Department for Environment Food & Rural Affairs





Darwin Initiative Main: Annual Report

To be completed with reference to the "Project Reporting Information Note": (<u>https://www.darwininitiative.org.uk/resources/information-notes/</u>)

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

Submission Deadline: 30th April 2024

Submit to: <u>BCF-Reports@niras.com</u> including your project ref in the subject line

Project reference	29-002	
Project title	Conserving and restoring orangutan habitat and ecosystems, Gunung Palung, Indonesia	
Country/ies	Indonesia	
Lead Partner	Fauna & Flora International	
Project partner(s)	 Gunung Palung National Park Yayasan Palung 	
Darwin Initiative grant value	£360,610.00	
Start/end dates of project	1 June 2022/31 March 2025	
Reporting period (e.g. Apr 2023 – Mar 2024) and number (e.g. Annual Report 1, 2, 3)	June 2023 – Mar 2024, Annual Report 2	
Project Leader name	Arief Hamidi	
Project website/blog/social media	N/A	
Report author(s) and date	Arief , Rahmawati, Edy , Edi , Jarian ,	

Darwin Initiative Project Information

1. Project summary

117,346 ha of forest within Gunung Palung National Park (GPNP) and its adjacent areas provides critical habitat for orangutans and other endangered species, but over 22,000 ha of buffer zone forest has been lost in the last decade. Building on proven collaborative protected area management interventions and sustainable financing mechanisms, the project aims to reduce forest loss, mitigate the climate change-related risk of fire, protect and restore orangutan habitat and support biodiversity friendly livelihoods activities, improving well-being for 11,223 people in four surrounding communities.

Biodiversity challenges in the landscape areas are caused by habitat loss due to forest fires, encroachment (including illegal logging) and poaching, which threaten biodiversity. Strengthening conservation management of GPNP and working collaboratively with surrounding communities are vital to reduce threats in their areas as a buffer to the National Park. Improving community wellbeing to reduce dependency on unsustainable use of the forest supports forest protection operations. Our project works in GPNP and four adjacent villages; Penjalaan, Rantau Panjang, Riam Berasap and Sempurna. In Y1, 4 Protection and Monitoring Units (PMUs) were established and operated as joint ranger teams of GPNP and communities to collaborate on protection patrols and forest monitoring. All PMUs were trained and equipped by SMART patrol system, biodiversity monitoring, with awareness in fire mitigation. The PMUs has collected 111 identified illegal activities considered as threats to be monitored. Biodiversity assessments in each PMU area were conducted and established a baseline orangutan population as well as other endangered species to be monitored, I.e., Bornean gibbon and Sunda pangolin. Challenges to biodiversity within GPNP areas which mainly caused by human activity, so the wellbeing level of forest-

dependent communities was assessed in 4 villages with the categories of rich, medium and poor. These group are the main target of the project, while the interventions that we have carried out are business plan training and product creation and innovation, in line with social forestry business group (KUPS).

The project has incorporated eight community business groups and two village forest institutions across the 4 villages, to enable access to sustainable fund sources from forest-friendly business products and sustainable financing of Payment for Ecosystem Services (PES) schemes. The six community business groups have been trained in socio-entrepreneurship (business plan, finance management, organisation management) and technical production (crafting, farming, and pre-harvest and post-harvest coffee production) to maintain and enhance the value of their product and to access markets in sustainable manner. Though some market access was identified, committed relations with these potential markets are still being developed, and production quantity and quality will continue be improved to meet market demand.

Beside community business groups, intervention is also targeting sustainable financing for two village forest institutions, under the Social Forestry mechanism. It will enable access to secure long-term funding to village forest institutions, grants from investors through carbon offsets and/or biodiversity offsets using performance-based payments. Four potential international investors were identified, approached and engaged to support this scheme for two village forests. Project Document Development (PDD) as the step to access the investment was developed by Y2. In line with the process, the two village forest institutions have shared learning through discussion and field visits with LPHD Manjau, who have secured 10 years' funding from a private company for biodiversity offset.

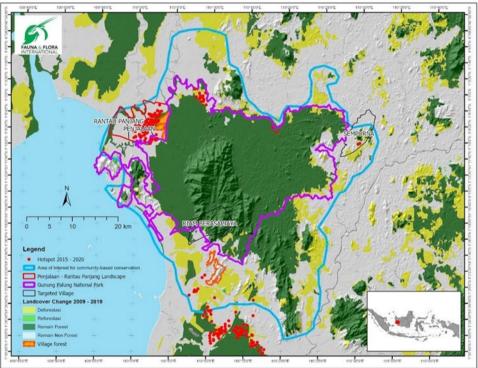


Fig. 1. Map of Project location

2. Project stakeholders/ partners

Directorate General for Nature Resources and Ecosystem Conservation – KSDAE Gunung Palung National Park (GPNP)

GPNP is the technical management unit of the National Park, under the Ministry of Environment and Forestry (MoEF) Directorate General for the Conservation of Natural Resources and Ecosystems (DG KSDAE). FFI in Indonesia operates under an MoU with the MoEF/ DG KSDAE. In this project, GPNP will be engaged in all aspects of the work, providing permissions for fieldwork, facilitating relationships with buffer zone villages, and providing additional technical advice and engaging in collaborative Protection and Monitoring Units (PMUs).

Yayasan Palung

Yayasan Palung (YP), has been working since 2002 to protect the orangutan population and biodiversity in and around GPNP. YP has been running a community empowerment programme around the GPNP area since 2010. The main activities include initiation and assistance in processing non-timber forest products (NTFPs), community agriculture and aquaculture (freshwater fish farming). YP will collaborate

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on the project implementation in the villages of Penjalaan and Rantau Panjang, targeted under this project. Work will mostly relate to the improvement of sustainable livelihoods to achieve outputs 3 and 4 of this project.

Communities in Sempurna, Laman Satong and Riam Berasap Jaya Village

In this project, the communities in these three villages are the main beneficiaries. An increased alternative productivity through farmer groups and business groups will be one of the main outputs. Some members of community are also empowered in Patrol Monitoring Unit groups that were established by the mutual agreement signed by the villages and GPNP.

Village Forest Rantau Panjang and Village Forest Penjalaan

Village Forest (VF) Rantau Panjang and VF Penjalaan are project beneficiaries. FFI, with support from GPNP and YP, has facilitated communities in conservation-based village development planning including forest patrol management, land clearing with zero-burning, and orangutan conflict management. The support will include also the development of livelihood alternatives for business group development.

Forest Management Unit (FMU) of Kayong Utara

In partnership, the FMU of Kayong Utara contributes to the security and protection of the area, especially in the Rantau Panjang and Penjalaan village forest areas, which are directly adjacent to forest areas with production forest status managed by the forest management unit. In sustainability-based management, the forest management unit is also a good liaison for community-based forest development stakeholders.

Manggala Agni

Manggala Agni, also known as the Forest and Land Fire Brigade, is operation unit under Directorate General of Climate Change Mitigation (PPI) by the Ministry of Environment and Forestry, Republic of Indonesia. This organisation is responsible for prevention, post-fire handling, evacuation and rescue support, and management support for forest and land fire control in the field. In this project, Manggala Agni facilitates forest management licenses for communities, such as the village forest managed by Rantau Panjang village and Penjalaan village forest. The support of Manggala Agni in the forest and land fire prevention and control programme is highly beneficial for this project to train the community to zero-burning, and training communities to handle forest and land fires independently in their respective villages.

3. Project progress

3.1 **Progress in carrying out project Activities**

Output 1. Reduced direct threats to forest habitat and rare and threatened species, through effectively operating joint Protection & Monitoring Units (PMU)

Protection and Monitoring Unit (PMU) Establishment (Activity 1.3, 1.4, & 1.5) Completed by Y1 (MoV: https://bit.ly/AgreementLetters)

<u>PMU's capacity building (Activity 1.6, 1.7 & 1.8)</u> Completed by Y1 (MoV: <u>https://bit.ly/BiodiveTraining</u>)

Baseline assessment and monitoring (Activity 1.1, 1.2, 1.7, 1.12 & 1.13)

Baseline of biodiversity, mapping and threats assessment (**Activity 1.1, 1.2, 1.7**) were completed in Y1 (MoV: biodiv report).

In Y2, baselines for target species and Orangutan monitoring were conducted as follows:

- Orangutan monitoring in 4 PMU operational areas:
 - two monitoring patrols in Penjalaan and Rantau Panjang Village Forest in August and October 2023 involving 36 people in total (all men; 20 LPHD staff, 8 community member rangers, and 8 GPNP staff)
 - two monitoring patrols in Sempurna resort and Riam Berasap in June and March 2023 respectively, deploying 24 rangers (8 community, 8 member of ranger-partner community, and 8 GPNP staff)
 - The method in estimating density of nests is using 1000 m by 40m line transects, with a total of 12 transects (4 transects in each site).
- Bornean gibbon observation to collect baseline population data has been conducted in GPNP resort Sempurna and Sungai Purang (Penjalaan and Rantau Panjang VF) over 10 days (5 days each). This observation was carried out by 13 rangers in total (all men; 5 LPHD, 4 PMU and 4 GPNP staff). Density and habitat range for the gibbons was estimated using a triangle count, each morning 6-10 am for 3 days.

 Observation to collect baseline information of Sunda Pangolin population was carried during 5 days on November 2023 in two Village Forest (Rantau Panjang and Penjalaan) using Visual Encounter Survey (VES) techniques and combined camera trapping for 3 months from November to January 2024.

Activity 1.12 & 1.13 will be completed by EoP

PMU's operations (Activity 1.9, 1.10 & 1.11)

32 monthly SMART patrols were operated by PMUs from April 2023 – March 2024 (**Activity 1.9**). The patrols carried by 20 rangers in total (19 M:1W), with total distance of: 717.90 km by foot, 1433.52 km by motorbike, 216.51 km by boat in 4 operational areas, which are:

- GPNP resort Sempurna: 10 patrols (by 5 rangers; 277.27 km by foot, 1,021.7 km by motorbike, and 147.48 km by boat)
- GPNP resort Riam Berasap: 2 patrols (5 rangers; 27.54 km by foot, 187.53 km by motorbike)
- Rantau Panjang Village Forest: 9 patrols (6 rangers; 272.18 km by foot, 20.07 km by motorbike, 69,03 km by boat)
- Penjalaan Village Forest: 10 patrols (6 rangers; 140.91 km by foot, 204.25 km by motorbike)

Beside regular patrols, two PMU teams conducted 6 monitoring patrols of PLTB adoption on village communities that applying horticulture and farming (**Activity 1.10**). The results are 12 farmers of Penjalaan and 8 farmers of rantau panjang adopted PLTB (MoV: <u>https://bit.ly/ZeroBurnMonitoring</u>). In law enforcement, responding to PMU's patrol reports and community information, we deployed one joint patrol to Penjalaan forest areas, involving law enforcement in Penjalaan village forest. The patrol was conducted on 19 – 21 Juni 2023, by 10 joint rangers (2 FMU, 2 community PMU, 1 GPNP ranger, 1 police department officer, 2 Village Government officers, 2 Yayasan palung; 10M:0W) (**Activity 1.11**). Patrols arrested 1 logger, with evidence of 1 chain saw, 5 litres of fuel, and 82 logs. Following the law, the logged wood was destroyed, and the logger made a statement not to carry out illegal logging activities any further. (MoV: <u>https://bit.ly/PatrolsGabungan</u>)

Output 2. 11,223 people in four communities around Gunung Palung have improved resilience to climate change through improved prevention and management of fires, water table management and peat swamp forest rehabilitation

Improve community-based resilience on fires through awareness and prevention efforts (Activity 2.1)

The project encourages local (village-level) regulation or agreement in mitigating land and forest fires (**Activity 2.1**). As a result, two village communities have an agreement in preventing forest and land fires, as a written commitment among villagers with authorised stakeholders. The village agreement in Rantau Panjang was signed by 30 people (26M:4W) on 12 August 2023, and in Penjalaan by 29 people (25M:4W) on 13 August 2023. In these signatories represented 6 community groups (head of village, head of sub-village, head of sub-village, head of sub-village, head of subunit community groups, youth group (Karang Taruna), farmer groups, village forest management, business group) and 4 government institutions (Manggala Agni, FMU, Babinkamtibnas, and Babinsa). The agreements cover what should be done prior to the dry season, how to mitigate and early prevention. The results of this agreement are intended to produce a legal Village Regulation.

Capacity building to improve community ability in fires mitigation (Activity 2.2, 2.4)

The training on land clearing without burning was conducted on October 11-12, 2023, and was attended by 80 participants (59M:21W) consisting of the Community, KPH, LDPHD, Babinkamtibnas, GPNP, Babinsa, Village Government, Students, Yayasan Palung and FFI. This training provides material on land cultivation without burning using heavy equipment and manual tools such as hoes, then provides material on making fertilisers to restore macro and micro elements in peatlands (**Activity 2.2**). On December 13, 2023, and February 24, 2024, FPIC FGDs were conducted in the community for the canal blocking plan in Rantau Panjang and Penjalaan. The FGDs were attended by 28 people from Penjalaan Village (22 M:6 W) and 18 people from Rantau Panjang (16M:2W) with representatives from the Village Head, FMU, Community Leaders, Village Consultative Body (BPD), Yayasan Palung and FFI. The results of this FGD for canal blocking are quite important to reduce the impact of drought on peatlands so that it can reduce forest fires in Rantau Panjang Village. From canal blocking, the water level could be raised by 40 cm. The community provided recommendations for the canal blocking point by considering the canal as community access for the transportation route for palm oil and access to fish in the river. The community welcomed the canal blocking because it can reduce the risk of forest fires in their village. (**Activity 2.4**).

Restore prone areas to fires by peat hydrology management and reforestation (Activity 2.3, 2.5, 2.6, 2.7) - Monitoring of peat hydrology (water table)

After hydrological assessment has been conducted by Y1 (**Activity 2.3**), water table (WT) monitoring was conducted 3 times, along with peat depth (PD) assessments on certain points (defined in Y1) in May, July (dry season) and September (rainy season) 2023, by PMU of Penjalaan and Rantau Panjang (**Activity 2.3**). The results show as table below, where WT levels are mostly increased May - July but still below

topsoil. During rainy season in September, all peat areas are flooded ("+" mean water table are above topsoil).

Location	ocation WP Coordinate			May Jul		July	ıly September		
		South	East	WT	PD	WT	PD	WT	PD
Penjalaan	P1	1.125484	110.05223	41	249	29	248	26+	247
Village Forest	P2	1.125896	110.05493	46	197	23	195.5	24+	194.5
	P3	1.125676	110.05773	43	257	20	257	15+	253
Rantau	R1	1.140634	110.040767	15	160	5	158.5	8+	156.5
Panjang VIIIage	R2	1.140652	110.043497	12	120	2	120	9+	120
Forest	R3	1.140674	110.046137	39	100	30	97	40+	96
	R4	1.156274	110.058233	2	144	1	144	37+	142
	R5	1.156404	110.060708	38	210	10	207.5	3+	204.5
	R6	1.155659	110.063409	48	312	43	307	21+	301

Notes: WP= water point; WT=Water table; PD=Peat Depth; "+" = water table are above topsoil (flooded); R=Rantau Panjang area; P=Penjalaan area

This decrease in WT in the dry season (May), if left unchecked, could lead to forest fires because it causes peat drying, while in the rainy season the Village Forest area is on average submerged in water or flooded (MoV: <u>https://bit.ly/WTable</u>)

<u>Construction of canal blocking</u>

Construction of canal blocking is necessary for peat rewetting and mitigation of climate disaster (to prevent fires during dry season and reduce floods during the rainy season). The construction of 7 canal blocks was conducted in March 2024 in Penjalaan and Rantau Panjang areas (Activity 2.5). The 7 points (four in Rantau Panjang and 3 in Penjalaan areas) are selected based on the hydrology assessment to minimise negative impact of climate change (floods and fires) as well as human activities that may reduce the water table. (MoV: https://bit.ly/CanalBlocking)

Forest restoration

Forest restoration aimed to restore the functioning of forest in halting the fires and keeping water catchments at a safe level. The restoration was designed according to the disturbance level of each forest area based on land cover analysis and field ground check. The result defines 4 methods of restoration covering the whole Village Forest of Penjalaan and Rantau Panjang, as shown in the table below:

Plan Restorasi	Target land cover	Penjalaan (Ha)	Rantau Panjang (Ha)
Assisted Natural Regeneration (ANR)	Old Secondary Forest	154. <mark>1</mark> 1	291.82
Enrichment Planting by Native/Forest species	Low-disturbed/young secondary forest	197.15	46.02
Multi-Purpose Tree Species (MPTS) Planting	Secondary forest/opened areas	21.92	4.11
Reforestation (incl. rehabilitation and revegetation)	Heavy-disturbed Forest/Opened areas	2.78	5.49

During February 2023 to April 2024, 3,380 seedlings were planted in Penjalaan and Rantau Panjang Village Forest, of which 2,818 seedlings were pioneers and native forest species for revegetation such as *Litsea glabra*, *Syzigium zeylanicum*, *Palaquium leiocarpum*, etc, and 102 seedlings are for MPTS with selected species such as *Parkia speciosa*, *Archidendron jiringa*, *Garnicia bencana* (Activity 2.7). Planting has involved 13 participants in total (13M:0W) (MoV: https://bit.ly/ReportSeedsMarch2024)

Hotspot Analysis in Gunung Palung Landscape (Activity 2.8)

Hotspot monitoring using NOAA analysis was taken in August - October 2023 as the highest potential fire vulnerability (**Activity 2.8**). Hotspot monitoring for this year's project activities started from March 2023 to March 2024. Monitoring hotspots using data instruments from MODIS C6.1 and J1 VIIRS C1, the results of the analysis and monitoring of hotspots included in the total Area of Interest per each instrument data source, namely MODIS C6.1 shows a total of 12 hotspots and J1 VIIRS C1 instrument shows a total of 16 hotspots.

Apart from the results of satellite monitoring, potential fire-prone areas are also monitored through fire spot monitoring patrols conducted by the PMU team around the Village Forest and TNGGP areas. The patrol team identified 9 hotspots that could potentially occur in these areas. The results of these findings will be

entered into the fire point data system to analyse annual fire point trends and inform Manggala Agni (KLHK Fire Prevention Brigade) and FMU Kayong at the end of the year.

Output 3. The capacity of at least four community business groups representing 500 households (>3,000 people) has increased to diversify livelihood opportunities based on biodiversity-friendly products.

Baseline assessment on community livelihood and the needs to improve opportunities (Activity 3.1, 3.2)

Participatory Wellbeing Assessment (PWA) (Activity 3.1) and training needs assessment (Activity 3.2) were conducted in Y1.

<u>Capacity building in social enterprise and technical production for community business groups</u> (Activity 3.3, 3.4, 3.6, 3.8)

Capacity building was mostly delivered in Y1, but we keep maintaining capacity buildings for communities as much as possible. In Y2 some trainings and technical assistances are as follow:

Activity 3.3 - 4 trainings and assistances to develop business plans for 2 KUPS: Mutiara Agro Lestari (holticulture) and Tani Makmur (chilli commodities); and Fajar Atsiri group (lemongrass oil) have been conducted on 6-7 March 2024 at Penjalaan Village, participated by 78 peoples (42M:36W) (MoV: <u>https://bit.ly/3y5OPzq</u> [Business plan report]) Financial training for KUPS in Rantau Panjang Village and Penjalaan Village was carried out on 20-22 November 2023 involving 20 participants (15M:5W). Then, financial bookkeeping is monitored monthly.

Activity 3.4 - 2 times assistances in developing SOPs for KUPS Ashoka woven pandanus, KUPS Tani Makmur Simpang Keramat and KUPS Mutiara Agro Lestari for chilli cultivation has been carried out on 25-27 March 2024 at Penjalaan Village involving 27 participants (15M:11W).

Activity 3.6 - 5 trainings have been conducted for Penjalaan, Rantau Panjang, Sempurna and Riam Berasap Jaya villages for LPHD and KUPS including workplan for LPHD, eco-print, rice field training, crafting pandanus mats training, zero burning and land clearing, involving 109 men and 42 women totalling 151 people. Eco-print and workbook group has been carried out on 6 March 2023 involving 15 participants (1 M:13, W:1G). Rice field training in Sempurna Village has been carried out on 11 March 2023 involving 30 participants (2 Groups; 27M:1W). Crafting pandanus mats training has been carried out on 14-15 March 2024 in Penjalaan Village involving 10 participants (1M:9W).

Activity 3.8 - Two (2) trainings and assistances in improving product/value chain and marketing were delivered to business groups as below:

KUPS Ashoka: Training has been carried out on 25 March 2024 involving 10 women. The standard operating procedures regulates how production standards must be adhered to by group members, starting from tools and materials, pandanus leaf processing, colouring, production, storage, packaging, and marketing.

KUPS Tani Makmur Simpang Keramat and KUPS Mutiara Agro Lestari: Training has been carried out on 26 – 27 March 2024 involving 13 men and 3 women. The standard operating procedure regulates the group's internal production standards in conducting chili cultivation, starting from raw materials, work tools, land processing, seed sowing, seedling planting, maintenance, harvesting, and marketing. (MOV SOP KUPS: <u>https://bit.ly/SOPKUPS</u>)

Support community business groups to improve production and business operation (3.7, 3.9, 3.10)

Activity 3.7 - Support mostly has been delivered by Y1, but more supports were delivered during this Y2. The needs of support for each business groups are assessed based on the monthly monitoring. Equipment assistances (i.e., organic fertilizer, vacuum sealer, seeds, sprayers, polybags, planter bags, organic fertilizer maker, and oil filter) has been distributed to business groups to improve production process and production operation. The beneficiaries of this support are reaching 281 peoples (119 M, 114 W). (https://bit.ly/Equiptmenlist)

Activity 3.9 - The Forest Management Unit (FMU) of Kayong is committed to support business activities towards all KUPS within their working areas, including KUPS Ashoka in Penjalaan Village. The FMU are committed to purchases products of KUPS Ashoka to be displayed in the FMU's gallery or used as souvenirs. In December 2023, KPH purchased KUPS products worth Rp 5,850,000. In addition, KPH also facilitates KUPS Ashoka to participate in exhibition activities.

101 Coffee House is one of the coffee businesses in Pontianak, West Kalimantan. 101 Coffee House expressed its support for KUPS NTFP processing business under LPHD Simpang Keramat in Penjalaan Village. They are committed to buy and promote the green bean of liberica and robusta coffee produced by LPHD Simpang Keramat. Besides, they are also giving willing to train LPHD in improving their coffee production. (MoV Support Letter from Stakeholder: https://bit.ly/Sup_Letters)

Activity 3.10 - All targeted villages are still focused on infrastructure development and there is no funding available for community business activities. However, we will continue to propose funding for business activities through the annual village development planning meeting.

Measuring result (Activity 3.11)

PWA re-assessment is planned to be conducted by EoP

Output 4. Two village forest institutions have secured long-term funding (at least 10 years) for PMU operations to protect village forests and contribute to community wellbeing

Activity 4.1 Facilitate learning visits and exchanges with Manjau village, which has secured 10 years of performance-based payments for environmental services

Completed by Y1

Activity 4.2 Identification of potential partners/investors for VCS Climate, Community & Biodiversity Standards (VCS-CCB) or RSPO RaCP schemes,

In year 2, the project analysed several standard carbon schemes, such as RSPO – RaCP, including national access in environmental services market mechanism. Though its potential in RSPO-RaCP, the carbon-based values of both Rantau Panjang and Penjalaan Village Forest are relatively low due to its small area. However, it still possible by joining several village forests in one proposal to reach maximum large areas. The other possible option is accessing the national market system following the new Regulation, i.e. PermenLHK No.7/2023 concerning the procedures for carbon trading in the forestry sector, Village Forest Management Institutions that have obtained a Management permit for Social Forestry Management approval holders with at least a silver classification in the implementation of social forestry in accordance with statutory regulations can apply for carbon trading by completing DRAM documents and registering in SRN. Following the regulation, a Mitigation Action Plan Document (DRAM) will be prepared by registering LPHD through the National registration system by Y3.

3.2 **Progress towards project Outputs**

Output 1: Direct threats to forest habitats and rare and threatened species decrease, through effective joint operation of Protection & Monitoring Units (PMUs)

Indicator 1.1 Joint Patrol and Monitoring Unit (PMU) agreements between village communities (Rantau Panjang, Penjalaan, Sempurna, Riam Beresapjaya) and GPNP established by Y1. Achieved by Y1 (see AYR1 and MoV)

Indicator 1.2 Four PMU teams (1 GPNP + 3-4 community rangers), totalling c.20 people, are trained in SMART patrolling/ biodiversity monitoring by end of Y1. Achieved by Y1 (see section 3.1 Output1)

Indicator 1.3. Workplans and operational areas for PMUs defined by end of Y1 Achieved by Y1 (see section 3.1 Output1 and MoVs <u>https://bit.ly/WorkplanPatrolsMaps</u>)

Indicator 1.4. At least 5 patrol days per month starting from year 2/Q1 until the end of the project Four PMUs has operated 155 patrol days in total during 12 months of April 2023 to March 2024, i.e.:

- PMU Riam Berasap: 2 months (total 10 days)
- PMU Sempurna: 10 months (total 50 days)
- PMU Penjalaan: 10 Months (total 50 days)
- PMU Rantau panjang: 9 Months (total 45 days)

The operation number and schedules were different from the original PMU's workplan. Operational areas in Sempurna and Penjalaan experienced flooding in Nov– Dec'23, while in Rantau Panjang has 3 months of flooding (Nov'23– Jan'24) which are impossible to deploy patrol activity. In GPNP resort Riam Berasap areas, patrols were deployed 2 months only. This is due to the changes of regulation in GPNP staffs, where the Head of resort was replaced and decided to renew the PMU's workplan. This is also because the agenda of GPNP Resort Riam Berasap become tighter that mostly overlapping with patrol agenda. We have discussed with GPNP management and agree to change the workplan and will do re-evaluation to the workplan considering the annual report of threats recorded.

Indicator 1.5. At least one joint patrol involving law enforcement officers from the Ministry of Environment and Forestry and/or the police takes place every year, starting in year 2

One joint patrol of Y2 was conducted in Penjalaan areas on 20-21 June 2023, involving 6 institutions, i.e. Babinkamtibnas (1 staff), GPNP (1 rangers), FMU of Kayong Utara (2 rangers), Village goverment of Penjalaan (1 staff), LPHD of Penjalaan Village Forest (3 staffs) and 2 staffs of Fauna&Flora. The patrol succeeds collecting some evidence (see activity 1.10 above and MOV parts)

Output 2: 11,223 people in four communities around Gunung Palung have improved resilience to climate change through improved prevention and management of fires, water table management and peat swamp forest rehabilitation.

Indicator 2.1 Decreased incidents of uncontrolled fires in 4 target villages with improvements, on both peat and mineral soils, by Y3 compared to 2019 (pre-pandemic).

Through village agreements and the adoption of zero-burning land preparation has reduced uncontrolled fires in four project locations. During 2023, there are only 12 hotspots in total (using MODIS analysis), or 9 incidents (using patrol monitoring records). This data is reduced from baseline number in 2019 of 150 hotspots, and previous year number in 2022 of 19 hotspots.

Indicator 2.2 At least 8 canal-blocking barriers are implemented in peat soil villages, by end of Y2, based on hydrological assessments.

Seven (7) canal-blocking barriers has been constructed during March 2024. The number and its location are based on expert's recommendation as a results of peat hydrology assessment and water table monitoring. Hence, the number are slightly reduced from eight (8) to seven (7). (See MoV: https://bit.ly/CanalBlocking)

Indicator 2.3 10,000 native forest species seedlings have been planted in re-wetted degraded peat swamp forest, with a minimum survival rate of 70%, by project end.

As much as 3,380 seedlings in total has been planted in Penjalaan and Rantau Panjang Village Forest, where 2,818 seedlings of them are pioneers for revegetation and 1,102 seedlings are for MPTS. Survival rates has been measured as monitoring will be conducted by Y3.

Ouput 3: Capacity of at least four community groups representing 500 households (>3,000 people) is increased to diversify livelihood opportunities based on biodiversity-friendly products

Indicator 3.1 Community business groups, representing 500HH and of whom >30% of members are women, are established and trained in business planning and finance management by Y1.

There have been 3 trainings for business plans and business SOPs, involving 135 men and 70 women with business plans made are Mutiara Agro Lestari and KUPS Tani Makmur engaged in chilli farming, and essential lemongrass oil processing Fajar Atsiri group, made business SOPs for Tikar pandan KUPS Ahoka, SOP KUPS Mutiara Agro Lestari and Tani Makmur for chilli farming.

Indicator 3.2 Partnerships between community businesses and private sector companies formalised to improve value chains and access markets, by end Y1

Two business agreements were reached between FMU of Kayong and the owner of the Kopi 101 Pontianak business,

1. FMU of Kayong has formalized agreement with KUPS Ashoka's to buys products of Pandanus weaving and to be marketed at the district, provincial and national levels. (MoV Support Letter from FMU: <u>https://bit.ly/Sup_Letters</u>)

2. The 101 Coffee with KUPS LPHD Simpang Keramat Penjalaan Village who is ready to accommodate and assist the community in coffee management. In addition, whenever the stock availability of coffee is large enough, 101 will assist KUPS to the export level. (MoV Support Letter from 101: <u>https://bit.ly/Sup_Letters</u>)

Indicator 3.3 Technical training delivered to at least 500 household representatives (coffee agroforestry production, coffee post-harvest processing, handicraft development and product manufacturing from NTFPs (e.g., rattan, pandan, bamboo) by Y2

The training was conducted for two business groups. The business plan development for the Fajar Atsiri business group that focuses on processing of lemongrass oil was conducted in Penjalaan village on 7 March 2024, involving 14 participants (8 M; 6 W). The Standard Operating System (SOP) development for KUPS Ashoka was conducted in Penjalaan village on 25 March 2024, involving 10 women and technical training in varying craft product in Penjalaan to KUPS Ashoka, in 14-15 March 2024, participated by 10 participants (1M:9W).

Indicator 3.4 Training in product development/ value chain development and marketing to four community business groups, with at least 10 participants in each training from each community group, of whom at least 50% are women, by end Y1

Technical assistant to analyse the feasibility and developing of business plan for busines groups was conducted on 6 - 7 Maret 2024 in Penjalaan village, attended by 19 participants (14M:5 W), involving horticulture groups (KUPS Tani Makmur Simpang Keramat, KUPS Mutiara Agro Lestari, and Fajar Atsiri farming group also FMU of Kayong. Subsequently, another technical assistant to develop SOPs was conducted on 25 - 27 March 2024, in Penjalaan, attended by 41 participants (21M:20W) from 3 business groups (i.e., KUPS Ashoka, KUPS Tani Makmur Simpang Keramat, dan KUPS Mutiara Agro Lestari), FMU of Kayong, Yayasan Palung, and Fauna & Flora. The SOP wrere designed to establish clear performance standards for business activities, provide guidance on maintaining consistent product quality, enhance the performance quality of members, and facilitate monitoring and evaluation of business group performance and member activities.

Indicator 3.5 Increased income of community business group members through improved value chains for local products by at least 10% by EoP

The result is expected to be seen by EoP. Along Y2, we are completing the baseline of each community business's income through their financial records as well as production through production logs, of which has started by Y2. The Y1, are focusing on their capacity in business skills and management. The Y2 baseline will be compared to annual financial records by EoP.

<u>Output 4:</u> Two village forest institutions have secured long-term funding (at least 10 years) for PMU operations to protect village forests and contribute to community wellbeing

Indicator 4.1 Sustainable financing mechanism (national/ international) based on potential buyers/ partners for ecosystem services or biodiversity offsets is identified by Y1

In Y1, we have identified four Potential investors (for VCS-CCB scheme) and three potential companies (for RSPO RaCP scheme) for PES of LPHD Penjalaan and Rantau Panjang Village Forest, of which channelling to Community Forest Ecosystem Services (CFES). During Y2, we have discussed with CFES to see feasibility of two VFs in accessing the sustainable financing through the Compensation Mechanism of RSPO. However, the scale wise, CFES have considered both areas is not feasible at this time, unless these must be combined with other VFs to reach the reasonable areas for RSPO scheme. In the meantime, there are new national regulation No.7/ 2023 on forestry sector carbon market procedures. This regulation encourages national standards in accessing the ecosystem services market which is mandatory for all forest managers in Indonesia. Forest managers are required to register with the MoEF website and then upload a mitigation action plan (DRAM) document to then obtain a greenhouse gas emission reduction certificate (SPE-GRK). The project will anticipate following this Indonesia regulation for carbon scheme, as the most possible option in accessing sustainable financing, by preparing a DRAM (The Climate Change Mitigation Action Plan Document) in Year 3.

Indicator 4.2 At least two community institutions meet international standards (e.g., VCS-CCB, RaCP) required to access ecosystem services markets by end of project

Following the new regulation above, there may be a need for changes slightly to this indicator adjusting to the market system prepared by government. We have informed for two LPHD regarding this regulation, and we will assist them in processing the DRAM and SPE-GRK to access national carbon market system by Y3.

3.3 **Progress towards the project Outcome**

0.1. By 2025, the annual deforestation rate in Gunung Palung National Park (GPNP) and adjacent village forests has been reduced by at least 50% compared to pre-pandemic baseline (Baseline: Deforestation rate 0.77% (2018))

The result is expected to be seen by EoP, but the progress until Y2 is promising. Using GIS analyses of satellite imagery, Hansen Forest Loss index was used toward Gunung Palung landscape. The result was overlayed with forest cover data of MoEF 2019 to measure the area of forest loss. The total Deforestation rate in GPNP and adjacent areas was 0.13% (153,02 Ha), of which **more than 50% decreased** compared to baseline (0.77% by 2018). The deforestation rate upon four project locations totalling 38.36Ha or 0.0327% with specifically as below:

- GPNP Resort Sampurna: 34.67Ha or 0,0295%
- GPNP Resort Riam Berasap : 3.69Ha or 0,0031%
- Rantau Panjang Village Forest: 0.13Ha or 0,0001%
- Penjalaan Village Forest: 0,00Ha or 0,00%

Deforestation areas mostly occurred in the edge of National Park, also most of areas were a non-forest since before 2019. Even though deforestation rate seems insignificant, most areas have been opened or non-forested areas prior to the project start. (See MOV: <u>https://bit.lv/LULCAnalysis</u>)

0.2. Number of forest crime incidents per year (e.g., illegal logging, hunting of protected species, canal and agricultural encroachment) reduced by 50% compared to baseline, by project end (Forest fire incidents: 238 (of which 150 are in village forests/ buffer zone); Encroachment:195 (2020))

As much as 64 threats was identified during SMART Patrol by PMUs with a total of 659.1 Km patrol distant within PMU operational areas (<u>https://bit.ly/Report PatrolsY2</u>), with specifically as table below. These records showing the threats reduction about **84%** of encroachment and **96%** of fires incidents compared to 2020' baseline.

Threat	Riam	Sempurna	Rantau	Penjalaan	Total
	Berasap		Panjang		

Forest-and-land fires	3	2	2	2	9
Agricultural and plantation land clearing	2	2			4
Illegal logging	4	5	1		10
Canal construction	1	1		2	4
Encroachment (farmland)	23	6			29
Poaching	1	3			4

0.3. Number of fire hotspots reduced, through improved community-based fire prevention, zero burning practices and rewetting of peat swamp forests, compared with baseline by end of project (EoP).

In 2023, Hotspot analysis using MODIS C6.1 resulting **12 hotspots** in total with specifically 10 hotspots in GPNP resort Sempurna and 2 hotspots in resrot Batu Barat. As comparison, hotspot analysis using J1 VIIRS C1 instrument records **16 hotspots** (see MOV https://bit.lv/ForestFireMapsGPNP) with specific:

- GPNP resort Sempurna: 5 hotspots
- GPNP resort Pangkal tapang: 3 hotspots
- GPNP resort Sedahan: 1 hotspot
- GPNP resort Batu Barat: 1 hotspot
- GPNP resort Matan: 1 hotspot
- GPNP resort Tanjung Gunung: 1 hotspot
- Rantau Panjang village forest: 3 hotspots
- Penjalaan Village Forest: 1 hotspot

Besides, hotspot monitoring through SMART Patrol by PMU identified 9 **hotspots**, within PMUs operational areas (see MOV <u>https://bit.ly/ForestFireMapsGPNP</u>). This number are reduced if compared to previous year in 2022, where there are 19 identified hotspot using MODIS/NOAA.

0.4. At least 75% of women and men from 4 target communities (proportional sample representing 11,223 people) report improvements in multiple indicators of well-being by EoP. Too soon to see the result and will be measured by EOP through the end PWA analysis. However, by the active business unit on each community group, there are improvement on their livelihoods as result from trainings and assistances (see indicator 0.7 below), which will lead to improvement of wellbeing.

0.5. At least 6 community business groups and village institutions (≥3000 people from 500HH) have new access to sustainable financing (PES, biodiversity offsets) or benefit from improved product value chains, as a result of this project, by EoP

There are **15** community groups (**281 HH**) in total, have new access to sustainable financing i.e.:

Thirteen (13) community business groups, accessing from improved product value chain:

- 1. KUPS Sinar Selatan (10 HH), Coffee production
- 2. KUPS Rapa Karya Mandiri (18 HH), stingless bee production
- 3. KUPS Sinar Selatan (15 HH), Banana Chips
- 4. KUPS Asoka (15 HH), Crafting (Ex. Pandanus)
- 5. KTH Sempurna (50HH), Non-timber forest product (Rubber)
- 6. KUPS Tani Makmur (15 HH), Horticulture
- 7. KUPS Mutiara Agro Lestari (15 HH), Horticulture
- 8. KWT Delima (30 HH), Horticulture
- 9. KUPS Rapa Karya Sejahtera (19 HH), Horticulture
- 10. KUPS Rapa Mina Berkarya(15 HH), Fish Cage
- 11. Poktan Fajar atsiri (50 HH), Lemongrass oil production and horticulture
- 12. Gapoktan RT 14 Rantau Panjang (16 HH), Horticulture
- 13. KWT Rantau Panjang (13 HH), Horticulture

Two (2) LPHD (village forest manager), accessing National Registration Standard of carbon market:

- LPHD Rantau Panjang (15 HH)
- LPHD Penjalaan (15 HH)

0.6. Population of orangutans and other threatened target species are stable or increasing in project area, at the end of project, compared to baselines

Bornean Orangutan

Through Orangutan monitoring Y2, we record the density of Orangutan are ranged within 0.51 - 2.16 ind./Km² (CI:95%, se: 0.35), if extrapolated roughly to a total project area about 1.173,46 Km², then the estimation population of Orangutan are ranged within 596 to 2529 individuals, while the baseline population in 2019 are 2200 individuals. It means that the population are **potentially remains stable or increase** compared to baseline. Meanwhile, the density of Orangutan and its population estimation on each PMU location are as below:

- GPNP Resort Riam Berasap: 1,61 ind./Km2, or ~216 ind.
- GPNP Resort Sempurna: 0,31 ind./Km2, or ~48 ind.
- Penjalaan Village Forest: 1,44 ind./Km2, or ~5 ind.
- Rantau Panjang VIIlage Forest: 1,11 ind./Km2, or ~4 ind.
- Bornean Gibbon

Through field survey in GPNP Resort Sampurna and Penjalaan Village Forest, on 20 November 2023, the Bornean Gibbon's density was 0.31 group/km² and 0.23 group/Km² in respective areas.

Sunda Pangolin

The Sunda Pangolin population remains under analysis, the team was found no individual of Sunda Pangolin through camera trapping, yet the PMU detected 8 marks of this species in Rantau Panjang Village Forest.

(See MOV Bornean Orangutan, Bornean Gibbon, Sunda Pangolin and other Biodiversity with at the following link : <u>https://bit.ly/OrnagutansAndBiodiversity</u>)

0.7. 50% of households trained (est. 250 HH) will benefit from an increase of 20% production compared to the baseline, as a result of implemented technical trainings

The total number of business group members is 281 HH and have received technical training, both through this project and from other project sources from Fauna & Flora, Yayasan Palung, government agencies such as Peatland and Mangrove Restoration Agency, and the Department of Agriculture and Food. So far, about 281 HH, or around 35-40% of the total member are actively involved in the group practicing the results of their training. As a result of these trainings, the increase in income per business unit ranges from 25-300% per year in year 2. (see https://bit.ly/MembersandLogProduk)

3.4 Monitoring of assumptions

Assumptions of Outcome:

Assumption 1: Catastrophic events, such as El Niño droughts, do not cause large scale un-controllable fire event

Comments: This still hold true, there are El Nino happened during August – September 2023 and causing big fires in some areas, but not in a large scale like happened in 2017 and 2019. Our project areas remain safe from big fires.

Assumption 2: Government regulations remain supportive of environmental services markets

Comments: The assumption remains applied. There are new regulations that support the National environmental market services, i.e. No. of 2023 on forestry sector carbon trading mechanism. The regulation is supportive to the implementation of environmental services markets, but slightly affecting the procedures where all voluntary carbon markets under forestry should proceed through national registry via the government bodies. Hence, this regulation will be affecting the achievement of output 4 and the outcome regarding the sustainable financing through PES schemes. Our mitigation is changing the procedure into National Registry System and will proceed effectively by Y3. (See explanation in output 4 section 3.2.)

Assumption 3: Continuous commitment by GPNP and local community partners

Comments: Commitment remains continues from GPNP even though there is an issue with the continuation process of MoU between Fauna & Flora and the MoEF. The commitment from communities are also remains continues.

Assumption 4: There are no significant new outbreaks of disease among target species that cause unprecedented losses

Comments: There are no new outbreaks of disease to target species causing unprecedented losses. However, the assumption still holds true, hence there are no mitigation strategy are needed.

Assumption of Output 1

Assumption 1: The targeted community groups remain committed to join PMUs

Comments: No change on this assumption and still hold true, where the PMU team remains same and operating accordingly.

Assumption 2: FFI's Memorandum of Understanding with GPNP remains in place.

Comments: Recently, Fauna & Flora are under the process of continuation of MoU with the MoEF were affecting the direct command to GPNP (as a local agent of MoEF). Some activities operating within GPNP areas are postponed, e.g. patrols. However, other activities remain continues as we have anticipated by

operating the PMU in adjacent GPNP areas (within PMU operational areas) while waiting the MoU process.

Assumption 3: Regulation and policy changes will not impact the conservation partnership agreement between community and GPNP agency

Comments: No change and still hold true

Assumption 4: Trainer community members and GPNP rangers remain healthy and able to complete patrols as intended

Comments: No change and still hold true. The patrol activities remain continues in place in well performances.

Assumption 5: Local fire management authorities (Manggala Agni) and law enforcement agencies (GAKUM/ police) respond to PMU reports.

Comments: No change and still hold true. The local Police department responded to PMU's report and joining the joint patrol for law enforcement in Penjalaan Forest Village. Meanwhile, the PMU on peatlands has recorded some fire sign in their operational areas but found no significant threats from fires. Hence, this finding was not necessarily reports to Manggala Agni. The annual fires finding will be report to Manggala Agni by the end of this year (calendar period).

Assumptions of Output 2

Assumption 1: No El Niño event causing large-scale devastating fires during project period Comments: No change and still hold true, since there is no significant effect from El Nino to project areas. Assumption 2: Local fire management authority (Manggala Agni) responds to community reports.

Comments: No change and still hold true. Coordination with Manggala Agni will be engaged if there are significant threats of fires to the forest, in collaborating with FMU, village government and LPHD in suppressing the fires.

Assumption of Output 4

Assumption 5: Government regulatory framework allows to access national or international carbon markets

Comments: No change and still hold true. By the new regulation, the National and International market are accessible following National Standard Registry (SRN), of which proposed by each land managers (LPHD) by filling the Document of Mitigation Action Plan (DRAM).

Assumption 6: RSPO palm oil companies are willing to compensate their liabilities for past High Conservation Value (HCV) clearing through village forest programme in target villages

Comments: The assumption remain applicable but needs to be fit with the new regulation that ensure that compensation from RSPO companies are also possible through SRN mechanism. However, the assumption also may change in the future, in respond to the new regulation regarding national Environment Services markets if the compensation mechanism is not facilitated yet by the regulation. We have option to follow the new regulation in national, where it is the most possible to access and support government in securing sustainable financing for communities by protecting forest.

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

By this Y2, some positive impacts have been fully or partially achieved, as below:

- a. Threats to biodiversity within project areas are shown reducing compared to baseline, as the result of patrols activities and fires mitigation on peatland, i.e.: Illegal logging and poaching reduced about 7,1%, annual fires incidences reduced about 10,6%, encroachment reduced about 14,8%. The positive change from these results is the better forest condition and biodiversity, of which shown progressing in reducing deforestation rate and stable species population. This is in line with our original desired impact from the project.
- b. By the established fires mitigation action in peatland areas, the villagers are aware and willing to adopt the zero-burning practice in preparing their farmland. This is in turn reducing the risk to fires in this year. This positive change in knowledge and practice are also the impact from the project where leading to the more resilient of the community to climate disaster.
- c. Some promising impact from alternative livelihood are shown. The ex-loggers are now joining the initiative of alternative livelihood (horticulture) to improve their income. This solution is supporting the poverty reduction as well as reducing threats from forest crime.

4. Project support to the Conventions, Treaties or Agreements

The project supporting contribution to any conventions and treaties but has not been submitted yet to the respective focal points (will be made under the organisations along with other project results). Some of them are as below:

• The Indonesia Nationally Determined Contribution (NDC) [REF-13] conditional reduction target (up to 41% of the business-as-usual scenario, by 2030) by reducing emissions from deforestation and fire, with support from the UK government. It specifically supports the delivery of two NDC programmes for climate change mitigation:

2, Capacity building of institutions, to prevent and control fires (mitigation actions). We have supported the capacity building to institutions i.e. GPNP, LDPHD, FMU, village government, Local Police and Village armies, as well as Local NGO in mitigating fires on peat lands, through output 2.1, 2.2. **6**, Developing and implementing an intervention programme for climate change mitigation in the sector of forestry, linked to agriculture. Beside point 2 above, our intervention also supports mitigation of climate change to help forestry and agriculture by establishing 7 canals blocking to control peat hydrology, of which aimed to rewetting the peat forest as well as help in regulating the water table in community's farm-land areas.

- Indonesia national targets under the CBD, including target number (in bold):
- 11, through sustainable management of Gunung Palung National Park and buffer, reflected in improved GPNP METT score, from 76 in 2021 to 83 in 2024. (Lampiran SK. METT 2023.png).12, through efforts to maintain the population of orangutan and other endangered species through habitat conservation, threat reduction through joint patrols, alternative livelihoods, fire management, and biomonitoring. Such efforts have been conducted by Y2 were as (1) Orangutan Monitoring and Other threatened species (Bornean Gibbon and Sunda Pangolin), (2) regular SMART Patrol and (3) Joint patrol for law enforcement. These interventions contribute to the reduction of threats by Y2 (see outcome 6). 14, improved functionality of the ecosystem, supporting multiple ecosystem services, through protection and re-wetting of peat swamp, canal blocking to restore the water table, and replanting. 15, through conservation of the lowland and peat swamp forest ecosystems, including through rewetting and canal blocking, and through effective collaborative management. 21, through establishing systematic information gathering on biodiversity through joint SMART patrols.
- Multiple Sustainable Development Goals, the most significant include targets of:

 Building the resilience of two remote village communities to climate-related shocks (fires) through output 2 (1.5) and supporting their access to economic resources, including GPNP buffer zone natural resources through output 3 (1.4). 8, Decoupling economic growth from environmental degradation by enabling legal, safe livelihoods options in the GPNP buffer zone for >3,000 people represented by 281 members of four community business groups, through output 3 (8.4). 11, Reducing the number of people affected by, and who suffer losses to, disasters, including extensive forest fires (11.5). 12, Enabling more sustainable use of natural resources (12.2) through the reduction in illegal logging through alternative livelihoods, deterrents, and fire prevention actions. 15, Supporting the conservation (15.1) and management (15.2) of lowland and peat swamp forest ecosystems, through improved management of GPNP, with resulting direct contributions to halt biodiversity loss (15.5 including orangutan and other endangered species, and to reducing poaching of fauna (15.7) by reducing illegal logging.

5. Project support for multidimensional poverty reduction

The project is supporting poverty reduction by investing in access to two new sustainable incomes; generating livelihoods and sustainable financing by protecting forests. Until Y2 project, for the generating income from community livelihood options, both social entrepreneurship and technical training have been delivered to 13 community business groups in total, include opening access for market options, and improving value chains. This is expected to increase incomes for 281 HH members, as demonstrated progressing during Y2 (see output 3 results and indicators). All the beneficiaries are villagers within project areas, of about 60% of them are categorized as 'poor' (PWA results Y1). Our expectation that their business can help in leveraging poverty reduction in targeted village, that will be seen by EoP. As example, the horticulture business is helping the ex-logger to gain access of livelihood, which help them to improve their income as well as stop their logging activities.

6. Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board ¹ .	
Please quantify the proportion of project partners that are led by women, or which	<u>4 Men:</u> Arief Hamidi (Project Leader-FFI) Edi Rahman (Director of Yayasan Palung) Edy Nordiansyah (Biodiversity Coordinator-FFI)

¹ 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.

have a senior leadership team consisting of at least 50% women ² .	Himawan Sasangko S.Hut, M.Sc (Head OF GPNP)
	<u>4 Women:</u> Rahmawati (West Kal Program Manager-FFI) Desi Kurniati (Yayasan Palung field Staff) Siti Zumrotin (Community Facilitation Coordinator FFI) Maris Sirande (Finance Manager-FFI)

GESI Scale	Description	Put X where you think your project is on the scale
Not yet sensitive	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
Sensitive	The GESI context has been considered and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups, and the project will not contribute to or create further inequalities.	X
Empowering	The project has all the characteristics of a 'sensitive' approach whilst also increasing equal access to assets, resources and capabilities for women and marginalised groups	
Transformative	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	

7. Monitoring and evaluation

We have developed Monitoring and Evaluation (M&E) system on M&E matrix to measure output and achievements that contribute to the project outcome. The matrix is attached in separated document to this report (please find the file M&E FORM DAR28Q2Y2 (1).xlsx as attachment to this report). There is no specific M&E works from each partner during this Y2 reporting period, but we have collected information from other partners to be incorporated in the project M&E and this report. We also agree to additional submit M&E report to all partners including GPNP agency, Yayasan Palung, and 4 assisted villages to ensure they are up to date on overall project progress.

8. Lessons learnt

- Reforestation took place covering 462.56 ha areas with a deforestation rate of 38.36 ha. This • shows that the project intervention has had a significant impact on the forest cover. By securing and protecting the forest area through Patrol Monitoring Unit (PMU), rehabilitation of forest areas with native plants and Multi-Purpose Tree Species (MPTS) and other community empowerment to reduce community activities or dependence on forest areas. This initiative is effectively contributed to habitat improvement, biodiversity conservation as well as community resilience in climate disasters, and therefore will be good to expand to adjacent areas.
- Patrol evaluations are effective in improving patrol performance and data management. Hence, we are planning to conduct patrol evaluation guarterly to ensure that routine patrols are carried out in accordance with the established SOPs.
- Small number of farmers are adopting the zero-burning land preparation but has significant impact in reducing fires incidences. The results from our monitoring show that the number of hotspots detected by both the hotspot image analysis tools and field monitoring is decreasing in the second

² 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. Darwin Initiative Main Annual Report Template 2024 14

year (see output 2.1). However, this adoption remains challenging to be effectively implemented by others, due to its difficultness in changing farmers' land clearing patterns and behaviour. Farmers still consider that burning practices is more efficient and effective. Therefore, the consistency of support and intensity of monitoring, as well as the implementation of the agreements that have been reached (activity 2.1), must be maintained until the change in behaviour towards slash-and-burn can be fully maximised by the community.

- Monitoring of Bornean orangutans is strongly influenced by human activities in the area and food availability. We also believe that density is influenced by the weather and microclimate in the area. The less human activity in the area that destroys habitat, the greater the likelihood of Bornean orangutans living and foraging in the area, as well as plant species that bear fruit throughout the year. The same applies to monitoring other threatened species. We need to monitor animals and plants through specialised monitoring, such as monitoring rare and endangered trees, and monitoring animals through camera traps throughout the year. The monitoring of rare trees has been initiated in this second year, although the implementation by the MMP or village institutions is still not optimal but will be improved in the following years.
- Based on data and information provided by local communities and members of the PMU. Sunda
 pangolins are often seen by communities around gardens and residential sites. Monitoring is
 considered ineffective as this animal is vulnerable to the wildlife trade in West Kalimantan. We
 have learnt that the monitoring of rare, threatened and protected species can be done using the
 citizen science approach. Not only for certain threatened, endemic and protected species, but also
 for human-animal conflicts. In the sense that it involves all people who have activities (farmers)
 around the management area, both the village forest and the Gunung Palung National Park area.
- By Y2, there have been several significant developments and went well from the first year to Y2 such as a decrease in threats, an increase in forest fire prevention, hydrology management, institutional strengthening and skills to increase product diversification. However, some constrains remain challenging, including in increasing the capacity of business development in KUPS which still does not have a broader market, or a proper value, besides that the internal management in the KUPS remain needs improvement, such as equitable gender involvement, financial management, institutional management, operational management. Among the business development programmes that have been running, in general, the problems of KUPS are its institutions both in terms of human resources and job desk arrangements, then related to the products produced, the quality, quantity and continuity of the products produced are still not able to reach a wide market. Therefore, for the next year the team will maintain programmes and activities that have been running well and keep improving those that are still not optimal. This is by keep maintaining the capacity of human resources, and skill improvement to increase production capacity with highest economic value, addressing broader market by involving all elements of the community who are committed in sociopreneurship/business management. So that the results of the project will have an impact on the community at large, especially in improving the economy in one village which will also have an impact on the village development index (IDM).

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

Respond and Feedback to previous (Y1) review:

Review	Feedback	Action
The project has responded to the DI Identity section in narrative format, but has not referred to or made use of evidence and should do so in its next AR	Noted, by AR1 we are not referred the evidence of DI identity due to limited documents prepared. But we will be preparing all evidence and referred to it.	In this year 2 we have included the darwin logo in every activity report, reports to partners including activity attendance and results documents.
<i>Provide M&E plan and refer to key aspects in M&E section</i>	Noted	We will provide our M&E matrix as part of this report. The M&E matrix are consisted of M&E plan that has been filled with actions, results, as well as our learning to improve adaptive management over the project. The matrix is living document were periodically updating in respond to changes or update.

It is highlighted that 'women remain relatively under-represented in groups (reflecting the norms in the area) and are largely participating in traditionally female roles'. The reviewer notes that this was expected from the project application, but encourages the project to work towards breaking social norms here, for example, are female only sessions possible? Are there barriers to female participation that could be broken down, such as timing of engagements, splitting patrol groups to cover varying field conditions that might be more manageable for women?	Noted, we are also support to women empowerment and looking for any significant improve for women's role in communities or in the project. By example, we have one patrol team that consist by all women in Riam Berasap Jaya village and remain active to date. We are continuous in looking for active of various roles and representatives of women by this project.	By this Y2 period, we have delivered training for community groups which consists by all women. 71 women participated in training such as SOP fire management training, ecoprint training, financial management, business plan development and crafting. The KUPS Asoka's member, which is 100% women, they can determine and have access to harvesting areas of Pandan materials inside the lands that mostly owned by Men.
Are there opportunities for greater levels of social inclusion within this project? Can the project incorporate these groups in activities and track against this? E.g., youth?	We have identified the youth group in our assisted village that possible to have and taking roles in the community and this project. I.e. Karang Taruna of Penjalaan and Rantau Panjang. Karang Taruna is youth organization established by community as facilitate to improve their capacities to be involved in community development.	The project will address more of youth involvement by this project. By Y2, youth group (karang taruna) of Penjalaan village are involved in establishing village agreement in fires mitigation. In addition, we will also include the youth group in such activities relate to improve resilience to fires-disaster, especially in planting and forest monitoring.
Incorporate sex-disaggregated data across a broader spectrum of indicators where possible. E.g., community business groups, any female led, etc.	Noted. We have sex- disaggregated data towards our indicators but may not covered all yet.	We have sex-disaggregated data on almost all of our indicators
The project should report against all conventions and treaties to demonstrate the wide-ranging impacts of its work.	Noted. So far, no contribution directly to any of international convention. Our key findings on key wildlife species will be reported to our provincial conservation agency in West Kalimantan (BKSDA) and cc-ed to DG of KSDAE of MoEF as a biodiversity conservation focalpoint of CBD. In National level, as part of supporting the NBSAP, MoEF have been initiated National Inventory and Verification (INVER) for key wildlife species (animal & plants). All the raw data findings will be synchronized through SIDAK portal of KSDAE.	By EOP, all project results that contribute to conservation will be report or inform to the MoEF as the focal points of CBD, CITES, and SDGs (from forestry sectors). Besides, our results of threatened species are remains actively informed to experts to improve NBSAP including Orangutan Action Plan and informing to IUCN Id SSG.
The reviewer notes that whilst the		

	the supporting materials (such as reports, files, etc.) to support our evidence in AR2.	attachment can be found in the folder: <u>https://drive.google.com/driv</u> e/folders/1wdziCjDVpvhDes <u>kiSQY-</u> <u>ZaYCpuquHvNK?usp=drive</u> <u>link</u>
What are the implications of delays to SMART patrols?	There are no significant implications to SMART patrols and remains perform well, the threats data can be obtained through threats assessment which are also as first SMART patrol operation.	The SMART Patrol remains well-perform, but there are constrains in agenda of which overlapping with GPNP activity.
Output 4 needs an additional indicator to meet the 'secured long term funding' aspect of its output. The project might wish to set some intermediary sub-indicators for this as well, noting the complexity in attaining long-term funding as well as the time inputs required.	Output 4 has been reviewed during the proposal stage and we have responded by adjusting the indicator. Then, following the development of the PES mechanism with the new Government regulation on the Carbon market mechanism, it is likely that there will be adjustments to the output 4 indicator in the future, by looking at the most feasible options to be applied to projects that support securing long-term funding from protecting forests.	We are studying in detail and will prepare the necessary steps to fulfill government regulations in the carbon market mechanism such as registering Village Forests on the MoEF website and preparing a Mitigation Action Plan Document (DRAM).

10. Risk Management

We are updating our risk registry, which be seen in the following link: <u>2023-BCF-ref-29-002-Risk-</u> <u>Registry.xlsx</u>

11. Sustainability and legacy

Sustainability has been built into the project approach through our focus on working with partners and supporting local communities with sustainable initiatives. The all-trained PMUs has been operating SMART patrol and biodiversity monitoring, and was guided by the developed SOP and workplans, which has included partners (GPNP, YP and communities) in support for long-term PMU operations. Thirteen (13) community business groups have been trained in socio-entrepreneurship by emerging business models and bookkeeping skills that will last beyond the project end. Village institutions and communities has been trained and awarded to improve their resilience to climate-disaster of fires that is expected to be adopted last beyond the project. Sustainable financing, following national standard registry to access environmental service markets, for two village forest body was initiated following the new regulation in the country that ensure the PES scheme process. We anticipate that the process may take longer, but the result will have secured a long period funding beyond the project (around 10-years) to support PMUs operation and improve livelihoods. An increase in positive relations between the community members and local government are an additional positive, sustainable impact of this project which possibly to scaling up toward overall villages surrounding the GPNP or others conservation areas.

12. Darwin Initiative identity

All project activities with communities, partners and government stakeholders convey that the activities are supported by the Darwin Initiative, including training materials and workshops resources feature the Darwin Initiative logo. FFI-West Kalimantan acknowledges Darwin Initiative funding as a distinct project with a clear identity. In the MoU between FFI and the Directorate General for Nature Resources and Ecosystem Conservation –KSDAE, and the MoU between FFI-West Kalimantan and GPNP Agency, it is clearly stated that the project is supported by the Darwin Initiative the funding involved, and that the funding must be spent in accordance with the Program Implementation Plan and award guidelines.

13. Safeguarding

is. Saleguarung				
Has your Safeguarding Policy been updated in the past 12 months?	No			
Have any concerns been reported in the past 12 months	2 No			
Does your project have a Safeguarding focal point?	Yes, they are: FFI's UK Safeguarding Leads or Safeguarding Officer (Kathie) FFI's Indonesia, Senior HR and Training Manager (Yasser)			
Has the focal point attended any formal training the last 12 months?	in Yes/No [<i>If yes, please provide date and details of training</i>] Yes. FFI has an internal Learning Management System, which enables online training in policies and procedures and all FFI staff are required to attend compulsory safeguarding training, including Safeguarding essentials; FFI's Safeguarding Children and Vulnerable Adults Policy			
What proportion (and number) of project staff	Past: 100% [14 People]			
have received formal training on Safeguarding?				
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses. There is not any violation against the Safeguarding issues on the overall project activities during this reporting period. As we have socialized and incorporating age requirement into any SOPs, there are no longer child-labouring in any activities, including hiring the old peoples (age >65y.o) to be involved in forest patrols or surveys.				
Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so, please specify. The Environmental and Social Safeguard (ESS) has been socialized and incorporated into SOPs of PMU and business, including PMU's patrol and forest monitoring operation, business operation procedures of Community business groups, village forest management.				
Please describe any community sensitisation that has taken place over the past 12 months; include topics covered and number of participants. N/A				
Have there been any concerns around Health, Safety and Security of your project over the past year? If yes, please outline how this was resolved. N/A				

14. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2023 - 31 March 2024)

Current Year's Costs	Agreed Annual Budget (£)	Total Actual BCFs Costs (£)	Variance %	Comments (please explain any variance)
Staff costs (from separate tab)				
Consultancy Costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (from separate tab)				

Others (from separate tab)			
Audit costs			
TOTAL			
	135,832.00	135,832.00	

For detailed please refer to the financial report

Table 2: Project mobilised or matched funding during the reporting period (1 April 2023 – 31 March 2024)

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)	0	0	
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project (£)			

15. Other comments on progress not covered elsewhere

N/A

OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words maximum). This section may be used for publicity purposes.

N/A

I agree for the Biodiversity Challenge Funds Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here).

File Type (Image / Video / Graphic)	File Name or File Location	Caption, country and credit	Online accounts to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
				Yes / No
				Yes / No
				Yes / No

Annex 1: Report of progress and achievements against logframe for Financial Year 2023-2024

Project summary	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
<i>Impact</i> Biodiversity, including orangutan and other threatened	Baseline biodiversity information has been collected, including Orangutan estimated population for monitoring	
species, is thriving in and around Gunung Palung National Park (West Kalimantan, Indonesia), supported by	Threats to the species and habitat has been identified and monitored	
strengthened local institutions, long-term financing and improved community livelihoods	Four strengthened local institutions actively protecting and monitoring the forest and its biodiversity	
	The community wellbeing and its needs has been assessed for improvement	
Outcome		
The Gunung Palung National Park and adjacent village forest effective fire prevention, and biodiversity-friendly livelihoods.	s are under improved protection and sustainable use throu	gh collaborative patrolling,
Outcome indicator 0.1	The result is expected to be seen by the EoP, but the	In Y3 it is planned to use drones
By 2025, the annual deforestation rate in Gunung Palung National Park (GPNP) and adjacent village forests has been reduced by at least 50% compared to pre-pandemic baseline. Baseline: Deforestation rate 0.77% (2018)	progress is promising until Y2. Using GIS analyses of satellite imagery, Hansen Forest Loss index was used toward Gunung Palung landscape. The result was overlayed with forest cover data of MoEF 2019 to measure the area of forest loss. The total Deforestation rate in GPNP and adjacent areas was 0.13% (153,02 Ha). (<u>Analisis tutupan lahan GPNP</u> <u>2024 report.docx</u>)	to monitor forest cover in 4 project locations.
Outcome indicator 0.2	Based on Patrol results during period of March 2023 – March	Patrols will continue to be
The number of forest crime incidents per year (e.g., illegal logging, hunting of protected species, canal and agricultural encroachment) reduced by 50% compared to baseline, by project end. GPNP baselines records: Forest fire incidents: 238 (of which 150 are in village forests/ buffer zone), Encroachment:195 (2020)	2024, it has recorded 64 threats in total, as below: Forest fires incidents: 9 Encroachment: 45 Illegal logging: 10 Poaching: 4 (<u>Report Patrols - 2023 - 2024 - Y2.docx</u>) These records showing the threats reduction about 84% of encroachment and 96% of fires incidents compared to 2020 baseline.	increased and workshops will be held to convey the findings of patrols to stakeholders (KPH, GPNP, Law Enforcement, etc.) in the hope of getting input from the parties to reduce threats in the GPNP area and its surroundings.
Outcome indicator 0.3: Number of fire hotspots reduced, through improved community- based fire prevention, zero burning practices and rewetting of peat swamp forests, compared with baseline by end of project (EoP). Baseline: 150 hotspots in 4 target village forest areas (Modis/ NOAA 2019)	In 2023, Hotspot analysis using MODIS C6.1 resulting 12 hotspots in total, while using hotspot analysis using J1 VIIRS C1 instrument as comparison have records 16 hotspots (<u>https://bit.ly/ForestFireMaps</u>), Besides, hotspot monitoring through SMART Patrol by PMU identified 9 hotspots, within PMUs operational areas. This number are	Monitoring of hotspots will continue in Y3.

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	reduced if compared to previous year in 2022, where there are 19 identified hotspot using MODIS/NOAA, and compared to baseline in 2019, where recorded 150 hotspots.(<u>Forest</u> <u>Fire.jpg</u>)	
Outcome indicator 0.4: At least 75% of women and men from 4 target communities (proportional sample representing 11,223 people) report improvements in multiple indicators of well-being by EoP.	Too soon to see the result and will be measured by EOP through the end PWA analysis. However, by the active business unit on each community group, there are improvement on their livelihoods as result from trainings and assistances (see indicator 0.7 below), which will lead to improvement of wellbeing.	
Outcome indicator 0.5: At least 6 community business groups and village institutions (≥3000 people from 500HH) have new access to sustainable financing (PES, biodiversity offsets) or benefit from improved product value chains, as a result of this project, by EoP.	13 Business groups and two (2) village forest managers with a total of 281 HH have been assisted to improve their economic level, and hence having new access for their sustainable financing.	
Outcome indicator 0.6: Population of orangutans and other threatened target species are stable or increasing in project area, at the end of project, compared to baselines	The result is expected to be seen by EoP, but the progresses in Y2 are shown promising: <u>Orangutan:</u> The density of Orangutan by Y2 monitoring were ranged 0.51 – 2.16 ind./Km2 (CI:95%, se: 0.35) towards a total project area of 1.173,46 Km2, then the rough population of Orangutan are estimated within range of 596 to 2529 individuals, while the baseline population in 2019 are 2200 individuals. It means that the population are potentially remains stable or even increase compared to baseline. <u>Bornean Gibbon:</u> Baseline of population density has been collected through field survey in GPNP Resort Sampurna and Penjalaan Village Forest, by 20 November 2023, i.e., was 0.31 group/km2 and 0.23 group/Km2 in respective areas. <u>Sunda Pangolin:</u> The Sunda Pangolin population remains under analysis, the team was found no individual of Sunda Pangolin through camera trapping, yet the PMU detected 8 marks of this species in Rantau Panjang Village Forest. (MoV: <u>Indicator 0.6 - Orangutans and Biodiversity</u>)	Monitoring of Orangutans and other target species will be monitored in y3.
Outcome indicator 0.7: 50% of households trained (est. 250 HH) will benefit from an increase of 20% production compared to the baseline, as a result of implemented technical trainings.	The total number of business group members is 281 HH and have received technical trainings from various program. So far, about 281 HH, or around 35-40% of the total member are actively involved in the group practicing the results of their training . As a result of these trainings, the increase in income per business unit ranges from 25-300% per year in year 2 if compared to previous year. (<u>1. Rekapitulasi KUPS</u> <u>dan poktan Project Darwin.xlsx</u>) (Log Produksi KUPS.xlsx)	

Output 1 (Insert agreed Outputs with indicators relevant to that Outputs of the output state of the output	tputs in lines below).
Direct threats to forest habitats and rare and threatened spec	ies decreased, through effective joint operation of Protection & Monitoring Units (PMUs)
Output indicator 1.1 (Insert original Output level indicators) Joint Patrol and Monitoring Unit (PMU) agreements between village communities (Rantau Panjang, Penjalaan, Sempurna, Riam Beresapjaya) and GPNP established by Y1.	Four PMU teams has been established by Y1, which recognized by village government and GPNP Management (<u>Kesepakatan.pdf)</u>
Output indicator 1.2 Four PMU teams (1 GPNP + 3-4 community rangers), totalling c.20 people, are trained in SMART patrolling/ biodiversity monitoring by end of Y1.	Completed by Y1. All PMU teams had been trained in SMART Patrol, Biodiversity survey techniques, Safeguarding and training in Fire Mitigation and suppression. totalling 22 rangers from Rantau Panjang, Penjalaan, Sempurna, Riam Berasap Jaya and GPNP Staff. (See MoV <u>Pelatihan Patroli</u> <u>dan Biodiversity.docx</u>)
Output indicator 1.3 Workplans and operational areas for PMUs defined by end of Y1.	Completed by Y1. Workplan of PMU Penjalaan and Rantau Panjang has been determined and incorporated into SOP, while in PMU Riam Berasap Jaya and Sempurna the workplan has been determined and incorporated under GPNP workplan. Operational areas have been agreed and prepared separately. (See MoV <u>Workplan Patrols - Rantau</u> <u>Panjang and Penjalaan - Maps.png)</u>
Output indicator 1.4 A minimum of 5 patrol days are taking place per month, starting in Y2/ Q1 until project end.	Four PMUs has operated 155 patrol days in total during 12 months of April 2023 to March 2024, i.e.: PMU Riam Berasap: 2 months (total 10 days) PMU Sempurna: 10 months (total 50 days) PMU Penjalaan: 10 Months (total 50 days) PMU Rantau panjang: 9 Months (total 45 days)
Output indicator 1.5 At least one joint patrol involving MoEF's law enforcement agency/ police is conducted per year during Y2 and Y3.	One joint patrol of Y2 was conducted in Penjalaan areas on 20-21 June 2023, involving 6 institutions, i.e. Bhabinkamtibnas (1 staff), GPNP (1 rangers), FMU of Kayong Utara (2 rangers), Village goverment of Penjalaan (1 staff), LPHD of Penjalaan VIllage Forest (3 staffs) and 2 staffs of Fauna&Flora. The patrol succeeds collecting evidence of 111 proceed woods and 2 un-proceed woods.
Output 2. 11,223 people in four communities around Gunung Palur fires, water table management and peat swamp forest rehabilitation	ng have improved resilience to climate change through improved prevention and management of .
Output indicator 2.1. Decreased incidents of uncontrolled fires in 4 target villages with improvements, on both peat and mineral soils, by Y3 compared to 2019 (pre-pandemic).	During 2023, there are only 12 hotspots in total (using MODIS analysis), or 11 incidents (using patrol monitoring records). This data is reduced from baseline number in 2019

	of 150 hotspots, and previous year number in 2022 of 19 hotspots.	
Output indicator 2.2. At least 8 canal-blocking barriers are implemented in peat soil villages, by end of Y2, based on hydrological assessments	7 canal blocking barriers were constructed in February - March 2024. These number were reduced from 8 to 7 following the recommendation of experts based on hydrological studies conducted by Y1. (See MoV <u>Canal</u> <u>Blocking.docx</u>)	
Output indicator 2.3. 10,000 native forest species seedlings have been planted in re-wetted degraded peat swamp forest, with a minimum survival rate of 70%, by project end	As much as 3,380 seedlings in total has been planted in Penjalaan and Rantau Panjang Village Forest, where 2,818 seedlings of them are pioneers for revegetation and 1,102 seedlings are for MPTS. Survival rates has been measured as monitoring will be conducted by Y3. (See MoV <u>Report</u> <u>Penanaman maret 2024.pdf</u>)	
Output 3. Capacity of at least four community groups representing still biodiversity-friendly products	500 households (>3,000 people) is increased to diversify liveliho	od opportunities based on
Output indicator 3.1.4 community business groups, representing 500HH and of whom >30% of members are women, are established and trained in business planning and finance management by Y1.	The total member of community business group to date was 281-HH. Most trainings are completed by Y1, but there are 3 additional trainings/assistances in business plans and business SOPs development, to 135 men and 70 women. (Business Plan for KUPS Mutiara Agro Lestari and KUPS Tani Makmur, Fajar Atsiri group; develop business SOPs in production for KUPS Ashoka, SOP KUPS Mutiara Agro and KUPS Tani Makmur.	
Output indicator 3.2. Partnerships between community businesses and private sector companies formalised to improve value chains and access markets, by end Y1.	Two business agreements were obtained between business groups and buyers i.e. (1) UPT FMU of Kayong and (2) the owner of the Kopi 101 Pontianak business: 1. FMU of Kayong with KUPS Ashoka's 2. 101 Coffee Company with KUPS LPHD Simpang Keramat Penjalaan Village	
Output indicator 3.3. Technical training delivered to at least 500 household representatives (coffee agroforestry production, coffee post-harvest processing, handicraft development and product manufacturing from NTFPs (e.g. rattan, pandan, bamboo)	 During Y2, four trainings/assistances was conducted: The business plan development for the Fajar Atsiri business group that focuses on processing of lemongrass oil (in Penjalaan village on 7 March 2024), involving 14 participants (8 M; 6 W). The Standard Operating System (SOP) development for KUPS Ashoka was conducted in Penjalaan village on 25 March 2024, involving 10 women and Technical training in varying craft product in Penjalaan to KUPS Ashoka, in 14-15 March 2024, participated by 10 participants (1M:9W) Technical assistant to develop SOPs held in 25 - 27 March 2024, in Penjalaan, attended by 41 participants 	

Output indicator 3.4. Training in product development/ value chain development and marketing to four community business groups, with at least 10 participants in each training from each community group, of whom at least 50% are women, by end Y1.	 (21M:20W) from 3 business groups (i.e., KUPS Ashoka, KUPS Tani Makmur Simpang Keramat, dan KUPS Mutiara Agro Lestari), FMU of Kayong, Yayasan Palung, and Fauna & Flora. Technical assistant to analyse the feasibility and developing of business plan for busines groups was held by 6 - 7 Maret 2024 in Penjalaan village, attended by 19 participants (14M:5 W), involving horticulture groups (KUPS Tani Makmur Simpang Keramat, KUPS Mutiara Agro Lestari, and Fajar Atsiri farming group also FMU of Kayong. 	
Output indicator 3.5. Increased income of community business group members through improved value chains for local products by at least 10% by EoP	Will be seen by EoP	
Output 4. Two village forest institutions have secured long-term fur wellbeing	nding (at least 10 years) for PMU operations to protect village fore	ests and contribute to community
Output indicator 4.1. Sustainable financing mechanism (national/ international) based on potential buyers/ partners for ecosystem services or biodiversity offsets is identified	Potential investors for LPHD Penjalaan and Rantau Panjang have been identified and we have registered four potential investors for the VSC-CCB scheme to support sustainable financing	
Output indicator 4.2. At least two community institutions meet international standards (e.g., VCS-CCB, RaCP) required to access ecosystem services markets by end of project	There is a need for changes slightly to this indicator, following the new regulation no. 7 of 2023 on forestry sector carbon market procedures. This regulation encourages national standards in accessing the ecosystem services market which is mandatory for all forest managers in Indonesia. Forest managers are required to register with the MoEF website and then upload a mitigation action plan (DRAM) document to then obtain a greenhouse gas emission reduction certificate (SPE- GRK). We have informed for two LPHD regarding this regulation, and we will assist them in processing the DRAM and SPE-GRK to access national carbon market system by Y3.	

Project Summary	SMART Indicators	Means of Verification	Important Assumptions		
Impact: Biodiversity, including orangutan and other threatened species, is thriving in and around Gunung Palung National Park (West Kalimantan, Indonesia), supported by strengthened local institutions, long-term financing and improved community livelihoods.					
Outcome: The Gunung Palung National Park and adjacent village forests are under improved protection and sustainable use through collaborative patrolling, effective fire prevention, and biodiversity- friendly livelihoods.	 0.1 By 2025, the annual deforestation rate in Gunung Palung National Park (GPNP) and adjacent village forests has been reduced by at least 50% compared to pre-pandemic baseline. <u>Baseline:</u> Deforestation rate 0.77% (2018) 0.2 The number of forest crime incidents per year (e.g., illegal logging, hunting of protected species, canal and agricultural encroachment) reduced by 50% compared to baseline, by project end. <u>GPNP baselines records:</u> Forest fire incidents: 238 (of which 150 are in village forests/ buffer zone) Encroachment: 195 (2020) 	0.1 Annual national land cover re- calculation (MoEF data) 0.2 SMART patrol records.	Catastrophic events, such as El Niño droughts, do not cause large scale un-controllable fire events Government regulations remain supportive of environmental services markets Continuous commitment by GPNP and local community partners There are no significant new outbreaks of disease among target species that cause unprecedented losses		

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

0.3 Number of fire hotspots reduced, through improved community-based fire prevention, zero burning practices and rewetting of peat swamp forests, compared with baseline by end of project (EoP). <u>Baseline:</u> 150 hotspots in 4 target village forest areas (Modis/ NOAA 2019)	0.3 Annual accumulated fire hotspot analysis by national space agency based on Modis/NOAA (<u>http://lowres-</u> <u>catalog.lapan.go.id/monitoring/</u>)
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0.4 At least 75% of women and men from 4 target communities (proportional sample representing 11,223 people) report improvements in multiple indicators of well-being by	0.4 Participatory well-being assessment report against baseline, with all relevant data disaggregated by sex.	
EoP. 0.5 At least 6 community business groups and village institutions (≥3000 people from 500HH) have new access to sustainable financing (PES, biodiversity offsets) or benefit from improved product value chains, contributing to forest protection by EoP	0.5 Verified Carbon Standards (VCS) Project Design Documents (PDDs)/ Roundtable on Sustainable Palm Oil- Remediation and Compensation Procedure (RSPO RaCP) Concept Notes for village forests, including benefit sharing for PMU operations and livelihoods; Annual community business reports, technical reports on improvements of value chains.	
0.6 50% of households trained (est. 250 HH) will benefit from an increase of 20% production compared to the baseline, as a result of implemented technical training.	0.6 Participatory well-being assessment report against baseline, with all relevant data disaggregated by sex	
Other species-specific targets tbc in Y1	Baseline/ project end biodiversity survey reports for RTE species	

Output 1: Reduced direct threats to forest habitat and rare and threatened species, through effectively operating joint Protection & Monitoring Units (PMU)	1.1. Joint Patrol and Monitoring Unit (PMU) agreements between village communities (Rantau Panjang, Penjalaan, Sempurna, Riam Beresapjaya) and GPNP established by Y1.	1.1 Signed agreements by Village Heads and GPNP Director.	The targeted community groups remain committed to join PMUs. FFI's Memorandum of Understanding with GPNP remains in place.
	 1.2. Four PMU teams (1 GPNP + 3-4 community rangers), totaling c.20 people, are trained in SMART patrolling/ biodiversity monitoring by end of Y1. 1.3. Workplans and operational areas for PMUs defined by end of Y1. 1.4 A minimum of 5 patrol days are taking place per month, starting in Y2/Q1 until project end. 1.5. At least one joint patrol involving MoEF's law enforcement agency/police is conducted per year during Y2 and Y3. 	 1.2 Training reports and test results, with all relevant data disaggregated by sex 1.3 Standard Operating Procedure (SOP), workplans, including map of operational area 1.4 Monthly SMART patrol reports 1.5 Joint patrol report in collaboration with law enforcement agencies per year 	Regulation and policy changes will not impact the conservation partnership agreement between community and GPNP agency Trainer community members and GPNP rangers remain healthy and able to complete patrols as intended Local fire management authorities (Manggala Agni) and law enforcement agencies (GAKUM/ police) respond to PMU reports.

Output 2: 11,223 people in four communities around Gunung Palung have improved resilience to climate change through improved prevention and management of fires, water table management and peat swamp forest rehabilitation.	 2.1 Decreased incidents of uncontrolled fires in 4 target villages with improvements, on both peat and mineral soils, by Y3 compared to 2019 (pre-pandemic). <u>Baseline:</u> 150 fire hotspots in target village areas (2019) 2.2 At least 8 canal-blocking barriers are implemented in peat soil villages, by end of Y2, based on hydrological assessments <u>Baseline:</u> 0 canals blocked 2.3 10,000 native forest species seedlings have been planted in re- wetted degraded peat swamp forest, with a minimum survival rate of 70%, by project end. 	 2.1 Village fire management regulation; annual MODIS/ NOOA fire hotspot analysis 2.2 Canal blocking construction report; water table measurement monthly report (Penjalaan/Rantau Panjang village) 2.3 Forest rehabilitation monitoring report. 	No El Niño event causing large- scale devastating fires during project period Local fire management authority (Manggala Agni) responds to community reports.
Output 3: Capacity of at least four community groups representing 500 households (>3,000 people) is increased to diversify livelihood opportunities based on biodiversity-friendly products	3.1. 4 community business groups, representing 500HH and of whom >30% of members are women, are established and trained in business planning and finance management by Y1.	3.1. Formal letter by village head; training reports with all relevant data disaggregated by sex.	
	3.2. Partnerships between community businesses and private sector companies formalised to improve value chains and access markets by the end of Y1.	3.2 Partnership agreements/ contracts	
Danuin Initiativo Main Appual Roport Tomplato 2	3.3. Technical training delivered to at least 500 household representatives (coffee agroforestry production, coffee post-harvest processing, handicraft development and product manufacturing from NTFPs (e.g., rattan, pandan, bamboo) by Y2	3.3 Training reports/ participant evaluation	

	 3.4 Training in product development/ value chain development and marketing to four community business groups, with at least 10 participants in each training from each community group, of whom at least 50% are women, by end Y1. 3.5 Increased income of community business group members through improved value chains for local products by at least 10% by EoP 	 3.4 Training reports; technical report documenting the development and marketing of community business products; annual reports by community business groups; 3.5 Annual business group reports. 	
Output 4: Two village forest institutions have secured long-term funding (at least 10 years) for PMU operations to protect village forests and contribute to community wellbeing	 4.1. Sustainable financing mechanism (national/ international) based on potential buyers/ partners for ecosystem services or biodiversity offsets is identified by Y1 4.2 At least two community institutions meet international standards (e.g., VCS-CCB, RaCP) required to access ecosystem services markets by end of project 	 4.1 Letters of Intent by potential buyers of carbon credits/ partners for biodiversity offsets 4.2 Project Design Document (VCS) or project concept note (RSPO RACP Annex 7) publicised on standard websites (VCS, RSPO) 	Government regulatory framework allows to access national or international carbon markets RSPO palm oil companies are willing to compensate their liabilities for past High Conservation Value (HCV) clearing through village forest programme in target villages

Activities

1.1. Conduct biodiversity baseline assessment and select key target RTE species for monitoring (orangutan is a pre-selected target species)

1.2. Conduct baseline mapping of forest/ land cover using remote sensing/ data, including the drainage canal system

1.3. Conduct village meetings to secure consent of village representatives to establish joint PMUs to patrol GPNP boundaries, GPNP traditional use zones and adjacent village forests

1.4. Assist village forest management institutions to establish a formal agreement with GPNP to establish and operate joint patrol units

1.5. Assist village institutions to recruit community rangers and GPNP to assign a ranger for each patrol group

1.6. Conduct SMART patrol, social safeguards and biodiversity monitoring training

1.7. Assist PMUs to undertake initial threat assessment and gather information on forest crime to define workplans and area of operation

1.8. Develop patrol procedures (collecting, recording, reporting, safeguards) and a coordination mechanism with law enforcement agencies.

1.9. Support operation of monthly monitoring and protection patrols by PMUs

1.10. Support PMUs to monitor adoption of zero burning techniques in four communities

1.11. Facilitate annual joint patrols between PMUs and law enforcement agencies in Year 2 and 3

1.12. Conduct biological monitoring survey of target species in Year 3

1.13. Conduct land cover/ canal monitoring surveys of village forests and GPNP traditional use zones in Year 2 and 3. 2.1. Support collaborative development and agreement of local village regulations for fire prevention 2.2. Facilitate training for zero burning land clearing/ preparation techniques in all 4 villages 2.3. Undertake hydrological peat assessment to inform water table management and canal blocking plans 2.4. Facilitate participatory planning for water table management and canal blocking in Rantau Panjang/ Penjalaan villages 2.5. Construct 8 canal blocks to manage water table in agriculture areas and to re-wet village forest areas 2.6. Conduct monthly monitoring of water table in rewetting areas 2.7. Rehabilitate degraded peat swamp forest areas through enrichment planting of at least 10,000 seedlings of native-forest tree species, including orangutan food species, and maintain/monitor seedlings 2.8. Download data and conduct analysis of fire hotspots (Modis/NOOA) to monitor project impact and inform activities 3.1. Undertake participatory well-being baseline survey including sex-disaggregated data 3.2. Conduct needs assessment for capacity building of community business groups in Riam Beresapiava, Sempurna, Penjalaan, and Rantau Panjang villages 3.3. Provide organisational, financial management, business planning and safeguards training to community business groups 3.4. Assist community business groups to develop standard operating procedures, including benefit distribution and grievance mechanisms 3.5. Develop partnerships between community businesses and private sector companies to improve market access 3.6. Provide technical training for sustainable livelihoods (pre-identified options include agroforestry coffee processing and post-harvest processing; stingless bee honey production, handicraft production/ bamboo product manufacturing) 3.7. Procure and provide essential equipment required for improved production and processing of selected commodities 3.8. Provide training in product/value chain development and marketing to community business groups 3.9. Facilitate community business groups to access additional technical training and/or grant investment from government sources 3.10. Facilitate community business groups to access annual village budget allocation (Dana Desa) 3.11. Undertake repeat PWA at project end to measure project impact on community well being 4.1. Facilitate learning visit and exchange with Manjau village, which has secured 10 years of performance-based payment for environmental services

- 4.2. Identify potential partners/ investors for VCS Climate, Community & Biodiversity Standards (VCS-CCB) or RSPO RaCP schemes
- 4.3. Support at least two village institutions to develop project design documents required for VCS CBB standard or project concept note for RSPO RaCP
- 4.4. Register and upload PDD/ concept note to VCS/ RSPO website

4.5. Develop and agree performance-based payment mechanism and benefit distribution mechanism

Annex 3: Standard Indicators

We have identified 17 Standard indicators that will fit or in line with our project results. However, not all Standard indicators can be measured by this reporting period and needs specific analysis to measure the metric/achievement. We have filled (whether fully or partially) the standard indicators that has been measured through our project indicators and referred to our evidence, i.e. DI-A01, A03, A04, A06, A10, A11, A12, B01, B06, B07, B10, B11, B12, C08, and D04. Moreover, the remaining of Standard Indicators will be completed by Y3 (see table of Annex 3 below).

Table 1.Project Standard Indicators

DI Indicator number	Name of indicator	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggrega tion	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-A01	Number of people from key national and local stakeholders completing structured and relevant training	Number of key stakeholder and community-based organisation member who attending livelihood enterprise training (output 3),	People Proportion	Gender (M:W)		(18:1)			
		Technical training of commodity production and accessing market	People Proportion	Gender (M:W)		(47:24)			
		Number of community member attending training on PMU Biodiv monitoring (output 1)	People Proportion	Gender (M:W)		(42:0)			
		Number of community member attending training on PMU SMART- patrol (output 1)	People Proportion	Gender (M:W)	20	(20:0)			
DI-A03	Number of local/national organisations with improved capability and capacity as a result	Number of local/national organisations with improved capacity and capability in SMART	Number of Organisation	Gov. institutions	1	2			
	of project.	Patroling as a result of project (Output 1)		Community institutions, NGO, CSO		5			
		Number of local/national organisations with improved capacity and capability in	Number of Organisation	Gov. institutions	1	2			
		Biodiversity Monitoring as a result of project (Output 1)		Community institutions, NGO, CSO		5			
		Number of local/national organisations with improved capacity and capability in	Number of Organisation	Gov. institutions		2			
		socioprenership as a result of project (Output 3)		Community institutions, NGO, CSO		14			

DI Indicator number	Name of indicator	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggrega tion	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
		Number of local/national organisations with improved capacity and capability in market- value chain as a result of project (Output 3)	Number of Organisation						
DI-A04	Number of people reporting that they are applying new capabilities (skills and knowledge) 6 (or more)	Number of community member (PMU) reporting their SMART Patrol's activity (Output 1)	People proportion	Gender (M:W)		(20:0)			
	months after training.	Number of NP staff(s) reporting their application in SMART Patrol (Output 1)	People Proportion	Gender (M:W)		(2:0)			
		Number people in community reporting that their applying new sociopreneurship skills (business plan, financial management, branding) (Output 3)	People Proportion	Gender (M:W)					
		Number of community member reporting that their applying new livelihoods/production technique (Output 3)	People Proportion	Gender (M:W)					
DI-A06	Number of people with improved access to services or infrastructure for improved well-being.	Number of community group member with improved access to new sustainable livelihood for improved well-being (Output 3)	People Proportion	Gender (M:W)	225	311 (500
DI-A10	Proportion sustainable livelihood enterprises established that are	Proportion of established community-based organisations or	Proportion	-	7: 7	13:11			

DI Indicator number	Name of indicator	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggrega tion	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
	functioning at project end (at least a year after establishment)	enterprise groups that are functioning (Output 3)							
DI-A11	Number of sustainable livelihood enterprises that are profitable (at least a year after establishment)	Number of enterprise group that are gaining profit (increasing income compared to previous year) from commodities (output 3)	4 Group (60 People)	23 Men, 37 Women	60	60			4
DI-A12	Annual turnover of established sustainable livelihood enterprises	Amount of annual turnover of each community enterprise group in the	IDR/year	KUPS Sinar Selatan					
	in the project's final year.	project's final year (Output 3)	IDR/year	KUPS Rapa Karya Mandiri					
			IDR/year	KUPS Sinar Selatan		3,89 M			
			IDR/year	KUPS Asoka		2,132 M			
			IDR/year	KTH Sempurna					
			IDR/year	KUPS Tani Makmur		7,82 M			
			IDR/year	KUPS Mutiara Agro Lestari		9,956 M			
			IDR/year	KWT Delima					

DI Indicator number	Name of indicator	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggrega tion	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
			IDR/year	KUPS Rapa Karya Sejahtera					
			IDR/year	KUPS Rapa Mina Berkarya					
			IDR/year	Poktan Fajar atsiri					
			IDR/year	Gapoktan RT 14 Rantau Panjang					
			IDR/year	KWT Rantau Panjang					
DI-B01	Number of new/improved habitat management plans available and	Number of new/improved habitat management plans available and	Number	Community institutions Habitat type	4	4			
	endorsed	endorsed (Output 2)		парітат туре	2	2			
DI-B05	Number of people with increased participation in local communities / local management organisations (i.e., participation in	Number of people with increased participation in local organizations (LPHD, KUPS, KTH, PMU)	People	Gender(M: W)					
DI-B06	Governance/citizen engagement). Number of Indigenous Peoples and Local Communities (people) with strengthened	Number of Household of local communities with strengthened	Household (HH)		288	311			

DI Indicator number	Name of indicator	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggrega tion	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
	(recognised/clarified) tenure and/or rights.	right to land (village forest, business area) (Output 3)							
DI-B07	Number of people participating in community-based management groups and/or Payment for Ecosystem Service schemes.	Number of people participating in community institutions for sustainable financing through community-based enterprises and PES scheme (Output 3&4)	People	Gender (M:W)	172	281 (167:144)			500
DI-B10	Number of individuals / households reporting an adoption of livelihood improvement practices as a result of project activities.	Number of individuals reporting an adoption of livelihood improvement practices (new production technique, etc.) (Output 3)	People	Gender (M:W)		13 (6:7)			
DI-B11	Area identified as important for biodiversity	Area identified as important for Orangutan's habitat (Output 1) - all project areas in 4 locations	Area (hectare)			29.714,42			
DI-B12	Number of policies developed or formally contributed to by projects and being implemented by appropriate authorities.	Number of village-level regulation developed and being implemented by village stakeholders (activity 2.1)	Number of regulations	-	0	2			
DI-C08	Areas of importance for biodiversity identified	Areas (Important Bird and Biodiversity): Brown-backed Flowerpecker Dicaeum everetti (birds), Pongo pygmeus, Hylobates agilis (non-birds)	Num of Area	Types/sche mes: Key Biodiversity	1	3			4
DI-D01			Hectare	Peat forest habitat					

DI Indicator number	Name of indicator	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggrega tion	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
	Hectares of habitat under sustainable management practices	Hectares of habitat under sustainable management practices		Lowland forest on mineral soil					
DI- D02	Number of people whose disaster/climate resilience has been improved.	Number of Household whose disaster/climate resilience has been improved, by adopting zero-burning land preparation, participating in fires prevention/mitigation, peat hydrological monitoring, habitat improvement to alter fires (output 2)	НН			28			20
DI-D04	Stabilised/ improved species population (relative abundance/	stabilized/improved species population (relative abundance)	Num ind. Density	Orangutan		2621 0.27			2000
	distribution) within the project area.	within project areas	Density	Bornean Gibbon					
			Density	Sunda pangolin					
			Density	Shorea platycarpa					
			Density	Gonystylus bancanus					
DI-D05	Number of people supported to better adapt to climate change as a result of the project [ICF KPI 1]	Number of people supported to better adapt to climate shange as a result of the project	Density Groups/kms q	Types/ schemes : Biodiversity					
DI-D07	Carbon Sequestered/Removed	Carbon sequestered within project areas	Tonnes of Co2						

DI Indicator number	Name of indicator	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggrega tion	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-D08	Value of ecosystem services generated or protected as a result of project support [ICF KPI 10].	Value of ecosystem services protected as a result of project support	GBP Sterling						
DI-D10	Area of improved sustainable agriculture practices benefitting people to be more resilient to weather shocks and climate trends.	Area of improved sustainable agriculture practices benefitting people to be more resilient to weather shocks and climate trends.	Hectare						
DI-D10	Number of people benefitting from improved sustainable agriculture practices and are more resilient to weather shocks and climate trends.	Number of HH benefitting from improved sustainable agriculture practices and are more resilient to weather shocks and climate trends	НН						
DI-D11	Area of degraded or converted ecosystems that are under active restoration	Area of degraded ecosystems that are under active restoration	Hectare	Peat ecosystem Active (planting) Intended (ANR)					
DI-D16	Number of households reporting improved livelihoods	Number of households reporting improved livelihoods	НН						
DI-D18	Drivers of biodiversity loss assessed to have been reduced or removed.	Number of assessments recording reducing the drivers of biodiversity loss	Num of assessment	deforestatio n Direct species exploitation					
DI-E01		Ecosystem Degradation Avoided	Hectare	Peat Ecosystem					

DI Indicator number	Name of indicator	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggrega tion	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
	Ecosystem Degradation Avoided (ha) (DEFRA / ICF KPI 8)			Lowland forest on mineral soil					

Table 2Publications

Title	Type (e.g. journals, best practice manual, blog post, online videos, podcasts, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)

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