



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

To be completed with reference to the “Project Reporting Information Note”:  
(<https://iwt.challengefund.org.uk/resources/information-notes/>).

It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes.

**Submission Deadline: no later than 3 months after agreed project end date.**

**Submit to:** [BCF-Reports@niras.com](mailto:BCF-Reports@niras.com) including your project ref in the subject line.

### IWT Challenge Fund Project Information

Project reference	IWT077
Project title	Reducing Illegal Wildlife Trafficking through a Community-based Conservation Approach
Country(ies)	Indonesia
Lead Partner	Yayasan Planet Indonesia
Project Partner (s)	Planet Indonesia - USA
IWTCF grant value	£ 363,150 (3 years)
Start/end dates of project	01 April 2020 - 31 March 2023
Project Leader’s name	Adam E. Miller
Project website/blog/social media	Website: <a href="http://www.planetindonesia.org">www.planetindonesia.org</a> Facebook: <a href="https://www.facebook.com/planetindonesia1">https://www.facebook.com/planetindonesia1</a> IG: <a href="https://www.instagram.com/planetindonesia/">https://www.instagram.com/planetindonesia/</a> Twitter : <a href="https://twitter.com/planet_indo?lang=en">https://twitter.com/planet_indo?lang=en</a>
Report author(s) and date	Adam E. Miller and Abrar Ahmad, 30/June/2023

### 1. Project summary

Problem: Rural communities living in tandem with the remaining forests of West Kalimantan, Indonesia, need access to essential services and opportunities to diversify their livelihoods. It often compels these communities to turn to poaching and illegal wildlife trafficking (IWT) to meet such basic needs. This results in the depletion of the natural resource base and creates a positive feedback loop that deepens a community’s growing inability to meet basic and financial needs, leading to further resource extraction and culminating in spiralling poverty. Such degenerative natural resource exploitation traps communities in a vicious cycle of environmental injustice.

To reverse this cycle at our project sites, we partnered with villagers to create Conservation Cooperatives (CC) at 2 project sites (Fig. 1). The CC approach is developed to reduce a community’s dependency on unsustainable resource extraction, which includes IWT, through a holistic strategy.

Our holistic approach fills the gap between conservation and poverty alleviation in West Kalimantan and Indonesia by addressing the systemic drivers that lead rural communities to engage in IWT. In particular, it integrates community-led resource monitoring and rule enforcement with access to unmet socio-economic services (e.g., basic healthcare, equitable financial capital, etc.) to empower local communities to shift away from IWT towards sustainable livelihood alternatives.

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 publishing 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.

The aim of this project was to improve wildlife densities for five threatened species while improving well-being, reducing poverty for 1,741 CC members, and generating novel insights into strategies to reduce IWT equitably from two project sites in West Kalimantan, Indonesia (Fig. 1). In particular, this project was designed to enable indigenous communities in Gunung Niyut and Gunung Naning to reduce their dependence on IWT (outcome).

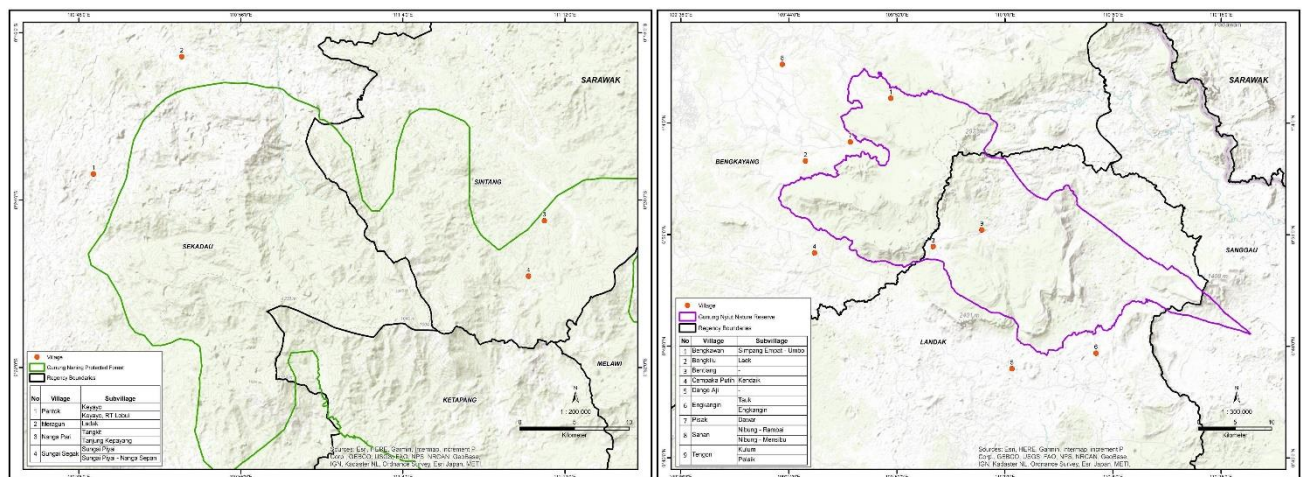


Figure 1: Project location map in Gunung Niyut Landscape (left), and Gunung Naning (Right)

## 2. Project Partnerships

Planet Indonesia’s in-situ work is based on mutual partnerships with local communities. These partnerships provide the basis for our commitment to partner communities to protect at-risk ecosystems and wildlife. Similarly, we also create partnerships with relevant government agencies to engage them in project activities. In Year 2, several such new partnerships were developed with the Indonesian government’s Forestry Agency (KPH) and Village Forest Management Unit (LPHD) across both landscapes.

In **Gunung Niyut**, we developed partnerships with KPH Landak to support the training on SMART patrolling for LPHD of Dange Aji Village members and trained a KPH staff as the Data Operator to assist the LPHD in data entry and data management. Also, we partnered with BKSDA officers from Serimbu and Sanggau Ledo Sub-districts. In Year 3, we partnered with the members of the Community Fire Prevention Unit (MPA) and police officers from Serimbu and Sanggau Ledo to provide support to community SMART patrol units. This is crucial as the majority of communities in Gunung Niyut landscape still use fire in land clearing, which can lead to habitat destruction and opportunities for people to engage in IWT. In this case, MPA with the help of police officers will be able to handle fires that occurred outside the area of the nature reserve.

In **Gunung Naning**, we developed village-level agreements with the Village Governments of Meragun

and Sungai Segak in July 2020, and with the Village Government of Nanga Pari in October 2021. In July, 2022, an agreement with Pantok village was made, to support the Kiyayo community by establishing a community-led SMART patrol unit. Similar to Gunung Niyut, in Gunung Naning, we also developed partnerships with KPH Sekadau and KPH Melawi and trained their officers in the SMART methodology. These partnerships are aimed at improving the capacity of government agency staff to support community-led SMART patrols.

### **3. Project Achievements (April 2020-March 2023)**

#### **3.1 Achievement towards project Outputs**

##### **Output 1.1: 6 SMART patrol units supported and conduct monthly patrolling in Gunung Niyut Nature Reserve**

The aim of this output was to support 10 community-led SMART patrol teams across two landscapes (Gunung Niyut and Gunung Naning). This was achieved during the time of the project (Annex 4: Table 1). In Gunung Niyut, six (6) teams were supported across Tauk, Dange Aji, Tengon, Umbo, Dawar, and Laek. (MOV 1.1). Data collected by SMART patrol teams was used to provide recommendations to both the village government and YPI for follow-up activities. In a few instances, In Gunung Niyut, SMART patrol teams from the Landak District recorded the locations of Helmeted Hornbill (*Rhinoplax vigil*) nests, which were then used by YPI's Biodiversity Monitoring team to set up a nest monitoring and protection activity. SMART patrol data was also used to implement program activities to address threats to wildlife in the surrounding forests. For example, villages where we found high levels of hunting activity in surrounding forests were targeted by YPI's Sustainable Agriculture program activities to engage farmers in improving on-farm livelihoods that would require them to spend more time on their farms, reduce farm costs, and afford poultry more regularly as a source of protein.

##### **Output 1.2: 4 SMART patrol units supported and conduct monthly patrolling in Gunung Naning Protection Forest**

In Gunung Naning four (4) teams were supported Tangkit, Sungai Piyai, Ladak, and Keyayo (MOV 1.1). In Gunung Naning, findings from the SMART patrols provided the basis for collaboration between local stakeholders (local communities, village government, and sub-district police) to control and prevent forest and land fires. Key activities that resulted from the collaborations included public campaigns to place banners about regulations regarding forest and land fires, and protected wildlife such as orangutans, pangolins, and hornbills in key public areas. These activities were aimed at creating awareness about the consequences of the use of fire in agriculture and the hunting of protected species (Annex 4: Fig. 2).

##### **Output 1.3: A total of 42 community members enrolled in SMART patrols and trained in SMART**

In the 10 teams, 51 community members (Gunung Niyut – 35, Gunung Naning - 16) were trained in the use of the SMART patrol methodology and the use of the application (MoV: 1.1). In Gunung Niyut, the 6 SMART patrol teams patrolled for 1,316 days in the 35 months (except April 2020) and submitted 174 reports with patrol results. The 4 SMART patrol teams from Gunung Naning conducted patrols for 690 days and submitted a total of 92 reports to relevant village stakeholders (Annex 4: Table 1).

##### **Output 1.4: 60% of Gunung Niyut protected and patrolled regularly by SMART patrols**

The target for this output was to cover 60% of the Gunung Niut area and 60% of the Gunung Naning areas with community-led forest patrols. In Gunung Niyut, six (6) SMART patrol teams covered around around 178,100 Ha (143%) of the Gunung Niyut Nature Reserve (~124,000 ha) and an additional Gunung 4,576 ha of the nearby Gunung Cermin forests. A key reason for not being able to cover 60% of the Nature Reserve was due to the inability to implement more CCs in this landscape. In case of

challenges, we did not face any significant challenges to conduct monthly patrols expect for bad weather and tough terrain. (MOV 1.2)

**Output 1.5: 60% of Gunung Naning protected and patrolled regularly by SMART patrols**

In the Gunung Naning site, SMART patrols covered around 74,030 Ha between April 2020 to March 2023 area which is 33% of the area of Gunung Naning protected forest area (228,500 Ha). During the project, the four (4) teams that have been formed are only able to cover 2 Districts (Sintang and Sekadau) of the 4 Districts areas (Sintang, Sekadau, Ketapang, Melawi) which are included in the Gunung Naning Protected Forest. In addition, an existing team is not allowed (no consent) to carry out monitoring in areas outside the village administration where the team is formed, including in areas that have not been YPI's intervention. **(Indicator 1.5)** (MOV 1.2).

At the end of each patrol, our team collated the data from the different teams and carried out quality checks before analysis and reporting. After analysis, we compiled the summary reports, which we shared with relevant local stakeholders such as members of the village government and Conservation Cooperative (CC) management. (MOV 1.3)

**Output 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); and Ouptut 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**

The aim of this output was to demonstrate the stabilisation/increase of multiple target wildlife populations across both sites. Using the PLEO methodology we were able to estimate changes in density of 8 target species upto Year 2 (Annex 4: Table 3) (MOV 2). In addition, analysis of SMART patrol data revealed that wildlife sightings remained relatively stable throughout the project period (Fig. 3).

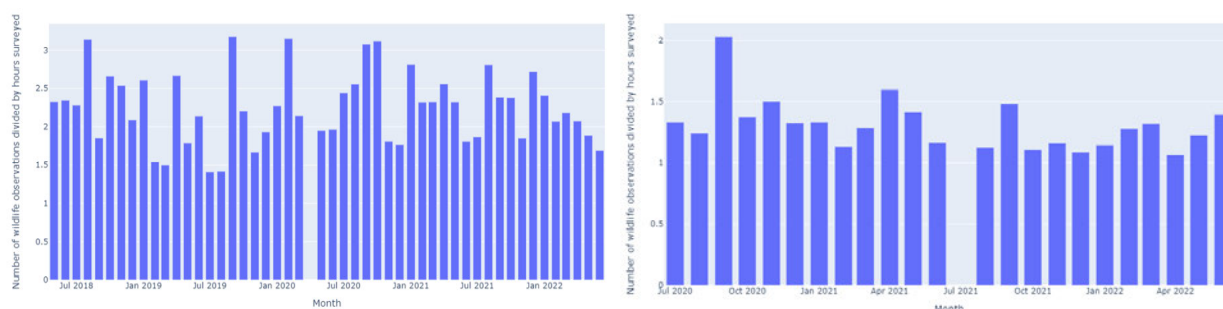


Figure 3: Encounter rates of wildlife estimated by creating 0.25 km2 hexagons and counting the total number of observations in one hexagon divided by the total effective patrol hours within that 0.25 sample. Encounter rate estimates showed stable to slightly increasing observations over the project period and in comparison to baseline for both Gunung Niyut (left) and Gunung Naning (right).

**Output 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)**

The target of this output was to enrol 200 new members from each of the 2 sites into Conservation Cooperatives annually. Before the project started, there were 821 CC members enrolled in Gunung Niyut (as of March 2020). At the end of Year 1 (March 2021), the number of members was 1,041 people (26% increase from baseline) of which 42.83% were women. In Year 2 (March 2022), the number of members in Gunung Niyut was 1,381 (68% increase from baseline) of which 44.53% were women. In Year 3 (March 2023), there were 1,459 members (77.7% increase from baseline) of which

44% were women. (MOV 3.1 and 3.2)

**Output 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)**

In Gunung Naning, at the end of year 1 a total of 319 CC's members enrolled in CCs. The number of members increased to 392 of which 45% were women ( Year 2) from 3 villages (Meragun, Sungai Segak, Nanga Pari). The total enrolled members was 505 with 219 (43%) women at the end of Year 3 (MOV 3.1 and 3.2). Therefore, we were able to meet the target of enrolling 1200 additional members by the end of the project (total new members enrolled was 1,854). (MOV 3.1 and 3.2)

**Output 3.3: 30% growth annually in Gunung Niyut Village Savings & Loan program (baseline=£23,265, +30% growth annually Y1,Y2,Y3)**

The target for this output was to achieve a 30% growth of the Village Savings and Loans program annually. The growth for the savings and loans program fluctuated throughout the project period (Annex 4: Table 2). In Gunung Niyut, key reasons for the increase in the savings and loans growth rates in Year 2 of the project was due to expansion of new CC locations (Tengon Pelaik, Rambai, Kendaik) leading to the participation of new CC members, and a demand for an easy to access capital for starting and expanding business as well as for daily use or other consumptive purposes. In Y3, there was also an increase in the percentage of both savings and loans, but not as high as in Y2. This indicates that the VSL programme has helped improve the community's economy. (MOV 3.3 and 3.4)

The following are the reasons mentioned by borrowers - to invest in general business (livestock and agriculture) (40.25%), to meet daily needs (17%), expenditure on educational expenses (14.66%) and health expenses (7%), and personal needs (paying debts, celebrations) (7%).

**Output 3.4: 30% growth annually in Gunung Naning Village Savings & Loans program (baseline = to be established in year 1, Y1=baseline +30% growth, Y2, Y3)**

In Gunung Naning, the savings growth reached 56%, and it was higher compared to Year 2 as of 53%. The loan growth also increased from Year 2 as 100% to 159% in Year 3 (MOV 3.3 and 3.4). The VSL programme not only benefited the direct members of the CC, but also the households or the other family members, as this programme is not only helping to meet with personal needs and interests but also for the whole family members as the secondary members with multi-purposes. (MOV 3.3 and 3.4)

**Output 3.5: >95% loan repayment rate from cooperative members (Y1, Y2, Y3) and >99% repayment rate for women**

In Gunung Niyut, the loan repayment rate was about 85% (88% for women). In Gunung Naning, the loan repayment rate during the project was 84% (83% for women) (MOV 3.5).

**Output 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)**

The aim of this output was to introduce alternative livelihood opportunities that would incentivise community members to reduce dependencies on IWT. To meet this output, in Gunung Niyut we supported community members to start 4 types of businesses that were not present previously across 8 villages. These business include stingless bee keeping in Umbo, poultry in Tauk and Engkangin, and Tengon Kulum, pig farms in Tauk, fish cultivation in Engkangin and Bentiang, and goat rearing in Laek. In Gunung Naning, we introduced 3 new commodities that include corn (Nanga Pari Village), palm sugar (Nanga Pari and Sungai Segak Vilages), and stingless beekeeping (Nanga Pari and Sungai Segak Villages). In total, there were 7 new businesses developed by CC members across both sites.

In addition to supporting the establishment of new types of businesses, we also supported farmers to grow new varieties of horticulture plants. In Gunung Niyut, farmers were trained in the cultivation of 52 types of crops that includes avocado, chives, onion, different varieties of chillies, leeks, small jackfruit (cempedak), durian, jengkol, water spinach, carrot, candlenut, cabbage, pepper, papaya, bitterbean, eggplant, local eggplant, white eggplant, local cucumber, etc. (MOV 3.6).

**Output 4.1: 1190 beneficiaries reached through population – health – environment model (baseline=15, Y1=590, Y2=890, Y3= 1190; 75% of annual beneficiaries are women).**

The target for this output was to create access to basic health care information and services for 1190 people across both communities. To achieve this target, we recruited and trained local women to become Health Ambassadors (HA) in their communities. Training was provided on how to conduct household visits and record health condition of household members, provide residents with health education, and also support household members in emergency situations. During the project period, a total of 109 HAs in Gunung Niyut and 50 HAs in Gunung Naning were trained and are who are active to date. (MOV 4.1)

Against this target, HAs across both sites reached 7,349 people (Gunung Niyut - 4,856, Gunung Naning - 2,493) with health related information and services during the project period. During the household visits, the HAs recorded data of key PHE indicators. A key achievement during the project period has been the development of cooperation between HAs and the local government clinic staff as well as other relevant local stakeholders that has created a sense of community ownership towards implementation of project activities.

**Output 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)**

The target for this output was to improve access to family planning options for 750 women. In Gunung Niyut, the data recorded by the HAs during routine household visits showed that women were using contraceptives (Y1=259 women; Y2=624 women; Y3=544 women) after receiving information on family planning options from the HAs. In particular, HAs and government healthcare staff worked together created access to information about family planning options and other health health-related for households that were well received. In the case of family planning, this enabled women to learn about the different contraceptive methods that enabled them to make a joint decision with their spouse to choose the most suitable method. (MOV 4.1)

**Output 4.3: 15 new health ambassadors trained annually in Gunung Niyut (baseline = 0, Y1=15, Y2=30, Y3=45; 75% of ambassadors or women)**

In Gunung Niyut, we facilitated training for 134 HAs (Y1: 88, Y2:14 Y3 32) of whom 109 HAs were active at the end of the project. HAs were trained to use forms/tools to collect data on the 12 indicators stipulated in the healthy family guide, learn about outreach techniques and methods to facilitate community outreach programs on health related topics, and facilitate community health check in cooperation with local health clinics (MOV 4.3 and 4.5).

**Output 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)**

The target for this indicator was to reach 450 women with family planning option in Gunung Naning. Since the Healthy Family program was established only in Year 2 of the project, we collected data through HAs that 90 women in Year 2 and 213 women in Year 3 used contraceptives after receiving information from the HAs. Although the target estimated was not reached during the project period, there was a 136% increase in the use of contraceptives from year-on-year for communities. (MOV 4.1)



**Output 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)**

In Gunung Naning, we trained 50 Health Ambassadors (HAs) throughout the project period. Recruitment and training of HAs were carried out twice during the project period. The first recruitment took place in Year 1 and included recruitment and training of 25 HAs. The second batch of HAs were recruited in Year 3 and included another 25 HAs (MOV 4.3 and 4.5).

**Output 5.1: 150 rifles/chainsaws returned annually across both sites, in exchange for additional trainings, agriculture and other incentives (Y1, Y2, Y3, total=450)**

This activity was carried out in Gunung Niut only. Socialization about the program was carried out in Year 1 with the participation of multiple stakeholders, including Local Police, Military, Sub-district Government Officers, BKSDA Officers, village government officials, and community members. The socialisation activities were used to provide information on the rifle-buy-back program to avoid misunderstanding between community members and government agencies (Annex 4: Fig. 4). A total of 618 firearms (Year 1 - 35 units, Year 2 - 583 units) were handed over by the community in Engkangin, Tengon Kulum, Mensibu, Umbo, Dawar and Laek (Annex 4: Figure 5). Surrendered firearms include various types of guns such as airguns, shotguns, 'bomens' and pistols. (MOV 5.1)

The aim of the buy-back program was to reduce hunting using firearms and provide social and livelihoods incentives for community for participating community members. In particular, people who surrendered their firearms received a 'Take home pay' as a fee for surrendering their firearm(s) that depended on the condition of the weapon and a contribution to a community management fund that can be used to meet community needs. For example, the community in Laek decided to purchase mini tractors and rice threshing machines, the Umbo community have managed the funds handed over in December 2022 to construct a semi-permanent multipurpose building/hall, the Mensibu community used the funds to buy goats to start a small farm, the Engkangin community used the funds to build a dam to improve the the clean water supply to villagers houses, and the Tengon community decided to use the funds in the construction of a church.

**Output 5.2: 7500 seedlings planted annually in Gunung Niyut Nature Reserve buffer zone area (Y1, Y2, Y3 total=22,500)**

In Gunung Niyut, we worked with community members from 11 partnership villages to plant 58,542 seedlings in the buffer-zone areas of Gunung Niyut Nature Reserve (MoV: 5.2).

**Output 5.3: 7500 seedlings planted annually in Gunung Naning protection forests buffer zone area (Y1, Y2, Y3, total 22,500)**

In Gunung Naning, we supported community members from 3 villages to 61,053 seedlings across 6 locations (Sepan, Sungai Piyai, Tangkit, Juwau, Batu Ancau and Ladak). In total, 293 people were from 4 CCs were involved in nursery management and planting (MoV: 5.3).

**Output 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)**

Across both landscapes, 1,048 farmers (Gunung Niyut - 540, Gunung Naning - 508) from 19 CCs (Gunung Niyut - 12 CCs, Gunung Naning - 9 CCs) participated in sustainable agriculture training activities throughout the project (Annex 4: Fig. 6). Around 36% of participating farmers were women (Gunung Niyut - 210, Gunung Naning - 167). Although there was a high rate of participation of farmers in program activities, the participation of women were lower (36%) than expected (60%). (MOV 5.4)

Key reasons for low levels of women's participation were due to their engagement with household tasks, while male members participated in the training. In addition to training farmers on climate-smart

agriculture practices, our field facilitators across both sites have facilitated partnerships between the local government Agriculture Outreach Centres and community farmers. MoV: 5.4) Participant list of sustainable agriculture training with gender disaggregated data

**Output 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)**

The project has generated important evidence related to the links between community-based conservation and illegal wildlife trade. One paper has been published in the Journal of Environmental Development related to this project. One has been submitted to the Journal of biological conservation and tentatively accepted pending revisions made by the coauthors. The final paper has yet to be submitted but uses a participatory impact assessment better to understand the linkages between socio-economic services and multidimensional outcomes. These manuscripts are provided in the appendix for the IWT challenge fund review team.

**Output 6.2: Publication on the causal pathways between ‘bundles’ of interventions provided by the CC model and reduced dependency on IWT**

In 2021, we analysed project data from 10 villages from 2017 to 2020 to understand how community-led programs supported at a landscape level can create interaction between human-wellbeing and environmental outcomes for communities living in tandem with a protected area. We determined environmental impact by using SMART patrol data to estimate encounter rates with illegal forest activities (e.g. logging, hunting, encroachment) and deforestation data from 2001 to 2020 using CIFOR Nusantara Atlas database. While the SMART patrol data was used in a general linear model (GLM) regression analysis to assess the change in the encounter rates over time, the CIFOR data was analysed based on a categorization of treatment villages (partnership villages) and control villages (non-partnership villages). We also used data from participatory impact assessments (PIA) and interviews with farmers to determine the most significant changes that occurred in their lives since they started participating in program activities and whether these changes were indicative of the intervention (Fig. 13). Finally, we used data from different programs to carry out a multivariate regression analysis to test the interaction between participation in program activities and environmental outcomes measured by combined SMART patrol encounter rates for all villages. We submitted the manuscript in August 2021 to the Environmental Journal, which then got accepted and published as an article in March 2023. (MOV 6.2)

**Output 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)**

We have completed the data collection, analysis, and manuscript submission to the Biological Conservation journal for this paper. At the time of reporting, we were working on addressing the comments from the reviewers.

**Output 6.4: Policy Brief published on key lessons from the CC model (baseline = 0, Y3 = 300 distributed to key policy makers and NGOs)**

This sub-output is contingent on the results from Indicator 6.2 and 6.3. Although we have results from output 6.2 that provides evidence of an inverse correlation between participation in integrated conservation programs and environmental impacts, we are still in the process of generating the reference for why people do not participate in conservation programs. Based on the findings from both of these research project, we still hope to develop policy documents to inform measures that can be used to reduce impacts on wildlife through community-led conservation programs.



## **Output 6.5: Blogs on the CC model and its design to inform policy**

Over the course of the project YPI has published 9 blogs on its own [website](#) about the CC model. [An interview](#) was conducted with the IUCN and published on their website in October 2022. We also added [6 landing pages](#) to the main navigation section of our website that outlines all the aspects and impact of the CC model in Indonesia. Three articles were submitted to the IWT Challenge Fund Newsletters (February 2021, August 2021 and March 2022 issues) and a working paper was published on the website ([here](#)) to highlight the impact of YPI's programs in Engkangin .

### **3.2. Progress towards the project Outcomes**

**Outcome 0.1: 1741 members enrolled in Planet Indonesia's Conservation Cooperatives and 30% Village Savings & Loan growth per CC per year (baseline= 541 members Gunung Niyut, 400 new members households enrolled in each Y1, Y2 and Y3; 100% beneficiaries Indigenous Dayak and 40% are women)**

Throughout the project period, 1,964 CC members of which 641 (56%) were women had access to a community-led savings and loans program (MOV Output 3.1 and 3.2). Of this, 1,191 people joined their village CC during the project period across both sites during the project period. In Gunung Niyut, the average annual growth in savings was 26.6% and for loans programs was 33.8%. This value suggests that the CC members were actively participating in creating savings and borrowing from their village savings and loans program (MoV 0.1).

**Outcome 0.1.1: 2000 secondary (family) members benefitted due to project**

Throughout the project period, a total of 2,005 secondary members (Gunung Niyut - 1,492, and Gunung Naning - 513) benefitted through the participation of direct members in CC activities (MoV 0.1).

**Outcome 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)**

The six (6) patrol teams in Gunung Niyut covered 178,100 Ha (Gunung Niyut Nature Reserve - 169,700 ha, Gunung Cermin village forest - 8,400 ha). The four (4) patrol teams Gunung Naning covered 74,030 Ha area patrolled or 33% of the total protected area in Gunung Naning protected forest area (228,500 Ha). Together, the patrol teams covered around 69% of the total protected area (MoV: 0.2)

**Outcome 0.3: Reduction in tree cover loss by 10-20% annually across target sites (Y1, Y2, Y3)**

We used SMART patrol encounter rates for encroachment and logging to estimate tree cover loss in patrolled areas. Encounter rates were calculated based on the number of observations divided by the number of kilometers patrolled. Based on the analysis of data from 2020 to 2023 in Gunung Niyut, we found that the combined encounter rates for logging and encroachment by 29.7% compared to Year 1 baseline. In Gunung Naning, the data reveals that combined encounter rates for encroachment and logging decreased by 40.3% compared to Year 1 (2020) (MOV 0.3).

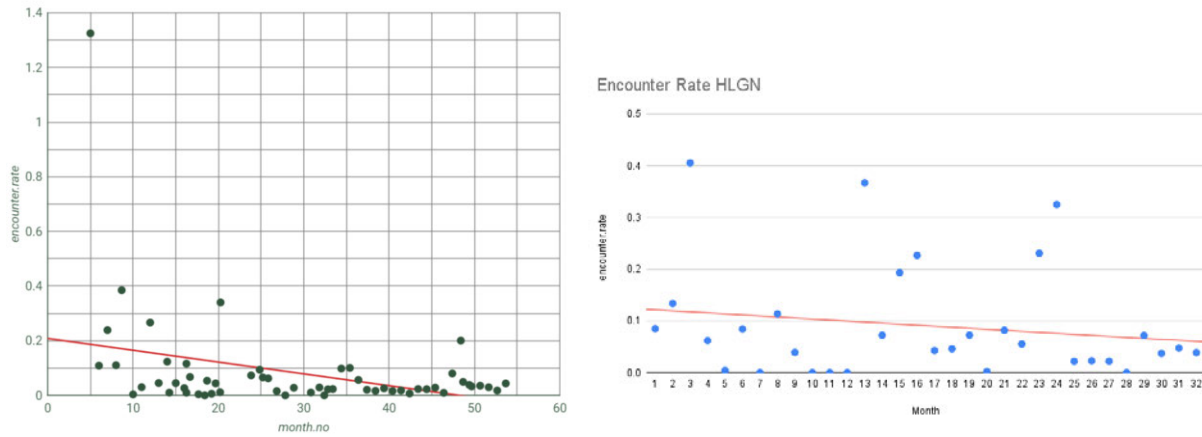


Figure 7: Encounter rates for Logging and Encroachment in Gunung Nyiut (Left), and Gunung Naning (Right)

The decrease in the encounter rate is inversely proportional to the level of community participation in CC's services. This suggests that as CC are established and participation in program activities increases, a community is less likely to engage in logging in and encroachment of surrounding forests. (MoV: 0.3 Encounter rates of illegal logging activity from SMART Patrol data)

#### Outcome 0.4: Stabilizing or increased wildlife populations by reduced IWT

We calculated the population density of the priority wildlife for Gunung Niyut and Gunung Naning using multiple data points that included SMART patrol sightings, transects, and PLEO surveys.

#### Density Estimates Using Transect Data for Gunung Niyut

Transect data from both the wet and dry season was utilized from 2020-2023. 47 kilometers of transects were walked in 2020, 76km in 2021, 73km in 2022. As the project ended in 2023 and between January - February 2023 only 12 km of transects were walked, 2023 data was combined with 2022 data for a year 3 estimate. The wet season survey was conducted between October - February of each year and the dry season between May - August. Data was analyzed using AIC hierarchical modeling in the R package Distance (MOV 0.4)

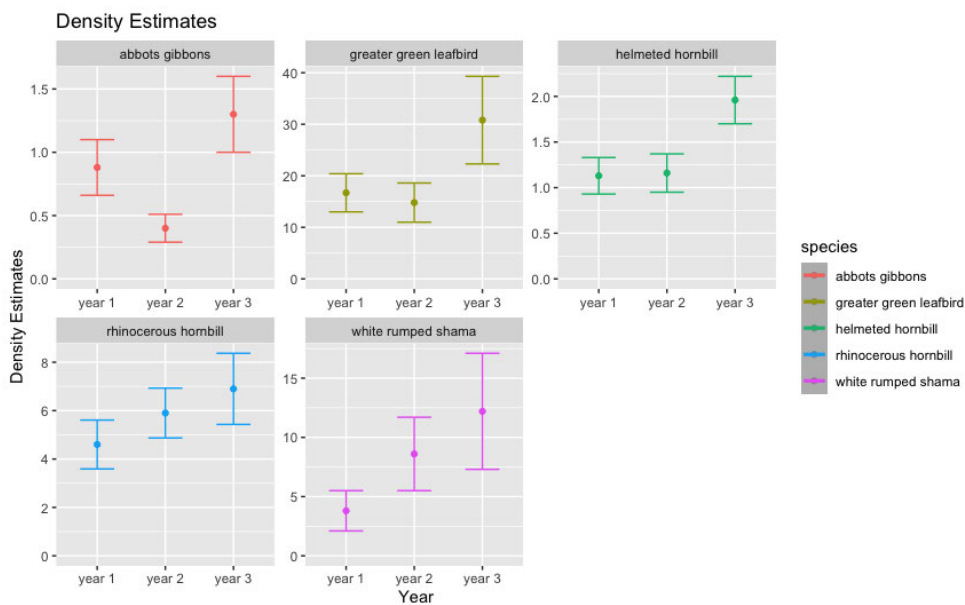


Figure 8a: Shows density estimates for several species impacted by illegal wildlife trade in Gunung Nyiut Nature Reserve. These estimates were calculated using transect data in the R Package 'Distance.'

Density estimates show stable to positive trends for species analyzed (Figure 8a). It is important to notice that Year 3 estimates may be slightly inflated due to the small amount of data between January IWT Challenge Fund Main Final Report Template 2023

and February being combined with 2022 data due to greater sampling effort. However, even by removing that data, all species show a positive to stable trend. The endemic and endangered Abbotts Gibbons did show a slight decrease in Year 2 but then an increase in Year 3. We also note that most species in Indonesian Borneo exist in low densities and populations fluctuate greatly from year to year due to highly variable fruiting season. Therefore, while our analysis shows that during the project period a positive trend was observed, we do recognize that a period of 5-10 years is needed to establish a long term result of the project. Nonetheless, given that all these species are highly targeted by poachers and trappers, this stable/increasing trend is a testament to the positive impact of the community-based models capacity for IWT reductio in the project site.

### SMART Patrol Sightings for Both Sites

Analysis of SMART patrol data revealed that the majority of observations made by teams across both sites were of wild boar followed by signs of Sunda pangolin, Muntjac deer, Hornbills, and other (Annex 4: Fig.9). In the case of hornbill species, across both sites Rhinoceros Hornbills are the most abundant followed Wreathed Hornbills and Helmeted Hornbills (Fig.9).

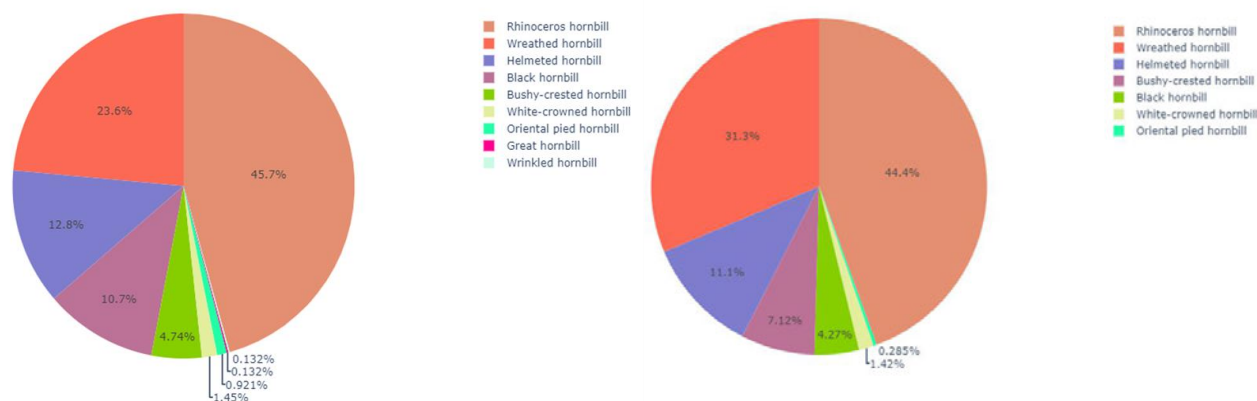


Figure 8b: Species of hornbills sighted in project sites (right) Gunung Niyut and (left) Gunung Nanying by SMART patrol teams.

Further analysis of the SMART patrol data revealed, after controlling for patrol effort (number of hours patrolled), hornbill hotspots across both sites (Annex 4: Fig. 10).

We conducted similar analysis for Sunda Pangolins and found that, although there was a slight decrease in the number of encounters with signs of Sunda Pangolins signs of pangolin activity, their signs were spotted by all the SMART patrol teams (Annex4: Fig.11).

### 3.3. Monitoring of assumptions

#### Outcome level assumptions and comments

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

**Comments:** Communities have been open to joining CCs which is evident from growth in CC membership and savings and loan program (see MOV for output 3.1 and 3.2).

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

**Comments:** This assumption remained true throughout the project period (see MOV for output 4.2 and 4.4).

**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:** We provided on the job, quarterly, and annual training support for SMART patrol team members to address data collection challenges. This assumption remained true throughout the project period (see MOV for output 1.1, 1.2, and 1.3)

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

**Comments:** CC members accessed loans to start/expand businesses (see Output 3.6) as well as participate in agriculture training activities throughout the project period (see MOV for Output Indicator 5.4)

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

**Comments:** SMART patrol data showed a decline in poaching activities around project-supported villages. This has likely had an impact on stability and even an increase in some animal populations (see Figure 9 Outcome 0.4).

## **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:** The target of members has been achieved, and the team that has been formed continues to carry out community-led patrol activities on a monthly basis. (MOV Output Indicator 1.1. and 1.2)

**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:** SMART patrol data is being used by to provide recommendation for follow-up by the Village/District/District Government (MOV output 1.4).

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

**Assumption:** Community members are open to new livelihoods

**Comments:** Our routine data shows that communities are more open to new livelihoods by starting new businesses or cultivating new crop varieties introduced through trainings. (output 3.6 and MOV 5.4)

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

**Comments:** The biodiversity monitoring data and SMART patrol encounters with wildlife reveal that populations of various species have stabilised/increased over the project period (Fig 8a & Fig 10)

**Assumption:** PLEO method is used effectively

**Comments:** Although we used PLEO surveys throughout the project period, in Year 3 we faced the following limitations using this method - not finding hunters who are aware of the sample area, people are not willing to participate in survey due to hunting being a sensitive topic, and number of people going to forest regularly have decreased. Hence we did not use PLEO as a stand alone method in estimating wildlife population densities, but rather also used transect data and SMART patrol data.

### **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:** In the course of the project, the target has been achieved but the community is still interested in registering as CC members. (See Output 3.1 and 3.2 Indicator)

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

**Comments:** Until the end of the project, the community continued to register to receive health and education services from CC, and CC administrators were also getting better at serving members. Services such as health, education and finance received by members motivate other people to enrol in CC and be actively involved in these services. (See Output Indicator 4.1, 4.2, 5.1, 5.2, 5.3, 5.4)

**Assumption:** Communities are active in savings funds in community-based savings/loans program  
**Comments:** There has been an increase in the number of people participating in savings and loan activities. Public trust in the savings and loan program is still quite high as seen from growth in value of savings and loans. (See Output Indicator 3.3 and 3.4)

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

**Comments:** We believe that community members in partnership villages understands the IWT and CC interventions since we start with a community-wide pledge and it is followed by regular socialisation about YPI's activities in supporting community empowerment and self-reliance to protect and manage protected areas.

#### **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:** There has been an annual increase in the number of households reached by HFI program (see Output Indicator 4.1 and 4.2).

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

**Comments:** Trained health ambassadors are active in visiting the households for health services and disseminating information on health issues, as well as report the results of activities (see output 4.2)

#### **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:** we have trained Lead Farmers who assist other farmers in the community to use new farming methods and cultivate/operate businesses that are environmentally friendly.

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

**Comments:** Community members in Gunung Niyut voluntarily participated in the rifle buy-back program.

#### **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 able to identify the salient variables that influence outcomes

**Comments:** we have published an article on the correlation between program participation and environmental outcomes in the journal of Environmental Development (See output 6.2)

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

**Comments:** We are working on incorporating feedback from reviewers for this manuscript.

### **3.4. Impact: achievement of positive impact on illegal wildlife trade and poverty reduction**

The overall impact of this project has been a decrease in hunting activity and an increase in various wildlife populations in forests near project supported villages recorded by SMART patrol teams and biodiversity monitoring activities. In addition, we have seen that community members increasingly accessed CC program services throughout the project. We carried out a multivariate regression analysis on SMART patrol encounter rates for illegal forest activities and program participation and found that increased participation in program activities were inversely correlated with extractive activities (Fig. 12). Hence, our analysis supports program logic that community-based interventions that integrate incentives and deterrents can reduce illegal wildlife trade and habitat loss.

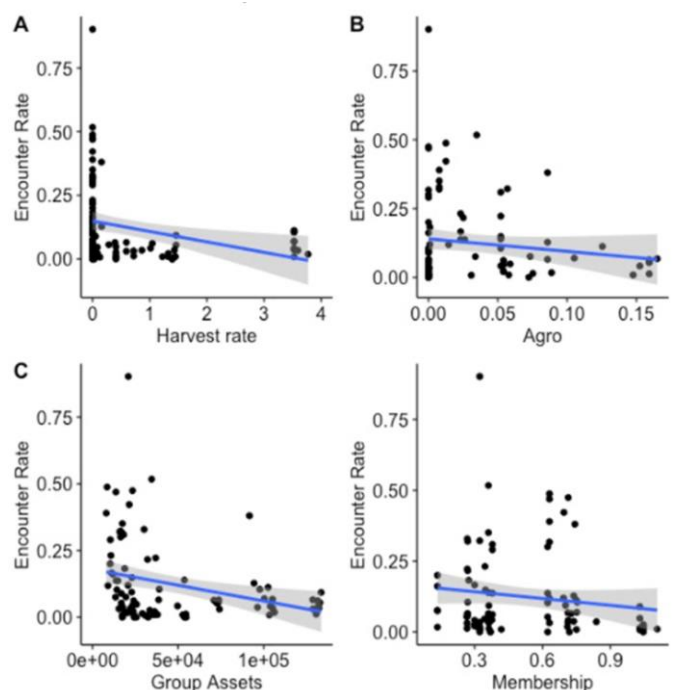


Figure 12: Multivariate regressions between predictor variables for program participation data as presented by (from top left) harvest rates for project trained farmers, proportion of village population participating in agroforestry activities, value of group assets, and CC membership and SMART patrol data as shown by the trend line, shows a statistically significant negative correlation.

#### 4. Contribution to IWT Challenge Fund Programme Objectives

##### 4.1. Thematic focus

The aim of this project was to reduce IWT through a holistic approach that empower local community members to shift away from IWT towards sustainable alternative livelihoods opportunities. As a result, project activities aligned with ‘strengthening law enforcement’ pillar through the establishment and support to community-led SMART patrols (Output 1), and ‘developing sustainable livelihoods to benefit people directly affected by IWT’ pillar by creating access to unmet services that reduced the need for community members to depend on IWT as a source of livelihood (Output 3,4, and 5).

##### 4.2. Impact on species in focus

Analysis of SMART patrol data revealed that wildlife encounter rates remained relatively stable throughout the project period (Fig. 13). Utilizing distance sampling (Figure 8a) we found positive trends in density estimates for species targeted by IWT within the project site. In addition, we used social interviews (PLEO) and found similar trends within the project sites. Triangulating all three types of data provides a very strong body of evidence that the project had positive impacts on wildlife and the target species in focus during the project period.

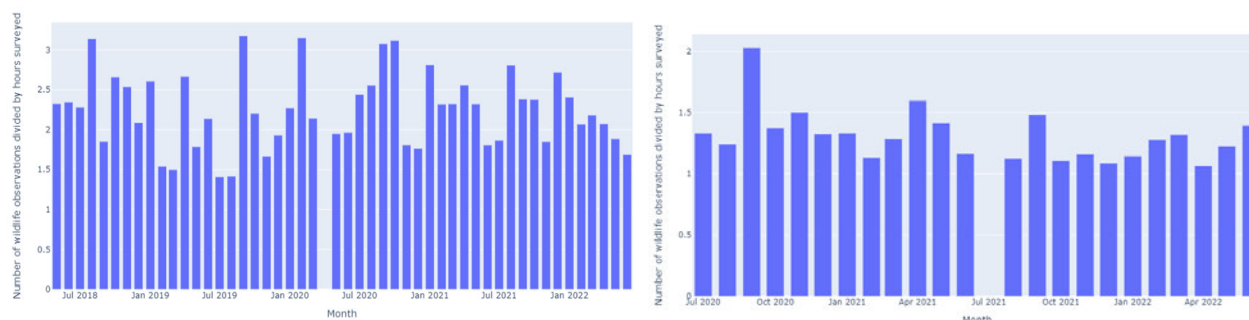


Figure 13: The number of wildlife observations in (left) Gunung Niyut and (right) Gunung Naning has remained relatively constant over time when accounting for unequal patrol effort over time.



### **4.3. Project support to poverty reduction**

We use the CC model to deliver the unmet services that often act as barriers for local communities to participate in achieving conservation outcomes. Therefore, through this project we supported 3900+ community members to benefit from the access to both social and economic opportunities created by the community led programs (Output 3.1 - 3.6, 4.1-4.5, Outcome 0.1, 0.1.1).

Beneficiaries of project activities include mostly members of Indigenous Dayak communities across both project landscapes. Direct impacts of the project were related to the increased access to various services that were difficult to access for community members. The savings and loans program and the access to livelihood loans enabled community members to invest in businesses or their farms to improve livelihoods. By the end of the project period, 19 CCs across both landscapes had accrued approximately IDR 1,623,137,309 (~GBP 84,900) in capital available to community members. In addition, we supported community members to identify and implement 4 new businesses (Output 3.6). As the primary source of livelihood in partner communities was farming, building the skills of farmers to practise sustainable and regenerative farming techniques meant that farmers could reduce farm costs, and become more resilient to market and climatic shocks. We helped to introduce 52 new varieties crops that farmers were not growing previously. Project activities also created social benefits by reducing the transaction costs of accessing basic healthcare services such as immunizations and family planning for community households. In many cases, these services were non-existent prior to the project.

### **4.4. Gender equality and social inclusion**

Recently, we carried out an evaluation by using a participatory impact assessment method adopted from the PRISM Conservation Evaluation toolkit (Dickson et al., 2017). The adapted framework used provided a nested ranking system to evaluate changes identified by community members attributed to the project, and the impact these changes have made in their lives. For details about the methodology please see [Miller et al. 2020](#).

Participants were asked to create an activity list based on their knowledge of YPIs programs' progress and then score each of the activities using the following criteria.

1. The importance of an activity as a motivator to engage in the CC.
2. The importance of the activity for their daily life.
3. The time expended by the community/individual in implementing this Activity.

Scores were on a scale of one to four, where one is low importance/ or labor and four is high importance/ or labor. The second step of the PIA was to create an Influence Matrix (Fig 14) based on the results and activities of step one. Participants then scored the level of influence of each activity on the observed change, with 0 = No Influence, 1 = Weak Influence, 2 = Moderate Influence and 3 = Strong Influence. Results were discussed with all FGD participants to understand the reasoning behind rankings and the FGD decided upon the final scores. The PIA was conducted 16 different times across eight villages with a total of 203 participants (120 women and 83 men).

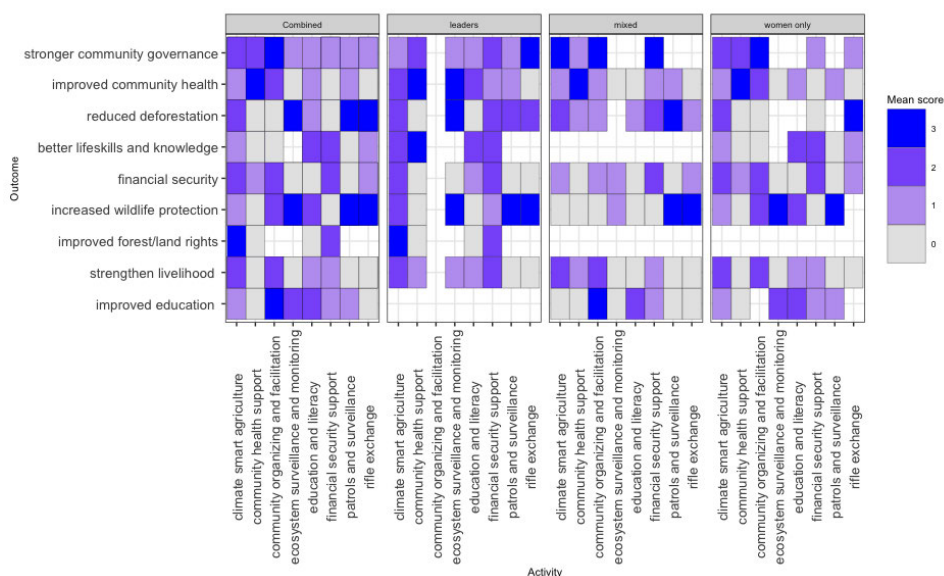


Figure 14: Influence matrix results from leader only, mixed without leaders, and women-only focus group discussions. Activities are on the x-axis and major positive outcomes are on the y-axis. A darker blue color indicates a higher mean score (e.g. activity X had a higher influence on outcome Y) across the project site.

Based on the result of the PIA scoring, we found that there were similarities and differences in between men, women, and leaders on various indicators (Fig. 13). For example,

- The outcome ‘stronger community governance’ was considered by leaders to be influenced by ‘rifle buyback’ and ‘financial security support’ activities, while mixed and women-only FGDs considered ‘community organizing and facilitation’, ‘climate smart agriculture’, and ‘financial security support’ activities as most influential for this outcome.
- The outcome ‘better life skills and knowledge’ did not appear in the mixed FGDs, but appeared in both leaders and women only FGDs who considered ‘climate smart agriculture’, ‘community organizing and facilitation’, ‘education and literacy’ and ‘financial security support’ activities to have had a strong positive influence on this outcome.
- Environmental outcomes of ‘reduced deforestation’ and ‘increased wildlife protection’ appeared to be influenced by activities differently between groups (Figure 13).
- All groups listed the activity areas of ‘patrols and surveillance’, ‘wildlife monitoring’, and ‘rifle buy back’ as having a significant influence on these outcomes. Leaders and women only groups linked other activities such as ‘climate smart agriculture’ and ‘financial security support’ as having a *high* influence on these environmental outcomes, vs mixed FGD participants mainly linked environmental outcomes to more typical conservation activities (e.g. patrols).
- The outcome ‘improved education’ did not appear in the Leader FGDs, but did in mixed and women only FGDs.
- The outcome ‘strengthened livelihoods’ was scored as having a heavy influence from ‘climate smart agriculture’ and ‘financial security support’ by all groups.

Please quantify the proportion of women on the Project Board <sup>1</sup> .	50%
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women <sup>2</sup> .	N/A

<sup>1</sup> A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

<sup>2</sup> Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

## **5. Monitoring and evaluation**

In Year 2 of the project (June 2022), we made a request to modify the definition of the Outcome Indicator 0.1 to replace 'households' with 'direct CC members', add a new Outcome Indicator 0.1.1 for indirect beneficiaries who are family members of direct CC members, and change the MOV for Outcome Indicator 0.3. These changes in definitions and MoV did not affect the targets, rather allowed us to report more accurately towards the outcome without methodological discrepancies.

Due to multiple regular monthly activities supported by the project (e.g. SMART patrols, Savings and Loans reports, Health Ambassador household surveys, farmer trainings) there was a significant amount of time spent by site managers and M&E officers to review monthly project data. In order to use the data to inform management decisions, we used Google Data Studio to provide near real-time data analysis that helped managers to track key performance indicators for their sites. Although this has been helpful, we are still working on making the system more efficient.

We conducted a Participatory Impact Assessment (PIA) in Gunung Nyiut to evaluate the impact of our interventions on people's lives. The PIA was focused on understanding the value community members assign to the different activities in terms of their effect on socio-ecological outcomes. Key positive influences identified by participants were community facilitation led to stronger community governance outcomes, health support led to improved community health, improve ecosystem surveillance (SMART patrols) led to reduced deforestation and increased wildlife protection, and climate-smart agriculture trainings led to improved land rights and managemnet. Alternatively, negative influences suggested by participants were related to SMART patrols and biodiveristy monitoring did not resolve issues with land-rights, rifle-exchange created uncomfortable situations with patrols, financial security support (access to savings and loans) needed to increase outreach. In Year 3, we also submitted an article to understand in the factors that influence non-participation in conservation programs, which we are working on to incorporate feedback from editors/reviewers (Output 6.3).

## **6. Actions taken in response to Annual Report reviews**

Yes, we have addressed the feedback from previous Annual Report reviews in subsequent reports.

## **7. Lessons learnt**

Apart from the lessons learnt reported in previous annual reports, this year we found that smallholder farmers in some villages were keen to experiment with varieties of seeds that they saw advertised in the media or other sources. This created opportunities for farmers to face crop failures due to different reasons. In order to address this, we worked with farmers to select crop varieties that they were interested in and carried out in-depth desk research to determine if the varieties were suitable for their region.

Based on our experience of supporting community-led programs, we feel that it is very important to have the support from different levels of government starting from the village government, sub-district government, and relevant government departments. This enables the development of long-term commitment by concerned government agencies for program activities. Therefore, it is important to start developing institutional relationship early on in the project lifetime.

## **8. Risk Management**

No significant risks arose during the last year of the project.

## **9. Sustainability and legacy**

This project will continue within the Gunung Nyiut Nature Reserve and within the Gunung Naning Proection Forest. In GNNR, we are still only supporting 10 of the 28 villages within the buffer zone. Deforestation data shows that deforestation is statistically lower in treatment sites vs control. This indicates that we need to continue expanding and replicating this model throughout the landscape to

work across the reserve. Therefore, we have secured additional funding sources to continue supporting the villages we have partnered with through IWT 077 and expand to additional sites.

The Gunung Naning Protection Forests is nested within a 2 million hectare forest block known as the ‘arabella-schwanner’ landscape. This area consists of one national park, several protection forests, community forests, and logging concessions. It is also home to Borneo’s largest orangutan population among other critical species. With the evidence base generated by IWT077 we hope to create an ecosystem wide forum. This forum will involved participants from other NGOs, government management authorities, private sector companies and, of course, local communities. We hope to use this forum to work across the entire 2 million hectares, acknowledging that Planet Indonesia cannot be everywhere at once. We have developed our own scaling plan for this landscape, but we hope to improve collaboration with other stakeholders to ensure that all key areas have both management and protection interventions in place.

## 10. IWT Challenge Fund Identity

We used banners with logos of UKAID for major project activities to acknowledge support of the IWT Challenge Fund. In particular, logos were used in 6 banners, 2 signboards, and 2 leaflets (MOV 10) In addition, we also reported support of project activities in 2 journal publications and will also plan to acknowledge IWT Challenge Fund support in 2 future publications. Both the UKAID and the IWT Challenge Fund logo are present on the supporters page of the Planet Indonesia website. UKAID and the IWT challenge fund are also mentioned as supporters in our 2021 and 2022 Annual Reports. Lastly, on the website and promoted through our social media channels were three blogs “Is a single song in a cage worth a silent forest?”, “Exchanging rifles for life-changing opportunities” and “The SMART way to protect Helmeted hornbill populations in Borneo” that acknowledged the UK government and the IWT grant as a funder. Recently, we participated in the 8th International Hornbill Conference held in Thailand, where we presented results of one of the published articles (see Output 6.2) where we acknowledged support for IWT Challenge Fund.

## 11. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	Yes
Have any concerns been investigated in the past 12 months	No
Does your project have a Safeguarding focal point?	Yes Agung Wibowo
Has the focal point attended any formal training in the last 12 months?	No Agung Wibowo is new to the position, training is scheduled in the next 6 months.
What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 2% [2] Planned: 100% [88]
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses. Yayasan Planet Indonesia is committed to strengthening its safeguarding policies and practices. In the last 6 months we have created a new safeguarding committee with an updated Terms of Reference, written a new code of conduct for staff, volunteers and partners, appointed two new safeguarding focal points, conducted an organizational wide safeguarding assessment and have began to plan trainings for the entire YPI staff for the near future.	

## 12. Finance and administration

### 12.1. Project expenditure

Project spend (indicative) since last Annual Report	2022/23 Grant (£)	2022/23 Total actual IWTCF 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)				
<b>TOTAL</b>	<b>£124,550.00</b>	<b>£124,548.87</b>		

### **12.3. Value for Money**

Currently, our cost per unit impact per hectare of forests conserved is around \$5/ha. By 2026, we want to reduce this to \$2.75/ha by improving the efficiency of our organization's outreach (Annex 4: Fig 12). Beyond numbers, this project also helped us to add value through enabling strengthening of relationships with multiple government agencies. For example, the rifle-buyback program enabled us to strengthen partnership with the Police at a district level, with assurances for cooperation to address IWT. Other such partnerships include, MOU with the public health centre at sub-district level, and social forestry department of West Kalimantan.



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

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

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
<p>Impact: Improved densities of five threatened wildlife species and improved human well-being and poverty alleviation for 1741 members at two sites in West Kalimantan, Indonesia. (Max 30 words)</p>			
<p>Outcome: (Max 30 words) Indigenous communities in Gunung Niyut and Gunung Naning show reduced dependency on IWT</p>	<p>0.1) 1,741 members enrolled in Planet Indonesia’s Conservation Cooperatives and 30% Village Savings &amp; Loan growth per CC per year (baseline= 541 members Gunung Niyut, 400 new membershouseholds enrolled in each Y1, Y2 and Y3; 100% beneficiaries Indigenous Dayak and 40% are women)  0.1.1) 2000 secondary (family) members benefitted due to project  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)</p>	<p>0.1) Cooperative membership reports, participant lists, and quarterly development report  0.1.1. CC membership records  0.2) SMART patrol monthly, quarterly, and annual reports  0.3) Encounter rates of illegal logging activity from SMART Patrol data  0.4) Annual report on state of wildlife populations from PLEO method (both sites) and traditional distance sampling (GNNR only)</p>	<ul style="list-style-type: none"> <li>• Communities are open to Conservation Cooperatives and continue to enroll and invest in Savings &amp; Loans program</li> <li>• Communities value CC services provided and enroll in healthcare and education programs</li> <li>• SMART patrol teams collect high-quality data in the field and abide to rules and regulations in the program’s Standard Operating Procedures</li> </ul>

	<p>0.4) Stabilizing or increased wildlife populations by reduced IWT (Baseline values [individuals / km<sup>2</sup>] 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)</p>		<ul style="list-style-type: none"> <li>• Community members are open to adopting new livelihoods and farming methods</li> <li>• Wildlife populations stabilize or increase as a response to reduced poaching</li> </ul>
<p>Outputs:          1. Improved community-based monitoring of Gunung Niyut Nature Reserve and Gunung Naning Protection Forest through implementation of SMART patrols</p>	<p>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)</p> <p>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)</p> <p>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)</p> <p>1.4) 60% of Gunung Niyut protected and patrolled regularly by SMART patrols (baseline = 40%, Y1=40%, Y2=50%, Y=60%)</p> <p>1.5) 60% of Gunung Naning protected and patrolled regularly by SMART patrols, (baseline=0%, Y1=20%, Y2=40%, Y3=60%)</p>	<p>1.1) Participant list and enrollment in SMART patrols, including gender disaggregated data</p> <p>1.2) Monthly SMART patrol reports provided to government agencies</p> <p>1.3) SMART Patrol reports</p> <p>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)</p> <p>1.5) Number of SMART reports that result in government action</p>	<ul style="list-style-type: none"> <li>• Members are interested in participating in SMART patrol teams</li> <li>• SMART patrol teams collect high-quality data in the field and abide to rules and regulations relayed in the programs Standard Operating Procedures</li> </ul>

<p>2. Increased populations of five species threatened by IWT</p>	<p>2.1) Stabilization or increase in target wildlife populations</p> <p>(Baseline values [individuals / km<sup>2</sup>] 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)</p> <p>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</p>	<p>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</p> <p>2.2) Annual working report on trends in wildlife densities across project sites</p> <p>2.3) Publications in primary literature based on project results</p>	<ul style="list-style-type: none"> <li>• Community members are open to new livelihoods</li> <li>• Wildlife populations stabilize or increase as a response to reduced poaching</li> <li>• PLEO method is used effectively</li> </ul>
<p>3. Improved access to financial services and livelihood development through Conservation Cooperatives (linked to reduced IWT)</p>	<p>3.1) 200 new members 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)</p> <p>3.2) 200 members enrolled in CCs in Gunung Naning annually (baseline =0, Y1 = 200, Y2=400, Y3=600, total = 600 and 40% of beneficiaries are women)</p>	<p>3.1) Participants monthly list at meetings including gender disaggregated data</p> <p>3.2) Participant list and enrollment books of cooperative</p> <p>3.3) Monthly tracking of Village Savings &amp; Loans Program including gender disaggregated data</p>	<ul style="list-style-type: none"> <li>• Communities are open to Conservation Cooperatives and continue to enroll</li> <li>• Communities value CC services provided and enroll/remain active in health, literacy, and finance programs</li> </ul>

<p>rates, lease see Theory of Change)</p>	<p>3.3) 30% growth annually in Gunung Niyut Village Savings &amp; Loan program (baseline=£23,265, +30% growth annually Y1,Y2,Y3)</p> <p>3.4) 30% growth annually in Guning Naning Village Savings &amp; 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)</p> <p>3.5) &gt;95% loan repayment rate from cooperative members (Y1, Y2, Y3) and &gt;99% repayment rate for women</p> <p>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)</p>	<p>3.4) Savings amount per member</p> <p>3.5) Loan amount and repayment rate including gender disaggregated data</p> <p>3.6) Total savings/loans across all cooperatives including gender disaggregated data</p> <p>3.7) Number of “working groups” supported and running within each cooperative focusing on new commodities</p>	<ul style="list-style-type: none"> <li>• Communities are active in savings funds in community-based savings/loans program</li> <li>• Communities see explicit links between IWT and CC services provision</li> </ul>
<p>4. Improved access to healthcare and family planning needs identified as priorities by members to improve</p>	<p>4.1) 1190 beneficiaries reached through population – health – environment model (baseline=15, Y1=590, Y2=890, Y3= 1190; 75% of annual beneficiaries are women)</p> <p>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)</p>	<p>4.1) Participant list and monthly activity log book of health ambassadors</p> <p>4.2) PHE baseline and post intervention survey</p>	<ul style="list-style-type: none"> <li>• Women and youth enroll in healthcare and family planning services</li> <li>• Members enroll in literacy program and remain active to reach graduation</li> <li>• Health ambassadors are properly trained and remain</li> </ul>

<p>well-being and reduce dependency on IWT</p>	<p>4.3) 15 new health ambassadors trained annually in Gunung Niyut (baseline = 0, Y1=15, Y2=30, Y3=45; 75% of ambassadors or women)</p> <p>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)</p> <p>4.5) 10 new health ambassadors trained annually in Gunung Naning (baseline = 0, Y1= 10, Y2 = 20, Y3 = 30, 75% of all ambassadors are women)</p>	<p>4.3) Certificates for “Health Ambassadors” provided for participants who complete training including gender disaggregated data</p> <p>4.4) PHE baseline and post intervention survey including gender disaggregated data</p> <p>4.5) Certificates for “Health Ambassadors” provided for participants who complete training</p>	<p>active and effectively distribute healthcare services</p>
<p>5. Trial and evaluation of rifle, snare, and chainsaw buyback program to reduce IWT at project sites</p>	<p>5.1) 150 rifles/chainsaws returned annually across both sites, in exchange for additional trainings, agriculture and other incentives (Y1, Y2, Y3, total=450)</p> <p>5.2) 7500 seedlings planted annually in Gunung Niyut Nature Reserve buffer zone area (Y1, Y2, Y3 total=22,500)</p> <p>5.3) 7500 seedlings planted annually in Gunung Naning protection forests buffer zone area (Y1, Y2, Y3, total 22,500)</p> <p>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)</p>	<p>5.1) Cooperative and farmer log books with gender disaggregated data</p> <p>5.2) Number of seedlings planted in Gunung Niyut</p> <p>5.3) Number of seedlings planted in Gunung Naning</p> <p>5.4) Participant list of sustainable agriculture training with gender disaggregated data</p>	<ul style="list-style-type: none"> <li>• Community members are open to new livelihoods and farming methods</li> <li>• CC members are open to rifle buy-back program</li> </ul>

<p>6. Improved understanding of how CC model design can impact IWT, participation rates and livelihoods, based on evaluation and novel research</p>	<p>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)</p> <p>6.2 Publication on the causal pathways between ‘bundles’ of interventions provided by the CC model and reduced dependency on IWT</p> <p>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)</p> <p>6.4 Policy Brief published on key lessons from the CC model (baseline = 0, Y3 = 300 distributed to key policy makers and NGOs)</p> <p>6.5 Blogs on the CC model and its design to inform policy (Y1=2, Y2 = 2, Y3 = 2)</p>	<p>6.1 Copy of journal article evaluating the outcomes of the CC model</p> <p>6.2 Copy of journal article</p> <p>6.3.1 Number of interviews secured with non-participants</p> <p>6.3.2 Copy of journal article</p> <p>6.4.1 E-copy of Policy Brief in English and Indonesian</p> <p>6.4.2 Distribution list of who brief was shared with</p> <p>6.4.3 List of meetings</p> <p>6.5.1 Links to blogs on the Planet Indonesia website</p> <p>6.5.1 Link to blog on IUCN Sustainable Use and Livelihoods website</p>	<ul style="list-style-type: none"> <li>• In the context of a complex environment and multiple interventions, we 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>
<p><b>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)</b></p> <p>Activity 1.1: SMART Patrol recruitment and training for new villages / members</p>			



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

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

Project summary	Measurable Indicators	Progress and Achievements April 2020-March 2023
<p><b>Impact</b></p> <p>Improved densities of five threatened wildlife species and improved human well-being and poverty alleviation for 1741 members at two sites in West Kalimantan, Indonesia.</p>		
<p><b>Outcome</b></p> <p>Indigenous communities in Gunung Niyut and Gunung Naning show reduced dependency on IWT</p>	<p>0.1) 1741 members enrolled in Planet Indonesia's Conservation Cooperatives and 30% Village Savings &amp; Loan growth per CC per year (baseline= 541 members Gunung Niyut, 400 new members households enrolled in each Y1, Y2 and Y3; 100% beneficiaries Indigenous Dayak and 40% are women)</p> <p>0.1.1) 2000 secondary (family) members benefitted due to</p>	<p>0.1. Gunung Niyut - 1459 members (641 women, 818 men) and Gunung Naning - 505 (219 women, 286 men). Total direct beneficiaries - 1,964 (816 women, 1043 men). 41.5% of direct beneficiaries were women.</p> <p>Gunung Niyut Annual Savings growth -            Year 1=IDR. 413,285,000 (28%)            Year 2=IDR. 683,528,574 (32%)            Year 3=IDR. 819,247,900 (14.65%)</p> <p>Gunung Niyut Annual Loan Growth -            Year 1=IDR. 210,710,000 (25.78%), since before the running of the project;            Year 2=IDR. 335,820,000 (59.37%)            Y3=IDR. 390,346,000 (16.23%)</p> <p>Gunung Naning Total Savings per 30 March 2023 was IDR. 271,375,800.            The savings growth in            Year 1=IDR. 114.033.000            Year 2=IDR. 173.928.300 ( 53%);            Year 3 IDR. 271.375.800 (56%)</p> <p>Gunung Naning Annual Loan growth            Year 1= 0 (0%);            Year 2= 8,940,000 (100%);            Y3=IDR. 61, 986,000 (159%)</p>

	<p>project</p> <p>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)</p> <p>0.3) Reduction in tree cover loss by 10-20% annually across target sites (Y1, Y2, Y3)</p> <p>0.4) Stabilizing or increased wildlife populations by reduced IWT (Baseline values [individuals / km<sup>2</sup>] 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)</p>	<p>0.1.1. The total number of secondary (family members) benefitted from both project sites were 2005 people (1059 men, 946 women) (Gunung Niyut 1,492, Gunung Naning - 513)</p> <p>0.2. Area patrolled in Gunung Niyut in Year 1=55,800.ha (45% of reserve area); Year 2: 60,200 ha (48% of reserve area and 2% outside reserve area in Gunung Cermin and Dange Aji Forest Village/4,576 ha); Year 3= 62,100 ha (48% of Gunung Niyut Reserve area and 2% in Gunung/4,576 ha).</p> <p>Area patrolled in Gunung Naning in Year 1: 4,030 ha (7% of protected area); Year 2: 23,900 hectares (11.3% of protected area) and Year 3: 36,100 Ha (17% of protected area). During the project=74.030 Ha area patrolled or 33% of the total protected area in Gunung Naning protected forest area (228,500 Ha).</p> <p>0.3. Reduction in tree cover loss for the following sites were,  <b>Gunung Niyut</b>, Year 1: -30.93%; Year 2: -21.60%%, Year 3: -36.55%%  <b>Gunung Naning</b> - Year 1: -20.92%, Year 2: -33.52%, Year 3: -66.49%</p> <p><b>0.4 Density estimates in Year 3</b>          Helmeted Hornbill - 1.96          Abbotts Gibbons - 1.3          Rhinoceros Hornbill - 6.9          White Rumped Shama - 12.2          Straw-headed bulbul* -  <i>Note straw-headed bulbuls exist in such low densities across both sites, both during and prior to the project, we have included two other songbird species that are estimated to be harvested and traded in the hundreds of thousands annually, and to be in great decline - greater green leafbird and white-rumped shama.</i></p>
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<p><b>Output</b> 1.Improved community-based monitoring of Gunung Niyut Nature Reserve and Gunung Naning Protection Forest through implementation of SMART patrols</p>	<p>1.1) 6 SMART patrol units supported and conduct monthly patrolling in Gunung Niyut Nature Reserve</p> <p>1.2) 4 SMART patrol units supported and conduct monthly patrolling in Gunung Naning Protection Forest</p> <p>1.3) A total of 42 community members enrolled in SMART patrols and trained in SMART</p> <p>1.4) 60% of Gunung Niyut protected and patrolled regularly by SMART patrols</p> <p>1.5) 60% of Gunung Naning protected and patrolled regularly by SMART patrols</p>	<p>1.1) 6 SMART patrol units supported and conduct monthly patrolling in Gunung Niyut Nature Reserve</p> <p>1.2) 4 SMART patrol units supported and conduct monthly patrolling in Gunung Naning Protection Forest</p> <p>1.3) A total of 36 community member in Gunung Niyut and 16 community member in the Gunung Naning were registered as patrol members and received training on conducting SMART patrols.</p> <p>1.4) 62,100 ha (48.06%) of the Gunung Niyut Nature Reserve was patrolled by SMART patrolled in year 3</p> <p>1.5) 36,100 Ha or 17% of protected area (228,500 ha) in Gunung Naning Protected Forests were patrolled in Year 3</p>
<p>Activity 1.1 SMART Patrol recruitment and training for new villages / members</p>	<p><b>Gunung Niyut</b> Recruitments were carried out for 5 teams in Year 1 and Year 2, and 1 team in Year 3. A total of 35 community members were recruited and 16 BKSDA staff were trained on the SMART patrol methodology in 6 villages.</p> <p><b>Gunung Naning</b> Recruitments were carried out for 2 teams in Year 1, 1 team in Year 2, and 1 team in Year 3. In total 16 community members and 6 KPH staff were trained in SMART patrolling for 4 villages</p>	

<p>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)</p>	<p><b>Gunung Niyut</b> - In 3 years, there were 35 months of patrolling that included 1,355 days of patrolling</p> <p><b>Gunung Nanying</b> - 32 patrol month that included 960 days</p>
<p>Activity 1.3 SMART patrol semester review and evaluation</p>	<p>There were a total of 14 SMART patrol reviews and evaluations (Gunung Niyut - 7 and Gunung Nanying - 7) conducted during this project's period.</p>
<p>Activity 1.4: SMART patrol data used to triangulate/validate M&amp;E findings from social surveys, Focus Group Discussions, and Participatory Impact Assessments</p>	<p>SMART patrol data was used to inform other activities that include Helmeted Hornbill nest monitoring in Gunung Niyut, intensive training for farmers in hunting prone villages, and use of SMART data in land fire monitoring and planning in Gunung Nanying.</p>
<p>Activity 1.5: Bi-annual government SMART review and evaluation</p>	<p><b>Gunung Niyut</b> - In total 6 evaluations were conducted (2 evaluations each year)</p> <p><b>Gunung Nanying</b> - 7 evaluation and review workshops were conducted</p>
<p><b>Output 2.</b> Increased populations of five species threatened by IWT</p>	<p>2.1) Stabilization or increase in target wildlife populations (Baseline values [individuals / km<sup>2</sup>] 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 Nanying baseline will be estimated in Y1)</p> <p>2.2) Annual estimations of wildlife populations at both sites using Pooling Local Expert</p> <p><b>Point Count Transect Data [individuals per km<sup>2</sup>]</b>  <b>Gunung Niyut</b>  Helmeted Hornbill - 1.96  Abbotts Gibbons - 1.3  Bearded Pig - N/A  Red Langur - N/A  Sunda Pangolin - N/A  Rhinoceros Hornbill - 6.9</p> <p><b>SMART Patrol Data Encounter Rates (Individuals per km patrolled)</b>  <b>Gunung Nanying</b>  Helmeted Hornbill - 0.03  White-bearded Gibbon - 0.12  Wild Boar - 0.15  Rhinoceros Hornbill - 0.11  Sunda Pangolins - 0.04</p> <p>2.2. <b>Gunung Niyut (Year 2) [density per km<sup>2</sup>]</b>  Helmeted Hornbill - 1.89  Abbotts Gibbons - 1.65</p>

	Opinion (PLEO) method and distance sampling in the Gunung Niyut Nature reserve	<p>Bearded Pig - 4.89 Red Langur - 2.3 Sunda Pangolin - 3.17 Rhinoceros Hornbill - 3.9</p> <p><b>Gunung Naning (Year 2) [density per km2]</b> Helmeted Hornbill - 0.2 White-bearded Gibbon - 0.3 Bearded Pig - 0.16 Sunda Pangolin - 0.05 Straw-headed bulbul - 0.25</p>
Activity 2.1. Activity 2.1 Training of field assistants in distance sampling and PLEO methods		<p><b>Gunung Niyut:</b> 7 trainings in 3 years (Y1- 2, Y2- 2, Y3- 3)</p> <p><b>Gunung Naning:</b> 1 training in Year 3</p>
Activity 2.2. Annual survey using distance sampling on pre-existing transects in GNNR and PLEO in both sites		<p><b>Gunung Niyut</b> - 22 transects in 2020, 11 transects in 2021, and a total of 23 transects in 2021-22; 0 transects in 2022-2023, PLEO surveys were conducted in 4 locations (Tauk, Dawar, Mensibu, and Umbo)</p> <p><b>Gunung Naning</b> - The first PLEO survey was carried out in April 2021 and the second was in December 2021 in 3 villages. The third survey carried out in January 2023 (Y1: April 2021; Y2: December 202; Y3: Januari 2023)</p>
Activity 2.3 Data input and compilation		PLEO data entry and compilation were completed simultaneously with data collection (see Activity 2.2)
Activity 2.4 Data analysis and report writing		PLEO data entry and compilation were completed simultaneously with data collection (see Activity 2.2)



<p><b>Output 3.</b> Improved access to financial services and livelihood development through Conservation Cooperatives (linked to reduced IWT rates, please see Theory of Change)</p>	<p>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)</p> <p>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)</p> <p>3.3) 30% growth annually in Gunung Niyut Village Savings &amp; Loan program (baseline=£23,265, +30% growth annually Y1,Y2,Y3)</p> <p>3.4) 30% growth annually in Guning Naning Village Savings &amp; 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)</p> <p>3.5) &gt;95% loan repayment rate from cooperative members (Y1, Y2, Y3) and &gt;99% repayment rate for women</p>	<p><b>3.1. Gunung Niyut</b>  Y1: 220 new members  Y2: 340 new members  Y3: 78 new member  44% of beneficiaries are women</p> <p><b>3.2. Gunung Naning</b>  Y1: 319 new members  Y2: 392 new members  Y3: 505 new members  43.3% of beneficiaries are women</p> <p><b>3.3. Gunung Niyut</b>  <b>Savings</b> - Y1: 28%, Y2: 32%, Y3: 14.65%   <b>Loans</b> - Y1: 25.78%, Y2: 59.37%, Y3: 16.23%</p> <p><b>3.4. Gunung Naning</b>  <b>Savings</b> - Y1: 114,033,000 (baseline), Y2: 53%, Y3: 56%   <b>Loans</b> - Y1: 0, Y2: IDR 8.940.000 (baseline), Y3:159% (IDR 61.986.000)</p> <p><b>3.5. Gunung Niyut</b> - loan repayment rate was 85% overall and 88% for women   <b>Gunung Naning</b> - The loan repayment rate was 84% overall and 83%for women. The repayment rate calculated includes loan amounts that have not yet been paid</p>
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	<p>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)</p>	<p>3.6. <b>Gunung Nyiut</b> - Y1, 4 new alternative livelihood support (stingless bee project, chicken, pig and fish farming); 8 new vegetable varieties introduced and trained farmers on growing new varieties. Y2, 2 - new alternative livelihood support (broiler poultry farms); Y3, # 2 new livelihoods supported (catfish and mountain goats). During the 3 Years project, 24 vegetable varieties introduced with training to farmers to cultivate the new varieties.</p> <p><b>Gunung Naning</b> 3 new commodities (corn farming in Nanga Pari Village, palm sugar processing in Nanga Pari and Sungai Segak Villages, and stingless beekeeping in Nanga Pari and Sungai Segak Villages. During the 3 Years project, 24 vegetables varieties introduced to farmers during project</p>
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<p>Activity 3.1 Conservation Cooperative recruitment and enrolment for new members and villages</p>	<p><b>Gunung Niyut</b></p> <p>Y1: 220 members (138 women, 82 men) from Bentiang, Dange Aji, Dawar, Engkangin, Laek, RT 03 Umbo, RT 04 Mensibu, Semadum, Kulum, and Tauk.</p> <p>Y2: 340 members (165 women, 175 men) from Bentiang, Dange Aji, Dawar, Engkangin, Laek, Pelaik, RT 03 Umbo, RT 04 Mensibu, RT 07 Rambai,, Kulum, and Tauk.</p> <p>Y3: 78 members (27 women, 51 men) from Dange Aji, Kendaik, Laek, Pelaik, and RT 03 Umbo.</p> <p><b>Gunung Naning</b> 1,216 members from (7 sub-villages) Meragun Village, Ladak Hamlet, Pantok Village, Keyayo Hamlet and RT Lobui, Nanga Pari Village, Tangkit Hamlet and Tanjung Kepayang Hamlet, Sungai Segak Village Sungai Piyai hamlet and RT Sepan</p> <p>Y1: 319 Members (184 Male, 135 Female) Dusun Ladak, Dusun Tangkit, and Dusun Sungai Piyai</p> <p>Y2: 392 Members (216 Male and 176 female)</p> <p>Y3: 505 Members (286 men and 219 women) from Sepan, Sungai Piyai, Tangkit, Tanjung Kepayang, Ladak, Keyayo, and Lobui</p>
<p>Activity 3.2 Initial financial literacy, management, and leadership training as well as conservation design and pledge</p>	<p>Gunung Niyut - 6 activities in Tengon Kulum, Tengon Pelaik, Dange Aji, Tauk, Engkangin, and Kendaik</p> <p>Gunung Naning - 2 Activities in Keyayo and Lobui in Pantok village</p>
<p>Activity 3.3 CC vision and mission building, memberships rules, elections, and standard operating procedures</p>	<p><b>Gunung Niyut</b> - 12 CCs were supported every month through capacity building by conducting routine assistance.</p> <p><b>Gunung Naning</b> - 7 CCs were supported to develop CC governance mechanism with regular monthly assistance</p>
<p>Activity 3.4 CC monthly meetings for VSL (savings, active loans, loan repayments, etc) and other important issues (village by village based)</p>	<p><b>Gunung Niyut</b> - One (1) monthly meeting was held for each of the 12 CCs on Village Savings and Loans activities and other important issues</p> <p><b>Gunung Naning</b> -One (1) monthly meeting was held for 7 CCs regarding Village Savings and Loans activities and other important issues</p>

<p>Activity 3.5 CC agreement creation and socialization</p>	<p><b>Gunung Niyut - 0</b> <b>Gunung Naning - Y1: 2, Y2: 1, Y3: 4. Total = 7 MoU signed</b></p>
<p>Activity 3.6 Asset transfers and field schools to CCs to generate income and identify new livelihood sources</p>	<p><b>Gunung Niyut - 247 CC members received livelihoods funds (Y1: 0, Y2 : 53 CC members, Y3: 194)</b> <b>Gunung Naning - there were no livelihoods loans program in this landscape</b></p>
<p><b>Output 4 - Improved access to healthcare and family planning needs identified as priorities by members to improve well-being and reduce dependency on IWT</b></p>	<p>4.1) 1190 beneficiaries reached through population – health – environment model (baseline=15, Y1=590, Y2=890, Y3= 1190; 75% of annual beneficiaries are women).</p> <p>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)</p> <p>4.3) 15 new health ambassadors trained annually in Gunung Niyut (baseline = 0, Y1=15, Y2=30, Y3=45; 75% of ambassadors or women)</p> <p>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)</p> <p>4.5) 10 new health ambassadors trained annually in Guning</p> <p>4.1. <b>Gunung Niyut</b> - Y1- 1,457 villagers, Y2: 2,136 villagers; Y3: 1,263 villagers <b>Gunung Naning</b> - Y1 - 0, Y2 - 0, Y3 - 2,493 villagers</p> <p>4.2. <b>Gunung Niyut</b> - Y1: 259 women used contraceptives; Y2: 624 women used contraceptives, Y3: 544 women used family planning after receiving counseling</p> <p>4.3. <b>Gunung Niyut</b> - 134 Health Ambassadors trained (109 active) all women (Y1: 88, Y2: 14 Y3: 32)</p> <p>4.4. <b>Gunung Naning</b> - Y1- 89 women, Y2 - 90 women, Y3 - 213 women</p> <p>4.5. <b>Gunung Naning</b> - Y1: 25 HA trained; Y2: 0 HA trained (existing 25 HAs from Year 1); Y3: 25 HA trained. Total HA trained during project in Gunung Naning was 50 women</p>

	Naning (baseline = 0, Y1= 10, Y2 = 20, Y3 = 30, 75% of all ambassadors are women)	
Activity 4.1 Health ambassador recruitment and training in PHE method		<b>Gunung Niyut</b> - Total 134 HAs trained (all women) however, only 109 HAs were active until the end of the project. <b>Gunung Naning</b> - Total 50 HAs trained (all women)
Activity 4.2 Health ambassadors weekly visits (5 households a week) to distribute health information and collect data under 'Health Family Initiative"		<b>Gunung Niyut</b> - since November 2020, there have been 1,338 visits by HAs <b>Gunung Naning</b> - since January 2021, there have been 277 visits by HAs
Activity 4.3 Health ambassadors monthly report to local government clinics and PHE staff		<b>Gunung Niyut</b> - reports were shared with govt. Health clinics of 4 sub-districts (Air Besar, Tujuh Belas, Suti Semarang, and Seluas) <b>Gunung Naning</b> - no reports were submitted
Activity 4.4 Quarterly and annual evaluations with health ambassadors		<b>Gunung Niyut</b> - 7 evaluations <b>Gunung Naning</b> - 1 evaluation
Activity 4.5 Annual meetings and evaluations with ambassadors and government health workers		In year 3 this activity was combined with Activity 4.4
<b>Output 5:</b> Trial and evaluation of rifle, snare, and chainsaw buyback program to reduce IWT at project sites	<p>5.1) 150 rifles/chainsaws returned annually across both sites, in exchange for additional trainings, agriculture and other incentives (Y1, Y2, Y3, total=450)</p> <p>5.2) 7500 seedlings planted annually in Gunung Niyut Nature Reserve buffer zone area (Y1, Y2, Y3 total=22,500)</p> <p>5.3) 7500 seedlings planted annually in Gunung Naning</p>	<p>5.1. <b>Gunung Niyut</b> - Y1: 35 firearms, Y2: 583 firearms, Y3: 0</p> <p>5.2. <b>Gunung Niyut</b> - Locations of plantings - Bentiang, Dange Aji, Dawar, Kendaik, Kelum, Laek, Mensibu, Pelaik, Rambai, Semadum, Umbo Number of seedlings planted - Y1: 20,074, Y2: 8,653, Y3: 26,137</p> <p>5.3. <b>Gunung Naning</b> - Location of plantings - Sungai Segak village, Sungai Piyai sub-village and RT Sepan, Juwau sub-village and Batu Ancau sub-village, Nanga</p>

	<p>protection forests buffer zone area (Y1, Y2, Y3, total 22,500)</p> <p>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)</p>	<p>Pari village, Tangkit sub-village, and Meragun village, Ladak sub-village) Number of seedlings planted - Y1: 0, Y2: 5,302, Y3: 55.751</p> <p>5.4. <b>Gunung Niyut</b> - 540 (39% women) <b>Gunung Naning</b> - 318, (34% women)</p>
Activity 5.1 Program socialization and community hearings		This activity was carried out in Year in Gunung Niyut villages.
Activity 5.2 Baseline survey to identify incentives and needs		The needs survey was conducted in Year 2 in Gunung Niyut
Activity 5.3 Buy-back program implemented in target sites		8 public events and multiple meetings were conducted to implement the rifle buy-back program in Gunung Niyut
Activity 5.4 Rewards and incentives provided		<p>Rewards and incentives provided as part of the buy-back scheme included</p> <p>15. Take home pay (based on the condition of the weapon)</p> <p>16. Community funds/ This were funds provided for the use in development/purchasing of joint assets belonging to the community. The amount of community funds was dependent on the total number of weapons surrendered in each community</p>
<b>Output 6:</b> Improved understanding of how CC model design can impact IWT, participation rates and livelihoods, based on evaluation and novel research	<p>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).</p> <p>6.2 Publication on the causal pathways between ‘bundles’ of interventions provided by the CC model and reduced dependency on IWT</p>	<p>6.1. Study design not completed</p> <p>6.2. 1 article published in the journal Environmental Development (Annex Table 2)</p>

	<p>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)</p> <p>6.4 Policy Brief published on key lessons from the CC model (baseline = 0, Y3 = 300 distributed to key policy makers and NGOs)</p> <p>6.5 Blogs on the CC model and its design to inform policy (Y1=2, Y2 = 2, Y3 = 2)</p>	<p>6.3. Manuscript published in Biological Conservation journal. Currently addressing reviewer comments</p> <p>6.4. contingent on 6.2 and 6.3</p> <p>6.5. 2 IWT Newsletter article and 1 working paper on the CC approach in Engkangin on Planet Indonesia website</p>
<p>Activity 6.1 Consultations and workshop with international technical advisors (Dr. J. Phelps and Dr. R. Carmenta) on research-based M&amp;E methods</p>	<p>Monthly meetings were carried out over video conferencing to develop tools, analyse data, write manuscript for Output 6.3</p>	
<p>Activity 6.2 Literature review and desk work to compile suitable methodology</p>	<p>Lit. review for the discussion section was completed in Year 3</p>	
<p>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</p>	<p>Activity planned for Year 3. Data collection was completed for the 'opt-out' study (Output 6.3)</p>	
<p>Activity 6.4 Field data collection</p>	<p>Completed in Year 3</p>	

Annex 3 Standard Indicators

**16.1.1. Table 1 Project Standard Indicators**

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
1A	Number of individuals who received training in sustainable livelihood skills	Male - 95, Female - 60	Indonesian	155	349	599	1,103	
1B	Number of individuals benefiting from training (i.e. broader HH of individual directly trained)	Male - 221  Female - 173		558	394	656	1,608	
3A	Number of credit and savings groups established			0	3	7	10	
3B	Number of loans provided to MSMEs	Male - 60 Female - 31		91	120	428	639	
3C	Total value (£) of loans provided			GBP 5,902 (IDR. 112,809,80 5)	GBP 18111 (IDR. 344,760,00 0)	GBP 23762 (IDR. 452,332,00 0)	GBP 47800 (IDR. 909,901,80 5)	
12	Duration or frequency of patrols by law enforcement rangers supported through the project			2,602 hours	2,808 hours	3,942 hours	9,346 hours	
15A	Number of intelligence reports fed into management decisions on species protection			82 reports	74 reports	110 reports	266 reports	



**16.1.2. Table 2 Publications**

<b>Title</b>	<b>Type</b> (e.g. journals, manual, CDs)	<b>Detail</b> (authors, year)	<b>Gender of Lead Author</b>	<b>Nationality of Lead Author</b>	<b>Publishers</b> (name, city)	<b>Available from</b> (e.g. weblink or publisher if not available online)
Leveraging local knowledge to estimate wildlife densities in bornean tropical rainforests	Journal	Ahmad, A., Gary, D., Rodiansyah, Sinta, Srifitria, Putra, W., ... & Miller, A. E. (2021).	Male	Bangladesh	Wildlife Biology, Lund, Sweden	<a href="https://bioone.org/journal/s/wildlife-biology/volume-2021/issue-1/wlb.00771/Leveraging-local-knowledge-to-estimate-wildlife-densities-in-bornean-tropical/10.2981/wlb.00771.full?tab=ArticleLinkCited">https://bioone.org/journal/s/wildlife-biology/volume-2021/issue-1/wlb.00771/Leveraging-local-knowledge-to-estimate-wildlife-densities-in-bornean-tropical/10.2981/wlb.00771.full?tab=ArticleLinkCited</a>
Understanding the interactions between human well-being and environmental outcomes through a community-led integrated landscape initiative in Indonesia	Journal	Novick, B., Crouch, J., Ahmad, A., Kartikawati, S. M., Sagita, N., & Miller, A. E. (2023)	Female	American	Environmental Development	<a href="https://www.sciencedirect.com/science/article/pii/S2211464522000938">https://www.sciencedirect.com/science/article/pii/S2211464522000938</a>

## 17. Checklist for submission

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:BCF-Reports@niras.com">BCF-Reports@niras.com</a> putting the project number in the Subject line.	Yes
<b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:BCF-Reports@niras.com">BCF-Reports@niras.com</a> about the best way to deliver the report, putting the project number in the Subject line.	N/A
If you are submitting photos for publicity purposes, <b>do these meet the outlined requirements (see section 10)?</b>	Yes
<b>Have you included means of verification?</b> You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
<b>Do you have hard copies of material you need to submit with the report?</b> 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.	Yes
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 13)?	Yes
Have you involved your partners in preparation of the report and named the main contributors	N/A
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	