade, Cambodia" project of Wildlife Alliance in Cambodia's Cardamom Rainforest Landscape addresses both rural poverty and unsustainable poaching of iconic species through an innovative and holistic approach of bottom-up Community Based Ecotourism and effective protected area patrolling. Our Law Enforcement efforts are amongst the most effective and professional in Asia. The 131 rangers of our Cardamom Rainforest Protection Program patrol 24/7 and are safeguarding populations of some of Asia's most iconic and highly threatened species including Asian elephant, Sunda pangolin, and Mainland clouded leopard. During the three-year project period 1,241 patrols were conducted from our fully equipped Chhay Areng Ranger Station. These operations were partially supported by the IWT Challenge Fund and resulted in the removal of 10,967 illegal hunting snares and the rescue of 83 live animals from wildlife poachers. The impact of snares on wildlife is particularly horrific. The opportunity cost of setting snares is so low that many snares are set and never again checked. Most of what is caught simply rots away: a tragic and heart-breaking waste.



In addition to combatting the illegal wildlife trade through law enforcement we also developed bottomup Community Based Ecotourism in eight remote forest dependent communities in the heart of the Cardamom Rainforest Landscape. All of the necessary management structures, capacities, and infrastructure for long-term sustainable ecotourism and revenue generation for the communities is in place. Whilst the number of international tourist visitors, and thus overall income generated, is lower than we had hoped, the high number of Cambodian visitors, and the project's ability to connect middleclass Cambodians with nature and wildlife, will be one our most significant legacies.



14. Finance and administration

14.1 Project expenditure

Project spend (indicative) since last annual report	2019/20 Grant (£)	2019/20 Total actual IWT Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)		_ , , ,	•	
Consultancy costs		_		
Overhead Costs		_		
Travel and subsistence		_		
Operating Costs		_		
Capital items (see below)		_		
Others (see below)		_		
TOTAL		_		

Staff employed (Name and position)	Cost (£)
Sophany Touch-Project Manager	
Thomas Gray, PhD- Conservation Impact Specialist	
Suwanna Gauntlett – Director of Programs/CEO	
Mann Ratanak – Project Assistant	
Tith Ly – Project Assistant	
Eduard Lefter-Law Enforcement Technical Advisor	
Dmytro Vashko-Areng Valley Law Enforcement Station Supervisor	
Seng Tet/Khlin Theavy-Womens Credit Fund Manager	
Areng Valley Law Enforcement Rangers	
TOTAL	

Capital items – description	Capital items – cost (£)
Please detail what items were purchased with fund money, and where	
these will remain once the project finishes	
N/A	0
TOTAL	0

Other items – description	Other items – cost (£)
Please provide a detailed breakdown for any single item over £1000	
Developing promotional materials for Ecotourism	
Conduct appropriate social surveys to measure changes in hunting and poaching of threatened mammals	
Project website development and management	
Womens Credit Fund	
TOTAL	

14.2 Additional funds or in-kind contributions secured

No additional in-kind contributions were secured during the project.

Source of funding for project lifetime	Total (£)
Barbara Delano Foundation	
Global Conservation/Morgan Family Foundation	
Charles Schwab	
Segre Foundation	
Waterloo Foundation	
TOTAL	

Source of funding for additional work after project lifetime	Total (£)
CCC LLC	
TOTAL	

14.3 Value for Money

Good value for money was provided by this project in all purchases. This was ensured by utilising the Wildlife Alliance Procurement Policy. For all expenditures of over USD, a letter of procurement was submitted by the project staff to the Wildlife Alliance Logistics Officer. Three separate quotations (for items or services of comparable quality) were then procured by the Logistics Officer, who submitted them for review and approval by the Committee on Equipment prior to purchase of the required item or service. All quotations on purchases must be approved by at least two of the three members of the Committee on Equipment (always excluding the Project Manager of the requesting project).

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 application and was approved by a Change Request the newest approved version should be inserted here, otherwise insert application logframe.

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
		and Global Goals for Sustainable Devel	opment are met by all communities,
	of the Cardamom Rainforest Landscap	e, Cambodia	·
Outcome: Community Based Ecotourism and Women's Credit and Savings Groups increase income and reduce poverty levels across eight communities in the Areng Valley, Cardamom	0.1 By Mar 2020 >75% of households (n=461) in the Areng Valley have annual income US\$ >2,000. [Aug 2015 baseline = 37%]	0.1 Social surveys of household income 0.2 Social surveys of household income	Income and benefits from CBET is sufficient to create societal and cultural pressures to reduce poaching and trade in threatened mammals.
Rainforest Landscape, which combined with effective law enforcement, provides cultural pressure for a reduction in the illegal poaching and commercial trade of threatened mammals.	0.2 By Mar 2020 commune rate of poverty ¹ declines to 6%. [2015 baseline = 12%] 0.3 By Mar 2020 at least 200	0.3 Loan records from Women's Credit and Savings Groups 0.4 Targeted social surveys using an appropriate methodology (e.g.	Randomised Response Technique surveys able to accurately measure levels of illegal poaching and wildlife trade. Law enforcement patrols provide
uneatened manimais.	microenterprise loans awarded from Women's Credit and Savings Groups.	Randomised Response Technique ²) to anonymously and robustly monitor levels of illicit activity	sufficient deterrent to prevent outsiders accessing forest and poaching threatened species for illegal wildlife trade.
	0.4 By March 2020 income to community members from Community Based Ecotourism is ranked as one of the top 4	0.5 Ranger patrol records from GIS database	
	income-generating activities amongst community members in the Areng Valley (July 2017 baseline rank = 8 th) whilst income from illegal wildlife trade is reduced to outside the top 8	² e.g. Nuno & St John (2015). Biological Conservation 189:5-15. doi:10.1016/j.biocon.2014.09.047	
	activities (July 2017 baseline rank 5 th most important livelihood activity for communities).		

Outputs: 1. Management structures, capacities, and infrastructure within communities in the Areng Valley are sufficient for successful establishment of Community Based Ecotourism (CBET).	 ¹ Based on Cambodian government definition of US\$ <0.9 income per day; baseline 12% 1.1 By Jun 2017 gender and ethnically balanced management committee is in place to operate the Community-Based Ecotourism project. 1.2 By Dec 2017 Appreciative Participatory Planning In Action (APPA) methodology used with communities to identify natural attraction sites leading to complete package of tourism products and services. 1.3 By Jun 2018 at least 400 community members, >60% of which are women, trained to acquire tourism skills (e.g. hospitality, English, cooking, nature-guiding). 1.4 By Jun 2019 ecotourism 	 1.1 CBET management committee established with documented work plan, agreement on roles, responsibilities, election policy, guidelines and by laws in place; list of members of committee including gender and ethnicity 1.2 Map of attraction sites and trails, details of the numbers of products and services 1.3 Training reports with names and gender/ethnicity of trainees, verbal reports of community members of new skills 1.4 Photographic reports of infrastructure, site-visits, receipts for equipment 	The CBET management committee, and the rules and regulations for benefit sharing are perceived as inclusive, balanced, and fair. Sufficient attractions exist within the Areng Valley, and are identified through the APPA process, to justify CBET. Sufficient households within the Areng Valley able and willing to join CBET and receive capacity training. Logistics and conditions within Areng Valley are suitable for the construction of CBET infrastructure.
	infrastructure is developed including: 25 homestays; 300 km of trails; 15 forest campsites; 30 mountain bikes; 50 sets of camping equipment.		
2. CBET functions effectively within the Areng Valley and generates annual income increases to CBET members	2.1 By Jan 2020 annual income to CBET members generated from tourism exceeds US\$ 60,000. 2.2 By Jan 2020 at least ten tour operators have signed business	2.1 Financial records from CBET management committee 2.2 Copies of business contracts 2.3 Copies of travel guides; screen-	Ecotourism market within Cambodia and Southeast Asia is not saturated and sufficient numbers of tourists exist to prevent over-competition with existing and developing ecotourism initiatives. Cambodia remains safe and stable
	contracts with CBET management committee. 2.3 By Jan 2020 at least two	shots of websites; link to CBET booking website 2.4 Visitor records from CBET	global tourism destination. Marketing and attractions able to attract Cambodian and Asian tourists

	international travel guides describe Areng Valley CBET. 2.4 By Jan 2020 at least 500 international tourists visit Areng Valley CBET annually.	management committee; photographs; endorsements from tourists	in addition to 'Westerners'.
	2.5		
3. Women's Credit and Savings Groups established in 8 villages in the Areng Valley and supporting at least 200 microenterprises per year	3.1 By Jan 2018 eight Women's Credit and Savings Groups established with at least 200 women participating.3.2 By Jan 2018 credit and savings	3.1 Meeting minutes and lists of members of each Credit and Savings Group 3.2 Copies of policies and regulations of each Credit and	Opportunities exist for microenterprise within communities in Areng Valley. Rules and regulations of Women Credit and Savings Groups perceived as transparent, fair, and
	policies for Women's Credit and Savings Groups have been developed and agreed upon. 3.3 By Jun 2018 at least 100 women from the community have received financial literacy	Savings Groups 3.3 List of trainees and reports of trainings; verbal endorsements from women trainees regarding skills	inclusive. Women in Areng Valley sufficiently empowered to engage in Women's Credit and Savings Groups.
	and basic business management skill training.	3.4 Financial records from Women's Credit and Savings Groups	
4. Multi-agency anti-poaching law enforcement teams patrol minimum of 15 days per month reducing threats to commercially hunted mammal species	4.1 By Jan 2018 at least 15 multi-day law enforcement patrols conducted monthly	4.1 Law enforcement patrol data and monthly reports from enforcement database 4.2 Law enforcement patrol data from enforcement database	Law enforcement patrolling, combined with societal peer-pressure in communities involved in CBET, sufficient to reduce levels of commercial poaching of threatened mammal species.
5. Model of Community Based Ecotourism in the Cardamom Rainforest Landscape is regarded as a global best practice methodology for developing sustainable livelihoods for communities impacted by the Illegal Wildlife Trade	 5.1 By Jan 2020 at least one peer-reviewed paper documenting CBET process and outcomes in Chi Phat and the Areng Valley is published 5.2 By Jan 2019 all project materials and resources are available on an open-access website 	5.1 Copy of peer-reviewed paper 5.2 Website links and information on visitors 5.3 Details of project visit to CBET sites including agenda, minutes, and photographs	Project outcomes are sufficiently scientifically robust and novel to merit publication. The project is able to robustly demonstrate community level behavior change / reduction in households engaged in Illegal

5.3 By Jan 2020 at least two alternative livelihood	Wildlife Trade.
development projects, from outside Cambodia, have visited CBET sites in the Cardamom Rainforest Landscape	Alternative livelihood projects from outside Cambodia have sufficient funds/resources to visit the Cardamom Rainforest Landscape.
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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 Facilitate CBET visioning, agreement on roles and responsibilities, and develop election policy and guidelines with all communities in Areng Valley
- 1.2 Hold fair and effective election of CBET committee
- 1.3 Develop CBET by-laws which includes clear, fair, and transparent benefit-sharing policy
- 1.4 Obtain legal registration from the government for CBET committee
- 1.5 Follow Appreciative Participatory Planning In Action (APPA) methodology to assist community to identify natural attraction sites, draw maps and compile stories
- 1.6 Conduct field research on natural attraction sites and trails
- 1.7 Develop map of attraction sites and trails.
- 1.8 Finalize concept for content and packaging of ecotourism products and services.
- 1.9 Conduct targeted training and capacity building for skills required for effective CBET operations. Including training in hospitality and small-scale business management, English language, computer literacy, how to be a local guide, housekeeping, cooking, first aid application, leadership and management skills, problem solving and conflict resolution.
- 1.10 Develop infrastructure required for CBET operations including building homestays, opening trails, developing forest camping site, acquiring mountain bikes and camping equipment for rental.

Output 2

- 2.1 Contact tour operators and sign contracts,
- 2.2 Create a booking website and conduct social media promotion on Facebook
- 2.3 Provide ongoing mentoring and training for CBET committee and members on operations

Output 3

- 3.1 Facilitate formation of Women's Credit and Savings Groups in all 8 villages.
- 3.2 Provide financial literacy and basic business management skill training to Credit group members
- 3.3 Develop credit and savings policy and regulations.
- 3.4 Provide ongoing mentoring and training for operations of Savings and Credit groups.

Output 4

4.1 Conduct effective monthly law enforcement patrolling

4.2 Conduct Randomised Response Technique surveys to estimate number of households involved in poaching

Output 5

- 5.1 Draft and submit a publication on lessons-learnt and approach for using CBET for developing sustainable livelihoods for communities impacted by the Illegal Wildlife Trade
- 5.2 Develop and manage a project website with all relevant materials uploaded
- 5.3 Organise (participant funded) study tour visits (approx. 7 days) to CBET sites in the Cardamom Rainforest Landscape

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

Project summary	Measurable Indicators	Progress and Achievements
Impact Globally significant populations of 19 Threatened mammals recover, and Global Goals for Sustainable Development are met by all communities, across 5,000-km² of tropical rainforest of the Cardamom Rainforest Landscape, Cambodia		Since April 2017 the Cardamom Rainforest Protection Program of Wildlife Alliance has made major progress towards our ambitious Conservation Impact. The activities of this DEFRA-IWT Challenge Fund project have contributed towards this. A total of 10,916 patrols across the 9,000-km² Cardamom Rainforest Landscape have removed 63,782 snares, confiscated 1,968 chainsaws, and sent 357 wildlife and forest offenders to court. As a result of this regionally unprecedented law enforcement effort the Cardamoms remains globally significant for threatened mammal conservation and populations of key iconic species, such as Asian elephant, appear to be recovering.
		Community Based Ecotourism (CBET) is making a major contribution to poverty alleviation and meeting the Sustainable Development Goals in Cardamom communities. This project expanded our award-winning CBET model to an additional eight villages in the remote Areng Valley. In 2019, across both Areng and Chi Phat CBET, a total of 5,961 tourists generated \$US 235,000 for local communities.
		The establishment of the Southern Cardamom REDD+ Project, in 2018, is helping secure the long-term sustainability of the protected area management and community engagement work of Wildlife Alliance and project partners in the Cardamom Rainforest Landscape.
Outcome Community Based Ecotourism and Women's Credit and Savings Groups increase income and reduce poverty levels across eight communities in the Areng Valley, Cardamom Rainforest Landscape, which combined with effective law enforcement, provides cultural pressure for a reduction in the illegal poaching 0.1 By Mar 2020 >75% of house (n=461) in the Areng Valley annual income US\$ >2,000. 2015 baseline = 37%] 0.2 By Mar 2020 commune rate poverty¹ declines to 6%. [20] baseline = 12%]		In March 2020, two surveys were conducted in the Areng Valley to assess the impact of STAR-CBET and other development, as well as increased law enforcement, one on the income and one on the livelihood perceptions of the communities. Randomised, systematic surveys were conducted, with 112 households surveyed on their livelihood activities and perceptions of livelihoods in their communities and 210 households surveyed for their income. The two surveys were conducted separately to reduce the change of influencing responses based on the other survey, so the overlap of respondents between the two surveys is somewhat limited.
and commercial trade of threatened mammals.	0.3 By Mar 2020 at least 200 microenterprise loans awarded from Women's Credit and Savings Groups.	The number of households earning "higher" incomes remains below our expectations, with 40% of households (n=210) in the Areng Valley earning an annual income of US\$ >2,000 (Indicator 0.1). However, respondent's income seemed to be far less reliant on subsistence agriculture and illegal activities, with "off-farm activities" such as ecotourism, labour, food vending and trading accounting for 65% of income, much of which can be directly or indirectly
	0.4 By March 2020 income to community members from	accounted for by the stimulation of the local economy caused in part by the CBET Project. It should additionally be noted that, when surveyed, respondents

Community Based Ecotourism is ranked as one of the top 4 incomegenerating activities amongst community members in the Areng Valley (July 2017 baseline rank = 8th) whilst income from illegal wildlife trade is reduced to outside the top 8 activities (July 2017 baseline rank 5th most important livelihood activity for communities). Output 1. Management structures, 1.1 By Jun 2017 gender and ethnically capacities, and infrastructure within

stated that tourism had sharply declined due to the COVID-19 pandemic and this likely influenced their responses.

Whilst it has not dropped to our goal of 6%, the commune rate of poverty

Whilst it has not dropped to our goal of 6%, the commune rate of poverty declined more to a rate of 9.52% in households surveyed (n=210) (indicator 0.2). It is positive to see an increase in affluence amongst the most vulnerable in the Areng community, especially when considering decreased profitability of illegal forest products due to the law enforcement activities of our project. The decrease in poverty despite stricter and more efficient punishment of forest crimes clearly demonstrates that the alternative livelihoods available are effective in providing alternatives to illegal activities.

We significantly over-estimated the volume of loans able to be issued due to a combination of required large sizes to be meaningful (16 loans, mean loan size 168 USD) and slow initial uptake of the groups. Nevertheless, we strongly believe that there has been a positive output on the overall poverty reduction in Chhay Areng (indicator 0.3).

Unfortunately, our livelihood perception survey did not correctly rank the activities, so we are unable to quantify how CBET income is ranked by villagers. However, the survey did show that wildlife hunting is now the lowest-ranked activity (Indicator 0.4) and that NTFPs, including sales to tourists, are the highest perceived source of income. We believe these results prove the success of the project in tackling the Illegal Wildlife Trade through improved income from alternative livelihoods.

Output 1. Management structures, capacities, and infrastructure within communities in the Areng Valley are sufficient for successful establishment of Community Based Ecotourism (CBET).

- 1.1 By Jun 2017 gender and ethnically balanced management committee is in place to operate the Community-Based Ecotourism project.
- 1.2 By Dec 2017 Appreciative Participatory Planning In Action (APPA) methodology used with communities to identify natural attraction sites leading to complete package of tourism products and services.
- 1.3 By Jun 2018 at least 400 community members, >60% of which are women, trained to acquire tourism skills (e.g. hospitality, English, cooking, nature-guiding).
 1.4 By Jun 2019 ecotourism

As a result of the project the newly created Areng Valley Community Based Ecotourism Association (STAR-CBET) has sufficient management structures, capacities, and tourist infrastructure to support long-term and sustainable ecotourism which is capable of generating significant income for local communities. Whilst not all of our numerical indicators were achieved we do not believe that this will impact the future functioning of STAR-CBET and ecotourism in the Areng Valley.

A CBET Management Committee (<u>Indicator 1.1</u>) has been in place since April 2017 and comprises 15 members (4 female) all of whom are ethnic Chong (Annex 4.7). The APPA methodology identified a total of 65 natural and cultural attractions including waterfalls, scenic viewpoints, wildlife viewing areas, and ancient burial sites (<u>Indicator 1.2</u>). Between April 2017 and December 2019 fifteen training events were held for STAR-CBET service providers (<u>Indicator 1.3</u>; Annex 4.8). A total of 366 community members (39.6% women) attended training (<u>Indicator 1.3</u>). By the end of 2019 22 community homestays were fully operational in 8 villages and 16 forest campsites were connected by 292-km of

	infrastructure is developed including: 25 homestays; 300 km of trails; 15 forest campsites; 30 mountain bikes; 50 sets of camping equipment.	marked and maintained forest trails (<u>Indicator 1.4</u>). The inventory of STAR-CBET includes 30 mountain bikes (including some donated by His Excellency the Minister of Tourism) and 54 sets of camping equipment (<u>Indicator 1.4</u>).
Activity 1.1 Facilitate CBET visioning, agreement on roles and responsibilities, and develop election policy and guidelines with all communities in Areng Valley		Visioning with communities completed by March 2017.
Activity 1.2. Hold fair and effective election of CBET committee		Elections for the STAR-CBET Management Committee election were held in April 2017 with a total of 42 candidates for 15 positions.
Activity 1.3 Develop CBET by-laws which includes clear, fair, and transparent benefit-sharing policy		By laws completed (provided as Annex 4.9 [in Khmer]).
Activity 1.4 Obtain legal registration from the government for CBET committee		In August 2017 the Stung Areng Community Based Ecotourism Association was legally registered as an association by the Cambodian Ministry of the Interior (Annex 4.10 [in Khmer]).
Activity 1.5 Follow Appreciative Participatory Planning In Action (APPA) methodology to assist community to identify natural attraction sites, draw maps and compile stories		The Appreciative Participatory Planning in Action (APPA) methodology was also used with community members to identify tourist attractions and compile stories.
Activity 1.6 Conduct field research on natural attraction sites and trails		A total of 65 natural and cultural attractions were identified including waterfalls, scenic viewpoints, wildlife viewing areas, and ancient burial sites. These have been formally mapped and described.
Activity 1.7 Develop map of attraction site	es and trails	Maps and photographs of the attractions are provided in Annex 4.11.
Activity 1.8 Finalize concept for content and packaging of ecotourism products and services		This activity has been completed.
Activity 1.9 Conduct targeted training and capacity building for skills required for effective CBET operations. Including training in hospitality and small-scale business management, English language, computer literacy, how to be a local guide, housekeeping, cooking, first aid application, leadership and management skills, problem solving and conflict resolution		A total of 15 training events were conducted (see Indicator 1.3; Annex 4.8)
Activity 1.10 Develop infrastructure required for CBET operations including building homestays, opening trails, developing forest camping site, acquiring mountain bikes and camping equipment for rental		All infrastructure has been completed (see Indicator 1.4).
Output 2. CBET functions effectively within the Areng Valley and generates annual income increases to CBET members	2.1 By Jan 2020 annual income to CBET members generated from tourism exceeds US\$ 60,000.	CBET in the Areng Valley has been operating since Q4 2017 with a total of 2,780 ecotourists generating \$US 35,984 (Indicator 2.1) for local communities. Quarterly income (Annex 4.12) and numbers of visitors, both domestic and

	 2.2 By Jan 2020 at least ten tour operators have signed business contracts with CBET management committee. 2.3 By Jan 2020 at least two international travel guides describe Areng Valley CBET. 2.4 By Jan 2020 at least 500 international tourists visit Areng Valley CBET annually. 	international (Annex 4.12), are showing reasonable growth and we expect this growth to continue into 2021 and beyond. However, the number of foreign tourists (114; Indicator 2.4) remains below our pre-project expectations. As foreign visitors generally stay longer and spend more than Cambodian tourists this was also the direct cause of income not meeting our ambitious targets. The STAR-CBET management committee is planning to increase fees (including for Cambodian visitors) in 2020. Nevertheless, despite not achieving all of our revenue goals we are extremely satisfied with the direction the ecotourism is going and are confident that in the longer-term revenues will increase. The high number of domestic visitors (>95% of visitors are Khmer) bodes very well for future sustainability of the project and will help buffer against changes in global tourism numbers. A significant contribution to the high number of Cambodian visitors is our advertising and outreach within Cambodia (largely through social media) and STAR-CBET's formal partnerships with five tour companies (Indicator 2.2).
Activity 2.1 Contact tour operators and si	gn contracts	Completed
Activity 2.2 Create a booking website and conduct social media promotion on Facebook		Completed. Areng Valey website (http://www.facebook.com/arengecotourism/ 2,671 likes; 2,700 followers) operational.
Activity 2.3 Provide ongoing mentoring at members on operations	nd training for CBET committee and	Ongoing with Wildlife Alliance continuing to be embedded in the communities through funding from the Southern Cardamom REDD+ Project.
Output 3. Women's Credit and Savings Groups established in 8 villages in the Areng Valley and supporting at least 200 microenterprises per year.	3.1 By Jan 2018 eight Women's Credit and Savings Groups established with at least 200 women participating. 3.2 By Jan 2018 credit and savings policies for Women's Credit and Savings Groups have been developed and agreed upon. 3.3 By Jun 2018 at least 100 women from the community have received financial literacy and basic business management skill	Credit and Savings Groups have been established in six villages (Indicator 3.1). All groups have with policies and by-laws (Indicator 3.2) and (by December 2019) the group's 75 members have all received financial training (Indicator 3.3). The total available credit is ~ \$US 8,000 (~40% of which provided by members of the groups). By February 2018 a total of 14 loans (~ \$US 1,800 in total) had been issued. Annex 4.4 provides further details of the Credit and Savings Groups.

	training.	
Activity 3.1 Facilitate formation of Women's Credit and Savings Groups in all 8 villages		Six groups have been formed meaning all villagers in the Areng Valley have access to affordable community micro-credit (see Section 3.1)
Activity 3.2 Provide financial literacy and basic business management skill training to Credit group members		Training conducted for all members of the Community Credit and Savings Groups
Activity 3.3 Develop credit and savings policy and regulations		Regulations developed and approved (Annex 4.13; in Khmer)
Activity 3.4 Provide ongoing mentoring and training for operations of Savings and Credit groups		Ongoing work led by the Project Manager
Output 4. Multi-agency anti-poaching law enforcement teams patrol minimum of 15 days per month reducing threats to commercially hunted mammal species	4.1 By Jan 2018 at least 15 multi-day law enforcement patrols conducted monthly	A total of 1,241 multi-agency law enforcement patrols were conducted by the project (average of 34.5 patrols per month). These patrols covered 51,025-km. Full details of this impressive law enforcement effort is provided in Annex 4.5, 4.6, and 4.7).
Activity 4.1 Conduct effective monthly law enforcement patrolling		Patrols were conducted throughout the project period (see Annex 4.5, 4.6, 4.7).
Activity 4.2 Conduct Randomised Response Technique surveys to estimate number of households involved in poaching		See Outcome 0.4
Output 5. Model of Community Based Ecotourism in the Cardamom Rainforest Landscape is regarded as a global best practice methodology for developing sustainable livelihoods for communities impacted by the Illegal Wildlife Trade	5.1 By Jan 2020 at least one peer- reviewed paper documenting CBET process and outcomes in Chi Phat and the Areng Valley is published 5.2 By Jan 2019 all project materials and resources are available on an open-access website 5.3 By Jan 2020 at least two alternative livelihood development projects, from outside Cambodia, have visited CBET sites in the Cardamom Rainforest Landscape	As described above (see section 9.1) the peer-reviewed paper (Indicator 5.1) has yet to be completed and will be submitted (likely to the Cambodian Journal of Natural History) following the end of the project once there has been sufficient time to analyse project Outcomes. All relevant project documents have been uploaded to the Areng ecotourism website (Indicator 5.2) whilst two alternative livelihood study tours visited Areng in May (Liger Cambodia) and June (Build Bright University) 2019 (Indicator 5.3).
Activity 5.1 Draft and submit a publication on lessons-learnt and approach for using CBET for developing sustainable livelihoods for communities impacted by the Illegal Wildlife Trade		Paper drafted but to be submitted in Q2 2020
Activity 5.2 Develop and manage a project website with all relevant materials uploaded		Website available with all documents uploaded.

Activity 5.3 Organise (participant funded) study tour visits (approx. 7 days) to	A total of two study tours have visited Areng
CBET sites in the Cardamom Rainforest Landscape	

Annex 3 IWT Contacts

To assist us with future evaluation work and feedback on your report, please provide details for the main project contacts below. Please add new sections to the table if you are able to provide contact information for more people than there are sections below.

Please see our Privacy Notice on how contact details will be used and stored: https://www.gov.uk/government/publications/illegal-wildlife-trade-challenge-fund-2018-application-round.

Ref No	IWT 035	
Project Title	Sustainability through ecotourism: improving livelihoods and disrupting wildlife trade, Cambodia	
Project Leader Details		
Name	Sophany Touch	
Role within IWT Project	Project Lead	
Name	Ollie Roberts	
Organisation	Wildlife Alliance	
Role within IWT Project	Assistant to the Wildlife Alliance CEO	
Partner 1	•	
Name	Kong Kimsreng	
Organisation	General Department of Administration for Nature Conservation, Ministry of Environment	
Partner 2 etc.	•	
Name	Tith Ly	
Organisation	Stung Areng Community Based Ecotourism Association	
L		

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to <a href="https://www.lwt.number.n</td><td>✓</td></tr><tr><td>Is your report more than 10MB? If so, please discuss with <a href=" https:="" td="" www.lwt.number.num<=""><td>N/A</td>	N/A
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	✓
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	N/A
Have you involved your partners in preparation of the report and named the main contributors	✓
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	,