



### Illegal Wildlife Trade (IWT) Challenge Fund Annual Report

To be completed with reference to the "Writing a Darwin/IWT Report" Information Note: (<a href="https://iwt.challengefund.org.uk/resources/reporting-forms-change-request-forms-and-terms-and-conditions">https://iwt.challengefund.org.uk/resources/reporting-forms-change-request-forms-and-terms-and-

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### • IWT Challenge Fund Project Information

Project reference	IWT077
Project title	Reducing Illegal Wildlife Trafficking through a Community-based Conservation Approach
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### 1. Project summary

Problem: Rural communities living across the remaining forests of West Kalimantan, Indonesia lack access to basic services and opportunities to diversify livelihoods. This often compels communities living around forests to turn to poaching and illegal wildlife trafficking (IWT) to meet basic needs. The depletion of the natural resource base create a positive feedback loop that deepens a communities' growing inability to meet basic and financial needs, which leads to further resource extraction culminating in spiralling poverty. Such degenerative exploitation of natural resources trap communities into a vicious cycle of environmental injustice.

In order to reverse this cycle at our project sites, we collaborate with villagers to create Conservation Cooperatives (CC) that are village-run institutions that enables us to reduce a community's dependency on unsustainable resource extraction through a holistic strategy. It integrates community-led resource monitoring and rule enforcement with access to unmet socioeconomic services (e.g. basic healthcare, equitable financial capital, etc.) to empower local communities to shift away from IWT towards sustainable livelihood alternatives.

By supporting partner communities, our project aims to improve wildlife densities for five threatened species while improving well-being and reducing poverty for 1,741 households and generate novel insights into strategies to reduce IWT equitably in two project sites in West Kalimantan, Indonesia (Fig. 1).



Figure 1: Map showing location of the two project sites in West Kalimantan, Indonesia

Our holistic approach fills the clear gap between conservation and poverty alleviation in West Kalimantan and Indonesia by addressing the systemic drivers that lead rural communities to engage in IWT. Moreover, as the CC model is based on the needs of the rural communities, we ensure flexibility in our programs and activities through incorporating input from partner communities and publish peer-reviewed research articles that help us to scientifically evaluate and explore our program logic and design. By using an iterative process, we strive to improve our own learning about "what works" in IWT, gain insights into effectively scaling-up impact and replicability, as well as enable the wider conservation community to learn from our progress.

In particular, this project was designed to enable indigenous communities in Gunung Niyut and Gunung Naning to reduce their dependence on IWT (outcome). In order to achieve this project outcome, we established multiple field programs and initiatives described below.

#### 1. Establish *deterrents* to reduce rates of IWT

We develop locally led deterrents to IWT by establishing conservation agreements as part of each Conservation Cooperative (CC) and institute community-led SMART patrols to enforce such agreements inside forests. Community-led SMART patrol units carry out monthly forest patrols to detect and disarm snares and record other illegal forest activity. Each unit consists of one government park ranger, three/four villagers, and one YPI staff.

At the end of each month, reports are produced based on the SMART patrol data, which are then provided to village leaders, cooperative leaders, and government officials to build transparency among stakeholders and decide on response action collectively. In this way, the SMART patrol program provides the basis for local communities to engage in wide-reaching anti-poaching efforts to protect local forests and wildlife while simultaneously collaborating with government park rangers.

#### 2. Provide financial incentives and benefits to reduce IWT and strengthen community resilience

Through our work, we have realised that "first impressions matter" because local residents at both project sites have often felt side-lined by conservation initiatives. In order to quickly build trust with partner communities, we provide immediate benefits that quickly engage communities to participate in their CCs. One way we do this is by strengthening agriculture-based livelihoods using a simple but effective four-step approach:

- (i) *Identify* income generating commodities and strategies
- (ii) Provide asset-based inputs to kick-start livelihoods
- (iii) Provide access to a savings/loans program to build resilience
- (iv) Provide leadership and financial literacy training to support long-term change

Another way that villagers benefit by becoming members of their village CC is by gaining access to a suite of financial services that create the opportunity for them to strengthen livelihoods.

Finally, our approach also includes a novel chainsaw/rifle buy-back program that is the first of its kind in Asia. This approach provides rewards (monetary and agriculture based) for individuals willing to 'sell' their rifle and/or chainsaw.

#### 3. Provide non-financial incentives to reduce the dependency on IWT

In both sites, Focus Group Discussions revealed that a lack of access to healthcare was a driver of IWT. Communities explained that in emergencies villagers turn to IWT to pay for unmet healthcare needs. To improve community health we utilize an integrated Population-Health-Environment (PHE) approach. The PHE approach recognizes that human and environmental health are inextricably linked.

Our health program team engages interested women from local communities and trains them to become Health Ambassadors in their communities. In turn, Health Ambassadors create access to basic healthcare services and support distribution of the government's family planning materials. Through this program, we also facilitate monthly visits from government health workers to our partner communities to provide immunizations, contraceptives, among others services.

### 4. Support community – led organizations for sustainability

While in its early stages, CC's represent a platform to mobilize community-led conservation. Over time, these platforms grow into self-sustaining and governing community-based organizations. Our program team supports villagers who are CC members to develop their CC's own vision, mission, hold elections, have monthly meetings, and manage a revolving fund that is supported through the savings/loans program. In the past, some CC's have also been able to access government funding and used their revolving fund to match government grants for development projects in their communities.

#### 5. Research on the CC model

We incorporate rigorous research-based monitoring and evaluation as part of our program activities. We apply both quantitative and qualitative methods to assess the impact of our interventions on wildlife populations and partner communities. In particular, we use the "Pooling Local Expert Opinion" (Hoeven et al. 2004) method to estimate wildlife densities in combination with traditional distance sampling methods. Presently, we are also in the process of beginning fieldwork to evaluate the different aspects of the CC model that include non-participation in CCs, and causal pathways between program bundles and its impact on local communities' dependency on IWT. We also publish regular blog posts, social media posts, and newsletters to communicate learnings directly from the field experiences to a wider audience.

### 2. Project partnerships

All project work is supported through community-led partnerships. We ask communities early on to submit official requests in writing (post needs assessment). In addition, we also create MOUs with villages to outline and legalize our work and program activities in our field sites.

In case of government partnerships, we have a 5-year MOU with West Kalimantan's BKSDA - the Department of Natural Resources who is the management authority of the Gunung Niyut Nature Reserve. They are also one of the major government stakeholders in IWT related issues. In case of the Gunung Naning site, though we have yet to sign an MOU with the district level department of forestry in charge of the Gunung Naning Protection Forests, field level KPH (Kesatuan Pengelolaan Hutan) members actively participate in all SMART patrols at this site and we also have MOUs with villages in the this landscape.

Drs. J.Phelps (Lancaster) and R.Carmenta (Cambridge) are directly involved with this project to provide academic oversight, including comments on design, analysis and publication, of research on key elements of the CC model. They will also help with continual, external review of our outputs and internal reports.

### 3. Project progress

### 3.1 Progress in carrying out project Activities

Output 1: Improved community-based monitoring of Gunung Niyut Nature Reserve and Gunung Naning Protection Forest through implementation of SMART patrols

### Activity 1.1: SMART Patrol recruitment and training for new villages / members

In total, 6 socialisation activities were carried out in 2 villages (Ladak and Tangkit) in Gunung Naning to recruit community members for the SMART patrol team.

### Activity 1.2: SMART Patrol monthly patrols (7-10 days per month) and data reports (due every 15 days of patrol finishing, 1 copy to village and 1 copy to government agencies)

In Year 1, SMART patrols were carried out for 11 out of 12 months in Gunung Niyut. In total 65 reports (1 report per team/ month) were generated based on patrol data and shared with village relevant stakeholders.

In Gunung Naning, SMART patrols were carried out for 9 months starting July 2020. In total, 17 reports were generated and shared with relevant stakeholders. Source: Output Indicator 1.4 - SMART Patrol reports Gunung Naning (Output MoV Folder)

#### Activity 1.3 SMART patrol semester review and evaluation

To improve time efficiency, this activity was paired with the government review. In this way, the review of SMART patrol key performance indicators can be done at once with patrol members from YPI, local communities, and government agencies. Source: Activity 1.5 SMART patrol semester review and evaluation (Activity MoV Folder)

# Activity 1.4: SMART patrol data used to triangulate/validate M&E findings from social surveys, Focus Group Discussions, and Participatory Impact Assessments

Data generated from SMART patrols will be combined with other sources of data to map settlements and farming activities inside the Gunung Niyut Nature Reserve and used as a reference in reviewing conservation area management blocks by BKSDA.

### Activity 1.5: Bi-annual government SMART review and evaluation

In the Gunung Niyut site, 2 evaluation activities were carried out in Year 1 (July 2020 and October 2020). Members of the community, BKSDA and YPI field staff attended the evaluation.

Similarly, in Gunung Naning site, 3 evaluation activities in 3 villages (October 2020 and February 2021). Members of the community, members attended the evaluation from the Forest Management Unit (KPH), and YPI field staff. Source: Activity 1.5 SMART patrol semester review and evaluation (Activity MoV Folder)

#### Output 2: Increased and/or stabilized populations of five species threatened by IWT

#### Activity 2.1: Training of field assistants in distance sampling and PLEO methods

A day-long training was held to train 4 data collectors (2 for Gunung Niyut and 2 for Gunung Naning) on the PLEO methodology. The training was focused on introduction to wildlife species, how to map to delineate the sample area for each participant and do data entry.

### Activity 2.2: Annual survey using distance sampling on pre-existing transects in GNNR and PLEO in both sites

In the Gunung Niyut site, PLEO data collection was carried out in February 2021. A total of 36 villagers were interviewed from 5 villages (Umbo, Mensibu, Dawar, Semadum, and Laek).

Additionally, 22 transects were carried out in 3 stages in 2020, and 10 transects in 2021 in Gunung Niyut.

In the Gunung Naning site, data collection was carried out in March 2021. In total 19 villagers were interviewed from 3 villages (Ladak, Tangkit and Piyai). Source: Activity 2.2. Transect\_GNNR\_2020.xlsx (Activity MoV folder), and Output Indicator 2.1 - PLEO 2021 databases (Output MoV folder)

#### Activity 2.3: Data input and compilation

PLEO data input and compilation was completed simultaneously with data collection.

In case of transect data, data input and compilation was carried out in the following month after data collection. Source: Output Indicator 2.1 - PLEO 2021 databases (Output MoV folder); Activity 2.2. Transect\_GNNR\_2020.xlsx (Activity MoV folder)

### Activity 2.4: data analysis and report writing

Data analysis was carried out on the second round of PLEO data collection and transect data. Additionally, revisions were made to the Ahmad et al. 2021 manuscript that was recently published in the Wildlife Biology journal. Source: Ahmad et al. 2021 (Activity MoV folder)

### Output 3: Improved access to financial services and livelihood development through Conservation Cooperatives

### Activity 3.1: Conservation Cooperative recruitment and enrolment for new members and villages

In Year 1, 200 new members enrolled as CC members in the Gunung Niyut site. Additionally, 319 enrolled as CC members through 6 activities (Ladak - 2, Tangkit - 2, and Piyai - 2) between April 2020 - March 2021 in Gunung Naning. Source: Output Indicator - 3.1 & 3.2 Beneficiaries Database.xlsx (Output MoV folder), Output Folder (Activity MoV folder)

# Activity 3.2: Initial financial literacy, management, and leadership training as well as conservation design and pledge

This training was carried out 2 times per village (total 6 activities) in the Gunung Naning site. Source: Activity 3.2 Report of Basic Training in CC HLGN July 2020 (in Output 3 folder) (Activity MoV folder)

# Activity 3.3: CC vision and mission building, memberships rules, elections, and standard operating procedures

In the Gunung Niyut site, in August – September 2020, this activity was carried out to assist the preparation of the Vision and Mission, and the preparation of a SOP for CCs.

In the Gunung Naning site, this activity will be carried out in Year 2. Source: Q3 Report CAGN Bengkayang.pdf, & Q3 Report CAGN Landak.docx (in Output 3 folder) (Activity MoV folder)

### Activity 3.4: CC monthly meetings for VSL (savings, active loans, loan repayments, etc) and other important issues (village by village based)

This activity was carried out each month for 10 CC in Gunung Niyut (10 meetings per month) and for 3 CCs (3 meetings per month) in Gunung Naning site. Source: Output 3 Folder (Activity MoV folder)

#### Activity 3.5: CC agreement creation and socialization

In total, 7 MoUs were signed between representatives of the Village Government, Village Advisory Board and CC group administrators for 7 partner villages in Gunung Niyut. This was followed by socialization of the MoU with other members of the CC those in 7 villages. The MoU discussion and signing activity was carried out in December 2020.

In Gunung Naning, 2 MoUs were signed between YPI and two villages (Meragun village and Nanga Pari village), followed by 2 MoU socialisation events with other CC members. Source: Activity 3.5 Evaluation of cooperation with the village government and signing of the MoU (in Output 3 folder) (Activity MoV folder)

# Activity 3.6: Asset transfers and field schools to CCs to generate income and identify new livelihood sources

This activity will be carried out in subsequent years.

### Activity 3.7: Annual CC evaluation with all members in each village

The tools for the CC evaluation are being revised because the previous tools did not adequately take into account the interconnectedness of the field programs (e.g. SMART, health, village savings and loans, etc.), assess organizational strength ability of each CC to meet needs of community members. This activity will be carried out in June-July 2021.

# Output 4: Improved access to healthcare and family planning needs identified as priorities by members to improve well-being and reduce dependency on IWT

### Activity 4.1 Health ambassador recruitment and training in PHE method

Recruitment and training of 88 Health Ambassadors (HAs) was carried out in September and November 2020 in 8 CCs from 6 Gunung Niyut villages (Engkangin, Bentiang, Tengon, Bengkawan, Sahan, Pisak).

In Gunung Naning, 25 health ambassadors were recruited and trained in November 2020.

Source: Output 4.3 & 4.5 Training/formation of health ambassadors.xlsx (Output MoV folder).

# Activity 4.2 Health ambassadors weekly visits (5 households a week) to distribute health information and collect data under 'Health Family Initiative"

In Gunung Niyut, HAs from 6 villages began weekly visits to provide information and data collection in November 2020, and 1 village from March 2021.

in Gunung Naning, HA weekly visits to provide information and data collection began in January 2021 at 3 CC villages.

Source: Output 4.1 Database of Health Ambassador Assisted Family.xlsx (Output MoV folder)

### Activity 4.3 Health ambassadors monthly report to local government clinics and PHE staff

The HA activity progress report was reported to 3 Community Health Centers (Puskesmas Tujuh Belas, Seluas, and Air Besar) in February 2021 in Gunung Niyut. Additionally, meetings were held for coordination of the preparation of health services in the community. The delay in providing reports was mainly due to limited availability of Puskesmas staff due to priority tasks related to COVID-19 mitigation and support activities. Source: Activity 4.3: Evaluation report for Puskesmas folder (Activity MoV folder)

### Activity 4.4 Quarterly and annual evaluations with health ambassadors

The quarterly evaluation meeting with the HAs will be held in May 2021 for the Gunung Niyut site due to their preoccupation with the rice harvest season.

Since HAs of Gunung Naning site just started household visits in January, evaluations are planned for Year 2.

### Activity 4.5 annual meetings and evaluations with ambassadors and government health workers

Due to the recent inception of the Healthy Family program, this evaluation will be carried out in Year 2.

# Output 5: Trial and evaluation of rifle, snare, and chainsaw buyback program to reduce IWT at project sites

### Activity 5.1: Program socialization and community hearings

In Gunung Niyut site, 3 socialisation activities were conducted (Dusun Dawar, Rt 03 Umbo, and Rt 04 Mensibu) in collaboration with sub-district police and military officials, BKSDA, and CC members. The aim of the socialisation activities were to provide information on the rifle-buy-back program to avoid future misunderstanding between community members and government agencies. Source: Activity 5.1 BTOR Program socialization and community hearings.docx (Activity MoV folder)

### Activity 5.2: Baseline survey to identify incentives and needs

A baseline survey data collection started in March 2021 and is ongoing. The results from the survey will provide the insights into motivations and basic needs of the surrounding communities around Dawar, Umbo and Mensibu sub-villages for participating in the rifle-buy-back program. These insights will be used to continue discussions with local community members about how CC management funds will be used for their respective villages. Source: No source since data collection is ongoing.

### Activity 5.3: Buy-back program implemented in target sites

This activity was implemented in 2 sub-districts of the Bengkayang district located near the Gunung Niyut site. In total, 35 firearms (Dawar - 15, Rt 04 Mensibu - 10, and Rt 03 Umbo - 10) were surrendered by villagers in return for a take-home-pay and deposit of funds into a management fund that will be used to develop services requested by the participants. Source: Activity 5.3 BTOR Rifle-buy-back program.doc, and Activity 5.3. Pictures (Activity MoV folder).

### Activity 5.4: Rewards and incentives provided

Rewards were provided in two ways to individuals who surrendered their weapons the to the Police, 1) Take home pay (THP) - given directly to the individual, and 2) Management funds, to be held by CC and used to according to the needs of the people who submit their firearms, e.g. clean water plant, agricultural equipment, telephone signal towers, etc. Source: Output 5.1 Rifle buy back list of participants.xlsx (Output MoV folder)

Output 6: Improved understanding of how CC model design can impact IWT, participation rates and livelihoods, based on evaluation and novel research

### Activity 6.1: Consultations and workshop with international technical advisors (Dr. J. Phelps and Dr. R. Carmenta) on research-based M&E methods

The YPI team met with Dr. Phelps and Dr. R. Carmenta to prepare research-based M&E methods. During Year 1, they were consulted to review data prepared in a draft manuscript looking at how participation and interventions that improve human well-being reduce environmental loss. The manuscript is currently being drafted.

Second, the team has focused research-based activities on understanding why individuals optout of conservation programs. Community-centered strategies have been identified as crucial approaches to conservation, particularly in the global South. From rights-based approaches to co-management of protected areas, a plethora of models exist to increase participation, positively impact human well-being, and reduce biodiversity loss. While there is an ever growing body of evaluations, research, and evidence in this field, the majority of work focuses on those who "optin" to these community-based strategies. Research tends to focus on how various interventions do or do not achieve the intended cross-sectoral outcomes that are flagship among these strategies. While some evaluations do include counterfactuals, very few studies look purely at those that "opt-out." Understanding the motivations behind this type of behaviour are extremely important, as theoretically, including more people should incrementally increase the impact of these cross-sectoral approaches. In Year 2, we are looking to conduct research to better understand the demographics, characteristics, perceptions, and motivations of those that opt-out of our programs. This will be used internally to create strategies to reach these individuals, and also has potential to contribute to the limited body of knowledge on the groups of individuals within a village, or landscape, who may make the decision to opt-out from a set of interventions.

### Activity 6.2: Literature review and desk work to compile suitable methodology

A literature review was conducted to better understand the existing body of knowledge on why individuals opt-out of various programs. Little to no research was found from the conservation field. Therefore, the team focused on a variety of other fields (e.g. public health, poverty alleviation) which had more insights into why certain individuals decide to not participate in a program, even if theoretically participation improves their well-being.

# Activity 6.3: In-country visit and training by international technical advisors on social survey methods such as qualitative comparative analysis (QCA), most significant change (MSC) and social network analysis

Delayed due to COVID-19. This activity will likely be pushed back to Year 3.

#### **Activity 6.4: Field data collection**

Data collection in the field related to those that opt-out started at the end of the project time period in Year 1. Data and progress will be reported in Year 2 of the project.

### 3.2 Progress towards project Outputs

The following sections reflect the project outputs and corresponding measurable indicators as described in the project log-frame. *Please note* that the Gunung Naning is a newly established project site established as part of this project, and therefore the baseline values for all indicators for this site was either '0' or TBD.

# 1. Improved community-based monitoring of Gunung Niyut Nature Reserve and Gunung Naning Protection Forest through implementation of SMART patrols

### Output Indicator 1.1 & 1.2

In Year 1, 6 SMART patrol teams from 6 villages in Gunung Niyut (Umbo, Dawar, Semadum, Laek, Tengon and Tauk) were supported to conduct forest patrols. Alternatively, 2 community SMART patrol teams with 4 members each were newly established in 2 villages (Ladak and Tangkit) in the Gunung Naning project site. The following information was collected from the participant lists of SMART patrol enrollment list. Source: Output 1.1 Participant list and enrollment in SMART patrols database (Output MoV folder)

### **Output Indicator 1.3**

In the Gunung Niyut project site, 20 community SMART patrol members were supported before the start of the project (baseline). Throughout Year 1 of the project, this support was continued for the 20 community SMART patrol members from 6 villages (Umbo - 3, Dawar - 3, Semadum - 3, Laek - 3, Tengon - 3, and Tauk - 5). Source: Output Indicator 1.4 SMART Patrol Report Gunung Niyut (Output MoV folder).

In Year 1 (June 2020 onwards), 8 community SMART patrol members were recruited, trained, and supported from the 2 villages in the Gunung Naning site. Therefore the total number of community SMART patrol members supported in Year 1 include 28 community members (Gunung Niyut - 20, Gunung Naning - 8). Source: Output 1.1 Participant list and enrollment in SMART patrols database.xlsx. (Output MoV folder)

### **Output Indicator 1.4**

Total area covered by SMART patrol teams in Gunung Niyut in Year 1 was 55,800 ha of forests, which is 45% of the total area on the Gunung Niyut Nature Reserve (protected area). This coverage is 5% higher than the baseline and the target for Year 1 for this project site.

Source: Output Indicator 1.4 - SMART Patrol reports Gunung Niyut (Output MoV folder)

#### **Output Indicator 1.5**

The total area of the 'protection forests' in the Gunung Naning site is 229,230 ha, which covers 4 administrative districts (regencies) of West Kalimantan (Sintang - 14%, Sekadau - 19%, Melawi - 26% and Ketapang - 41%).

In Year 1, two (2) community SMART patrol teams were established at this project site, one each in a village in Sintang regency and Sekadau regency. Combined, these SMART patrol teams covered 14,030 ha through forest patrols in around protection forests near their village. This is equivalent to 6.12% of the total forest area that is under the 'protection forests' status in Gunung Naning. The patrol coverage was lower than the target for Year 1 (20%), primarily due to two reasons: (1) only 1 village per district had a SMART Patrol team, and (2) SMART patrol teams only patrolled forests that were part of their village's territory to avoid conflict arising from territoriality with surrounding (Dayak) communities that are not part of YPI's programs.

Source: Output Indicator 1.5 Naning.xlsx (Output MoV folder)

### 2. Increased and / or stabilized populations of five species threatened by IWT

#### **Output Indicator 2.1 and 2.2**

Table 1 provides a comparison of density estimates (individuals/km²) for 2 priority species from Gunung Niyut site:

Table 1: Comparison of density estimate for 2 priority species from the Gunung Niyut site

Species	Baseline (2018-2019) from Ahmad et. al (2021)	Year 1 Estimate (2020- 2021)	Method Used
Helmeted hornbill	1.54 (0.58-4.11)	2.6 (1.6-4.1)	Point Transects and Line Transects
Abott's Gibbons	1.7 (1.13 -2.26)	1.7 (1.06 - 2.7)	PLEO and Line Transects

Line transect and PLEO data will be gathered annually to compare densities for species throughout the project period. Since the majority of species in Bornean rainforests exist in low densities, reproduce at slow rates, and local densities fluctuate based on seasonality (e.g. due to fruiting seasons), we feel it is best to compare and track densities over time.

At the end of Year 1, we were able to compare baseline density estimates for two of the five target species from Oct 2018- Feb 2019 and from Nov 2020- Feb 2021 with line transect data estimates. Initial analysis shows a slight increase in the population of the critically endangered Helmeted Hornbill (*Rhinoplax vigil*) and for the endangered endemic Abbott's Gibbons (*Hylobates abbotti*) the density appears to be stabilized.

Additional datasets from PLEO, camera traps, and line transects will be used to investigate trends in the other 3 target species throughout the project period.

In Year 1, we established the baseline density estimates (individuals/km²) for the following 5 target species (Table 2) based on our original proposal for the Gunung Naning site using the PLEO methodology:

Table 2: Baseline density estimate for the 5 priority species from the Gunung Naning site

Species Common Name	Baseline Value (individual per km2)
Helmeted Hornbill	0.14
White-bearded Gibbon	0.64
Bearded Pig	0.27
Sunda Pangolin	0.14
Straw-headed bulbul	0.45

Source: Output Indicator 2.1 PLEO 2021 databases folder (Output MoV folder)

# 3. Improved access to financial services and livelihood development through Conservation Cooperatives

### **Output Indicator 3.1 and 3.2**

Before the start of the project, there were 821 CC members enrolled in CCs in Gunung Niyut (upto March 2020). At the end of Year 1 (March 2021), an additional 220 members joined their village CCs at this project site. At the end of Year 1, the total number of direct beneficiaries enrolled in Gunung Niyut was 1,041 Of the total number CC members, 42.84% of beneficiaries are women.

In Year 1, in the Gunung Naning site, 319 members enrolled in CCs (Male = 184; Female = 135). Of the total number of CC members, 41.59% of beneficiaries were women. Source: Output Indicator 3.1 & 3.2 Beneficiaries Database.xlsx (Output MoV folder)

### Output Indicator 3.3 and 3.4

In the Gunung Niyut site, the savings program grew by 28%, with total savings reaching IDR or (approx.) GBP at the end of Year 1 (March 2021).

In the Gunung Naning site, the total value of the savings program at the end of Year 1 was IDR or (approx.) GBP Source: Output 3.3 & 3.4 Saving and Asset Database.xlsx

### **Output Indicator 3.5**

In Year 1, the total loan repayment rate for CC members in the Gunung Niyut project site was 84%. The repayment rate for women borrowers was 97%. Source: Output Indicator 3.5 Loan Database.xlsx (Output MoV folder)

### **Output Indicator 3.6**

In Year 1, CC members of Umbo village from Gunung Niyut site were supported to develop the stingless bee project. The stingless bee project will allow CC members to use specially designed apiaries to harvest wild honey from the *Heterotrigona itama* bees and sell in the market as a nontimber forest product. Additionally, training on planting and growing 8 new high-value vegetable varieties were introduced to farmers who participate in our Sustainable Agriculture program. These vegetable varieties include radish (lobak), purple eggplants (terong ungu), beans (buncis), carrots (wortel), shelled corn (jagung pipil), shallots (bawang merah), sweet corn (jagung manis), and scallions (bawang sop). Alternatively, as part of the CC livelihood development support, partner villages in the Landak regency were supported with the development of business related to animal (chicken and pig) and fish farming.

Source: Output 3.6 Assistance for Forest Honey (Kelulut) Cultivation.xlsx, Output 3.6 Database Farmer Assistance Progress.xlsx (sustainable ag. support), Output 3.6 Report of Business Work in Landak CAGN.docx (animal and fish farming) (Output MoV folder)

4. Improved access to healthcare and family planning needs identified as priorities by members to improve well-being and reduce dependency on IWT

### **Output Indicator 4.1**

Before the start of the project, 15 beneficiaries had access to YPI's PHE services in the Gunung Niyut site. At the end of Year 1, a total 1,475 beneficiaries were reached through the PHE program at the Gunung Niyut site. Source: Output 4.1 Database of Health Ambassador Assisted Family.xlsx (Output MoV folder)

#### **Output Indicator 4.2**

The baseline value for this indicator was 15. At the end of Year 1, at least 259 women in Gunung Niyut used contraceptives after receiving information from HAs. Source: Output 4.1 Database of Health Ambassador Assisted Family.xlsx (Output MoV folder)

### **Output Indicator 4.3**

In Year 1 at the Gunung Niyut site, 88 health ambassadors were trained, of which all were women. The baseline value of this indicator was 0. Source: Output 4.3 & 4.5 Training / formation of health ambassadors.xlsx (Output MoV folder)

### **Output Indicator 4.4**

At the end of Year 1, at least 89 women in Gunung Naning used contraceptives after receiving information from HAs. Source: Output 4.3 & 4.5 Training / formation of health ambassadors.xlsx (Output MoV folder)

### **Output Indicator 4.5**

In Year 1 at the Gunung Naning site, 25 health ambassadors were trained, of which all were women. The baseline value of this indicator was 0. Source: Output 4.3 & 4.5 Training / formation of health ambassadors.xlsx (Output MoV folder)

# 5. Trial and evaluation of rifle, snare, and chainsaw buyback program to reduce IWT at project sites

### **Output Indicator 5.1**

This activity was only able to be carried out in the Gunung Niyut site. In Year 1, a total of 35 homemade firearms (illegal) were handed over to the police by the local community of a village in the Bengkayang area in Gunung Niyut. Source: Output 5.1 Rifle buy back list of participants.xlsx (Output MoV folder)

### **Output Indicator 5.2**

In Gunung Niyut, a total of 20,074 seedlings (Bentiang - 3,034 trees, Laek - 5,819 trees, Mensibu - 5,528 trees, and Tengon - 5,693 tress) were planted in Year 1. Source: Output 5.2 Number of seedlings planted in Gunung Niyut.xlsx (Output MoV folder)

#### **Output Indicator 5.3**

In Gunung Naning, a total of 11,060 polybags with seedlings of different plant species were distributed across 3 locations (Ladak - 5,320 polybags, Tangkit 2,205 polybags, and Sungai Piyai - 3,570 polybags). Currently, these seedlings are kept at the nursery and will be planted in Year 2. The types of seeds planted are cacao, jengkol, petai, coffee, and durian. Source: Output 5.3 Participant List of Polybag Distribution (Output MoV folder)

### **Output Indicator 5.4**

Across both sites, 312 farmers (Gunung Niyut - 162 and Gunung Naning - 150) were provided basic training on sustainable agriculture practices. Among the farmers, 62% (193) were men and 38% (119) were women. Source: Output 5.4 Participant list of sustainable agriculture training with gender disaggregated data.xlsx (Output MoV folder)

# 6. Improved understanding of how CC model design can impact IWT, participation rates and livelihoods, based on evaluation and novel research

### **Output Indicator 6.1**

During Year 1, our team focused on designing a study to better understand why individuals optout of conservation development programs. We felt this was the essential starting point as it is crucial to better understand who's behaviour we are not changing at all before we dive deeper into the causal pathways of the CC's model impacts on wildlife. During Year 2, we will focus on developing a second study that investigates the CC's model impact on wildlife and human well-being. With that said, biodiversity indicators (e.g. density estimates) support the claim that the CC model has positive impacts on wildlife populations. However, greater research is needed to better understand the causal pathways between the CC model and environmental outcomes.

#### **Output Indicator 6.2**

We are in the process of writing a manuscript with the proposed title - 'Integrating Participation and Well-being: Why it Matters in Conservation' in which our aim is to evaluate the impact of an integrated landscape project ('bundles' of interventions) on both biodiversity and well-being of local communities living across a protected area (PA) in West Kalimantan, Indonesia. Our target is to publish the manuscript in Year 2 of the project.

### **Output Indicator 6.3**

In Q4 of Year 1, we initiated the process of carrying out field research to understand the factors that influence non-participation in community-based conservation programs for forest dependent communities in West Kalimantan, Indonesia. At present, we are in the primary tool development stage.

### **Output Indicator 6.4**

This sub-output is contingent on the results from Indicator 6.2 and 6.3.

### **Output Indicator 6.5**

We have submitted an article that was published in the February 2021 IWT Challenge Fund Newsletter. The article title was 'Reducing illegal wildlife trafficking through a holistic community-led conservation approach'. We also published a blog on our website describing some of the insights that have emerged from our work with local communities in our project sites. Source: IWT Newsletter article (pg. 5), and Blog on Planet Indonesia's website.

### 3.3 Progress towards the project Outcome

### Outcome 0.1

At the end of Year 1, 1041 CC members were enrolled and active in Gunung Niyut and 319 CC members in Gunung Naning (Output 3.1 & 3.2). The average growth of the Village Savings & Loan growth was 28% in Gunung Niyut (Output 3.3 - see above).

#### Outcome 0.2

In Year 1, 45% of Gunung Niu protected area and 6.12% of Gunung Naning Protection Forests were patrolled by community-led SMART patrol teams. Source: Output 1.4 and Output 1.5 (see above)

#### Outcome 0.3

Compared to before project, reduction in tree cover loss was around 47% (calculated by comparing Year 1 SMART data with historical SMART data)

#### Outcome 0.4

After Year 1 of our project, we will use encounter rates (detection per kilometre patrolled) as a proxy for dependency on IWT. The assumption is that we will see a reduction in illegal activity encounter rates across the project site over the project period if communities were less reliant on IWT as a source of income for day-to-day consumption or to support their livelihood. Encounter rates show a decline in "IWT events" (e.g. hunting) inside Gunung Niyut and Gunung Naning over the project period to date (Fig. 2).

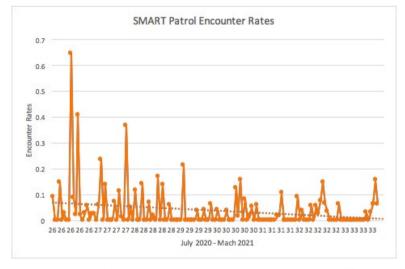


Figure 2: Trend in encounters with (detection per kilometer patrolled) with IWT activities inside the Gunung Niyut Nature Reserve and Gunung Naning between July 2020 and March 2021

### 3.4 Monitoring of assumptions

### Outcome level assumptions and comments:

**Assumption**: Communities are open to Conservation Cooperatives and continue to enroll and invest in Savings & Loans program

**Comments:** The Savings and Loans programs is a cornerstone for every CC. In both Gunung Niyut and Gunung Naning, growth in both CC membership and CC savings funds indicates that community members are open to this program. Source: Output - 3.3 & 3.4 Saving and Asset Database.xlsx and Output Indicator - 3.1 & 3.2 Beneficiaries Database.xlsx (Output MoV folder)

**Assumption**: Communities value CC services provided and enrol in healthcare and education programs

**Comments**: Proxy indicators from the health program suggest that community members are open to participating in YPI programs. Source: Output 4.1 Database of Health Ambassador Assisted Family.xlsx (Output MoV folder)

**Assumption**: SMART patrol teams collect high-quality data in the field and abide to rules and regulations in the program's Standard Operating Procedures

**Comments**: Continuation support and use of data generated from the SMART program by BKSDA (Provincial Natural Resource Management Agency) in management of project sites indicates data quality and integrity along with observance of park regulations. Source: Activity 1.4 (see above) & Output Indicator 1.4 - SMART Patrol reports Gunung Niyut (Output MoV folder)

**Assumption**: Community members are open to adopting new livelihoods and farming methods **Comments**: In Year 1, CC members were supported to develop both farm and NTFP livelihood sources. Participation by CC members in these programs indicates that there is interest in the YPI's support in livelihoods development in partner communities. Source: see Output 3.6 sources.

**Assumption**: Wildlife populations stabilize or increase as a response to reduced poaching **Comments**: PLEO survey data and line transect data reveals that there has been an include in Helmeted Hornbills and stable population of Abbot's Gibbons in the Gunung Niyut site. Source: Output Indicator 2.1 - PLEO 2021 databases; Activity 2.2. Transect\_GNNR\_2020.xlsx (Output MoV folder)

### **Output level assumptions and comments:**

Output 1: Improved community-based monitoring of Gunung Niyut Nature Reserve and Gunung Naning Protection Forest through implementation of SMART patrols

**Assumption:** Members are interested in participating in SMART patrol teams

**Comments:** SMART patrol recruitment and enrolment indicators were met on target, suggesting members were indeed interested in participating.

**Assumption**: SMART patrol teams collect high-quality data in the field and abide to rules and regulations relayed in the programs Standard Operating Procedures

**Comments:** Data has been collected in correspondence with SMART patrol methodology, ensuring high-quality data allowing us to analyse monthly IWT events throughout the project period.

#### Output 2: Increased and/or stabilized populations of five species threatened by IWT

Assumption: Community members are open to new livelihoods

**Comments:** Indicators of new income generating activities suggest that community members are indeed open to new livelihood opportunities.

Assumption: Wildlife populations stabilize or increase as a response to reduced poaching

**Comments:** Early data from the Helmeted Hornbill and Abbot's gibbons suggest that two of the five target species are stabilized to slightly increasing in population size

Assumption: PLEO method is used effectively

Comments: Based on the quality of PLEO data, and the recent publication, this assumption was

met.

# Output 3: Improved access to financial services and livelihood development through Conservation Cooperatives

**Assumption:** Communities are open to Conservation Cooperatives and continue to enrol

**Comments:** Enrolment continued throughout the project period and surpassed our year one target, indicating community excitement and motivation around enrolment.

**Assumption:** Communities value CC services provided and enrol/remain active in health, literacy, and finance programs

**Comments:** Enrolment continued throughout the project period and surpassed our Year 1 target, indicating community members remained active in health and education interventions.

**Assumption:** Communities are active in savings funds in community-based savings/loans program

**Comments:** The size of the savings program grew consistently throughout the project period, despite economic challenges related to the global pandemic. This indicates communities have trust in the savings/loans program

Assumption: Communities see explicit links between IWT and CC services provision

**Comments:** The CCs standard operating procedures around membership behavior, and interaction with nature (including IWT), clearly state how services are intended to reduce exploitation of wildlife.

### Output 4: Improved access to healthcare and family planning needs identified as priorities by members to improve well-being and reduce dependency on IWT

Assumption: Women and youth enrol in healthcare and family planning services

**Comments:** The program continued to grow over the project period, indicating excitement around healthcare services.

**Assumption:** Members enrol in literacy program and remain active to reach graduation

**Comments:** The program continued to grow over the project period, indicating excitement around education services.

**Assumption:** Health ambassadors are properly trained and remain active and effectively distribute healthcare services

**Comments:** Health ambassadors were able to meet their targets, suggesting they were properly trained and capable of reaching many households through weekly visits.

# Output 5. Trial and evaluation of rifle, snare, and chainsaw buyback program to reduce IWT at project sites

Assumption: Community members are open to new livelihoods and farming methods

**Comments:** Rifle buy-back was slightly lower than our target. FGDs with communities suggested that some community members were not interested in farming alternatives, while others were. This assumption was not fully met which impacted the results under this output.

**Assumption:** CC members are open to rifle buy-back program

**Comments:** CC members were open to the rifle buy-back program. However, as mentioned above, the interest in the incentive varied between individuals, and not all individuals were interested in farming/agriculture incentives in exchange for their rifle.

### Output 6: Improved understanding of how CC model design can impact IWT, participation rates and livelihoods, based on evaluation and novel research

**Assumption:** In the context of a complex environment and multiple interventions, we are are able to identify the salient variables that influence outcomes

**Comments:** Our team is currently preparing the research instruments to conduct more in depth evaluations on the CC model. Therefore, this assumption has been met in a theoretical manner, but direct data from the field has not yet been collected

**Assumption:** Local residents, including people who are not active in the CC, are willing to participate in research

**Comments:** In Year 1, our team conducted a literature review on "non-participation" and designed a survey instrument. At the end of Year 1, the survey commenced. So far, non-CC members have been willing to participate in the research.

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

The overarching impact of this project is to improve the densities of five threatened wildlife species and improve human well-being and poverty alleviation for 1741 households at two sites in West Kalimantan, Indonesia. The two sites include our existing project site of Gunung Niyut and the newly established site in Gunung Naning. In the Gunung Niyut site, wildlife surveys (PLEO and Transects) revealed that populations of some of the priority species are stabilizing (Output 2). Additionally, data generated by community-led SMART patrols show a reduction in the incidence of poaching activity around the locations patrolled by the SMART patrols inside the nature reserve (Fig. 3 - Left).

Alternatively, in Year 1, the baseline density estimates for priority species were established using the PLEO method and community-led SMART patrols were established in the Gunung Naning site (Table 2). Data from community-led SMART patrols from Year 1 show a downward trend of poaching-related encounters across patrolled areas (Fig. 3 - Right).

Activities related to livelihood developments were initiated in Year 1 for the Gunung Niyut site. These activities are on-going and will be evaluated at the end of Year 2.

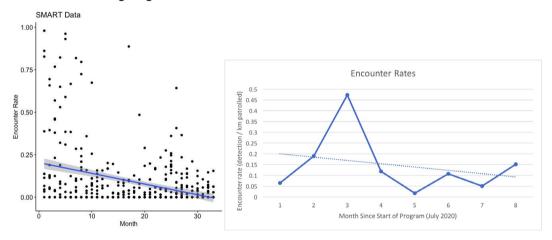


Figure 3: (Left) SMART Patrol Encounter rates (detection / effort) over 30 months in Gunung Niyut Nature Reserve. Data shows a statistically significant reduction in detections per kilometer patrolled over a 30 month period. (Right) Shows encounter rates (detection of IWT controlled for patrol effort) in Gunung Naning from July 2020 until March 2021.

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

This project directly addresses the commitments of the London Conference Declarations and the Kasane Statement, particularly by strengthening law enforcement through locally-led community patrols (See Output 1), and supporting sustainable livelihoods and economic development to address the drivers of IWT (See Output 3). Based on program indicators, in a relatively short amount of time, our interventions have produced notable results. In Gunung Niyut there is evidence that one of the world's most endangered species, the Helmeted hornbill, has a stable population. This species casque (head) is worth 5 times the price of elephant ivory (for equal quantities) on the Chinese black market. In addition, human well-being indicators point to improved economic resilience, human health, and the adoption of sustainable livelihoods.

### 5. Impact on species in focus

During the project period, the team published a paper in the Journal of Wildlife Biology that established baseline density estimates for species of focus (see attachment Ahmad et al. 2021 Activity MoV folder) in the Gunung Niyut Nature Reserve. These estimates were based on data collected from point counts October 2018 - February 2019 and social surveys April and May 2019. During the project period the team collected additional data from transects November 2020 - February 2021. Data was used to estimate densities of important species of focus. The DISTANCE package in R was used to analyze data and estimates were chosen based on the top model (AIC).

After Year 1, we can present data towards the overall outcome for 2 of the 5 target species in Gunung Niyut (Table 1). During Year 1, baseline values were established in the new project site - Gunung Naning, as well as for other target species in Gunung Niyut. We expect by the end of Year 3 to be able to draw inference on population parameters of target species, providing further insights into the impact of the CC model. Early inference for the critically endangered Helmeted Hornbill and the endangered Abbott's Gray Gibbons show that populations have been stabilized or are slightly increasing.

### 6. Project support to poverty alleviation

The direct beneficiaries of this project are rural Indigenous Dayak communities, including Dayak Bekati and Dayak Belangin communities in Gunung Niyut Nature Reserve, and Dayak Seberuang and Dayak Taman communities in Gunung Naning Protected Forest. These communities live in poverty, which is exploited by IWT traders to entice hunters into poaching animals such as hornbills, pangolins, primates, and other high-value animal species.

In order to reduce the incentives to engage in IWT activities, we have initiated access to equitable village savings and loans programs and financial training for members of each CC. By becoming a member of their village CC, villagers are able to create savings as well as borrow from the village fund at very low interest rates. Farmers in communities also benefit from training in organic agriculture and access to environmentally safe inputs. Households also get access to basic health service and information through community Health Ambassadors trained by us to act as a link between government health clinics and rural villages, and provide health education materials and voluntary family planning options to women and men in their community. Finally, we establish and support a SMART patrol team in every CC led by local community members in collaboration with a government park ranger. Such join patrolling creates opportunities for collaboration in the management and governance of local forests.

Direct poverty impacts expected from this project will include increase in household income due to livelihood development and diversification. Presently, we are working with farmers to introduce new high-value crop species that will support farmer incomes and introduced forest honey as an alternative livelihood for one village. Additionally, for Year 2 we are developing a grant program through the CC to provide group based loans to villages for productive purposes. Grants will be given to small member groups (~15 individuals or less) within each CC, which will then be available to individual members in each group based on the merit of their business proposals. Te whole group will be responsible to pay back the loan to their CC.

Notable achievement in Year 1 of the project includes a 2% higher CC membership than Year 1 target in the Gunung Niyut site and, 60% higher in the Gunung Naning site for Year 1 (Output 3.1 and Output 3.2)

Evaluation of the loan program shows that CC members take loans mainly to invest in their farms (43%), meet family needs (31%), repair assets (12%), and invest in business (12%). Sixty-three percent (63%) of villagers who took loans from their village CCs mentioned that their income increased because of taking the loans. Among villagers whose income increased as a results of the loan, fifty-three percent (53%) used this profit to meet family needs, 29% used it to repay debts, and 18% invested it into their farms/business. Source: CAGN PUMK Loan.docx

Additionally, by establishing Health Ambassadors in partner communities, more than 1,400 people have in Gunung Niyut, and >300 villagers in Gunung Naning have received greater access to health information and basic services.

Alternatively, community farmers in Gunung Niyut now have the expertise and inputs to grow 8 new high-value vegetable species that will improve their incomes. Other livelihood opportunities supported include development of poultry, pig, and fish production. We have also supported development of a stingless honey production in a village in Gunung Niyut that we will continue to develop in Year 2 and Year 3.

### 7. Consideration of gender equality issues

We understand that men and women interact differently with the environment that gives rise to conditions for gender inequality. As a result, our community-driven, human rights-based approach to conservation looks to engage and empower both women and men through a community-based conservation model. We recognize that the health of people and the environment are inextricably linked and that there are gender-specific needs related to healthcare and livelihood opportunities. As a result, >40% of our direct beneficiaries in Gunung Niyut and nearly 60% of direct beneficiaries in Gunung Naning are women (see Output 3.1 and Output 3.2).

Our approach ensures that women and girls have an improved access to healthcare, and develop skills that enable them to engage in leadership and decision-making roles in their communities as well as engage in income generating activities and seize better opportunities for their future. As part of this project, we are training women in their local communities to act as health extension agents (Health Ambassadors) (see Output 4.3 and Output 4.5). These women are extend government health programming in their remote communities and create access for women and girls in their communities to learn about family planning options (see Output 4.2 and Output 4.4).

In Year 1, the project has exceeded the project goal (195%) of recruiting HAs in Gunung Niyut and nearly met the 3-Year Goal in Gunung Naning (83%). All HAs are women from our partner villages. Going forward, we remain committed to meeting project targets and ensure gender equality within the design, implementation, evaluation, and interventions.

Although there have not been any significant achievements related to gender mainstreaming,

### 8. Monitoring and evaluation

We use multiple sources of information and methods of collecting data to aid us in our strategic planning and adaptive management. The following is a list of the common tool and methodologies that we use to measure the contribution of project activities towards project output and outcome.

### 1) Participatory Impact Assessment (PIA)

In subsequent years of the project, we plan to carry out a Participatory Impact Assessment (PIA) to evaluate the direct and indirect impact of our interventions on people's lives. Essentially, a PIA recognizes that local community program beneficiaries are central to identifying and measuring indicators of change and outcomes. We will use a nested ranking PIA method adapted from the <u>PRISM Conservation Evaluation toolkit</u>. The nested ranking system allows us to test how different activities, incentives, and deterrents drive different outcomes.

#### 2) Conservation Cooperative Monthly Reports

Each CC conducts a monthly meeting that reports the number of members, size of the savings/loans program, number of active and outstanding loans, and repayment rate. This allows us to track financial data easily throughout the life of the project across all of our Conservation Cooperatives.

#### 3) SMART Patrol Reports

We use data from monthly data collected by each community-led SMART patrol team during their forest patrols. We use this information to calculate encounter rate per hour patrolled and kilometre patrolled. This provides important environmental monitoring information to track deforestation and other extractive activities.

#### 4) Distance Sampling and PLEO

We use transects and distance sampling techniques to estimate wildlife densities through time as an output indicator (Output 2). We also use a method called 'Pooling Local Expert Opinion' (PLEO), which is a social survey based method to leverage local knowledge of wildlife population trends.

### 5) Health Ambassador Monthly Reports

Trained Health Ambassadors (HAs) conduct monthly household visits in their communities and track indicators such as: *Is there a smoker in the house? Are women using contraceptives? Is there a toilet in the house? What is the trash disposal method? Is there an infant in the house? Is there a pregnant woman in the house?* Responses are recorded and if indicators are flagged, appropriate corresponding health information is provided. These indicators are tracked through time to understand progress of community health intervention.

### 6) Sustainable Farming Quarterly Reports

The Sustainable Agriculture and Agroforestry team records data for monthly and bi-annual reports that track the number of farmers enrolled, number and topics of training provided, the number of participants attending training, number of seedlings planted, etc. These indicators enable us to track progress of activities towards project outputs.

### 7) Novel research on interventions to address IWT

In Year 1, we have initiated the process of carrying out research to gain in-depth insights into the factors that deter villagers from becoming part of a Conservation Cooperative. Results from this study will be used to design interventions to encourage participation of Indigenous communities in conservation programs in Indonesia. Additionally, we are also working on a manuscript that focuses on the impact of an integrated landscape approach on community well-being.

In case of Output monitoring, we use Tableau, which is an online visualization software, to visualize outputs of our activities across our project sites. We have also started to use Smartsheets, which is online project management software, to allow field teams to work more effectively and record progress of outputs as they happen.

At the end of Year 1, our wildlife monitoring efforts revealed that 2 of the 5 of the targeted species are showing an increase/stabilisation of populations compared to baseline values. In order to estimate wildlife densities, we use an innovative social survey methodology (PLEO) and standard distancing sampling techniques to estimate changes in wildlife densities.

The tools and methods described as part of the M&E plan has not changed for this project.

#### 9. Lessons learnt

Despite the immense challenges of COVID-19 our project met the majority of its targets in Year 1. We can attribute this to our dedication in investment in grassroots local efforts. While larger multinational NGOs often rely on outside 'experts', our model recognizes the importance of investing in local champions who are nested within the target landscapes and communities. This allowed us to continue program activities, *and* launch the Gunung Naning project site during the COVID-19 pandemic.

One area of improvement is the rifle buy-back program. We were slightly under on this target due to some confusion on the interest in various incentives at the community level. We based the strategy based on a rifle buy-back intervention we had done in another district prior to the IWT Challenge Fund project. However, the needs, challenges, and opportunities differ between villages, and our target area during Year 1 showed a lower interest in agricultural incentives. This led to a lower buy-back rate than expected. In Year 2 and Year 3, our team will ensure focus group discussions are conducted far in advance to identify suitable incentives that results in higher rates of rifle buy-back.

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

The main comment in our initial application was improving indicators and related to the legality of the rifle buy back. During Q1 of Year 1, we submitted a change request form to improve our logical framework - focusing on making indicators SMARTer. Second, we also clarified that the rifle buy-back program is administered through the police, who legally has the oversight of weapons. YPI simply facilitates the buy-back process.

### 11. Other comments on progress not covered elsewhere

COVID-19 continues to inflict unprecedented social and economic costs on communities further trapping marginalized rural communities into a vicious cycle of environmental injustice. As out partner communities lose access to markets to sell their produce a feedback loop is created that deepens a community's inability to meet basic and financial needs leading to higher levels of resource extraction culminating into spiralling poverty and depletion of surrounding natural resources. Realizing that many of our communities will be hard hit from prevailing circumstances, we identified 1,400 at-risk households and developed an emergency relief fund with the help of DEFRA and other donors. We used these emergency funds to support households in our Gunung Niyut by giving them cash handouts that would support their families and cover losses incurred due to COVID-19 lockdowns. Along with administering our own emergency relief funds, we supported our partner villages through our CCs to gain equal rights and access to Indonesian government aid, since many rural villages that we work with have not received information or have the capacity to access these funds.

### 12. Sustainability and legacy

The Indonesian government has shown increasing interest in the CC model. In fact, BKSDA West Kalimantan has expressed interest in making the Gunung Niyut Nature Reserve a model for nature reserve management across Indonesia.

Our exit strategy focuses on improving community-led systems. The CC model was designed to give local communities complete ownership of the process. These CCs also generate and manage funds. In this way, YPI is less the implementer of a program and more the facilitator of a process. As CCs mature, YPI's involvement and expenditure decreases. Therefore, our exit strategy focuses on support community-led organizations on their pathway to independence and self-reliance.

### 13. IWT Challenge Fund identity

The fund was acknowledged on all posts related to the project. In addition, all community trainings and events where funds were used included banners or booklets with the UK government's logo.

### 14. Impact of COVID-19 on project delivery

YPI developed a strict set of standard operating procedures to ensure safety during the time of COVID-19 pandemic. This ranges from regular testing, to limited office use, to longer periods of time in the field to reduce travel. This of course also includes standard requirements of social distancing, mask wearing, taking temperature, and using outdoor facilities for any community meetings or gatherings. Due to our investment in local communities, our project was able to meet nearly all its targets during Year 1. The major adjustments were under Output 6, where we had planned to bring two professors, Dr. Carmenta and Dr. Phelps, to Indonesia to conduct trainings and oversee fieldwork. This was revised and conducted online. We believe our project has the potential to both (i) build community level resilience, and (ii) reduce the potential for future pandemics. Outside of IWT funding, we have a research project in partnership with Stanford and Health In Harmony, looking at how holistic interventions do or do not increase resiliency and reduce biodiversity loss. We are using COVID-19 as a case study for this. In year two or three of our IWT project we will share some of these results with the IWT challenge fund.

### 15. Safeguarding

Please tick this box if any safeguarding or human rights violations have occurred during this financial year.	
If you have answered yes, please ensure these are reported to <a href="mailto:ODA.safeguarding@defra.gov.uk">ODA.safeguarding@defra.gov.uk</a> as indicated in the T&Cs.	

Internally, we have a variety of standard operating procedures related to safeguarding, whistleblowing, anti-fraud, anti-corruption, sexual harassment, feedback/accountability, among others. These policies were drafted by our Human Resources department, reviewed by senior management and the board of directors. We review policies annually, and conduct biannual internal support sessions to ensure all staff are familiar with these policies. These policies set

the code of conduct and have clear policies towards investigation, action pathways, and consequences.

### 16. Project expenditure

Table 1: Project expenditure during the reporting period (April 2020-March 2021)

Project spend (indicative) since last annual report	2020/21 Grant (£)	2020/21 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				

### • Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2020-2021

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
Impact Improved densities of five threatened will being and poverty alleviation for 1741 ho Kalimantan, Indonesia.		Density of 2 threatened species have stabilized/improved.	
Outcome Indigenous communities in Gunung Niyut and Gunung Naning show reduced dependency on IWT	0.1) 1741 households enrolled in Planet Indonesia's Conservation Cooperatives and 30% Village Savings & Loan growth per CC per year (baseline= 541 households Gunung Niyut, 400 new households enrolled in each Y1, Y2 and Y3; 100% beneficiaries Indigenous Dayak and 40% are women)  0.2) 60% of total area (353,000 ha) patrolled and managed by local communities (50% by Y2 and 60% by Y3 baseline = 40% of Gunung Niyut nature reserve)  0.3) Reduction in tree cover loss by 10-20% annually across target sites (Y1, Y2, Y3)  0.4) Stabilizing or increased wildlife populations by reduced IWT (Baseline	0.1. Gunung Niyut - 1041 CC members Gunung Naning - 319 CC members Gunung Niyut Village Saving & Loan growth - 28%  0.2. Gunung Niyut - 45% of the total area on the Gunung Niyut Nature Reserve (protected area) Gunung Naning - 6.12% of the total forest area that is under the 'protection forests' status in Gunung Naning  0.3. 47% reduction in SMART patrol encounter rates (logging and encroachment)  0.4. Stabilization/Increase of 2 priority species:	
	values [individuals / km2] in Gunung Niyut for priority species as follows: Helmeted Hornbill= 1.13	Helmeted Hornbill - 2.6 (1.6-4.1) Abbott's Gray Gibbons - 1.7 (1.06 - 2.7)	

Output 1. Improved community-based monitoring of Gunung Niyut Nature Reserve and Gunung Naning Protection Forest through implementation of SMART patrols	Sunda Bearded Pig= 6.79 Abbotts Gibbons= 1.13 Sunda Pangolin= 2.05 Straw-headed bulbul = 0.10; Gunung Naning baseline will be estimated in Y1)  1.1) 6 SMART patrol units supported and conduct monthly patrolling in Gunung Niyut Nature Reserve  1.2) 4 SMART patrol units supported and conduct monthly patrolling in Gunung Naning Protection Forest  1.3) A total of 42 community members	1.1 and 1.2) 6 SMART patrol unit are act in Output 1.1 & 1.2) 1.3) Gunung Niyut - 20 SMART members (Total = 28 SMART members supported 1.4) 45% of the Gunung Niyut Nature Re SMART (Evidence Output 1.5) 1.5) 6.12% of the Gunung Naning Protect	s, Gunung Naning - 8 SMART members in Year 1). (Evidence in Output 1.3) serve (protected area) patrolled by
A STATE OF THE STA	enrolled in SMART patrols and trained in SMART  1.4) 60% of Gunung Niyut protected and patrolled regularly by SMART patrols  1.5) 60% of Gunung Naning protected and patrolled regularly by SMART patrols	Output 1.5)	
Activity 1.1 SMART Patrol recruitment a	nd training for new villages / members	6 activities were carried out to recruit and train villagers into SMART patrols	The aim is to recruit more SMART patrols members in new villages in Gunung Naning
Activity 1.2 SMART Patrol monthly patrols (7-10 days per month) and data reports (due every 15 days of patrol finishing, 1 copy to village and 1 copy to government agencies)		Gunung Niyut - 11 out of 12 months patrolled; total 65 reports generated Gunung Naning - 9 months of continuous patrol since July 2020. Total 17 reports generated	The aim for next period is to continue supporting existing and new SMART patrol units at both sites
Activity 1.3 SMART patrol semester review and evaluation		This activity was combined with Activity 1.5	This activity will be continued in Year 2
Activity 1.4: SMART patrol data used to triangulate/validate M&E findings from social surveys, Focus Group Discussions, and Participatory Impact Assessments		SMART data shared with BKSDA will be combined with other sources for PA management in Gunung Niyut	Continue supporting BKSDA with data from SMART program

		Gunung Niyut - 2 review and evaluation activities	
		Gunung Naning - 3 review and evaluation activities	
Output 2. Increased populations of five species threatened by IWT	2.1) Stabilization or increase in target wildlife populations  (Baseline values [individuals / km2] in Gunung Niyut for priority species as follows  Helmeted Hornbill= 1.13  Sunda Bearded Pig= 6.79  Abbotts Gibbons= 1.13  Sunda Pangolin= 2.05  Straw-headed bulbul = 0.10; Gunung Naning baseline will be estimated in Y1)  2.2) Annual estimations of wildlife populations at both sites using Pooling Local Expert Opinion (PLEO) method and distance sampling in the Gunung Niyut Nature reserve	Density estimates based on Point/Line To Helmeted hornbill - 2.6 (1.6-4.1) Abott's Gibbons - 1.7 (1.06 - 2.7)	ransects and PLEO ot 2 priority species:
Activity 2.1 Training of field assistants in	distance sampling and PLEO methods	4 data collectors were trained for PLEO	
Activity 2.2 Annual survey using distance sampling on pre-existing transects in GNNR and PLEO in both sites		Gunung Niyut - 22 transects in 2020, and 11 transects in 2021; PLEO survey in 5 villages Gunung Naning - PLEO survey in 3 villages	Transect will be carried out in Gunung Niyut in Year 2.  PLEO will be carried out in Q3/Q4 in Year 2 for both Sites
Activity 2.3 Data input and compilation		PLEO data collection and compilation completed simultaneously	
Activity 2.4 Data analysis and report writi	ng	Year 2 PLEO data analysis was conducted, and revisions on Ahmad et al. 2021 made	
Output 3. Improved access to financial services and livelihood development through Conservation Cooperatives	3.1) 200 new households enrolled in CCs in Gunung Niyut annually	3.1. Gunung Niyut - 220 CC members er	nrolled; 42.84% are women

(linked to reduced IWT rates, lease see	(baseline value=541, Y1=741, Y2=941,	3.2. 319 members enrolled in CCs in Gu	nung Naning: 41 50% ara waman
Theory of Change)	Y3= 1,141		<b>3</b>
	total=1,141; 40% of beneficiaries are	3.3. 28% growth in Village Savings and L	Loan in Year 1
	women)	3.4. Year 1 baseline - IDR for 3 villages	
		3.5. Gunung Niyut - 84% loan repaymen	t rate
	3.2) 200 households enrolled in CCs in Gunung Naning annually (baseline =0, Y1 = 200, Y2=400, Y3=600, total = 600 and 40% of beneficiaries are women)	3.6. 4 - new alternative livelihood suppor fish farming); 8 new vegetables varieties growing new varieties.	
	3.3) 30% growth annually in Gunung Niyut Village Savings & Loan program (baseline, +30% growth annually Y1,Y2,Y3)		
	3.4) 30% growth annually in Guning Naning Village Savings & Loans program (baseline = to be established in year 1, Y1=baseline +30% growth, Y2, Y3; note growth depends on initial investment by community members and groups)		
	3.5) >95% loan repayment rate from cooperative members (Y1, Y2, Y3) and >99% repayment rate for women		
	3.6) 3 new commodities (e.g. forest honey, organic products, new ag commodities) and income generating activities identified and supported annually in both target areas (Y1, Y2, Y3)		
Activity 3.1 Conservation Cooperative recomembers and villages	ruitment and enrolment for new	Gunung Niyut - 220 new CC members enrolled Gunung Naning - 319 new CC members enrolled	In Year 2, the plan is to continue socialization activities and reach more villages in the Gunung naning site. For the Gunung Niyut site, we will continue to carry out regular activities and

			incorporate new members through different programs.
Activity 3.2 Initial financial literacy, management, and leadership training as well as conservation design and pledge		Gunung Naning - 2 activities per villages (3 villages, total 6 activities)	Follow up activities related to financial management of village saving and loans program will be continued in Year 2
Activity 3.3 CC vision and mission building, memberships rules, elections, and standard operating procedures		Gunung Niyut - activities carried out as part of monthly CC support to develop Mission and Vision Gunung Naning - Activity scheduled for Year 2	In Year 2, the aim for Gunung Niyut CCs will be to finalise Mission and Vision statements for CCs. In Gunung Naning, this process will being in Year 2.
Activity 3.4 CC monthly meetings for VS repayments, etc) and other important iss		Gunung Niyut - 1 meeting per month fo 10 CC (10 meetings per month)	This is a core activity that will continue in Year 2.
		Gunun Naning - 1 meeting per month for 3 CCs (3 meetings per month)	
Activity 3.5 CC agreement creation and	socialization	Gunung Niyut - 7 MoUs signed	In Year 2, as new CCs join more such
		Gunung Naning - 2 MoUs signed	MoUs will be co-developed and signed.
Activity 3.6 Asset transfers and field schedentify new livelihood sources	ools to CCs to generate income and	Activity was not carried out in Year 1	In Year 2, the aim is to provide community grants to groups for productive purposes in Gunung Niyut.
Output 4 - Improved access to	4.1) 1190 beneficiaries reached	4.1. Gunung Niyut - 1,475 villagers were	reached through the HAs
healthcare and family planning needs	through population – health –	4.2. Gunung Niyut - 259 women used contraceptive after receiving information	
identified as priorities by members to improve well-being and reduce	environment model (baseline=15, Y1=590, Y2=890, Y3= 1190; 75% of	4.3. Gunung Niyut - 88 new health ambassadors trained in Year 1	
dependency on IWT	annual beneficiaries are women)		
•	,	4.4. Gunung Naning - 89 women used contraceptive after receiving information	
4.2) 750 women and girls receive improved access to healthcare in Gunung Niyut over three years (baseline= 15, Y1=440, Y2=590, Y3=740)		4.5. Gunung Naning - 25 new health aml	passadors trained in Year 1
	4.3) 15 new health ambassadors trained annually in Gunung Niyut (baseline = 0, Y1=15, Y2=30, Y3=45; 75% of ambassadors or women)		

	4.4) 450 women and girls receive improved access to healthcare in Gunung Naning over three years (baseline= 0, Y1= 150, Y2= 300, Y3=450)  4.5) 10 new health ambassadors trained annually in Guning Naning (baseline = 0, Y1= 10, Y2 = 20, Y3 = 30, 75% of all ambassadors are women)		
Activity 4.1 Health ambassador recruitme	1	Gunung Niyut - 88 HAs trained (100% women)	In year 2, the recruited HAs in Gunung Niyut will be supported through
		Gunun Naning - 25 HAs trained (100% women)	refresher training and ad-hoc support. In Gunung Naning, further recruitments will be made, especially for new villaged that will be reached in Year 2
Activity 4.2 Health ambassadors weekly health information and collect data under	visits (5 households a week) to distribute 'Health Family Initiative"	Gunung Niyut - Weekly household visits started from November 2020	HAs will continue household visits in year 2 across both sites
		Gunung Naning - Weekly household visits started in January 2021	
Activity 4.3 Health ambassadors monthly report to local government clinics and PHE staff		Gunung Niyut - Report were provided to 3 Community Health Center	Reports will be provided to local government clinics and discussion will be organized based on their availability
Activity 4.4 Quarterly and annual evaluat	ions with health ambassadors	Gunung Niyut - Not done in Year 1 (scheduled for May 2021)	HA evaluations will be carried out in both sites in Year 2
		Gunung Naning - Evaluation planned for Year 2 (Q3/Q4)	
Activity 4.5 Annual meetings and evaluat health workers	ions with ambassadors and government	Scheduled for Year 2	
Output 5: Trial and evaluation of rifle,	5.1) 150 rifles/chainsaws returned	5.1. Gunung Niyut - 35 homemade firearms (illegal) were returned	
to reduce IWT at project sites	snare, and chainsaw buyback program to reduce IWT at project sites  annually across both sites, in exchange for additional trainings, agriculture and other incentives (Y1, Y2, Y3, total=450)		anted in Year 1
. ,			vith seedlings in Year 1
	5.2) 7500 seedlings planted annually in Gunung Niyut Nature Reserve buffer zone area (Y1, Y2, Y3 total=22,500)	er sustainable agriculture practices in Year 1	
<u> </u>	<u> </u>	<u> </u>	

Activity 5.1 Program socialization and co	5.3) 7500 seedlings planted annually in Gunung Naning protection forests buffer zone area (Y1, Y2, Y3, total 22,500)  5.4) 150 farmers annually join sustainable and organic agriculture trainings across both sites (Y1=150, Y2=300, Y3=450 total=450, 60% aore women farmers)  mmunity hearings	3 socialisation activities were	In Year 2, further socialisations will be
		conducted in Gunung Niyut	made with Local Police in lead.
Activity 5.2 Baseline survey to identify inc	centives and needs	Baseline survey started in March 2021 in Gunung Niyut	Based on results of the baseline survey, communities will be supported to realize unmet services in Year 2
Activity 5.3 Buy-back program implemented in target sites		Implemented in 2 sub-districts in Bengkayang	In Year 2, more communities who want to participate in rifle/chainsaw buy back program will be identified
Activity 5.4 Rewards and incentives prov	ided	2 incentives/rewards for provided:     1) take home pay (price of firearm)     2) payment to management fund (to be use to build community infrastructure)	Program teams will work towards implementing support requested by communities in Year 2
Output 6: Improved understanding of how CC model design can impact IWT, participation rates and livelihoods, based on evaluation and novel research	6.1 Evaluation of the CC model impacts on wildlife (baseline = 0, no structured evaluations of this type of intervention in SE Asia, Y2 interim report, Y3 report, linked to Indicator 2.2)  6.2 Publication on the causal pathways between 'bundles' of interventions provided by the CC model and reduced dependency on IWT  6.3 Publication on the factors that shape non-participation/participation in the CC model, and specifically the buy-	<ul> <li>6.1. Study design (ongoing)</li> <li>6.2. Working on manuscript</li> <li>6.3. Tool development stage</li> <li>6.4. contingent on 6.2 and 6.3</li> <li>6.5. 1 IWT Newsletter article and 1 blogg</li> </ul>	post on Planet Indonesia website

	back scheme (baseline = 0 no such study conducted in this context, Y3)  6.4 Policy Brief published on key lessons from the CC model (baseline = 0, Y3 = 300 distributed to key policy makers and NGOs)  6.5 Blogs on the CC model and its design to inform policy (Y1=2, Y2 = 2, Y3 = 2)		
Activity 6.1 Consultations and workshop J. Phelps and Dr. R. Carmenta) on resea		Multiple consultations were carried out over video conferencing to review methods used in the research on integrated landscape approach and community well-being (Output 6.2)	This will be continued in Year 2
Activity 6.2 Literature review and desk we	ork to compile suitable methodology	Lit. review was completed on why individuals opt-out of programs.	Literature review will be continued for future research based work
Activity 6.3 In-country visit and training by social survey methods such as qualitative significant change (MSC) and social networks.	e comparative analysis (QCA), most	Activity planned for Year 2 and Year 3.	
Activity 6.4 Field data collection		Data collection was started for the 'optout' study (Output 6.3)	Once data collection is complete, analysis and report writing will be carried out

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

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
Impact: Improved densi Kalimantan, Indonesia. (Max 30 words)	ties of five threatened wildlife species and improved human w	rell-being and poverty alleviation for 1	741 households at two sites in West
Outcome: (Max 30 words) Indigenous communities in Gunung Niyut and Gunung Naning show reduced dependency on IWT	0.1) 1741 households enrolled in Planet Indonesia's Conservation Cooperatives and 30% Village Savings & Loan growth per CC per year (baseline= 541 households Gunung Niyut, 400 new households enrolled in each Y1, Y2 and Y3; 100% beneficiaries Indigenous Dayak and 40% are women)  0.2) 60% of total area (353,000 ha) patrolled and managed by local communities (50% by Y2 and 60% by Y3 baseline = 40% of Gunung Niyut nature reserve)  0.3) Reduction in tree cover loss by 10-20% annually across target sites (Y1, Y2, Y3)  0.4) Stabilizing or increased wildlife populations by reduced IWT (Baseline values [individuals / km²] in Gunung Niyut for priority species as follows: Helmeted Hornbill= 1.13  Sunda Bearded Pig= 6.79  Abbotts Gibbons= 1.13  Sunda Pangolin= 2.05  Straw-headed bulbul = 0.10; Gunung Naning baseline will be estimated in Y1)	<ul> <li>0.1) Cooperative membership reports, participant lists, and quarterly development report</li> <li>0.2) SMART patrol monthly, quarterly, and annual reports</li> <li>0.3) Global Forest Watch data (Tree cover loss, GLAD alerts, terra-I alerts)</li> <li>0.4) Annual report on state of wildlife populations from PLEO method (both sites) and traditional distance sampling (GNNR only)</li> </ul>	Communities are open to Conservation Cooperatives and continue to enroll and invest in Savings & Loans program  Communities value CC services provided and enroll in healthcare and education programs  SMART patrol teams collect high-quality data in the field and abide to rules and regulations in the program's Standard Operating Procedures  Community members are open to adopting new livelihoods and farming methods  Wildlife populations stabilize or increase as a response to reduced poaching
Outputs:  1. Improved community-based monitoring of Gunung Niyut Nature Reserve and Gunung Naning Protection Forest through	<ul> <li>1.1) 6 SMART patrol units supported and conduct monthly patrolling in Gunung Niyut Nature Reserve (baseline= 4 units, by Y2=6 active units, Y3= 6 active units)</li> <li>1.2) 4 SMART patrol units supported and conduct monthly patrolling in Gunung Naning Protection Forest (baseline = 0, Y1=2 active units, Y2= 4 active units, Y3=4 active units)</li> </ul>	<ul> <li>1.1) Participant list and enrollment in SMART patrols, including gender disaggregated data</li> <li>1.2) Monthly SMART patrol reports provided to government agencies</li> <li>1.3) SMART Patrol reports</li> </ul>	Members are interested in participating in SMART patrol teams     SMART patrol teams collect high-quality data in the field and abide to rules and regulations relayed in the programs Standard Operating Procedures

implementation of SMART patrols	1.3) A total of 42 community members enrolled in SMART patrols and trained in SMART (baseline= 12 members, Y1= 24 members, Y2= 36 members, Y3= 42 members)  1.4) 60% of Gunung Niyut protected and patrolled regularly by SMART patrols (baseline = 40%, Y1=40%, Y2=50%, Y=60%)  1.5) 60% of Gunung Naning protected and patrolled regularly by SMART patrols, (baseline=0%, Y1=20%, Y2=40%, Y3=60%)	1.4) Quarterly and annual SMART patrol reports (e.g. annual recap on all SMART indicators such as snares removed, hectares covered, individuals encountered, wildlife encounter and detection rates)  1.5) Number of SMART reports that result in government action	
2. Increased populations of five species threatened by IWT	2.1) Stabilization or increase in target wildlife populations  (Baseline values [individuals / km²] in Gunung Niyut for priority species as follows  Helmeted Hornbill= 1.13  Sunda Bearded Pig= 6.79  Abbotts Gibbons= 1.13  Sunda Pangolin= 2.05  Straw-headed bulbul = 0.10; Gunung Naning baseline will be estimated in Y1)  2.2) Annual estimations of wildlife populations at both sites using Pooling Local Expert Opinion (PLEO) method and distance sampling in the Gunung Niyut Nature reserve	2.1) Annual estimations of wildlife populations using Pooling Local Expert Opinion (PLEO) Method in both sites and distance sampling from pre-existing transects in Gunung Niyut Nature Reserve  2.2) Annual working report on trends in wildlife densities across project sites  2.3) Publications in primary literature based on project results	Community members are open to new livelihoods     Wildlife populations stabilize or increase as a response to reduced poaching     PLEO method is used effectively
3. Improved access to financial services and livelihood development through Conservation Cooperatives (linked to reduced IWT rates, lease see Theory of Change)	3.1) 200 new households enrolled in CCs in Gunung Niyut annually (baseline value=541, Y1=741, Y2=941, Y3=1,141 total=1,141; 40% of beneficiaries are women)  3.2) 200 households enrolled in CCs in Gunung Naning annually (baseline =0, Y1 = 200, Y2=400, Y3=600, total = 600 and 40% of beneficiaries are women)  3.3) 30% growth annually in Gunung Niyut Village Savings & Loan program (baseline=£, +30% growth annually Y1,Y2,Y3)  3.4) 30% growth annually in Guning Naning Village Savings & Loans program (baseline = to be established in year 1, Y1=baseline +30% growth, Y2, Y3; note growth	3.1) Participants monthly list at meetings including gender disaggregated data 3.2) Participant list and enrollment books of cooperative 3.3) Monthly tracking of Village Savings & Loans Program including gender disaggregated data 3.4) Savings amount per member	Communities are open to Conservation Cooperatives and continue to enroll  Communities value CC services provided and enroll/remain active in health, literacy, and finance programs  Communities are active in savings funds in community-based savings/loans program  Communities see explicit links between IWT and CC services provision

	depends on initial investment by community members and groups)  3.5) >95% loan repayment rate from cooperative members (Y1, Y2, Y3) and >99% repayment rate for women  3.6) 3 new commodities (e.g. forest honey, organic products, new ag commodities) and income generating activities identified and supported annually in both target areas (Y1, Y2, Y3)	3.5) Loan amount and repayment rate including gender disaggregated data  3.6) Total savings/loans across all cooperatives including gender disaggregated data  3.7) Number of "working groups" supported and running within each cooperative focusing on new commodities	
4. Improved access to healthcare and family planning needs identified as priorities by members to improve well-being and reduce dependency on IWT	<ul> <li>4.1) 1190 beneficiaries reached through population – health – environment model (baseline=15, Y1=590, Y2=890, Y3= 1190; 75% of annual beneficiaries are women)</li> <li>4.2) 750 women and girls receive improved access to healthcare in Gunung Niyut over three years (baseline=15, Y1=440, Y2=590, Y3=740)</li> <li>4.3) 15 new health ambassadors trained annually in Gunung Niyut (baseline = 0, Y1=15, Y2=30, Y3=45; 75% of ambassadors or women)</li> <li>4.4) 450 women and girls receive improved access to healthcare in Gunung Naning over three years (baseline=0, Y1= 150, Y2= 300, Y3=450)</li> <li>4.5) 10 new health ambassadors trained annually in Guning Naning (baseline = 0, Y1= 10, Y2 = 20, Y3 = 30, 75% of all ambassadors are women)</li> </ul>	<ul> <li>4.1) Participant list and monthly activity log book of health ambassadors</li> <li>4.2) PHE baseline and post intervention survey</li> <li>4.3) Certificates for "Health Ambassadors" provided for participants who complete training including gender disaggregated data</li> <li>4.4) PHE baseline and post intervention survey including gender disaggregated data</li> <li>4.5) Certificates for "Health Ambassadors" provided for participants who complete training</li> </ul>	Women and youth enroll in healthcare and family planning services      Members enroll in literacy program and remain active to reach graduation      Health ambassadors are properly trained and remain active and effectively distribute healthcare services

5. Trial and evaluation of rifle, snare, and chainsaw buyback	5.1) 150 rifles/chainsaws returned annually across both sites, in exchange for additional trainings, agriculture and other incentives (Y1, Y2, Y3, total=450)	5.1) Cooperative and farmer log books with gender disaggregated data	Community members     are open to new     livelihoods and farming methods
program to reduce IWT at project sites	5.2) 7500 seedlings planted annually in Gunung Niyut Nature Reserve buffer zone area (Y1, Y2, Y3 total=22,500)  5.3) 7500 seedlings planted annually in Gunung Naning protection forests buffer zone area (Y1, Y2, Y3, total	<ul><li>5.2) Number of seedlings planted in Gunung Niyut</li><li>5.3) Number of seedlings planted in Gunung Naning</li></ul>	CC members are open to rifle buy-back program
	22,500)  5.4) 150 farmers annually join sustainable and organic agriculture trainings across both sites (Y1=150, Y2=300, Y3=450 total=450, 60% are women farmers)	5.4) Participant list of sustainable agriculture training with gender disaggregated data	
6. Improved understanding of how CC model design can impact IWT, participation rates and livelihoods, based on evaluation and novel research	<ul> <li>6.1 Evaluation of the CC model impacts on wildlife (baseline = 0, no structured evaluations of this type of intervention in SE Asia, Y2 interim report, Y3 report, linked to Indicator 2.2)</li> <li>6.2 Publication on the causal pathways between 'bundles' of interventions provided by the CC model and reduced dependency on IWT</li> <li>6.3 Publication on the factors that shape non-participation/participation in the CC model, and specifically the buy-back scheme (baseline = 0 no such study conducted in this context, Y3)</li> <li>6.4 Policy Brief published on key lessons from the CC model (baseline = 0, Y3 = 300 distributed to key policy makers and NGOs)</li> <li>6.5 Blogs on the CC model and its design to inform policy</li> </ul>	6.1 Copy of journal article evaluating the outcomes of the CC model 6.2 Copy of journal article 6.3.1 Number of interviews secured with non-participants 6.3.2 Copy of journal article 6.4.1 E-copy of Policy Brief in English and Indonesian 6.4.2 Distribution list of who brief was shared with 6.4.3 List of meetings	<ul> <li>In the context of a complex environment and multiple interventions, we are are able to identify the salient variables that influence outcomes</li> <li>Local residents, including people who are not active in the CC, are willing to participate in research</li> </ul>
	(Y1=2, Y2 = 2, Y3 = 2)	6.5.1 Links to blogs on the Planet Indonesia website 6.5.1 Link to blog on IUCN Sustainable Use and Livelihoods website	

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

Activity 1.1: SMART Patrol recruitment and training for new villages / members

- Activity 1.2: SMART Patrol monthly patrols (7-10 days per month) and data reports (due every 15 days of patrol finishing, 1 copy to village and 1 copy to government agencies)
- Activity 1.3 SMART patrol semester review and evaluation
- Activity 1.4: SMART patrol data used to triangulate/validate M&E findings from social surveys, Focus Group Discussions, and Participatory Impact Assessments
- Activity 1.5: Bi-annual government SMART review and evaluation
- Activity 2.1: Training of field assistants in distance sampling and PLEO methods
- Activity 2.2: Annual survey using distance sampling on pre-existing transects in GNNR and PLEO in both sites
- Activity 2.3: Data input and compilation
- Activity 2.4: data analysis and report writing
- Activity 3.1: Conservation Cooperative recruitment and enrolment for new members and villages
- Activity 3.2: Initial financial literacy, management, and leadership training as well as conservation design and pledge
- Activity 3.3: CC vision and mission building, memberships rules, elections, and standard operating procedures
- Activity 3.4: CC monthly meetings for VSL (savings, active loans, loan repayments, etc) and other important issues (village by village based)
- Activity 3.5: CC agreement creation and socialization
- Activity 3.6: Asset transfers and field schools to CCs to generate income and identify new livelihood sources
- Activity 3.7: Annual CC evaluation with all members in each village
- Activity 4.1 Health ambassador recruitment and training in PHE method
- Activity 4.2 Health ambassadors weekly visits (5 households a week) to distribute health information and collect data under 'Health Family Initiative"
- Activity 4.3 Health ambassadors monthly report to local government clinics and PHE staff
- Activity 4.4 Quarterly and annual evaluations with health ambassadors
- Activity 4.5 annual meetings and evaluations with ambassadors and government health workers
- Activity 5.1: Program socialization and community hearings
- Activity 5.2: Baseline survey to identify incentives and needs
- Activity 5.3: Buy-back program implemented in target sites

### Activity 5.4: Rewards and incentives provided

- Activity 6.1: Consultations and workshop with international technical advisors (Dr. J. Phelps and Dr. R. Carmenta) on research-based M&E methods
- Activity 6.2: Literature review and desk work to compile suitable methodology
- Activity 6.3: In-country visit and training by international technical advisors on social survey methods such as qualitative comparative analysis (QCA), most significant change (MSC) and social network analysis
- Activity 6.4: Field data collection

### Annex 3 Standard Measures

Table 1: Project Standard Output Measures

Code No.	Description	Gender	Nationalit	Year	Year	Year	Tota	Total
		of people (if relevant)	y of people (if relevant)	1 Total	2 Total	3 Total	I to date	planned during the project
1A	Number of individuals who received training in sustainable livelihood skills	Male - 95, Female - 60		155				
1B	Number of individuals benefiting from training (i.e. broader HH of individual directly trained)			558				
3A	Number of credit and savings groups established			3				
3B	Number of loans provided to MSMEs	Male - 60 Female - 31		91				
3C	Total value (£) of loans provided			GBP 5,902				
12	Duration or frequency of patrols by law enforcement rangers supported through the project			2,602 hours				
15A	Number of intelligence reports fed into management decisions on			82 report s				

	species protection				

Table 2: Publications

Title	Type (e.g. journals, manual, CDs)	<b>Detail</b> (authors, year)	Gender of Lead Author	Nationalit y of Lead Author	Publisher s (name, city)	Available from  (e.g. weblink or publisher if not available online)
N/A						

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

### • Checklist for submission

	Check
Is the report less than 10MB? If so, please email to <a href="https://www.lwo.number.n&lt;/td&gt;&lt;td&gt;Yes&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Is your report more than 10MB? If so, please discuss with &lt;a href=" https:="" www.lwt.number.number-in-the-subject"="">lwt-Fund@ltsi.co.uk</a> about the best way to deliver the report, putting the project number in the subject line.	No
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you need to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	