

Darwin Initiative Main & Extra Annual Report

To be completed with reference to the "Project Reporting Information Note":

(<https://www.darwininitiative.org.uk/resources/information-notes/>)

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

Submission Deadline: 30th April 2025

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Darwin Initiative Project Information

Scheme (Main or Extra)	Main
Project reference	29-016
Project title	Livelihoods enhancement through community-based conservation of Bornean orangutan and habitat
Country/ies	Indonesia
Lead Organisation	Center for International Forestry Research (CIFOR)
Project partner(s)	Riak Bumi Indonesia Foundation
Darwin Initiative grant value	£419,000.00
Start/end dates of project	1 June 2022 – 31 March 2025, extended to 30 June 2025 (no-cost extension)
Reporting period	Apr 2024 - Mar 2025, Annual Report 3
Project Leader name	Dr. Elizabeth Linda Yuliani
Project website/blog/social media	https://www.cifor-icraf.org/orangutans/
Report author(s) and date	E.L. Yuliani, Jean-Charles Rouge, Desy Leo Ariesta, Valentinus Heri, Veronika Heni

1. Project summary

Orangutans, the only remaining Asian great apes, are classified as Critically Endangered under the IUCN Red List. Of the three Bornean orangutan subspecies, *Pongo pygmaeus pygmaeus* has the smallest population with fewer than 10,000 remaining (Ancrenaz et al. 2016). In 1996, the lowland and peat swamp forests of Danau Sentarum Wetlands supported 1,578 orangutans of this subspecies (Russon et al. 2001), but in 2014, the number declined to 88 (Yuliani et al., 2023). Possible factors of the considerable decline were illegal logging, forest clearing for large scale plantations, external poaching and illegal trade.

The remaining orangutans in this area are mostly found in sites with both non-degraded forests and the presence of strong traditional beliefs and land use systems that help protect the orangutans and forests (Yuliani et al. 2018). However, local communities in these locations lack basic infrastructure such as electricity and clean water supply, and tend to be poor with an average annual income of Rp. 9 million per household (US \$ 630) in 2019 (Statistics of Kapuas Hulu 2020). The main livelihood is swidden farming for subsistence with additional income from

casual labour in towns and Malaysia (mostly men), and sale of traditional handwoven cloth and handicrafts produced by women who usually work in the evening, relying on traditional lighting tools. The sale of fruit from agroforests is also a common practice, although prices are low during the peak harvest time. Lack of clean water installation affects women considerably higher as they are the ones who carry the water from the river. See also Section 6.

Meanwhile, oil palm companies continue to negotiate with communities with the aim of gaining access to the forest. According to the Indonesian Law on Plantations, companies have to inform, gain approval and pay compensation. To persuade communities to agree, companies promise employment, basic infrastructure and one-time cash payments. Some community members have agreed to these arrangements, but others have refused after observing the negative impacts of plantations in other villages (see details in Yuliani et al. 2020). Similar process (companies trying to persuade the local communities) continued to occur in the area. There are, therefore, pressing needs to address local communities' demands on poverty reduction, as evidence of benefits from conserving forest and orangutans.

The above problems were identified through participatory research and stakeholders engagement in past and existing works of CIFOR with partners, among others, studies to estimate the orangutan populations and traditional knowledge systems that help protect the orangutans and forest funded by USFWS (2009-2013); and Collaborating to Operationalise Landscape Approaches for Nature, Development and Sustainability (COLANDS) funded by IKI-BMUB (2018-present).

This project aims to improve these communities livelihoods and support the protection of the remaining orangutans and their habitat through the following activities:

- Facilitate development of micro-hydropower, clean water supply and income generation;
- Rehabilitation of degraded areas;
- Participatory forest patrol, orangutan monitoring, awareness raising

Those activities were proposed by the communities in a series of workshops under previous CIFOR projects in the region (e.g. Yuliani et al. 2018a, Moeliono et al. 2021). They stated, "Keeping the forests should directly benefit us. If our lives continue like this - no electricity, no clean water supply, sales are difficult – some village members may be tempted by promises from plantation companies, especially those who don't know the negative impacts of losing our forest". Communities in other areas in Borneo have similar aspirations (see Chua et al. 2021).

The activities are being implemented in the northern and eastern bufferzones of Danau Sentarum National Park, Kapuas Hulu District, West Kalimantan (Figure 1).

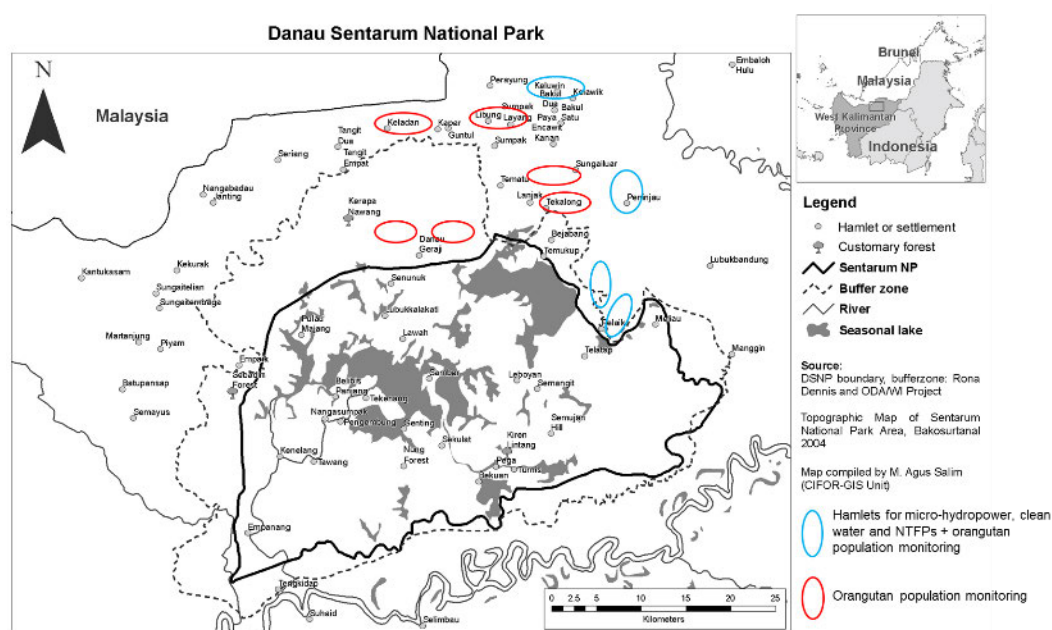


Fig.1. Map of transect locations (red and blue), and hamlets where livelihoods improvement activities are conducted (blue).

2. Project stakeholders/ partners

This project is formally partnering with Riak Bumi Indonesia Foundation, a local NGO based in West Kalimantan which has been working on local communities empowerment and conservation in particular in Danau Sentarum National Park, and more generally in Kapuas Hulu District. Riak Bumi has been CIFOR local partner for various projects since 2004. Their staff are native to the area, have strong commitment on bridging conservation and livelihood objectives, and have a deep understanding on social, historical and cultural aspects, and speak local dialect. These have contributed significantly to the success of our projects. We always jointly design proposals (including this project), work plans and methodologies by applying two-way learning principles, and write publications (see for examples Heri et al. 2010, Yuliani & Heri 2012, Heri et al. 2020, Hasantoha et al. 2024).

The project team has also been working closely with the key stakeholders at multiple levels to jointly plan project objectives and activities, including participatory monitoring and evaluation. At the local level, we engage local communities, customary leaders, NTFP producer associations (whose members are mostly women) and Forum of Communities of Labian-Leboyan Watershed. We also engage with micro-hydropower specialists, i.e. local communities from West Java to provide training on micro-hydropower for the targeted communities in our research locations; and forest rehabilitation specialists in project locations to train other community members.

At the regional level, CIFOR has been working with the Government of Kapuas Hulu District, formalised in 2020 through a Memorandum of Understanding on Achieving Sustainable Development in Kapuas Hulu. We particularly work with the Planning Agency (BAPPEDA), the Environment, Public Housing and Residential Areas Office, National Park Authority and Watershed Management Agency to facilitate collaborative management of Danau Sentarum Catchment Areas including protection of remaining habitats of the orangutans; and with the Education Office to better integrate conservation in the local school curriculum. The project also participated in coordination meetings of orangutan conservation in West Kalimantan, organized by FOKKAB (Forum Konservasi Orangutan Kalimantan Barat/West Kalimantan Orangutan Conservation Forum).

We continued to maintain relations and communication with the Betung Kerihun-Danau Sentarum National Park Authority, one of the institutions under the KSDAE. In Year3, we managed to get additional funding from another donor to conduct orangutan population surveys in 7 locations within the boundaries the Danau Sentarum National Park (DSNP) to complement the orangutan population data from this (#29-016) project. Three staff of the DSNP Authority participated in the surveys. This collaboration was made possible through SIMAKSI mechanism (SIMAKSI stands for *Surat Ijin Masuk Kawasan Konservasi*/Permit Letter to Enter Conservation Area). The first round of surveys were undertaken in May-June 2024, and will be repeated in April-May 2025. Our participatory approaches were appreciated by the DSNP Authority, as evidenced from their recommendation to the Lore Lindu National Park (LLNP) Authority in Central Sulawesi to invite us to their workshop in August 2024, which was organized to look for potential partners to support LLNP management.

At the national level, during the preparation of the project proposal, we consulted the Directorate General of Natural Resources and Ecosystem Conservation (Konservasi Sumber Daya Alam/KSDAE) of the Ministry of Environment and Forestry (MoEF). The Director General at that time gave full support and recommended that the results of the participatory monitoring on orangutans would contribute to the High Conservation Value Forests assessment that they are coordinating. During proposal development, we also reached out to the British High Commission in Indonesia, and received very useful comments, i.e. the importance of involving local forestry agency for safeguarding the local communities in forest patrol and the difficulties faced by other projects in marketing handwoven products:

3. Project progress

3.1 Progress in carrying out project Activities

Output 1: Improved access to electricity and clean water by targeted local communities.

Output indicator 1.1: 4 micro-hydro power plants and clean water supply installations are operational in 2 hamlets in 2023 and 2 other hamlets in 2024 (1 per hamlet).

Electricity. This indicator has been achieved. Micro-hydropower (MH) installations in 4 hamlets have been completed as planned. In the last 2 of 4 targeted hamlets, i.e., Entebuluh and Sungai Iring, the MH was developed in August 2024. As in the first two hamlets, we began with preparatory activities to ensure sustainability of the outcomes, i.e.,:

- July-early August 2024: A series of community meetings, knowledge sharing between Pelaik (one of the first two hamlets receiving the MH) and the Entebuluh and Sungai Iring people, and participatory decision making and planning for next steps. This included a visit by the Entebuluh and Sungai Iring people to Pelaik to learn the MH operations, maintenance, safety and how the Pelaik people shared responsibilities in maintaining the MH installations. These were followed by technical studies by the MH consultant team, Riak Bumi NGO and community representatives, preparation of technical design of the turbine and civil structure components, and the required materials. During these activities, the communities came up with an idea to form an MH network to share experiences and knowledge, and to make MHs in their hamlets as a learning place for other communities and stakeholder groups.
- Development of MH in Entebuluh hamlet (9-17 August 2024), providing a maximum of 7,500 KVA, distributed to all 10 *biliks* ('apartments') of the long-house. The MH plant in Entebuluh started its operation on 17 August 2024, the day of the Indonesian Independence celebration. To express their happiness, the Entebuluh people said, "This is what we call 'independence', i.e. freedom from darkness." DI-D04: improved access of 25 HHs (44 women, 40 men) to electricity, **from 0** to 400-500 watt/bilik available 24 hours/day.
- Development of MH in Sungai Iring hamlet (21-31 Aug 2024), producing 10,000 KVA, distributed to all 11 biliks of the long-house. DI-D04: improved access of 21 HHs (32 women, 37 men) to electricity from 10-20 watt/bilik available 3-4 hours/day, to 600-900 watt/bilik, 24 hours/day.

The operation of the MH in Entebuluh was formally launched by the Camat (head of sub district) of Batang Lupar on 17-18 November 2024, and the next day in Sungai Iring. Following local tradition, the people conducted traditional rites before the launching ceremony.

The before-after situation of the electricity in the 4 hamlets is described in the following table.

Hamlet	Beneficiaries			Forest (Ha)	Baseline			Outcomes of micro-hydropower	
	House-holds	Women	Men		Source	Conditions	Used for	Additional power watt/hour/ <i>bilik</i>	Used for
Kedungkang	40	46	59	6,069.3	Solar panel from the government in 2016	Usable, 50-70 watt/hour/ <i>bilik</i> , 3-6 hours/night depends on weather; Some panels and lamps have broken, unavailable in local stores.	2-3 bulbs/ <i>bilik</i>	100-150	Lighting all rooms (additional 5-10 bulbs/ <i>bilik</i>), terrace, bridge, TV, and internet signal booster; Available 24 hours/day
Pelaik	21	27	39	3,101.3				250	
Entebuluh	25	44	40	17,825.4				Unelectrified	
Sungai Iring	21	32	37	672.6	600-900				
Total	107	149	175	714.995					

Clean water. In Year3 Q1, clean water pipes to each house in Kedungkang and Pelaik hamlets were installed, improving access of 61 (100%) HHs (DI-D04c total 171 people, i.e., 73 women, 98 men) to clean water. The clean water pipes installation in Kedungkang was fully funded from the government through Village Funds, and in Pelaik (Figure 2) was co-funded by this project IDR 7 million and by Women of Wildlife Organisation IDR 40 million.

Pipes for the other 3 hamlets (Sungai Ajung, Entebuluh and Sungai Iring) had been purchased in Year3 Q4, and installation will be done in Year4 Q1 as the people were waiting for the rainy season to end, to ensure long-lasting water reservoir structures. The costs for pipes purchase and construction of water reservoirs for these hamlets were co-funded by the project and Village Funds. Details will be reported in the Final Report.



Fig.2. Development of clean water supplies installation in Pelaik hamlet: water reservoir (top and bottom left), pipe (top center), clean water flowing to bathroom (center bottom) and to the washing place in one of the *biliks* (right)

Output indicator 1.2: At least 2 members per household in all hamlets (2 hamlets in 2023, 2 in 2024) are trained to implement technical and safety procedures and maintain the electricity and clean water installation.

During and after development of MH in both hamlets, the MH consultant team trained 6 members of Entebuluh and Sungai Iring (3 members respectively) as trainers (DI-A05: 6, all men). These 6 members then trained the rest of the community members. Led by local leaders, the people drafted common rules and established an operational and maintenance group. For maintenance, they propose to use village funds from the government.

Trainees in Year2 from Pelaik also shared their knowledge to the people from Entebuluh and Sungai Iring on the MH operation and maintenance.

In the first 2 hamlets, the self-sufficient MH systems were proven by sustainable operation of the MH installations, traditional rites to celebrate the 1st anniversary of the MH (Figure 3), and the local communities' voluntary actions to clean and maintain the areas around the MH installations (featured in the local online media <https://sepandan.digitaldesa.id/berita/gotong-royong-warga-dusun-kedungkang-desa-sepandan>, and also attached as Annex 4d).



Fig.3. Customary rite by the Pelaik people to celebrate the 1st anniversary of the micro-hydropower

Output indicator 1.3: 1 operational and maintenance group is established in each hamlet for the MH plant and 1 for water supply in 2024.

As in the first two hamlets, the Entebuluh and Sungai Iring communities agreed that all members of the hamlets automatically became members of the MH maintenance groups, coordinated by the existing hamlet administrators. They decided not to establish a new group to avoid dualism in management and coordination. The hamlet administrators had organised small groups and made schedules to monitor and maintain the MH plants, regulate the inflow and monitor the water storage tanks.

Output 2: Marketing mechanisms and capacity to produce marketable non-timber forest products (NTFP) are established

Output indicator 2.1: At least 1 training for 1 women's association of NTFP producers and elders in project locations is conducted every year in production of high-quality products, packaging, marketing, building small-scale fruit seedlings nursery, management of small enterprises, etc.

To achieve this output, we conducted the following activities during the reporting period:

- Facilitated the women to apply for food product distribution permit from the District Health Service, including participation of four women from 3 hamlets (Keluin, Ngaung Keruh and Sungai Ajung) in the Health Service's training on 31 July 2024¹ (see Annex 6b).
- As permit will only be given to association instead of individuals, the project team facilitated the women to establish an association on 17 Dec 2024, named Kelompok Pangan Hutan Empran Kapuas Hulu (Empran Forest Food Producer Association of Kapuas Hulu). The women jointly formulated goals of the association, i.e.:
 - Preserving forests and protecting the environment through sustainable use of NTFPs.
 - Improving local economy
 - Fully responsible to work together to achieve the group's vision
 - Encouraging the production of local food crops.

In Year3 Q4, the association was preparing necessary documents to apply for the permit through the online system.

- Strengthened the existing handweaver associations of each hamlet and facilitated discussions among members to revisit the association's structure and to reformulate their roles and responsibilities (July - December 2024). DI-A03: 3 local associations.
- Training on natural-dye making and yarn-dyeing on 27-28 August 2024, participated by 18 women (14 from Keluin, 2 from Entebuluh and 2 from Kelawik hamlets). DI-A01: 14 women who participated in handweaving training in Year2¹ and 4 new participants (2 women respectively from Entebuluh and Kelawik). Trainers were women from Pelaik hamlet. This is an example of 'from-community-to-community' approach, which is part of the project exit and scale-out strategy. In subsequent months, participants reported that they have applied the new skills. DI-A04: 18 women. See agenda and list of attendance in Annex 5a,b.



Fig.4. Training on natural-dye making.

- The project team collaborated with another institution, i.e. the Asian Non-Timber Forest Products Exchange Program to facilitate three representatives of the handweaver associations from 3 hamlets (1 respectively from Kedungkang, Keluin and Pelaik) to the Iban Weavers Exchange Visit to Sarawak, Malaysia, 8-12 Oct. 2024. They learned new techniques to improve the handwoven fabric quality and the natural-dye colors, the Iban traditions and history, and new motifs and their historical meanings. They also built a network among the Iban weavers. Back home, they shared the new techniques to other

¹ This detail is written to avoid double counting.

women in their respective hamlets. The women in 3 hamlets reported that the new techniques and motifs have increased the selling price of their products. DI-A04 (Number of people reporting that they are applying new capabilities (skills and knowledge) 6 (or more) months after training): 46 (25 from Kedungkang, 13 from Pelaik, 8 from Keluin).

- Training on business plan and managing small enterprise for the local food producers and handweavers associations on 14 February 2025 (Annex 5c,d), participated by 20 women from 5 hamlets, (2 women from Sumpak Sengkuang, 3 from Ngaung keruh, and 5 respectively from Pelaik and Keluin hamlets). DI-A01: 16 participants who participated in the local food production training in Year2 and 4 new participants. The trainers were from Koperasi Jasa Menenun Mandiri (JMM) based in Sintang, a cooperative that manages the traditional woven fabric business and assists women weaving associations. Objectives of the training were as follows:
 - To build knowledge and skills on: (a) finding various sources/schemes of capital including risks and benefits of each source/scheme; (b) pricing; (c) managing investment with the lowest possible financial risks; (d) handling orders including avoiding fake orders;.
 - Managing groups or associations, required structure and distribution of roles of administrator and group member.

Output indicator 2.2: 2 representatives of women's associations in project locations participate in 2 regional or national exhibitions and 1 international event in 2023 and 2024 to introduce their products to market and meet potential buyers and relevant government actors.

- The project facilitated four women to participate in 2 international events, i.e. the 25th and 26th INACRAFT. The products were also displayed in 2 other events to introduce their products to wider audience (1 international, 1 national). Those events are detailed below:

International events:

- *The 25th INACRAFT (Indonesian largest International Handicraft Exhibition), Jakarta Convention Center, 2-6 October 2024.* Two women (1 from Kedungkang and 1 from Pelaik) representing the handweaver associations participated in this event.
- *The 26th INACRAFT, Jakarta Convention Center, 5-9 February 2025.* Two women (1 from Kedungkang and 1 from Keluin) participated.

In these events, the women managed to get loyal buyers, ranging from collectors, resellers and producers of other products (e.g. handbag, guitar strap) that used traditional handwoven as the main materials (Annex 6a). They exchanged contact numbers, thus allowing the handweavers to directly communicate with the buyers independently from the project team. This is part of the project exit strategy, i.e., enabling the women associations to sell their products safely beyond the project lifetime.

The women also learned that sewing the making clothes from their handwoven fabrics would increase the selling price, therefore they proposed sewing machines (3 per association for collective uses) from the project. We agreed and purchased the sewing machines, as the Capital Equipment budget was sufficient to cover these.

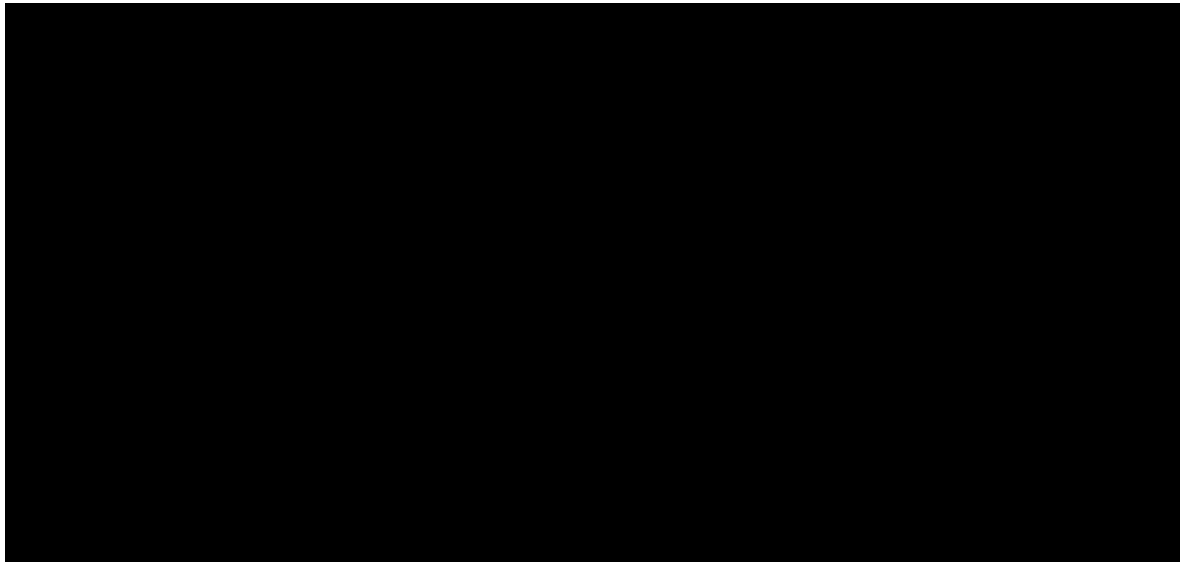
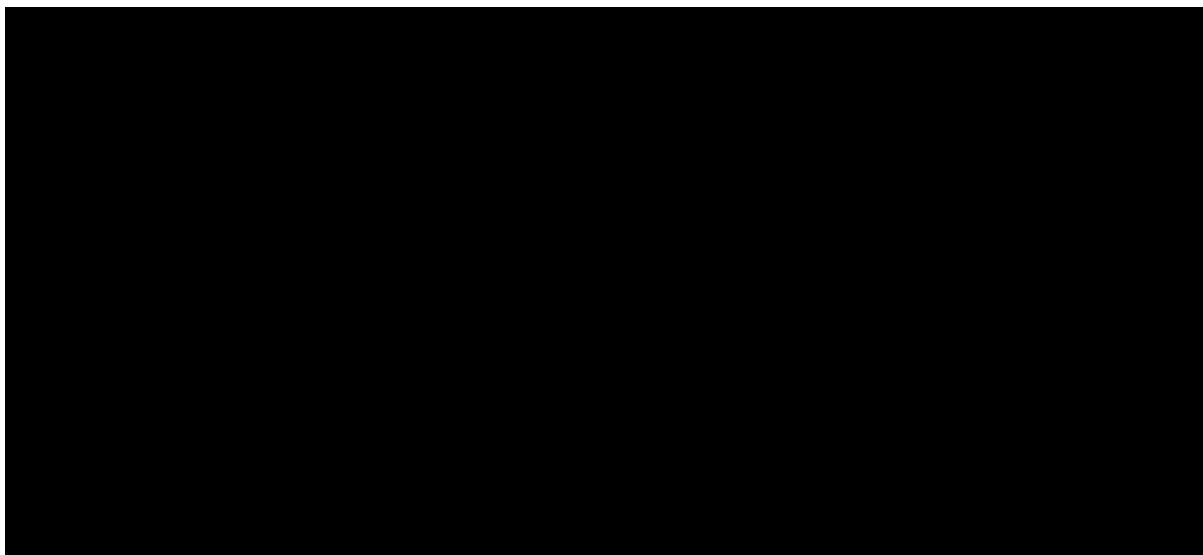


Fig.5. The women from project locations interacting with buyers in Inacraft exhibition.



- *Asia Land Forum/ALF, Jakarta, 19-20 February 2025.* The meeting and exhibition were organized by a consortium of various organizations, network and alliances (Agrarian Reform Consortium/KPA, Participatory Mapping Network/JKPP, SAINS, RMI, members of the Indonesian National Land Coalition/NLC, the Indigenous Peoples Alliance of the Archipelago/AMAN, The Indonesian Forum for Living Environment/WALHI, CIFOR etc.). Local food products and handwoven fabrics were displayed in CIFOR booth (Annex 6c). One project team member represented in the booth, not only to introduce the products but also to explain about the project's approaches in bridging conservation and poverty alleviation (contribute to Output Indicator 5.2).
- *Introduce the products to high level international audience*, e.g., by giving the handwoven scarves as souvenir for VVIP speakers in an international event "Considering restoration, communities, and livelihoods for sustainable peatlands: A MAHFSA learning exchange", Riau, 10 - 11 Feb 2025, Riau, Indonesia (Annex 6c). The handwoven fabrics were also given as souvenir for VVIPs met by CIFOR DG in various international events.

National event:

- *Festival Jejak Pangan Lestari (Sustainable Food Trail Festival), Jakarta, 25 October 2024.* The festival was organized by the Coalition of Sustainable Food Systems coalition. Local food products and handwoven fabrics were displayed in CIFOR booth.

Two project team members represented in the booth to introduce the products and the project's key findings and approaches, contributing to Output Indicator 5.2.

- The Head of West Kalimantan Anti Drugs Agency, as follow-up of our discussions last year, endorsed the food products to several hotels in Pontianak and facilitated the project team to meet with the managers. In the meeting, the managers tasted the samples and confirmed that their hotel would buy the products after distribution permit is granted.

Output indicator 2.3: 60% of the planted seedlings supporting production of NTFPs indicate good growth (observed from height, leaves, stem size) by end of the project.

During the food production training in Year2, we (trainers, participants and the project team) planned to plant seedlings of selected nut species, and agreed to collect seeds and prepare a nursery in Year3. However in Year3, the women received handwoven fabric orders and wanted to focus their time meeting these orders. They did not want to disappoint buyers, but also wanted to work comfortably at their own speed (see also section 13, community sensitisation). Therefore, the women only planted the natural-dye plants that were not found around their settlement, e.g. engkerebai (*Psychotria malayana*) and rengat (*Clerodendrum laevifolium*). While the engkerebai indicated good growth (Figure 6), rengat did not, which might be caused by bad seeds. Therefore they were going to look for better seeds. In Year3 Q4, they also mentioned that they wanted to plant yellow root plant (*Fibraurea tinctoria*) but could not find the seeds. The project team has been facilitating the women to find the required seeds from the associations and other hamlets.

The women were maintaining the planted seeds, however they did not make records. As this indicator is difficult to quantify, we propose to revise this indicator to the number of species planted by the women (At least 3 species of natural dye plant planted by women in the project locations). This highlights the challenges faced by the women in balancing their commitments, and explains the needs of applying adaptive management approach in the project. This also emphasizes the community's commitment and the efforts made by the project team to facilitate the women to get the required seedlings.



Fig.6. The engkerebai plant planted by the women in their home garden (left), source of red dye (right).

Output 3: Findings from participatory monitoring of forest conditions and orangutan population is available to inform multiple level decision making.

Output indicator 3.1: Bi-monthly participatory forest monitoring patrols and six-monthly orangutan population monitoring (both including 2022 baseline) are conducted in local communities' territory every year.

During the reporting period, the project conducted the following activities:

- Six-monthly orangutan population monitoring were conducted in 10 transect locations as planned. The 4th monitoring was on 20 June – 21 July 2024, and the 5th monitoring 29 November – 21 December 2024.
- Participatory forest patrols were conducted in 4 hamlets (Pelaik, Kedungkang, Sungai Ajung and Keluin) in July and September 2024. Another round of forest patrol was initially planned for Year3 Q4, however could not be conducted as it was rice harvesting season and the local people spent their time mostly in the rice field. Therefore, the next forest patrol was rescheduled to Year4 Q1. The people also conducted forest patrol as part of their Village Forest patrolling activities.
- Scaled-out the orangutan population monitoring to 7 additional locations, i.e., inside the Danau Sentarum National Park (DSNP). The monitoring was conducted jointly with the DSNP staff and local community representatives with funding from another donor (matched-funding). This activity provided complementary data on the orangutan populations in the region. The 1st monitoring was undertaken in May-June 2024, and the 2nd will be in April-May 2025.

Output indicator 3.2: Key findings from orangutan population monitoring and habitat conditions are disseminated at least at 2 high-level events per year.

To achieve this output, we conducted the following activities in Year3:

- As the monitoring were located in the buffer zones of Betung Kerihun-Danau Sentarum National Park, we shared the key findings to the Betung Kerihun-Danau Sentarum National Park Authority in a series of meetings in May and July 2024, and February 2025. In these meetings, we discussed plan to write the report jointly, including the results from monitoring inside the DSNP. The report, once it is published, will contribute to DI-C02. The NPA also showed interest to learn how we built a self-sufficient MH system, particularly the local communities' motivation and capacity to maintain the MH installations independent from the project.
- The project team also planned to present the key findings in the West Kalimantan Orangutan Regional Meeting organized by the West Kalimantan Conservation Agency and FOKKAB. The meeting was planned in February 2025, however rescheduled to 16 April 2025. As the meeting happened beyond the reporting period, detailed information will be written in the Final Report. Within the reporting period, the project team member participated in the preparatory meeting on 17 February 2025.
- The project approaches and lessons learnt were disseminated in 1 international event, i.e. the Forests & Livelihoods: Assessment, Research, and Engagement (FLARE) 2024 Annual Meeting, Rome, 3-7 October 2024 through 2 presentations at 2 sessions, detailed under Output 5.
- Dissemination of the key findings in Year2 resulted in the integration of protection of orangutan habitat in the Danau Sentarum Catchment Areas Management Plan, which is now being written in the latest format, following new regulation from the central government. DI-B01: 1 management plan is available and endorsed by the District Government.
- Facilitation to improve protection of the orangutan habitat outside protected areas, which were done through the following activities:

- Training for communities along Labian-Leboyan watersheds on drafting village regulation (matching funds from the IKI-BMUB COLANDS project). In September 2024, four villages (Mensiau, Labian, Labian Iraang dan Sungai Ajung) submitted new village regulations to the District Legal Bureau, including chapters to strengthen customary rules that protect the orangutans and their habitat, and sanctions for violators. These new regulations were submitted to the district government in November 2024. In February 2025, the District Legal Bureau provided feedback and suggested revisions of some terms to synchronize with the umbrella regulations. These village regulations are now being revised following the feedback, and will be resubmitted in Year4 Q1. DI-B03: 1 country (Indonesia), 4 villages' new regulations.
- Assisted the Pelaik people to finalise customary forest proposal and prepare supporting documents to get legal recognition of their customary territory. The proposal and supporting documents were submitted in September 2024 to the Committee for the Recognition and Protection of the Indigenous Communities (Panitia Pengakuan dan Perlindungan Masyarakat Hukum Adat/PPPMHA), and is now awaiting for verification by the committee. To facilitate this process, the project team collaborated with the Indigenous Peoples Alliance of the Archipelago (Aliansi Masyarakat Adat Nusantara/AMAN), the Registration of Indigenous Peoples Maps (Badan Registrasi Wilayah Adat/BRWA) and Lanting Borneo NGO. If the proposal is approved and customary forest certificate is granted, it will contribute to DI-B06: 66 people (27 women, 39 men). Typology of tenure: ownership rights over the indigenous territory. Verified extent of the customary forest: 4,318 Ha.

Output 4: Degraded forests and areas are rehabilitated to extend usable orangutan habitat

Output indicator 4.1: By 2025, in total 8,000 seedlings of orangutan food trees and nesting trees are planted in degraded forests and areas (2,000 seedlings per targeted hamlet).

From Year1 to Year3, in total there were 8,037 seedlings of orangutan food and nesting trees planted in the four hamlets (2,139 in Kedungkang, 2,114 in Pelaik, 2,000 in Entebuluh and 2,054 in Sungai Iring). Details and photos are provided in Annex 8.

In the last two hamlets (Entebuluh and Sungai Iring), the people prepared the seedlings in November-December 2024, and planted them on the degraded land in January-February 2025 (Sungai Iring) and March 2025 (Entebuluh). Monitoring will be done in May-June 2025.

Output indicator 4.2: By 2025, at least 75% of the planted seedlings grow well (observed from height, leaves, stem size).

During the reporting period, the people of Pelaik and Kedungkang continued monitoring the planted seedlings, and replaced the poor growth seedlings. Survival rate of the planted seedlings in these hamlets ranged between 40%-85%, depending on species (see Annex 8). The poor growth seedlings were replaced in December 2024, and their growth was monitored in March 2025. Monitoring in Entebuluh and Sungai Iring will be done in Year4 Q1.

Output 5: New data, knowledge, research and policy recommendations about the link between poverty alleviation and conservation are produced and shared at multiple levels

Output indicator 5.1: New knowledge products in various forms and recommendations are produced and disseminated to targeted stakeholders: 1 in 2022, and at least 2 respectively in 2023, 2024 and 2025

The project wrote two related articles on how the project contributed to achieve Gender Equity and Social Inclusion (GESI):

- The 1st article titled *Micro-hydropower: Empowering Women* describes the positive outcomes of the improved access to electricity for women, submitted to the donor's newsletter in January 2025.

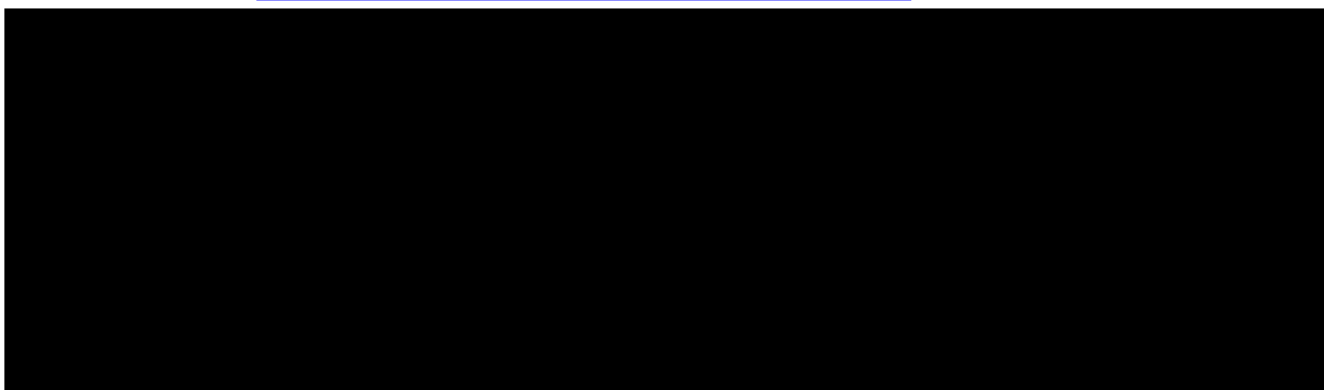
- The 2nd article *Addressing GESI: lessons from the field* describes the different gender equity/inequity situations in different locations, and explains the needs to use approaches and tools that are appropriate for the different context. The article was published in CIFOR-ICRAF Project News page <https://www.cifor-icraf.org/news/corporate-news/addressing-gesi-lessons-from-the-field/>.

Output indicator 5.2: Knowledge sharing events at multiple levels are organized once a year in 2023/2024 and 2024/2025 respectively at regional and/or national level to share key results and raise awareness of the links between orangutan conservation and poverty reduction to different stakeholder groups;

- The project shared key results and approaches to link orangutan conservation and poverty reduction in FLARE 2024 Annual Meeting, Rome, 3-7 October 2024 through 2 presentations at 2 sessions, detailed below:
 - The 1st presentation “Community-based orangutan protection and poverty alleviation: approaches, methods and SMART indicators to ensure gender equity and sustainability of outcomes” (Annex 9a) was presented in Session 27 on “Conservation and community planning tool”.
 - The 2nd presentation was on “Gender Transformative Tools” (Annex 9b), presented in one of the conference workshops “Gender, Equity and Social Inclusion (GESI) in Forestry/ Agroforestry Projects: Workshopping tools for change”.
- The PI gave a presentation on *Conservation and Sustainable Use of Rainforest* at the British Jakarta School on 21 March 2025 following their invitation. Participants: 4th grade students aged 8-9 years (Annex 9c).
- The project also contributed to a knowledge-sharing and coordination meeting, i.e., the West Kalimantan Orangutan Regional Meeting which was planned in February 2025, but rescheduled to 16 April 2025. Therefore the details will be reported in the Final Report.

Output indicator 5.3: At least 1 awareness raising program event is organized every year to strengthen customary rules and formal law enforcement on orangutan and forest protection in 2023 and 2024, involving customary leaders, law enforcement institutions, government across levels and other relevant stakeholders.

Following up on activities reported in Annual Report2, the project finalised one video on Keeping Traditional Knowledge Alive for Future Generations, uploaded to CIFOR-ICRAF Youtube channel <https://www.youtube.com/watch?v=SucEi5CM1ZY>.



An awareness program is planned in May 2025 for local stakeholder groups. Around 500 ha of their hamlet territory was just converted into oil palm nursery and plantation, 3 km from the orangutan habitat. The awareness program is aimed to strengthen their customary rules and institutions to help protect the orangutans (will be reported in the Final Report).

3.2 Progress towards project Outputs

As detailed in Section 3.1, most activities to achieve all outputs have been progressing as planned. We measured the progress by comparing the implemented activities against the means of verifications.

Some activities were indeed postponed and/or may require changes, as also detailed in Section 3.1. Installation of clean water supply in Sungai Ajung, Entebuluh and Sungai Iring hamlets were rescheduled to Year4 Q1 as the water reservoirs are better constructed in dry season to ensure the structures' durability.

3.3 Progress towards the project Outcome

Looking at the progress so far, the project outcome will be achieved by the end of the funding in June 2025, yet some adjustment and modification are needed, depending on the situation in the field (detailed below).

Referring to the outcome indicator 0.1 (By 2025, 75% of households in four targeted hamlets use electricity generated by micro-hydro (MH) power plants and water pipes as their source of energy and have clean water), the project outcome has exceeded the target. As detailed in Section 3.1 Output 1 above, 100% of households in all 4 hamlets had improved access to electricity.

Water reservoir construction and pipe installation in one hamlet (Pelaik) had improved the access of 100% households to clean water. Pipes for the remaining 3 hamlets had been purchased. Water reservoir construction and pipe installation will be done in Year4 Q1 (to be reported in the Final Report).

For the outcome indicator 0.2 (By 2025, at least 2 women's associations of NTFP producers successfully establish a partnership agreement with one company or market aggregator), the weaver associations found such partnership agreements to be challenging. During the exhibitions, the weaver representatives met buyers who were interested in developing partnership agreements. However these agreements had requirements that were difficult to meet with handmade products, i.e., consistency in the number of productions over a certain period, and consistency in colors and sizes. Given the customary rules that may affect the handweaving activities, and as handmade products may vary in colors and sizes, the associations preferred normal selling without such agreements. Despite these challenges, the sale of handwoven fabrics has significantly increased compared to the baseline data (see Table in Section 3.1, Output Indicator 2.2). Therefore we propose to revise this indicator to the Darwin Initiative Standard Indicators no. DI-D03b: 46 women and DI-A03: 3 associations. This highlights the challenges faced by the women in meeting the requirements of partnership agreements and the adaptive management approach taken by the project team. It emphasizes the community's commitment and the efforts made to improve their market presence and income through normal selling.

For the outcome indicator 0.3 (By 2025, the population of orangutans in target locations shows no decline from 2022 baseline), the results of 5 rounds of orangutan population monitoring in 2022-2025 showed relatively stable populations, yet fluctuating in each transect location across times. This might suggest that the orangutans' mobility to find fruit-bearing trees. For indicator 0.4 (By 2025, the extent of orangutan habitat in project locations is maintained from 2022 baseline), the extent of the orangutan habitat in the project locations in Year3 was relatively stable compared to Year1. The people of 4 villages developed village regulations to legally strengthen the customary rules that protect the orangutans and their habitat, as reported in Section 3.1. However, there was a new oil palm plantation that started its nursery approximately 3 km from the orangutan habitat in Libung hamlet (Libung is not one of the 4 hamlets). Although the people of Libung did not give permission to the oil palm company to operate in the orangutan habitat, the close distance could endanger the orangutans. Therefore,

the project will be organizing a training-workshop in Year4 Q1 for the people of Libung on how to ensure that the new oil palm will not danger the orangutans and their habitat. The same oil palm company also keeps trying to get approval from the communities of other villages. These developments clearly highlight the community's commitment and the efforts made to address the potential threats posed by the oil palm plantation.

For outcome indicator 0.5 (By 2025, at least 1 regulation/ policy framework/ management plan/ strategic planning from relevant authorities (planning agency and/or conservation agency) addressing orangutans' habitat and forest conservation uses data sources resulting from the project's participatory monitoring system) and 0.6 (At least 2 stakeholder organisations (e.g. Directorate General of KSDAE, and Kapuas Hulu District Government) use participatory approaches and key lessons from linking poverty alleviation with conservation in their planning of similar initiatives), authorities at the district level have adopted the participatory poverty reduction approaches and key findings from orangutan population monitoring in the multi-stakeholders workshops and in the Collaborative Management Plan of Danau Sentarum Catchment Areas. The project's key findings and recommendations were also shared in the West Kalimantan Orangutan Regional Meeting in April 2025, and will be integrated into the Proceeding and the Orangutan Conservation Strategic Plan and Action (to be reported in the Final Report).

3.4 Monitoring of assumptions


Assumption 1: COVID-19 pandemic abating so that field work can be implemented as planned
Our comments: This assumption holds true.

Assumption 2: Regional, national and international economic development is showing continued signs of improvement following COVID-19 pandemic, therefore allowing recovery of the market of the local communities' products.
Our comments: this assumption holds true.

Assumption 3: No natural disaster that may endanger the orangutans and/or alter the extent of forest.
Our comments: until now this assumption holds true.

Assumption 4: Political and social situation in the region and targeted hamlets remain stable.
Our comments: this assumption holds true. The political and social situation remained stable, and the campaign and election in 2024 did not cause delays of the key activities.

Assumption 5: The project maintains good relations and communication with the government, local communities and other key stakeholders.
Our comments: the project has been maintaining good relations and communication with the Directorate General of KSDAE, West Kalimantan BKSDA, National Park Authority, Kapuas Hulu District Government, local communities and other key stakeholders.



Assumption 7: Conditions of river, topography and distance to settlement make the development of micro-hydropower and clean water supply technically feasible.

Our comments: this assumption holds true. River condition, topography and distance in all four hamlets were feasible, and the MH plants had been developed and in operation.

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

The higher-level impact we expect to achieve is “Improved protection of orangutans and their habitat outside protected areas in Borneo with reduced poverty of local communities, serving as a scalable model for similar areas in Indonesia.” Following the Year2 activities, in Year3 we continued activities in the field towards the expected pathway to change, i.e. orangutan monitoring, forest patrol, rehabilitation of degraded land, development of micro-hydropower, and women empowerment in the NTFPs value chain in fully participatory ways to build local communities self-efficacy and resilience.

The improved access of the local communities to electricity and the women capacity building on NTFPs have become evidence for the communities in the project locations that their well-being could be improved without sacrificing the forest. Women acknowledged that they now handweave more comfortably and more productively due to the increased lights from the electricity. Further, the women said that the handweaving training and connection to the market through participation in national and international exhibitions have convinced them that this project has a real impact on improving their livelihoods.

Involving the communities in rehabilitation of degraded land and corridor, forest patrol, and orangutan monitoring have increased their care towards the forest and wildlife, particularly the orangutans, as reflected in their customary forest proposals and village regulation drafting to better protect the orangutans and their habitat. From Year1 to Year3, there had been no cases of orangutan poaching, illegal trade and habitat conversion.

In the long run, the project is expected to generate scalable examples of reward mechanisms (through poverty reduction) for the communities who have contributed to the protection of the orangutans and their habitat. To communicate our approach and scalable examples to the broader scale, in Year2 and Year3 we took video footage and interviews of people’s opinions regarding the project activities on poverty alleviation and how they relate with conservation. The video will be edited and made public in Year4 Q1.

4. Project support to the Conventions, Treaties or Agreements

In Year3, we continued the 4th and 5th round of participatory orangutan monitoring and forest patrol. We also conducted the 1st round of the orangutan population monitoring in additional 7 locations inside the DSNP in May-June 2024, and will be repeated in April-May 2025. Data analysis of all monitoring will be done and reported to the MoF KSDA in Year4 Q1 to contribute to their HCVPs assessment, as mandated by the Director General of KSDAE in our meeting in January 2022. We have communicated this in subsequent meetings and discussions with the Betung Kerihun-Danau Sentarum National Park Authority and the Director of Species and Genetic Diversity Conservation of MoF.

The project's activities, particularly participatory monitoring of the orangutan population and habitat, support to local people's customary forest proposal, awareness program and facilitation of Collaborative Management Plan of Danau Sentarum Catchment Areas which include better protection of the orangutan habitat have contributed to the achievements of the first four categories of the Orangutan Conservation Strategy and Action Plan 2019-2029 (the Minister of Environment and Forestry Decree no. 308/MENLHK/KSDAE/KSA.2/4/2019), i.e., (1) preserving orangutan habitat within and outside protected areas; (2) regulation and policy that support conservation based on ecosystem characteristics, regional spatial planning, legal status, and local people's traditional knowledge; (3) partnership and collaboration; and (4) awareness building, communication and campaign. The project's capacity building for the women and development of micro-hydropower contributed to support the local economies (the 5th category). These contributions were evidenced from stable populations of the orangutans and the extent of their habitat, and to livelihood improvement of the local communities, particularly the women in the project locations.

In the West Kalimantan Orangutan Regional Meeting, the KSDA official in his opening speech mentioned that MoF is going to develop a new Orangutan Conservation Strategy and Action Plan, and all key stakeholders including CIFOR and Riak Bumi are invited to contribute. In year4 Q1, we are committed to contribute to this activity and continue communicate with FORINA and FOKKAB. As this project will end in June 2025, we are raising funding to continue and scale up/out our activities.

Within the reporting period, the communities of four hamlets have planted and maintained in total 8,037 seedlings, in which 8 of 12 species showed good growth (65-85%) as observed from their height, stem and leaves, while the dead seedlings had been replaced with new ones. This activity is aimed to create corridor and connectivity among the orangutan habitat and contribute to rehabilitation of the Danau Sentarum Catchment Areas, therefore supporting the operationalisation of the President's Regulation no. 60/2021 to save 15 national priority lakes (Danau Sentarum is one of the 15 lakes). It will also contribute to rehabilitation of two major watersheds in West Kalimantan which was launched by the President in December 2021 (<https://www.presidentri.go.id/siaran-pers/rehabilitasi-kerusakan-hutan-presiden-jokowi-tanam-pohon-di-area-bekas-tambang/>).

The project has also been supporting local communities in the project locations to apply for legalisation of their customary forests, particularly assisting them in preparing proposals and

supporting documents. This will contribute to the achievement of the national target on Social Forestry specified in the Ministry of Environment and Forestry regulation no. 83/2016.

The project is also supporting the national commitments under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Ramsar Convention on Wetlands (Ramsar), and Global Goals for Sustainable Development (SDGs). The proposed forest patrol and orangutan monitoring is aimed to prevent hunting and illegal trade of orangutans, and therefore contribute to the national commitments under CITES. The project locations are situated in the catchment areas of Danau Sentarum Wetlands, Indonesia's 2nd Ramsar site, therefore rehabilitation and better protection of orangutan habitat in these areas will contribute to sustainability of Danau Sentarum Wetlands. We expect to achieve the targeted contribution by the end of the project.

5. Project support for multidimensional poverty reduction

As described in Section 1 (Project Summary), the expected direct beneficiaries are the local communities who have been protecting the orangutans and their habitats, but live in poverty. This project is aimed to improve their access to electricity and clean water, and to build their capability and capacity, particularly women, through relevant training and linking to the NTFP market. Those needs were identified in our previous activities and cross-checked during the baseline studies to ensure the relevance. Through MH development in Year2 and 3, 100% of the communities in four hamlets have increased their access to electricity (detailed in Table 1, Section 3.1). The women acknowledged that the improved access to electricity has allowed them to carry out activities such as handweaving and cooking more easily, and enabled children to study in the evening hours. This will potentially improve education outcomes in the longer run. Two hamlets i.e. Kedungkang and Pelaik have increased access to clean water, and three more hamlets i.e. Entebuluh, Sungai Iring and Sungai Ajung will build water reservoir and install the clean water pipes in Year4 Q1 (also detailed in Section 3.1).

Provisioning of the electricity for those 4 hamlets has become the pride of the community and sub-district head. They always proudly mentioned in their meetings and events about the micro-hydropower including the reasons why they received support to develop the MH, i.e. for protecting the orangutan and their habitat.

The project facilitated a series of training sessions for women, elders and the youth to build their capacities to produce marketable products, and to connect with the market/buyers. The training events in Year3 were as follows (as detailed in Section 3.1): (a) procedures to get distribution permit from the Health Service; (b) business plan and managing small enterprise for the local food producers and handweavers associations; (c) natural-dye making and yarn-dyeing techniques. To facilitate women's access to the market, the project has been facilitating participation of the women representatives in national and international exhibitions/events in Year2 and Year3. As a result, the women are now in direct contact with buyers and frequently receive orders. Most of the buyers met the women in the exhibition, but there are also some buyers who received recommendations from other buyers. As income grows and new opportunities arise, and village members have learned to diversify their products through new technology, poverty levels are expected to decrease in the long term.

The project is also facilitating processes to accommodate local aspiration, including by women to better protect their customary land and strengthen traditional institutions, a.o through gaining recognition of customary forest under the government's Social Forestry programme and by engaging them in the government strategic planning meetings.

All these changes have strengthened the communities' motivation to continue protecting orangutans and the forest, therefore reducing risks of giving up their forest for external agricultural expansion.

6. Gender Equality and Social Inclusion (GESI)

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.	
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	X
Transformative	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	

The project team members have been observing and analysing the GESI situation in Kapuas Hulu, particularly within and surrounding areas of Danau Sentarum National Park, through various participatory activities since 2004, from where we gain in-depth understanding of the GESI context in the project locations (see for example Yuliani, 2022²). We are also considerably helped by the presence of a local NGO partner whose most members are native to the area, and a gender expert (i.e., Dr. Carol J. Pierce Colfer) who has been guiding us on the GESI concept, and methods and tools. The project, therefore, was developed based on our in-depth understanding and updated knowledge of the different interests, roles, rights, responsibilities and capacity of women, men, elders, youth and children.

In the project locations, the communities are the Dayak Iban and Dayak Tamambaloh ethnic groups. Their main livelihood activities are swidden rice cultivation, mixed agroforest garden, hunting, and fishing. Each activity involves specific gendered distribution of labour, roles and responsibilities. In swidden and agroforest cultivation, men's roles are clearing the land including tree felling, burning, dibbling/sowing and building field huts, while women do weeding (manually), sowing, harvesting, carrying harvest, drying the rice under the sun, threshing, storing harvested products (Maharani et al. 2019³). Women also play an exclusive role, i.e. selecting the best seeds for the next planting season. Rice milling is a collective action, done together by men and women.

Fishing and hunting also involve gendered distribution of roles. Men and women do fishing, but using different gears. Men typically make fishing gears, while women do the after-catch processes such as cleaning, drying, and making smoked fish or salted fish.

Collecting forest products such as fibers, bamboo shoots, mushrooms and fruits were done by both men and women, but hunting is mostly done by men. Carrying and processing the catch

² Yuliani, E.L. 2022. Communities at the Crossroads: Forest of large-scale monoculture plantation in Kalimantan, Indonesia. Dissertation. Radboud University of Nijmegen, The Netherlands.
<https://repository.ubn.ru.nl/bitstream/handle/2066/283905/283905.pdf?sequence=1&isAllowed=y>

³ Maharani, C.D., Moeliono, M., Wong, G.Y., Brockhaus, M., Carmenta, R. and Kallio, M., 2019. Development and equity: A gendered inquiry in a swidden landscape. *Forest Policy and Economics*, 101, pp.120-128.
<https://www.sciencedirect.com/science/article/pii/S1389934117305063>

are done together by men and women. In this area, cooking is not exclusive to women (see Yuliani et al. 2025⁴).

The Iban women have a tradition of handweaving with Sidan as the most famous type of handwoven fabric, and the Tamambaloh women making bead crafts.

Decision-making at the hamlet level is made through discussions in the inner terrace of their long-house, involving all community members. In the Iban and Tamambaloh people, as well as in other Dayak sub-ethnic groups⁵, women speak freely in meetings. Although each long-house has their own set of rules on tenure and land rights, in general women and men have equal rights over land and other inheritance.

Lack of electricity and clean water supplies to each *bilik*⁶, and lack of capacity and marketing on Non-Timber Forest Products (NTFPs) were the main barriers for the women in day-to-day activities and in their efforts to gain more income. With insufficient electricity, women mostly weave during the day relying on sunlight, or in the evening using head lamps and traditional torches. This situation slowed their ability to produce handwoven fabric.

Lack of clean water supplies made them rely on rivers. For cooking and washing, women had to carry water using water buckets from the nearest river to home. They bathed and washed clothes in the river.

The project has focused on the Gender Empowering approach, which we understand as expanding women's capabilities. The project did not take a transformative approach, as transformation seeks to alter fundamental relationships between men and women (or other social groups). Among the Iban and Tamambaloh, there was little need for such a fundamental shift. This observation was confirmed by the scientist conducting gender study in the area⁷.

The micro-hydropower systems, clean water supplies installations and capacity building on NTFPs value chain for women supported by this project have changed the situation. The electricity has enabled women to weave comfortably to meet the buyers' orders, and their participation in events have enabled them to directly connect with buyers⁸. The clean water supplies have saved the women's time, and enabled the whole family members to use clean water from the sources in the nearby hills instead of water from rivers.

Lessons learnt in the last 12 months were described in Section 3.1 under Output Indicator 2.3.

7. Monitoring and evaluation

As in previous years, in Year3 we continued the same approach to internally monitor and evaluate the project. At the institutional level, CIFOR is overseeing implementation of all activities and responsible for communication and knowledge management, budget management, auditing, and partner contracting. Elizabeth Linda Yuliani is the Project Lead, supported by CIFOR's Finance Department, Programme Management & Coordination Unit (PMU), Communication, Outreach and Engagement (COE) Team, and Quality-for-Impact (Q4I) Unit.

At the project level, the project team (the PI, partner institution i.e. Riak Bumi and consultants) jointly developed work plans and detailed methods, and undertook field activities in accordance

⁴ Yuliani, E.L., Colfer, C.J.P., Ickowitz, A., Heri, V., Adnan, H. 2025. Addressing GESI: Lessons from the Field. Project News. CIFOR-ICRAF, Bogor, Indonesia.

⁵ See also Colfer, C.J.P., 2020. Masculinities and Muted Gender in Bali and Kalimantan. In *Masculinities in Forests* (pp. 67-104). Routledge. <https://www.taylorfrancis.com/chapters/oa-edit/10.4324/9780367815776-4/masculinities-muted-gender-bali-kalimantan-carol-pierce-colfer>

⁶ The Dayak long-house consists of tens of *bilik*, the local term for each family's house (similar to an apartment) within the long-house.

⁷ Julia. 2024. A Gendered Landscape of Labian-Leboyan Watershed. Field report, unpublished. COLANDS Project, CIFOR, Bogor, Indonesia (on-going research).

⁸ Electricity from the micro-hydropower also enabled the people to install an internet signal booster. Previously, they had to climb the nearest hill to receive a signal.

with respective roles and expertise. All field activities were conducted in participatory ways, involving representatives of local communities including women, and other key stakeholder groups e.g. the District Government. The team had three-monthly meetings to monitor and evaluate the progress, and make plans for subsequent months by referring to the agreed timetable and Output level SMART Indicators and Means of Verification in the project logframe. The partner's activities and deliverables are specified in a Letter of Agreement (LoA).

To ensure compliance with the timetable and the project logframe, PMU and Q4I teams are providing oversight and backstopping as needed. The latter is also reviewing activities and the quality of outputs, including with respect to the sustainability, gender equity, and social inclusion considerations, as well as to derive lessons for informing targeted audiences on linking poverty reduction and conservation. The Q4I team also functions as the project's M&E advisor and has designed a project M&E System that fulfils the following three functions: monitoring and documenting the delivery, relevance, and quality of project activities and their efficient and effective translation into outputs. Thus, the M&E is a shared responsibility of both CIFOR and partner organisations, and non-sensitive information is always shared amongst stakeholders. The Q4I team has developed the Terms of Reference for the endline studies and evaluation of the project (see Annex 11), planned in early June 2025.

As detailed in Section 3.1-3.3, most planned activities and outputs have been achieved and contributed to the Outcome, involving both quantitative and qualitative indicators.

8. Lessons learnt

In Year3, the following have worked well: MH development, operation and capacity building in the last 2 hamlets; clean water pipe installation and operation in 2 hamlets and preparation for installation in 3 hamlets; capacity building for local communities on NTFPs production and marketing; women (handweavers) participation in national and international events; orangutan population monitoring; participatory rehabilitation on degraded land in 4 hamlets; and communicating/sharing the project findings, lessons and approaches in scientific conferences, policy processes, project webpage and CIFOR and partner's Youtube channels.

The operation of self-maintained MH systems in 4 hamlets have become pride of the Head of Sub-district. The Head shared the success and endorsed the strong participatory ways in various meetings at the district capital and other villages. The electricity has also provided sufficient lightings for women to handweave and children to study comfortably.

Training on handweaving and natural-dye making, and participation of handweaver representatives have significantly improved the capacity of women to generate income. By participating in the exhibitions, the women directly interacted with buyers, learned the market quality standard and received orders directly from buyers. The success have inspired the youth in the project locations and women in other locations to learn handweaving and natural-dye making techniques.

The following activities did not work well in Year3:

The local food producer association has not yet been able to meet orders on time, as the production highly depends on fruiting seasons. Quantity and taste could not be as consistent as expected by buyers, because wild fruits highly rely on season and weather. Getting a distribution permit also took longer than expected, as the Health Service must directly observe the production processes which could only be done in the next fruiting season (December-February). This was another reason why having partnership agreement as one of the outcome indicators (Outcome Indicator 0.2) did not work well as detailed in Section 3.3. We therefore recommend using DI-D03b and DI-A03 as the indicators.

Customary forest application involved long and complicated procedures, requiring back-and-forth revisions to meet all requirements and small detail changes, including to synchronise with the latest regulations. Despite these challenges, customary forest certificate is still one of the most potential ways to save the orangutans habitat. Collaboration with other institutions that have more experience in proposing customary forest certificates helped a lot, yet required intensive communication to maintain synergies.

Finalisation of some knowledge products which were planned in Year3 has been delayed due to the intensive fieldwork schedule and other commitments. We will finalise these products during the no-cost extension period (Year4 Q1).

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

The project team discussed the issues raised in the review of last year's Annual Report. Below are our (CIFOR and Riak Bumi) responses to comments that require responses in AR3.

Comment #2: The reviewer notes the project could consider setting more explicit GESI-related targets and indicators in the project's logframe to track progress towards equitable outcomes.

Our responses: We thank this suggestion. We just realized that we put the GESI-related indicators following the Darwin Initiative Standard Indicators only in Section 3.1 of AR2, but we missed to put those indicators in Annex 1 (Report of progress and achievements against logframe). The GESI-related indicators we put in Section 3.1 were in particular disaggregated numbers of women and men, and number of the Indigenous People groups benefiting from relevant activities of the project. To compare with the situation before the project, in AR2 we also provided Table of 'before-after' data of access to electricity (power generated by the MH, and number of HHs, women and men), and graph of 'before-after' capacities of training participants (all women) in AR2-Annex 5c. In this (AR3) report, we put the GESI-related indicators in both Section 3.1 and Annex 1 to ease tracking progress towards equitable outcomes.

Comment #6: Given timings, work with relevant authorities may benefit from being broken down into smaller attributable areas to ensure desired impact can be achieved.

Our response: We thank and fully agree with this suggestion. We have been working at smaller attributable areas (hamlets and village levels) and with formal and informal institutions at site level (customary leaders, hamlet and village administration and sub-district government). By doing this, the project has achieved the intended outcomes at site level. However, for scalability of the project approaches and findings, and to better protect the orangutans and their habitat outside the project locations, we also continued to build communication and relations with the institutions at higher levels.

Comment #7: The application suggests the project is aligned with the Orangutan Conservation Strategy and Action Plan 2019-2029 Ministry of Environment and Forestry Decree no. 308/MENLHK/KSDAE/KSA.2/4/2019, but this is not included in reporting. Inclusion would be beneficial.

Our response: We thank this suggestion. We include this in Section 4.

Comment #9: Timeline inclusion for pending activities would assist the review process

Our response: We follow this suggestion. Below is the timeline for the pending activities.

Pending activities	No-cost extension			Post project		
	April	May	Jun	Jul	Aug	Sept.
Clean water supplies installation						
Training on natural dye						
Facilitating women to find required seeds of natural-dye plants						
Forest patrol						
Orangutan population monitoring: analyse data and write article for open access journal						
Continue support Village Regulations and Customary Forest Proposal						
Monitoring of planted seedlings in all hamlets						
Awareness program for Libung people						
Finalise and launch video on The Orangutans' Life						
Finalise other knowledge products						
Communication/dissemination at high-level event(s)						
Project evaluation						
Project audit						
Final report						

10. Risk Management

There was 1 new risk we registered for Year3, i.e. risk of illness due to the too intensive schedules. To manage this risk, we proposed a no-cost extension until 30 June 2025 and got approval. The extension has allowed us to work with much less time pressure.

11. Scalability and durability

The project's achievements in developing self-sufficient micro-hydropower systems for the 4 isolated hamlets quickly spread throughout the region, gaining recognition from the future adopters, including the local communities, the village, sub-district and district governments, as well as the Betung Kerihun-Danau Sentarum National Park Authority. The Head of sub-district proudly shared the achievements and acknowledgement to the project team and donor in meetings and events at various locations and levels. The ceremonial launch of the MH systems in the last two hamlets was featured in the regional online news (<https://pontianak.tribunnews.com/2024/11/20/rumah-betang-sungai-iring-batang-lupar-kapuas-hulu-resmi-dapat-pembangkit-listrik-tenaga-mikro-hidro>), reaching a wider audience beyond the project locations. Government support was evident through the allocation of Village Funds for purchasing spare parts and covering other maintenance costs.

The self-sufficient MH systems and clean water supplies demonstrated their durability through the communities' ability to operate and maintain the installations. The Kedungkang people voluntarily maintained the MH installations and the surrounding forest, with their activities reported in regional online news. The Pelaik people celebrated the 1st anniversary anniversary of the MH by conducting traditional rites.

Knowledge sharing among the communities began when the residents of the 1st 2 hamlets shared their knowledge and collective action strategies with the last 2 hamlets. This included building a sense of ownership and responsibility for maintaining the MH installations.

As future adopters, particularly from the government, were keen to learn how the project developed local communities' confidence and sense of responsibility, the communities proposed forming an MH network to share experiences and knowledge. This network would also serve as a learning platform for future adopters.

Capacity building for women and strengthening their associations inspired youth and women in other hamlets to learn handweaving and natural-dye making techniques. These associations began forming an informal handweavers network. The improved capacities of the women attracted other institutions to provide advanced training and linked them with the Iban handweavers in Sarawak, Malaysia. The Head of the District Crafts Council and the Head of the District Industry Service visited the hamlets and committed to facilitating the sale of handwoven fabrics. Following the visit, the women received several orders from the Head of the District Industry Service.

The project's poverty reduction approaches were endorsed by the Head of West Kalimantan Anti Drugs Agency. Following our first meeting in Year2 Q4 (reported in AR2), in Year3 Q1, the Head visited one of the project's sites to see the handweaving activities and other Non Timber Forest Products, featured in their social media channel

https://www.youtube.com/watch?v=pK_m-0ACmb4. The Head endorsed the women's food products to potential buyers in Pontianak and facilitated meetings with hotel managers (detailed in Section 3.1, Output indicator 2.2).

Key findings from the orangutan population monitoring and habitat patrol have been handed to the West Kalimantan BKSDA. In the West Kalimantan Orangutan Regional Meeting, we jointly developed recommendations to be integrated into the new Orangutan Conservation Strategy and Action Plan. The development of village regulations of 4 villages and customary forest proposal will also strongly contribute to protection of the orangutan habitat outside protected areas. The project has also initiated the creation of an informal network of local communities who share concerns about the orangutans and are motivated to continue protecting them.

The self-sufficient MH, clean water and NTFP production-marketing systems have been running as expected, and will contribute to the durability of the project's outputs, outcomes and impacts. Acknowledgement and endorsement from future adopters will contribute to scalability of the project approaches.

12. Darwin Initiative identity

In Kapuas Hulu, this project was the first funded by the Darwin Initiative. Stakeholders and beneficiaries were not familiar with the Darwin Initiative, until the project started. To familiarise participants and stakeholders, as in Year1 and 2, in Year3 we continued promoting the project, Darwin Initiative and the UK Government in presentation, speech, articles, press release, project webpage and other media. The logos of Darwin Initiative and the UK International Development were presented on banner, communication outputs, and orangutan conservation campaign props such as T-shirts. See Fig. 5.

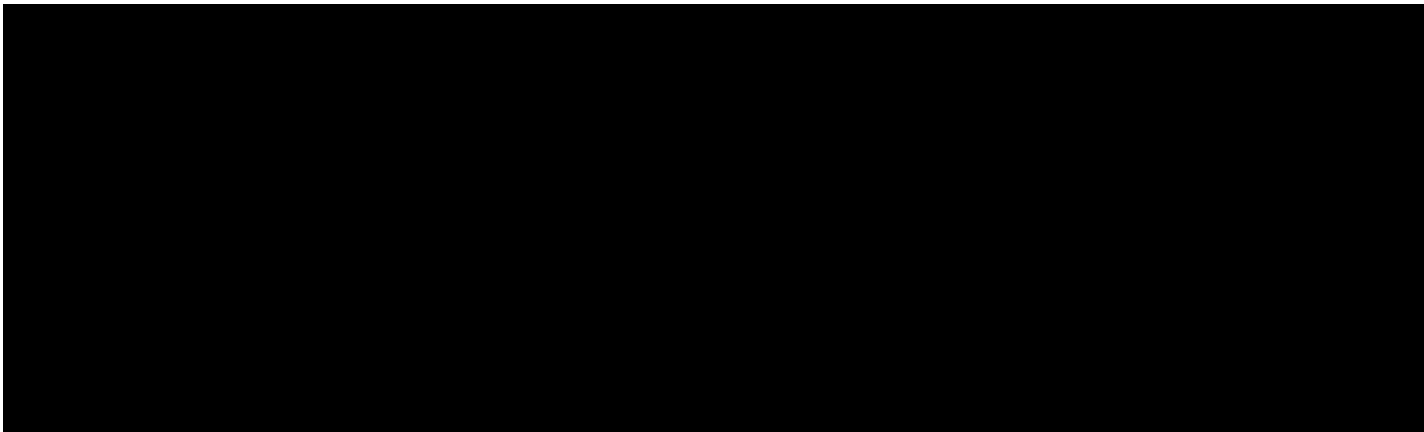
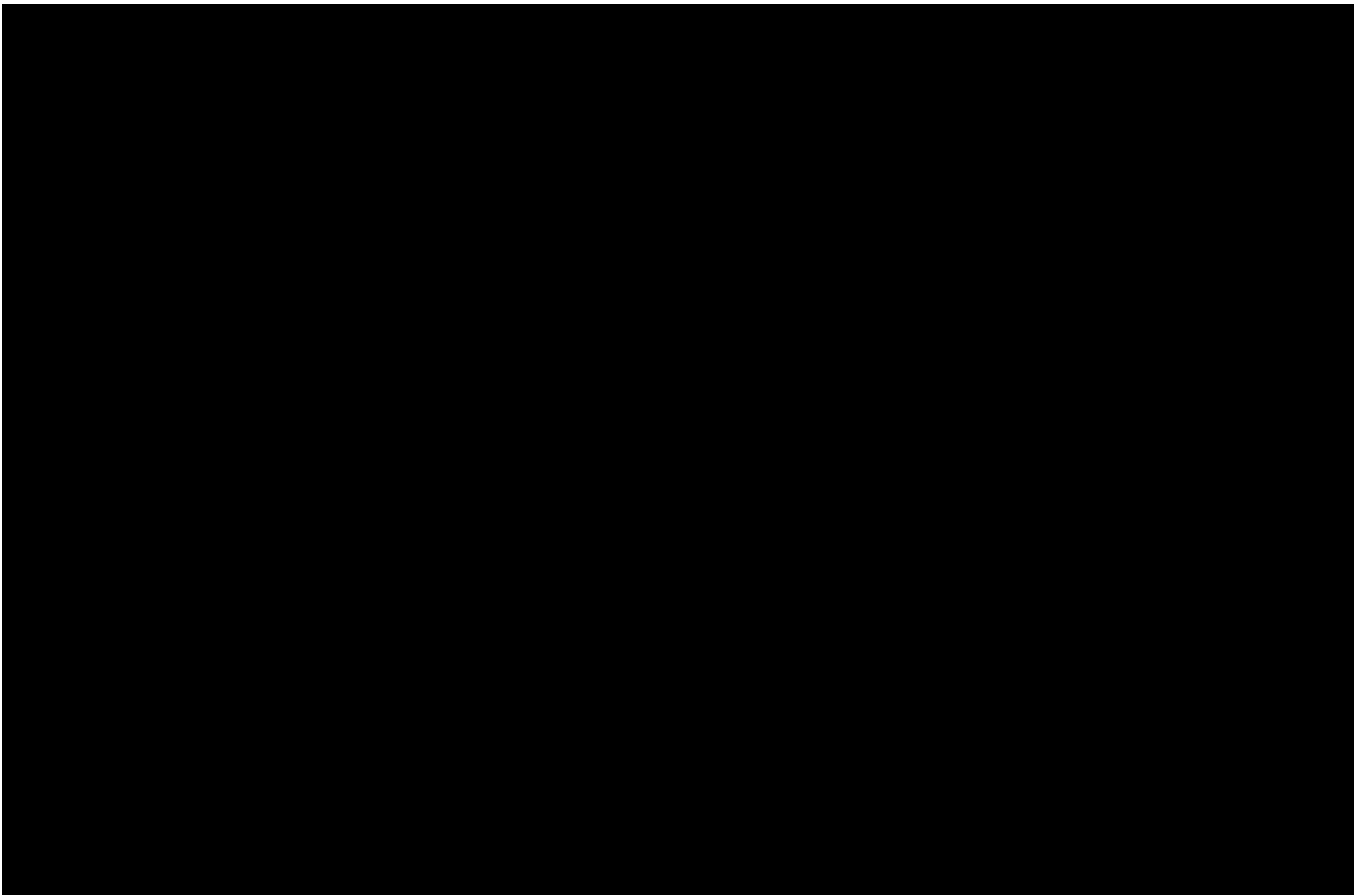


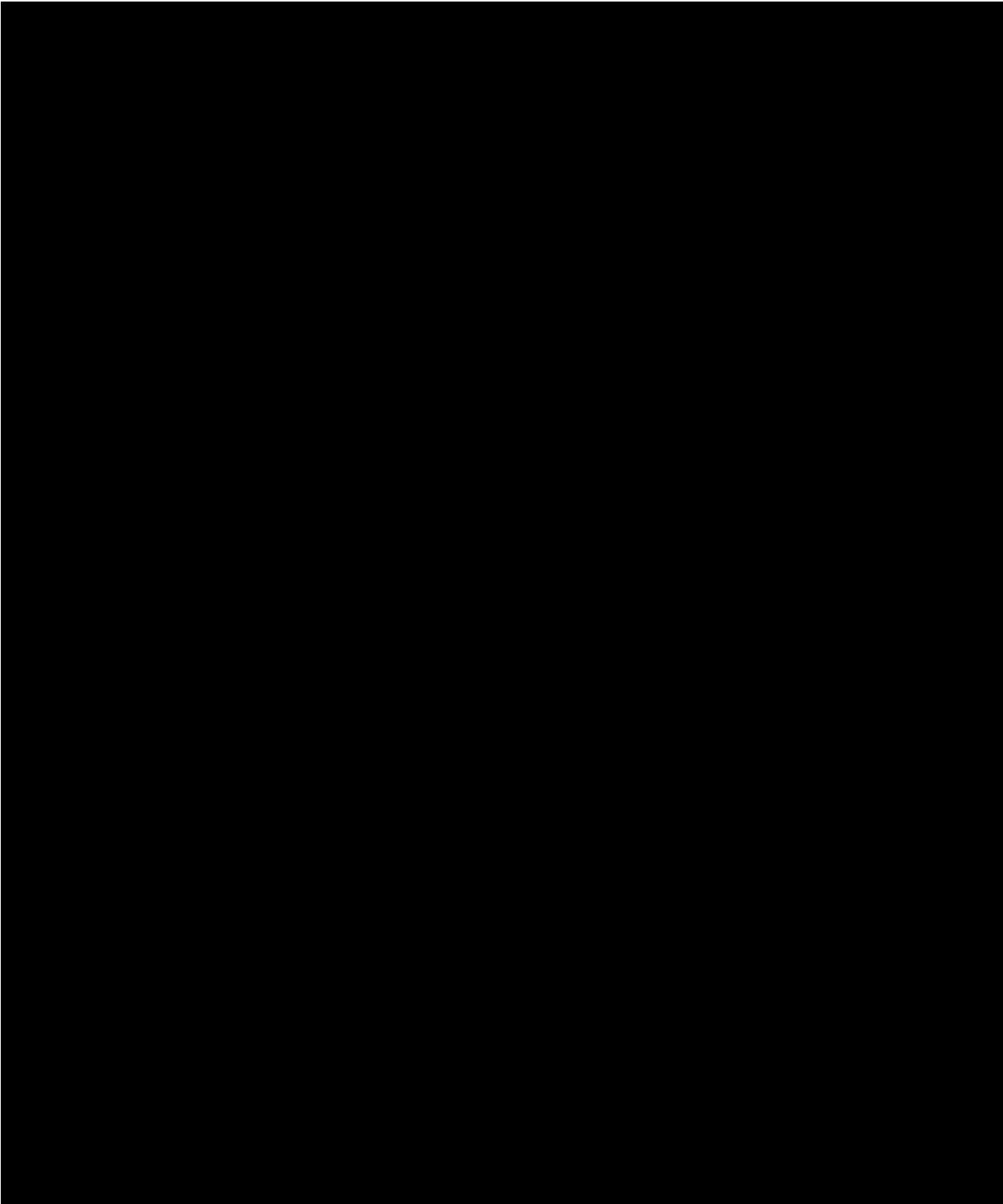
Fig.5. We promoted and acknowledged Darwin Initiative and the UK Government, among others on the micro-hydropower notice board (left), banner (middle) and T-shirt

At national level, Darwin Initiative has been well known by the MoEF and has a good reputation, as reflected in the comment from one of high officials: “The Darwin Initiative has been a good donor that support species conservation”. The PI also shared funding opportunities from the Darwin Initiative to colleagues and partners, and provided guidance for those who were preparing reports.

In Year3, we continued promoting the project to a wider audience by linking with CIFOR high level events, e.g. Measurable Action for Haze-Free Sustainable Land Management in Southeast Asia (MAHFSA) Learning Exchange Event and Field Visit, organized by the ASEAN Secretariat in partnership with CIFOR, 10-11 February 2025, Riau, Indonesia. The handwoven scarves produced by the women in the project locations were given as souvenirs for VVIP speakers (Annex 5).

13. Safeguarding





14. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2024 – 31 March 2025)

Project spend (indicative) since last Annual Report	2024/25 Grant (£)	2024/25 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				

Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
TOTAL	£ 162,529			

Table 2: Project mobilised or matched funding during the reporting period (1 April 2024 – 31 March 2025)

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)			
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

We do not have further comments. All issues have been covered in other sections.

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

I agree for the Biodiversity Challenge Funds to edit and use the following for various promotional purposes (please leave this line in to indicate your agreement to use any material you provide here).

The project has successfully improved the access of communities of 4 hamlets to electricity, which enabled women to handweave comfortably with sufficient lightings. We have written a story of how electricity has empowered women for the donor's newsletter, and now awaiting for publication.

Another notable achievement is the stable populations of the orangutans and their habitat in the project locations. However, this finding is not published yet. The data is still being analysed, and a scientific article will be written and submitted to open access journal.

[Image, Video or Graphic Information:](#)

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

Annex 1: Report of progress and achievements against logframe for Financial Year 2024-2025

Project summary	Progress and Achievements April 2024 - March 2025	Actions required/planned for next period
<p>Impact</p> <p>Improved protection of orangutans and their habitat outside protected areas in Borneo with reduced poverty of local communities, serving as a scalable model for similar areas in Indonesia.</p>	<p>We had conducted activities towards the expected pathway to change, i.e. development and operationalisation of 4 micro-hydropower plants (MH) in 4 hamlets, planted 8,037 seedlings to rehabilitate degraded land in 4 hamlets, orangutan population monitoring and forest patrol, capacity building for local communities of 4 hamlets in MH maintenance and for women of 6 hamlets in producing and marketing non timber forest products/NTFPs (please see more details in Section 3.1 and 3.5). All activities were conducted in fully participatory ways, aimed to build local communities self-efficacy and resilience.</p>	
<p>Outcome: Local communities and relevant authorities have enhanced capacity, knowledge and incentives to conserve orangutans' habitat, their forest, and improve their livelihoods</p>		
<p>Outcome indicator 0.1: By 2025, 75% of households in four targeted hamlets use electricity generated by micro-hydro (MH) power plants and water pipes as their source of energy and have clean water</p>	<p>By 31 March 2025, 100% of households in all (4) targeted hamlets use electricity generated by the MH plants from the project as source of energy; 100% of households in two hamlets have clean water supply installations (1 hamlet was funded by the government, the other 1 was by the project, co-funded by Women of Wildlife organisation). Preparation for the clean water supply installations in 3 other hamlets were done in Year3 Q4, and development of water reservoir will be done in Year Q1.</p> <p>DI-D04: improved access of total 107 (100%) households (149 women, 175 men) to electricity;</p> <p>DI-D04c: improved access of total 61 (100%) households (73 women, 98 men) to clean water. By end of project, in total it will be 5 hamlets. Total number of people with improved access to clean water will be reported in the Final report.</p>	<p>In Year4, the project will continue communicate with the MH maintenance groups in 4 hamlets to monitor the performance of the MH and the maintenance groups, and facilitate development of the water reservoir and clean water installations in 3 last hamlets as detailed in Section 3.1.</p>
<p>Outcome indicator 0.2: By 2025, at least 2 women's associations of NTFP producers successfully establish a partnership agreement with one company.</p>	<p>By end of March 2025, 3 handweaver (all women) associations established contact with loyal buyers and with the Head of District Craft Council and the Head of District Industry Service, and received orders regularly from them. As reported in Section 3.3, partnership agreement requires consistencies of products which would be difficult to meet</p>	<p>Activities in Year4 Q1:</p> <p>Training for women on making natural dye (for those who haven't been trained before);</p>

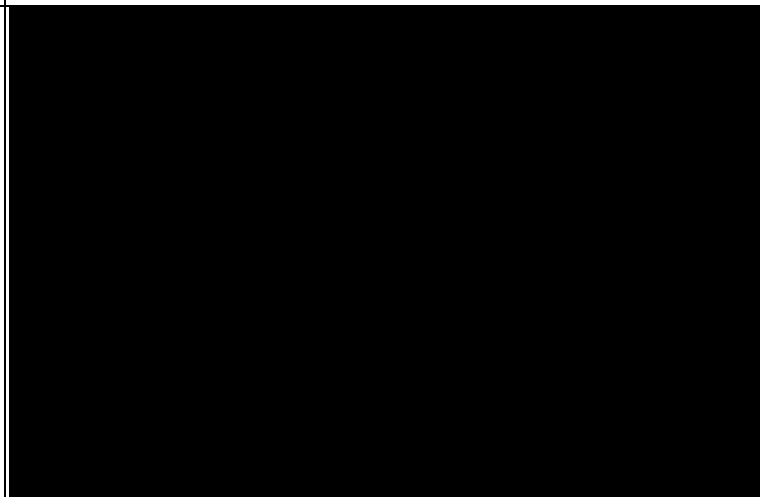
	<p>due to the nature of handmade products and some traditional norms. Therefore we propose to revise this outcome indicator to DI-A03 and DI-D03b.</p> <p>DI-A03: 3 women associations</p> <p>DI-D03b: 46 women (25 from Kedungkang, 13 from Pelaik, 8 from Keluin)</p>	<p>Continue support the women to apply for distribution permit and halal certificate of the food products in order to meet market requirement.</p> <p>Continue strengthening the women's associations.</p>
Outcome indicator 0.3: By 2025, the population of orangutans in target locations shows no decline from 2022 baseline.	Total five rounds of orangutan population monitoring in Year1-3 showed fluctuating populations across 10 transect locations. By looking at the data from transects located in three clusters of forest (Annex 7), this might suggest that the orangutans were moving across transect locations in the same forest cluster to find fruit-bearing trees. Additional surveys in 7 locations inside DSNP will complement the data and to check this assumption.	Analyse the data and write a scientific article for open access journal. Writing and review process may exceed the end-date of the project. When published, the article will contribute to DI-C02 (1 country, 1 species).
Outcome indicator 0.4: By 2025, the extent of orangutan habitat in project locations is maintained from 2022 baseline.	The extent of the orangutan habitat in Year3 in the project locations (4 hamlets) was relatively stable compared to baseline in Year1, i.e. 714,995 ha. Outside the project locations, a large oil palm company started its operation.	Connect with other institutions and NGOs to jointly raise concerns to the government.
<p>Outcome indicator 0.5: By 2025, at least 1 regulation/ policy framework/ management plan/ strategic planning from relevant authorities (planning agency and/or conservation agency) addressing orangutans' habitat and forest conservation uses data sources resulting from the project's participatory monitoring system;</p> <p>Outcome indicator 0.6: By 2025, at least 2 stakeholder organisations (e.g. Directorate General of KSDAE, and Kapuas Hulu District Government) use participatory approaches and key lessons from linking poverty alleviation with conservation in their planning of similar initiatives.</p>	<p>Authorities at the district level have adopted the participatory poverty reduction approaches and key findings from orangutan population monitoring in the multistakeholders workshops and in the Collaborative Management Plan of Danau Sentarum Catchment Areas. Number of stakeholder organisation use the participatory approaches: 1 (the District Government).</p> <p>DI-B01: 1 country (Indonesia); type: improved. Status at the end of Year3: format revision following the new regulation from the central government.</p> <p>Four villages developed Village Regulations to strengthen customary rules that protect the orangutans and their habitat. DI-B03: 1 country (Indonesia) but at village levels, i.e. 4 villages (status at the end of Year3: under revision, following feedback from the District Legal Bureau). Type: new.</p> <p>The project's key findings and recommendations were also shared in the West Kalimantan Orangutan Regional Meeting in April 2025, and will be integrated into the Proceeding and the new Orangutan Conservation Strategic Plan and Action (to be reported in the Final Report). Number of stakeholder</p>	<p>Continue facilitate the legislation processes of the management plan and village regulations;</p> <p>Continue contribute to the development of new Orangutan Conservation Strategy and Action Plan.</p>

	organisation use the key findings: 1 (Directorate General of KSDAE of MoF).	
Output 1 Improved access to electricity and clean water by targeted local communities		
Output indicator 1.1: 4 micro-hydro power plants and clean water supply installations are operational in 4 hamlets (1 per hamlet: 2 hamlets in 2023 and 2 other hamlets in 2024).	<p>By end of March 2025, 4 micro-hydropower plants are operational in 4 hamlets, and all are self-maintained by the local communities. DI-D04: improved access of total 107 (100%) households (149 women, 175 men) to electricity</p> <p>100% of households in 2 hamlets have clean water supply installations (Kedungkang hamlet was funded by the government, Pelaik hamlet was co-funded by the project and the Women of Wildlife organisation). Preparation for the clean water supply installations in 3 other hamlets were done in Year3 Q4, and development of water reservoir will be done in Year Q1.</p> <p>DI-D04c: improved access of total 61 (100%) households (73 women, 98 men) to clean water. By end of project, in total it will be 5 hamlets. Total number of people with improved access to clean water will be reported in the Final report..</p>	Continue facilitate installation of clean water supplies in the last 3 hamlets.
Output indicator 1.2: At least 2 members per household in all hamlets (2 hamlets in 2023, 2 in 2024) are trained to implement technical and safety procedures and maintain the electricity and clean water installation.	In total 21 men (DI-A05) of 4 MH hamlets (9 from Kedungkang, 6 from Pelaik, 3 respectively from Entebuluh and Sungai Iring) were trained as trainers on the operation, maintenance and safety preocedures of the MH systems. These 21 people have trained other community members including women in informal and step-by-step ways.	Continue communicate with the communities of the 4 hamlets to monitor the MH operation, clean water supply installation and performance of the maintenance groups.
Output indicator 1.3: 1 operational and maintenance group is established in each hamlet for the MH plant and 1 for water supply in 2024.	The MH operational and maintenance groups were established and common rules were developed in the 4 hamlets.	
Output 2. Marketing mechanisms and capacity to produce marketable non-timber forest products (NTFP) are established		
Output indicator 2.1: At least 1 training for 1 women’s association of NTFP producers and elders in project locations is conducted every year in production of high-quality products, packaging, marketing, building small-scale fruit seedlings nursery, management of small enterprises, etc	<p>In year1-3, in total 4 structured training events (2 per year) were organized by the project, participated by women from 7 hamlets (Kedungkang, Pelaik, Keluin, Sungai Ajung, Ngaung Keruh, Entebuluh, Kelawik):</p> <ul style="list-style-type: none">Training on handweaving, February 24. DI-A01: 29 participants, all women;	In Year4 Q1: Conduct another training on natural-dye techniques for those who have not yet been trained.

	<ul style="list-style-type: none"> • Training of production and marketing of local food products, March 2024: DI-A01: 15 participants (13 women, 6 of them participated in the handweaving training; 2 men); • Training on natural-dye techniques, Aug 2024: 18 women. DI-A01: 14 women who participated in handweaving training in Year2 and 4 new participants (2 women respectively from Entebuluh and Kelawik); • Training on business plan and managing small enterprise: Feb. 2025: 20 women. DI-A01: 16 participants who participated in the local food production training in Year2 and 4 new participants. • A series of meetings to strengthen the women associations; <p>3 women representing the associations also participated in a training organized by the District Health Service on the requirements to apply for distribution permit, July 2024.</p> <p>Note: As the there were some women participated in more than 1 training, to avoid double counting, we will report the final number for DI-A01 in the Final Report.</p>	
Output indicator 2.2: 2 representatives of women's associations in project locations participate in 2 regional or national exhibitions and 1 international event in 2023 and 2024 to introduce their products to market and meet potential buyers and relevant government actors	<p>Year2: four representatives of the local communities (3 women, 1 man) participated in 3 events (2 national, 1 international). See details in Section 3.1 under Output indicator 2.2.</p> <p>Year 3: 4 women participated in 2 international exhibitions; 2 in international exchange programs facilitated by another institutions (detailed in Section 3.1 under Output indicator 2.2).</p> <p>The women shared lessons learnt from their participation in those events to other members of the associations.</p> <p>DI-A03: 3 local associations.</p>	Continue facilitate the women to link with market and to apply for distribution permit and halal certificate of the food products
Output indicator 2.3: 60% of the planted seedlings supporting production of NTFPs indicate good growth (observed from height, leaves, stem size) by end of the project.	In Year2, the women in the project locations made a list of natural dye plants, and indicated which ones might require planting. In Year3, they planted 2 types of plants i.e. <i>engkerebai</i> (<i>Psychotria malayana</i>) and <i>rengat</i> (<i>Clerodendrum laevifolium</i>). While the engkerebai indicated good growth, rengat did not, which might be caused by bad seeds.	Continue facilitate the women to mobilise their network to find good seeds of rengat, yellow root and other species for natural dye.

	As detailed in Section 3.1 Output indicator 2.3, we propose to revise this indicator to 'At least 3 species of natural dye plants are planted and cultivated by the women for supporting the NTFPs production'.	
Output 3: Findings from participatory monitoring of forest conditions and orangutan population is available to inform multiple level decision making		
Output indicator 3.1: Three-monthly participatory forest monitoring patrols and six-monthly orangutan population monitoring (both including 2022 baseline) are conducted in local communities' territory every year	<p>Six-monthly orangutan population monitoring in 10 transect locations and forest patrol in 4 hamlets were conducted as planned. Total: 5 rounds.</p> <p>In addition, we received matching funds to conduct additional monitoring of the orangutan population in 7 transect locations inside the DSNP. Total: 1 round in Year3, another round in Year4.</p>	Analyse data and write scientific article to report the results of the monitoring, to be submitted to open access journal. When published, the article will contribute to DI-C02 (1 country, 1 species).
Output indicator 3.2: Key findings from orangutan population monitoring and habitat conditions are disseminated at least at 2 high-level events per year.	<p>The key findings were shared and discussed in a series of meetings with the Betung Kerihun-Danau Sentarum National Park Authority in May and July 2024, and February 2025; and in the West Kalimantan Orangutan Regional Meeting organized by the West Kalimantan Conservation Agency and FOKKAB.</p> <p>The project approach and lessons learnt were disseminated at 1 international event, i.e. the Forests & Livelihoods: Assessment, Research, and Engagement (FLARE) 2024 Annual Meeting, Rome, 3-7 October 2024 through 2 presentations at 2 sessions, detailed under Output 5.</p> <p>Integration of protection of orangutan habitat in the Danau Sentarum Catchment Areas Management Plan, which is now being written in the latest format, following new regulation from the central government. DI-B01: 1 management plan is available and endorsed by the District Government.</p> <p>Facilitation to improve protection of the orangutan habitat outside protected areas through the following activities:</p> <p>Training for communities along Labian-Leboyan watersheds on drafting village regulation (matching funds from the IKI-BMUB COLANDS project). Results: 4 Village Regulations developed and submitted. These village regulations are now being revised following the feedback, and will be resubmitted in Year4 Q1. DI-B03: 1 country (Indonesia), 4 villages' new regulations.</p>	<p>Continue share key findings in high-level events and participate in policy processes including development of new Orangutan Conservation Strategy and Action Plan;</p> <p>Continue support Village Regulations and Customary Forest Proposal until they receive approval.</p>

	Assisted the Pelaik people to finalise customary forest proposal and prepare supporting documents to get legal recognition of their customary territory, in collaboration with AMAN, BRWA and Lanting Borneo NGO. The proposal is now awaiting for verification by the committee. When the proposal is approved and customary forest certificate is granted, it will contribute to DI-B06: 66 people (27 women, 39 men). Typology of tenure: ownership rights over the indigenous territory. Verified extent of the customary forest: 4,318 Ha.	
Output 4: Degraded forests and areas are rehabilitated to extend usable orangutan habitat.		
Output indicator 4.1: By 2025, in total 8,000 seedlings of orangutan food trees and nesting trees are planted in degraded forests and areas (2,000 seedlings per targeted hamlet)	From Year1 to Year3, in total there were 8,037 seedlings of orangutan food and nesting trees planted in the four hamlets (2,139 in Kedungkang, 2,114 in Pelaik, 2,000 in Entebuluh and 2,054 in Sungai Iring). Details are provided in Annex...	Continue facilitate participatory monitoring maintenance in all 4 hamlets.
Output indicator 4.2: By 2025, at least 75% of the planted seedlings grow well (observed from height, leaves, stem size)	40-85% of the planted seedlings showed good growth, and the dead seedlings were replaced by new ones by the local communities. As each species showed different survival rate, the dead seedlings of species with lowest rate were replaced by other species.	Continue facilitate participatory monitoring and maintenance of the planted seedlings.
Output 5: New data, knowledge, research and policy recommendations about the link between poverty alleviation and conservation are produced and shared at multiple levels.		
Output indicator 5.1: New knowledge products in various forms and recommendations are produced and disseminated to targeted stakeholders: 1 in 2022, and at least 2 respectively in 2023, 2024 and 2025.	<p>The project wrote 2 related articles on how the project contributed to achieve Gender Equity and Social Inclusion (GESI):</p> <p>The 1st article titled <i>Micro-hydropower: Empowering Women</i> describes the positive outcomes of the electricity for women, submitted for the donor's newsletter in January 2025.</p> <p>The 2nd article <i>Addressing GESI: Lessons from the Field</i> describes the different gender equity/inequity situations in different locations, and explains the needs to use approaches and tools that are appropriate for the different context. The article was published in CIFOR-ICRAF Project News page https://www.cifor-icraf.org/news/corporate-news/addressing-gesi-lessons-from-the-field/, and also attached as Annex.....</p>	<p>Finalise the short videos;</p> <p>Write 1 journal article resulted from the orangutan monitoring;</p>
5.2 Knowledge sharing events at multiple levels are organized once a year in 2023/2024 and 2024/2025 respectively at regional and/or national level to share key results and raise awareness of	The project shared key results and approaches to link orangutan conservation and poverty reduction in FLARE	Organize an expose and knowledge sharing event to share the project approach, key

<p>the links between orangutan conservation and poverty reduction to different stakeholder groups.</p>	<p>2024 Annual Meeting, Rome, 3-7 October 2024 through 2 presentations at 2 sessions::</p> <ul style="list-style-type: none"> • The 1st presentation “Community-based orangutan protection and poverty alleviation: approaches, methods and SMART indicators to ensure gender equity and sustainability of outcomes” (Annex 9a), presented in Session 27 on “Conservation and community planning tool”. • The 2nd presentation “Gender Transformative Tools” (Annex 9b), presented in one of the conference workshops “Gender, Equity and Social Inclusion (GESI) in Forestry/ Agroforestry Projects: Workshopping tools for change”. <p>The PI gave presentation at the British Jakarta School on 21 March 2025 following their invitation. Participants: 4th grade students aged 8-9 years (Annex 9c).</p> <p>The project contributed to a knowledge-sharing and coordination meeting, i.e., the West Kalimantan Orangutan Regional Meeting which was planned in February 2025, but rescheduled to 16 April 2025 (will be reported in the Final Report).</p>	<p>findings and lessons learnt at higher level.</p>
<p>5.3 At least 1 awareness raising program event is organized every year to strengthen customary rules and formal law enforcement on orangutan and forest protection in 2023 and 2024, involving customary leaders, law enforcement institutions, government across levels and other relevant stakeholders</p>		<p>Finalise and publish the orangutan video;</p> <p>Conduct an awareness program for local stakeholder groups to strengthen their customary rules and institutions to help protect the orangutans.</p>

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

Project summary	SMART Indicators	Means of verification	Important Assumptions
Impact: Improved protection of orangutans and their habitat outside protected areas in Borneo with reduced poverty of local communities, serving as a scalable model for similar areas in Indonesia.			
Outcome: Local communities and relevant authorities have enhanced capacity, knowledge and incentives to conserve orangutans' habitat, their forest, and improve their livelihoods	0.1 By 2025, 75% of households in four targeted hamlets use electricity generated by micro-hydro (MH) power plants and water pipes as their source of energy and have clean water;	01. 3-monthly participatory monitoring reports on the operation of the MH plants and clean water supplies, by targeted hamlet (2022-2025);	COVID-19 pandemic abating so that field work can be implemented as planned.
	0.2 By 2025, at least 2 women's associations of NTFP producers successfully establish a partnership agreement with one company;	02. Signed partnership agreements with targeted associations in 2025;	Regional, national and international economic development is showing continued signs of improvement following COVID-19 pandemic, therefore allowing recovery of market of the local communities' products
	0.3 By 2025, the population of orangutans in target locations shows no decline from 2022 baseline;	03.a. 2022 Baseline report; 03.b. Six-monthly orangutan population monitoring reports using nest surveys methods (2022-2025);	No natural disaster that may endanger the orangutans and/or alter the extent of forest.
	0.4 By 2025, the extent of orangutan habitat in project locations is maintained from 2022 baseline;	04a. 2022 Baseline report 04b. Annual analysis using remote sensing, GIS and 1:50,000 ecological vegetation map (2022-2025) 04c. Bi-monthly forest patrol reports using indicators jointly developed with the communities (2022-2025)	Political and social situation in the region and targeted hamlets remain stable.
	0.5 By 2025, at least 1 regulation/ policy framework/ management plan/ strategic planning from relevant authorities (planning agency and/or conservation agency) addressing orangutans' habitat and forest conservation uses data sources resulting from	05.a. Quarterly project outcome influence logs (2022-2025) 05.b. Formal regulation/ policy framework/ management plan/ strategic planning, referencing our knowledge product as the source of data	The project maintains good relations and communication with the government, local communities and other key stakeholders. National and regional authorities are committed to protect the orangutan habitat outside protected areas. Conditions of river, topography and distance to settlement make the development of micro-hydropower and clean water supply technically feasible.

	<p>the project's participatory monitoring system;</p> <p>0.6 At least 2 stakeholder organizations (e.g. Directorate General of Conservation of Natural Resources and Ecosystem, and Kapuas Hulu District Government,) use participatory approaches and key lessons from linking poverty alleviation with conservation in their planning of similar initiatives</p>	<p>06.a. Evaluations of knowledge sharing workshops demonstrating participants' willingness to use participatory approaches in planning processes, and follow-up semi-structured interviews (2022-2025)</p> <p>06.b. Quarterly project outcome influence logs (2022-2025)</p>	
Output 1: Improved access to electricity and clean water by targeted local communities	<p>1.1. 4 micro-hydro power plants and clean water supply installations are operational in 2 hamlets in 2023 and 2 other hamlets in 2024 (1 per hamlet);</p> <p>1.2. At least 2 members per household in all hamlets (2 hamlets in 2023, 2 in 2024) are trained to implement technical and safety procedures and maintain the electricity and clean water installation;</p> <p>1.3. 1 operational and maintenance group is established in each hamlet for the MH plant and 1 for water supply in 2024.</p>	<p>1.1.a. Monitoring reports, including photos and videos of installed equipment and feedback from local communities in 2023 and 2024</p> <p>1.1.b. Signed receipts by households receiving electricity and clean water supply in 2023 and 2024</p> <p>1.2 Training attendance sheets, pictures of participants;</p> <p>1.3 Communal rules to monitor and maintain the electricity and clean water installation jointly written by hamlet's operational and maintenance groups.</p>	<p>River physical characteristics (flow, slope, water pressure, gravity flow, riverbed shape and substrate etc.) are suitable for development of micro-hydropower and clean water pipes installation.</p> <p>No significant shifts in seasons (dry season usually occurs from July to September) so that construction of the micro-hydropower and clean water pipe can take place as planned to minimize negative impact to freshwater species.</p> <p>All required equipment is available and can be transported to the hamlets on time.</p>
Output 2: Marketing mechanisms and capacity to produce marketable non-timber forest products (NTFP) are established	<p>2.1 At least 1 training for 1 women's association of NTFP producers and elders in project locations is conducted every year in production of high-quality products, packaging, marketing, building small-scale fruit seedlings</p>	<p>2.1.a. Training course attendance certificates</p> <p>2.1.b. Yearly training evaluations demonstrating a change in knowledge associated with the topics covered</p>	<p>Efforts to increase income from producing traditional handicrafts, do not lead to overexploitation of the plants resources.</p> <p>It is technically possible to grow selected plants in nurseries.</p>

	<p>nursery, management of small enterprises, etc.</p> <p>2.2 2 representatives of women's associations in project locations participate in 2 regional or national exhibitions and 1 international event in 2023 and 2024 to introduce their products to market and meet potential buyers and relevant government actors;</p> <p>2.3 60% of the planted seedlings supporting production of NTFPs indicate good growth (observed from height, leaves, stem size) by end of the project.</p>	<p>2.2. Project documentation, including reports, photos and videos of participation at selected events in 2023 and 2024</p> <p>2.3. 3-monthly monitoring reports of the planting activities and its maintenance, including photos and videos (2022-2025)</p>	<p>The producers are able to get product to market in a timely way such that quality does not degrade.</p> <p>No natural disaster or significant shifts in seasons that can alter the growth of planted seedlings and the fruiting season of wild fruits. COVID-19 pandemic abating so that regular exhibitions/events take place.</p> <p>Women's association's producers members are able to attend training courses and travel to selected events' locations</p>
Output 3: Findings from participatory monitoring of forest conditions and orangutan population is available to inform multiple level decision making.	<p>3.1 Bi-monthly participatory forest monitoring patrols and six-monthly orangutan population monitoring (both including 2022 baseline) are conducted in local communities' territory every year.</p> <p>3.2 Key findings from orangutan population monitoring and habitat conditions are disseminated at least at 2 high-level events per year.</p>	<p>3.1. Six-monthly monitoring of orangutan population (quantitative using nest survey methods)</p> <p>3.2. Events evaluation demonstrating an increased awareness of the topics covered among participants. The evaluation will be done through the following techniques: (a) participants' self-assessment of knowledge or skills before and after each event using dot voting; and (b) blog stories, video documentation of participants comments and/or follow-up actions of the events, and media coverage.</p>	<p>Relevant authorities, private sector actors and development practitioners are committed to conservation of forest and protection of orangutan's habitat outside protected areas</p>
Output 4: Degraded forests and areas are rehabilitated to extend usable orangutan habitat	<p>4.1 By 2025, in total 8,000 seedlings of orangutan food trees and nesting trees are planted in degraded forests and areas (2,000 seedlings per targeted hamlet).</p>	<p>4.1 Three-monthly monitoring reports, including reports, photos and videos of replanting, monitoring and maintenance activities</p>	<p>Customary leaders, hamlet members, and relevant government sectors are willing to engage in jointly selecting locations for the rehabilitation (to minimize risks of overlapping claim of land tenure).</p>

	4.2 By 2025, at least 75% of the planted seedlings grow well (observed from height, leaves, stem size).	4.2 Project documentation, using drone, GIS and 1:50,000 ecological vegetation map in 2022 and 2025	No significant shifts in seasons (rainy season usually starts in October) so that planting can start at the beginning of rainy season to ensure good growth of the seedlings
Output 5: New data, knowledge, research and policy recommendations about the link between poverty alleviation and conservation are produced and shared at multiple levels	<p>5.1 New knowledge products in various forms and recommendations are produced and disseminated to targeted stakeholders: 1 in 2022, and at least 2 respectively in 2023, 2024 and 2025;</p> <p>5.2 Knowledge sharing events at multiple levels are organized once a year in 2023/2024 and 2024/2025 respectively at regional and/or national level to share key results and raise awareness of the links between orangutan conservation and poverty reduction to different stakeholder groups;</p> <p>5.3 At least 1 awareness raising program event is organized every year to strengthen customary rules and formal law enforcement on orangutan and forest protection in 2023 and 2024, involving customary leaders, law enforcement institutions, government across levels and other relevant stakeholders.</p>	<p>5.1 Knowledge products (e.g. blog stories, short videos featuring key activities, immediate outcomes and opinions or reflection from participants, presentation in strategic events, open access journal articles, and/or CIFOR occasional papers);</p> <p>5.2a. Events evaluation demonstrating an increased awareness of the topics covered among participants. Evaluation will be done with the same techniques as detailed in 3.2 above;</p> <p>5.2b. Publications and events database;</p> <p>5.3a. Events evaluation demonstrating an increased awareness of the topics covered among participants;</p> <p>5.3b. Publication and events database</p>	Relevant authorities and development practitioners are committed to conservation of forest and protection of orangutan's habitat
<p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p> <p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p> <p>1.1 Baseline studies in project locations on the orangutan population, habitat conditions, main threats, the extent of the forest and degraded areas, status of the forest, sources of livelihoods of the local people, types of source of and access to electricity and clean water (if any), number of potential beneficiaries, historical trend of NTFPs production and sale, associations, marketing mechanisms and lessons learned. .</p> <p>1.2 Technical studies and environmental impact assessment to plan micro-hydropower and water pipe installation.</p>			

- 1.3 Community meetings to jointly plan next steps, share roles and responsibilities, build sense of belonging and self-motivation, and avoid over-reliance of the communities on external actors
- 1.4 Construction of micro-hydropower and clean water installation led by the experts (consultants)
- 1.5 Training for the local communities on technical and safety procedures to maintain the equipment

- 2.1 Training for women's associations and elders to improve the quality of various NTFP products and packaging to meet market standards and increase value, to manage small enterprises, in financial management, promotion and communication with consumers, understanding agreements, building and maintaining local fruit seedlings nursery, etc.
- 2.2 Facilitate the women's associations to create links and develop partnership with relevant government sectors, private sectors and consumers through participation in regional, national and international events.
- 2.3 Facilitate meetings/workshops with NTFP producer associations from other regions to discuss opportunities, challenges and strategies.
- 2.4 Support local communities in growing and sustaining the plants used in the production of the NTFPs through replanting in their natural ecosystems.

- 3.1 Facilitate multistakeholder meetings to discuss the plan, objectives, team members, schedule, followed by joint development of indicators of forest patrol and training on nest surveys methods
- 3.2 Conduct 2022 baseline of orangutan population followed by six-monthly monitoring using nest survey methods
- 3.3 Bi-monthly forest patrol followed by reporting
- 3.4 Mapping, data verification, data management, analysis, reporting

- 4.1 Facilitate multistakeholder meetings to jointly select locations to rehabilitate and plan technical details (schedule, team etc.)
- 4.2 Conduct baseline and endline studies on the extent of land use classes including forest and degraded land using drone, GIS and vegetation cover analysis .
- 4.3 Support the building and maintenance of community nursery
- 4.4 Facilitate rehabilitation activities by local communities (planting, monitoring, maintenance)

- 5.1 At all stages of the project: communicate the project's objectives and progress through continuous communication and meetings with the local communities and relevant government at national, regional and local levels to ensure mutual understanding and to develop synergies.
- 5.2 Conduct awareness raising program to strengthen customary rules and formal law enforcement on orangutan and forest protection once a year in 2023 and 2024, involving customary leaders, law enforcement institutions, government across levels and other relevant stakeholders.
- 5.3 Production and dissemination of knowledge products, for instance through blog stories, short videos of maximum five minutes featuring key activities, immediate outcomes and opinions or reflection from participants, to be uploaded in CIFOR and Riak Bumi's social media accounts, and submission of scientific articles to open access journal.
- 5.4 Organize knowledge sharing events at regional and/or national level to share key findings and raise awareness on the links between orangutan conservation and poverty reduction to different stakeholder groups. Representatives of the local communities including women and other key stakeholder groups will be invited to directly share their experiences.

Table 1 **Project Standard Indicators [in blue: in progress. Still compiling the numbers]**

DI Indicator number	Name of indicator	Units	Disaggregation	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	People	Gender	0	42 women, 17 men	30 women, 15 men	42 women, 17 men	72 women, 32 men
DI-D04	Number of people with improved access to services or infrastructure for improved well-being (<i>electricity and clean water</i>)	People	Gender	0	61 HHs (73 women, 97men)	43 HHs (52 women, 73 men)	107 HHs (149 women, 175 men)	104 HHs (125 women, 170 men)
DI-B01	Number of new/improved habitat management plans available and endorsed (<i>Danau Sentarum Catchment Areas Collaborative Management Plan</i>)	Number	None	0	1	1	1	1
DI-B06	Number of Indigenous Peoples and Local Communities (people) with strengthened (recognised/clarified) tenure and/or rights.	People, Area	Gender	0	1 customary forest decree for Kedungkang people covering 12,187.49 Ha, including 6,069.38 ha of forest; 40 HHs (46 women, 58 men). Typology of tenure: ownership rights over the indigenous territory.	1 customary forest proposal for Pelaik people (21 HHs, 27 women, 39 men). Verified extent of the customary forest: 4,318 Ha. Typology of tenure: ownership rights over the indigenous territory.	1 decree for 6,069.38 ha of forest was granted; another decree for 4,318 Ha of forest is awaiting verification.	At least 2 customary forest decree; 10,077 ha of forest
DI-D01	Hectares of habitat under sustainable management practices. Note: the process was facilitated collaboratively by several institutions i.e. the project team (CIFOR and Riak Bumi), the Indigenous Peoples' Alliance of the Archipelago/AMAN, Lanting Borneo, Yayasan Konservasi Alam Nusantara/YKAN and the Indigenous Territory Registration Agency/BRWA.							
DI-C01	Number of best practice guides and knowledge products published and endorsed <i>Year1: Teachers' manual on biodiversity and article in The Conversation</i> <i>Year2: two presentations in XIX Biennial IASC Conference</i>	Number	Knowledge/ practice area, product typology	2	2	2	6	6

DI Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
	<i>Year3: two presentations in FLARE 2024 Annual Meeting</i>							
DI-C06	Number of downloads of new peer reviewed publications <i>(Paper on Bornean orangutan by Yuliani et al. published in Year1 Q4)</i>	Number	Downloads per year.	0	From CIFOR website: 200 downloads; From Wiley: 1,858 full text views.	From CIFOR website: 644 downloads From Wiley: 2,870 full text views.	644 downloads 2,870 full text views	n/a
DI-C14	Number of decision-makers attending briefing events <i>Year1-2: workshops on Collaborative Management of Danau Sentarum Catchment Areas)</i>	Number	Gender, types of decision-makers	9 women, 30 men (25 gov't, 5 NGO, 9 local people)	18 women, 65 men (70 gov't, 4 NGOs, 6 local people, 3 private sectors)	n/a	18 women, 65 men (70 gov't, 4 NGOs, 6 local people, 3 private sectors)	n/a
DI-C19	Number of other publications produced	Number	Publication typology	0	2	2 published, 2 will be published in Year4 Q1	6	4

Table 2 Publications

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)
Keeping Traditional Knowledge Alive for Future Generations.	Video	Yuliani, E.L., Heri, V., Almatsier, V. 2024.	Woman	Indonesian	CIFOR, Bogor	https://www.youtube.com/watch?v=SucEI5CM1ZY&t=45s

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)
Kehidupan Mayas: Pengalaman Masyarakat Sekitar Hutan <i>(The Orangutans' Life: Stories from Their Human Neighbors)</i>	Video	Yuliani, E.L., Adirahmanta, S.N., Almtsier, V. 2025.	Woman	Indonesian	CIFOR, Bogor in collaboration with the Betung Kerihun-Danau Sentarum National Park, Directorate General of Conservation, Ministry of Forestry	Will be launched in Year4 Q1
Addressing GESI: Lessons from the Field	Project news (online article)	Yuliani, E.L., Colfer, C.J.P., Ickowitz, A., Heri, V., Adnan, H. 2025.	Woman	Indonesian	CIFOR, Bogor	https://www.cifor-icraf.org/news/corporate-news/addressing-gesi-lessons-from-the-field/
Micro-hydropower: Empowering Women	Article for newsletter	Yuliani, E.L., Colfer, C.J.P., Ickowitz, A., Heri, V., Heni, V. 2025.	Woman	Indonesian	CIFOR, Bogor	Submitted on 31 January 2025 for the Darwin Initiative Newsletter

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the correct template (checking fund, scheme, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	
Is your report more than 10MB? If so, please consider the best way to submit. One zipped file, or a download option, is recommended. We can work with most online options and will be in touch if we have a problem accessing material. If unsure, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	
Have you provided an updated risk register? If you have an existing risk register you should provide an updated version alongside your report. If your project was funded prior to this being a requirement, you are encouraged to develop a risk register.	
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see Section 16)?	
Have you involved your partners in preparation of the report and named the main contributors	
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	

ⁱ In HYR3, we mistakenly put August. The right date was 31 July 2024.