

## Darwin Initiative Main Annual Report

To be completed with reference to the “Writing a Darwin/IWT Report” Information Note:  
(<https://www.darwininitiative.org.uk/resources-for-projects/reporting-forms-change-request-forms-and-terms-and-conditions/>).

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

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### Darwin Project Information

Project reference	28-004
Project title	Halting Biodiversity Declines through Enhanced Community Wellbeing in Indonesia
Country/ies	Indonesia
Lead organisation	Yayasan IAR Indonesia (YIARI)
Partner institution(s)	
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Start/end dates of project	1 <sup>st</sup> October 2021 to 31 <sup>st</sup> March 2024
Reporting period (e.g. Apr 2020 – Mar 2021) and number (e.g. Annual Report 1, 2, 3)	Annual Report 1 Reporting period: 1 <sup>st</sup> October 2021 to 31 <sup>st</sup> March 2022
Project Leader name	Karmele Llano Snachez
Project website/blog/social media	<a href="https://www.internationalanimalrescue.or.id">https://www.internationalanimalrescue.or.id</a>
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### 1. Project summary

Poverty, marginalisation and lack of opportunity drive small-scale, yet pervasive deforestation, forest degradation and biodiversity loss across much of Indonesia. The islands of Sumatra and Borneo, in particular, have experienced some of the highest forest conversion rates anywhere in the world (Margono *et al* 2014).

Agricultural encroachment, illegal logging and hunting are contributing to the gradual erosion of ecosystems and biodiversity in Batutegei Protection Forest (BPF - 58,174 ha, Lampung Province, Sumatra) and Bukit Baka Bukit Raya National Park (BBBRNP - a 181,000 ha national park in West Kalimantan).

A socio-economic study of the villages surrounding BBRNP found that approximately 79% of households were poor and that access to employment, education or healthcare is insufficient. The overwhelming majority (92%) of respondents met basic needs by taking out loans (when available) to pay for medical care (35%), education (25%) and food (21%). As a means to obtain quick revenues, local communities mostly turn to logging inside the park, with poorer households relying more heavily on unsustainable practices to meet these needs. The local orangutan population was almost decimated due to hunting, with 6 nests counted in 2015, while a large viable population existed sometime between 50 and

30 years ago. Almost half (42%) of the local community members have no formal education, making it harder for them to reduce their dependence on logging, encroachment and hunting.

BPF is composed of a core forest zone (12%) surrounded by a utilisation zone (88%) that allows for some economic activities (e.g. farming and non-timber forest product collection). Agricultural encroachment for coffee cultivation is the main threat endangering the persistence of the protection forest. Drivers are much the same as in BBBRNP with poverty, lack of opportunity and weak local forest governance being the most important. Local laws have not been adequately socialised to the tenant farmers and communities working within BPF, which has led to confusion over where hunting is permitted and which areas of the landscape can be utilised. In the villages surrounding BPF, 76% of people relied on farming as their primary source of income, and 62% were deemed to be living under the poverty line.

The proposed project will tackle these drivers through conservation agriculture and agroforestry programmes, secondary education scholarships, female literacy programmes, provision of essential healthcare, promotion of collaborative governance as well as job creation linked to wildlife reintroduction, SMART patrolling and long-term monitoring.

This project is working closely with the community and local government representatives, academic institutions, farming and healthcare professionals to improve monetary and non-monetary aspects of wellbeing for ~3,000 women and men, in ways that value and strengthen direct links between human prosperity and ecosystem protection. The project will also result in wild Bornean orangutan population increases and maintenance of at least six other threatened species' populations.

## 2. Project stakeholders/ partners

**Health in Harmony and sister organisation *Alam Sehat Lestari (ASRI)*** - ASRI has a particular interest in human health and conservation and has had a strong working relationship with YIARI for the past 10 years focusing on collaborations in Ketapang and Kayung Utara regencies in West Kalimantan. ASRI has implemented an effective Planetary Health programme within YIARI's two main target villages (Nusa Poring and Mawang Mentatai). Frequent informal communication between ASRI and YIARI field staff takes place through telephone, WhatsApp and face-to-face meetings. Senior Management staff have held three remote meetings to discuss making progress within three main areas of collaboration, namely Education and Literacy, Planetary Health and Community Empowerment. A joint logistical framework for the next 12-months has also been discussed and is in the final stages of production and agreement. Once this has been agreed upon, evaluation sessions between YIARI and ASRI will take place every three months.

**Batutege Forest Management Unit (*Kesatuan Pengelolaan Hutan (KPH)* a branch of the provincial government)** - YIARI and KPH have built up a strong and trusting relationship in the 15 years that YIARI has been working in BFP. The Head of KPH BPF was recently promoted to the Head of the Provincial Forestry Services (*Kepala Dinas*). Mr Yanyan is still very involved in overseeing the project at Batutege and offers advice and support to the new head of KPH Batutege. YIARI's Batutege Project Manager (Huda) communicates directly with Mr Yanyan and the new head of KPH Batutege, Mr Qodri. They discuss the progress and evaluation of the project, policy and regulations related to the farming groups, and mechanisms for establishing Forest Protection Units. Communication happens by phone, WhatsApp or face-to-face meetings in the field or at the office of KPH in Air Naningan, Tanggamus. A WhatsApp group was created between YIARI, KPH and farming groups to help coordinate sustainable farming and forest protection activities. This has improved the efficiency and frequency of communication between stakeholders. Communication occurs as and when required but on average every week. In January 2022, YIARI's project manager visited the KPH Office to discuss project activities and direction with the whole KPH team (10 people). YIARI's supervisors and field staff communicate directly with the head of divisions (*Kepala Seksi*), and forest police about patrol schedules, coordinating engagement with communities or members of farming groups and educational materials for the scouts ([Annex 4. 1](#)).

### **Lampung University (UNILA)**

Communication between YIARI and UNILA has been about once monthly over the last project period. Communication with the heads of the Biology and the Forestry departments occurred via phone,

WhatsApp and face-to-face meetings. YIARI's Batutegi Project manager (Huda) visited UNILA in Lampung in February 2022 and met with the heads of the two departments to discuss potential research projects at Batutegi including on indicator species monitoring, as well as on socio-economic and education aspects of the project. There have been some administrative delays in appointing a focal person within UNILA, but these should be resolved in Q3 2022.

**Bukit Baka Bukit Raya National Park Authority (BBBRNPA)** - We have a local office in N. Pinoh, where the BBRNP staff often drop in unannounced for informal weekly chats. The two most significant meetings that took place during this project period were the evaluation of our collaborative workplan in 2021 and the agreement on joint activities for 2022 ([Annex 4. 2](#)).

### 3. Project progress

#### 3.1 Progress in carrying out project Activities

##### Output 1:

###### 1.1 Run participatory rural appraisals to understand community needs in more depth.

Participatory rural appraisals are ongoing, but community needs are already starting to emerge more clearly. In BBRNP villagers have welcomed support to access vegetable markets more easily and cheaply where their produce (consisting of approximately 60 different vegetables and other products, mainly aubergines, cucumbers, chillies, bamboo shoots, taro and mustard greens) can be sold. This is because over half (58%) of farmers access village markets on foot, whereas about 30% use expensive community boats and 8% use motorbikes. As compared to communities in BPF, communities in BBRNP have shown lower levels of interest in agroforestry initiatives. Consultation so far suggests communities in BBRNP are both afraid of crop failure and think areas best suited to establishing agroforestry are too far from their villages. The project wants to better understand local concerns. Consultations will continue to deepen our understanding of the needs, obstacles and opportunities to improve local wellbeing through agro-biodiversity based livelihood approaches.

Income data for BPF farmers was collected through a rapid survey carried out on 15 farmers from three different farming groups in BPF: six members of the Farming Group (*Gapoktan*) Sumber Makmur (SM), four from Wana Tani Lestari (WTL) and five members of Mandiri Lestari (ML). The range of annual income for the Farming Group SM was IDR ██████████ (GBP ██████████), for WTL was IDR ██████████ (GBP ██████████), and for ML was IDR ██████████ (GBP ██████████) ([Annex 4. 3](#)). The estimation of annual income in IDR was calculated from the yields obtained from all arable land management activities (coffee, pepper, jengkol (*Archidendron pauciflorum*, a legume tree producing large high-protein seeds consumed in many dishes), durian and other crops). The income in rupiah was then calculated based on the value set by the Central Statistics Agency (BPS). This method is standard in rural Indonesia and was used because farmers themselves do not keep a record of their yearly earnings. More detailed socio-economic data for farmer groups in BPF will be collected in 2022 Q3 and Q4.

###### 1.2 Provide training resources and support to successfully grow agroforestry seedlings for at least 100 women and men.

In BPF, seven socialisation meetings and FGDs on agroforestry practices have been carried out with 88 local farmers from three different community groups (*gapoktan*): Farming group ML (2 FGDs and a total of 35 participants), SM (2 FGD and 27 participants) and WTL (3 FGDs and 26 participants). During these events, farmers were supported in learning about arable land management and maintaining canopy diversity. The SM group agreed to the planting of areca nut trees between the farmers' land boundaries. Data on plant diversity in the cultivated land has been collected for monitoring purposes and to contribute to the land management plan. Two agreements were signed and an activity planning schedule was drafted for the implementation of two agroforestry nurseries at KTH Beringin 4 (WTL group) and the Seputih Silam site (ML group). Socialisation meetings in agro-sylvopastoral systems were carried out with 13 farmers from the SM group, where farmers consent was sought going forward and data collection on the farmer's land use activities was planned. In total, between November and December 2021, the YIARI team assisted the community farming groups to plant 1,145 seeds ([Annex 4. 4 -A](#)). YIARI has mentored BPF's vegetable farmers. Before the start of this grant, five vegetable farmers from WTL group had already been mentored. Currently, there are 53 active farmers (52 men and 1 woman)

enrolled in the agroforestry programme from the three assisted community groups in BPF: 13 people from WTL, 20 from SM and 20 from ML. In this reporting period, four training sessions were provided to farmers in pest and disease control, livestock management, animal health and nursery plant care. In addition, goats, fences and animal feed were provided. Although women's participation is encouraged through female-only FGDs, there are still many obstacles to women's involvement in this landscape, mainly due to them being tasked with all childcare and domestic responsibilities and the challenges in balancing those with travelling the distance to the agricultural plots. Women occasionally come to help their husbands with farming duties, but this tends to be seasonal work only. The project will explore whether women might be able to take a lead on processing any of the produce once it has been harvested.

### 1.3 Provide agricultural training and market systems support to 144 women and men, and

### 1.4 Develop and implement action plans to improve production, storing, processing, packaging and selling of selected sub-sectors.

(these two activities are discussed together)

Consultations with 201 people in BBRNP (80 men and 121 women) identified vegetable market access as a major barrier to improving farmer wellbeing. Vegetable farmers were often discouraged from making trips to the local vegetable markets to sell their produce because of the high costs incurred in renting boats and buying gasoline for their motorcycles. Some of the farmers were making the trip on foot, but this resulted in them not being able to transport all their produce and ultimately making less money. It also put women at a disadvantage, as the increased time involved in travelling to and from the market was incompatible with looking after children and taking care of household chores.

The most efficient way to reach markets is via boat, so the programme discussed the purchase of a motorised boat (*klotok* in Indonesian) to be managed by the community group of interested farmers during 8 meetings in 4 villages and sub-villages. A total of 78 people (29 men and 49 women) discussed SOPs to be adopted in the management of the *klotok*. During this project period (November 21), an additional 8 female farmers from Nusa Poring received training on the use of safety equipment and safety SOPs. The new transportation system started to operate in December 2021.

By providing the community with access to a motorised boat, costs to vegetable farmers were halved (from IDR 120,000 (£6) to IDR 60,000 (£3) per person). Payments are used to cover the salaries of two trained boat drivers (who used to log in the national park for a living) and to pay for maintenance costs. Currently, 41 female farmers are benefiting from the *Klotok* programme and additional three local men are involved in book-keeping and operationalising the new system (including 2 male boat drivers).

Before the start of this project, two community farmer groups (54 members) were formed in Nanga Dawi and Sekujang sub-villages for the development of the 'Sugar Cane Processing programme'. This programme aims at improving the quality of a traditionally grown, high-value product by providing two processing machines, as well as training to the enrolled farmers. Before the start of this grant, socialization and training were provided to the community members, and 995kg of sugar cane were processed. During this reporting period, the project has continued to provide mentoring to those farmers in the processing, packaging of this product as well as in facilitating access to Serawai market.

As part of supporting these communities enhance benefits from agro-biodiversity based livelihoods the project is facilitating the following:

- Training on organic fertilizers, pesticides, fungicides and other environmentally friendly agricultural practices provided to 40 farmers (15 men and 25 women).
- Agricultural demonstration plots and the establishment of 4 women's groups (for a total of 38 female participants) ([Annex 4.5 -B](#)). The women's groups have prepared 13,56 m<sup>2</sup> of open land for planting.
- Fish farming and spawning training in three locations (i.e., Sekujang, Nanga Dawi, Nusa Poring) with the participation of 11 men. At the end of the training, the participants were able to distinguish between male and female catfish and understand the process and stages of catfish breeding.
- Grafting training with native forest species carried out with 12 men from 4 villages.

Photos and more details about the Community Development Programme in BBRNP can be found in [Annex 4.5](#).

### 1.5 Train 20 community members and 6 government officials in wildlife monitoring.

During this reporting period, a total of 44 community members in the buffer of BBRNP were trained in phenology monitoring (15 people), camera trap data analysis (22 people) and wildlife monitoring (7 people).

### 1.6 Support community members to take part in and benefit from employment in the release and long-term monitoring of 30 orangutans.

Orangutans are reintroduced twice a year based on food availability in the forest. Twelve orangutans were reintroduced earlier in the year; seven in May and five in August 2021, no orangutan reintroductions have yet taken place during this project period. However, during these earlier reintroductions, >30 local people were employed during both these events, with three more local people being added to our reintroductions team to undertake daily monitoring of the newly reintroduced orangutans (in rotation with the current staff). Based on recent phenological data the next orangutan reintroductions are scheduled for May/June 2022.

To date and within this project period, we are employing 30 full-time wildlife monitoring staff, one orangutan keeper, one logistical staff, one camp manager, one camp coordinator, two camp cooks, one data officer, one Human Orangutan Conflict (HOC) verification and mitigation officer, one public relations officer, two *klotok* drivers, one vehicle driver and 23 daily staff.

### 1.7 Run literacy courses for 100 women.

This course has been scheduled to begin in July 2022 and run for three months in conjunction with Food and Nutrition courses. We have conducted basic computer learning skills for 10 local women from Mawang Mentatai and Nusa Poring (September 2021) and 5 female local teachers.

Additionally, due to an overwhelming demand from parents, mainly mothers, to implement a Youth Literacy Programme, we decided to explore the possibility and the need for such a programme. A programme that would be dedicated to increasing the literacy skills of young children, especially elementary school students, starting from the basic building blocks of learning; reading and writing.

In early 2022, literacy baseline data were collected across 8 sub-villages from Mawang Mentatai and Nusa Poring villages. A total of 188 children ranging from grades 1-6 of primary/elementary school (6 - 12-year-old) attended YIARI literacy activities outside of school hours. We categorised them based on UK basic reading milestones (Table 1 in Annex 4. 6). All of the children were delayed in their literacy development with 65% displaying severe challenges for their ages. This was an unexpected result, as literacy of younger generations in Indonesia tends to be very good.

Basic literacy activities started in January 2022. Classes are run monthly with a duration of 20 days of learning activities per sub-village, focusing on increasing the literacy levels of the 123 children. The remaining 65 children, who can already read and write properly, will continue to attend literacy activities to further advance their abilities and learning while supporting learning in less advanced students as well. The first initial round of learning in all sub-villages will take a period of 8-months. A total of 188 children (80 girls and 108 boys) from seven villages and sub-villages (i.e., Nusa Poring, Mengkilau, Mawang, Beloyang, Guhung Bajang, Sekujang and Nanga Dawai) are participating in our literacy course (Annex 4. 6). After three months of implementation, the project is observing significant improvements. In the last exam, students that reach the middle level increased by 25% and students that scored at the advanced level increased by 5%.

### 1.8 Award scholarships for secondary education to 20 children.

Mawang Mentatai and Nusa Poring villages have primary schools (6-12 years old) and junior high schools (13-15 years old), but no senior high schools (16-18 years old). Most villagers cannot afford to send their children to senior high school in other villages. Often the only way to make up the extra income needed is through logging and hunting in the national park. The scholarship programme provides financial assistance to selected youth from our target communities so that they can continue their higher education, lessening pressure on forest resources now and in the future. Past assessments have identified



extra-curricular activities as also being important to support local communities in diversifying livelihoods and moving away from purely extractive uses of the forest. The project is therefore providing courses in financial literacy, administrative and management skills; as well as workshops on problem-solving, project management and working effectively as part of a team. In addition, the project is also providing opportunities for students to remain in touch with traditional Dayak culture (mainly through dance and art) which is intrinsically so linked to forests and nature.

In 2021, 11 new scholarships were awarded (7 junior high school students and 4 high school students) which together with past scholarships make a total of 28 active scholarships (Annex 4. 7 for student profiles). Students are achieving grades of 75/100 or above. Computer training has been carried out in four schools from Mawang Mentatai and Nusa Poring villages. Computer training is part of our After-School Programme and aims at providing the local children and village schools with skills and laptop devices for the development of computer literacy in our target villages.

The first period of computer training started in early October 2021 and lasted for two months. Classes were carried out by two trained teachers and 27 students (20 girls and 7 boys) enrolled from Mawang Mentatai Junior and Senior High Schools. Training included topics on basic computer skills and the use of Microsoft Office (Word, Excel and PowerPoint) functions. In January 2022, a further 5 female teachers from Nusa Poring school were trained in basic computer skills for 10 days as part of the Training of Trainers programme. In February 2022, 13 laptop devices were delivered to two schools in Nusa Poring. Training started in March 2022 with 20 elementary school students. Unlike the computer training in Mawang Mentatai Village, the training at Nusa Poring school cannot be done outside school hours due to the long distance between the student's homes and the schools. The school principal and the teacher in charge have therefore included computer skills taught once a week as part of the curriculum.

Between February and March 2022, several classes were carried out with school children, out-of-school children and women from both Mawang Mentatai and Nusa Poring villages. In total, 15 children and 5 women have participated in the second computer training period. Overall, 49 girls, 34 boys, 10 women and 7 female teachers (5 within this reporting period) were trained in Computer Basic Skills.

### 1.9 Provide healthcare support to ~2,000 women and men.

Over the past five months, with the help of our local partner ASRI, we have provided health services to approximately 1,224 people (~749 women and ~475 men) from Mawang Mentatai and Nusa Poring villages. Also, 67 YIARI Forest Guardians (65 men and 2 women) from 8 sub-villages have received discounted healthcare from ASRI (Annex 4. 8).

## **Output 2:**

### 2.1 Facilitate community meetings and provide support in the drafting of community plans.

#### BPF:

A meeting was held in BPF (on 1st February 2022) for the discussion of the 'Long-term Plan for Forest Management' (*Rencana Pengelolaan Hutan Jangka Panjang 2023-2033*) with the local government (KPH) and community farmer groups (Annex 4. 9).

At the community level, our initial plan was to facilitate the drafting of a governance strategy that defines local farming laws, practices and sanctions and delineates the protected forest zone boundary. In 2021, it was discovered that such a document already exists but was previously unknown to the farming groups active in BPF (Annex 4. 10). This document, called the "Anggaran Dasar/ Rumah Tangga (ADRT)" (roughly translated as Articles of association for households), was created by the KPH in collaboration with BPF's farming groups to regulate (previously illegal) farming activities within the BPF. Perhaps due to a lack of socialisation of this document and the intrinsic difficulty of the official language used in it, the regulations featured within have not been adhered to. Rather than produce a new document, YIARI has since carried out a series of FGDs and meetings with local farming groups to help socialise the regulation in the ADRT and ensure all aspects are understood. The original ADRT was deemed to be inadequate in certain areas such as dealing with stealing, and so additions to the document have since been made in the form of appendices. A socialisation meeting on land and forest management, regulations and best practices was carried out with 43 community members from SM group on the 18<sup>th</sup> January 2022. Additionally, land management has been discussed with all three target community groups

during agroforestry socializations and training. Overall, more than 100 people have received socialisation on land management and regulations in the BPF buffer zone, with an average participation of 15 people per meeting.

#### BBBRNP:

The following output is an unexpected positive development of the project. The rapid rate of land clearing along the Mentawai River (coupled with climate change) is causing landslides and floods along the riverbanks to become very common. To prevent further damage to the environment and impact on local agro-biodiversity based livelihoods, YIARI offered to support Nusa Poring Village Government in the drafting of a Village Regulation on Environmental Protection and Management (*Perdes*). The head of the Nusa Poring village welcomed the idea. In January and March 2022, two meetings took place with the Village Head at the Nusa Poring Village office. The Village Head expressed the need to invite village government members to form a working group to draft the regulation. To prepare for this, in March 2022 YIARI's Community Development team conducted training for 18 field team members —comprised of 5 village heads, 10 local community members and 3 YIARI staff (being 2 people from the village) — regarding techniques to identify environmental problems, how to find joint solutions and how to write regulations (Annex 4. 11).

#### 2.2 Facilitate a series of awareness-raising meetings to clarify where the BPF core zone boundary sits and what will be used to demarcate it.

Participatory mapping of the farmland and core zone boundaries was carried out with local farmers in the BPF buffer zone during three FGD sessions in February (4<sup>th</sup> -7<sup>th</sup> and 10-15<sup>th</sup>) and March 2022 (1<sup>st</sup> - 2<sup>nd</sup>). In total, 48 farmers participated in the FGDs from SM and MJ community groups. Farmers presented maps of the land that they currently manage (the location, coordinates and size) which assisted YIARI and the local government (KPH) in comparing and verifying the actual boundaries (Annex 4. 12). All farmers that received socialization agreed that there is a clear boundary between the core protected forest block and the land that they manage. Preliminary positive responses from the farmers involved in the mapping process suggested that the demarcation of the Protected Forest boundary will run smoothly. Participatory mapping not only assists in clarifying to all stakeholders where the boundary of the protected area lies, but has also shown to be an excellent tool to engage communities in the protection of BPF.

#### 2.3 Demarcate the BPF core zone boundary with natural barriers every 50 metres.

The demarcation of the BPF core zone boundary will begin after the participatory mapping is finished, likely around the fourth quarter of this project (October 2022). Furthermore, site verifications still need to be carried out by the SM community group. Site and boundaries verifications have already been carried out by 21 members of the Mitra Jaya group along with the YIARI team and KPH Batutegi. The process of verification involves the checking of land certificates owned by the farmers issued by the Ministry of Environment and Forestry and then cross-checking the location in the field to assess whether the location, borders and size of the plot are correct.

#### 2.4 Provide SMART patrol training for 45 tenant farmers.

Training on patrol goals, procedures, and Spatial Monitoring and Reporting Tool (SMART) was provided to one forestry police officer from KPH Batutegi and one community member from SM community group in February 2022. Additionally, two meetings were held earlier this year with 27 members of the SM group in January and February 2022 to discuss and evaluate the protection and security of their land and make a patrol schedule along with the Batutegi KPH head. The participants displayed enthusiasm towards this activity, by preparing a schedule for the patrols and discussing at length the implementation at length. Some of the farmers have been victims of crop theft and were therefore very keen to take a leading role in better governance of this area.

## 2.5 Support monthly SMART patrol activities.

From October 2021 to March 2022, a total of 56 patrols were carried out, totalling 292 hours and a distance of 222 km patrolled. There are 22 people active in the patrol teams: eight forestry police officers (*polhut*), nine YIARI team members, two farming group members, two local people and one volunteer student from the University of Lampung (UNILA). Overall, signs of 119 illegal human activities (Encounter Rate [ER] of 2.12 per patrol) and 340 wildlife (ER=6.07) were recorded. February was the month with the highest number of illegal activities encountered ([Annex 4. 13](#)). The field coordinator has explained this is due to encountering a large number of encroachments in a previously unpatrolled area.

Patrol findings are reported monthly to the Batutegi KPH office. Whenever possible, actions are immediately taken on-site when evidence of illegal activities within the Protected Area are found. Actions may include the destruction of tools used to perpetrate the illegal activity, confiscations, verbal and written warnings and documentation for future prosecution of the offenders. In this reporting period, 6 people from Linggapura were encountered in the forest illegally harvesting bamboo crystals, which grow in the roots and stems of the bamboo and are used in China as medicines for certain diseases or dysfunctions, such as impotence. These cases have been under investigation and a case has been made for their prosecution, once it was discovered they were not new in the area and they were aware of the PBF's protected status. Furthermore, a written warning was issued to a coffee farmer that had cleared 1.05 ha of forest within the Protected Area. Three large camp areas within the Protected Area were destroyed during this period and verbal warnings were given to 10 perpetrators found in the forest carrying out illegal activities, such as hunting or harvesting bamboo crystals. In addition to the verbal warnings, all perpetrators were accompanied out of the forest and the hunted animals and equipment used were seized. All snares or camps found within the forest were destroyed.

### **Output 3:**

#### 3.1 Conduct socio-economic and wildlife consumption surveys and compare to 2019 baselines.

#### 3.2 Report back the results of wildlife consumption surveys to communities.

As per the original timeline, this is planned for Yr 2. A questionnaire was produced ([Annex 4. 14](#)) and FGDs with community members from BPF and BBRNP are planned to happen this year.

#### 3.3 Hold awareness-raising sessions in collaboration with religious leaders and/or village heads to clarify which species can and cannot be legally hunted.

##### BBRNP:

In Sukujang village, an agreement was signed on 14<sup>th</sup> March 2022 with the Catholic Church to include conservation messages at Sunday gatherings ([Annex 4. 15](#)). An MoU with the Catholic Church for long-term cooperation is in preparation. In addition, two religious leaders from the Mengkilau sub-village who are actively involved in their congregations through family worship have become YIARI collaborators and have spoken about conservation in their religious meetings. No payments have been made to members of the Church congregation, but some computer lessons have been provided as a gesture of goodwill.

#### 3.4 Hold sessions with boy scout groups, local youth groups, and women and men in target communities to explain how best to make use of ecosystem services without compromising them for future generations.

##### BBRNP:

Awareness-raising activities were undertaken with local children during four special days for conservation in Indonesia: the Indonesia Primate day, Earth Day, World Orangutan Day and Orangutan Caring Week. Activities involved video making, poetry, theatrical performance, storytelling and Dayak traditional dances. In total, 79 local children participated in these activities. Additionally, we have continued and expanded our After-School Programme with local children during this period. The After-School Programme aims to build the capacity of school-age children in areas of knowledge that are not currently included in their standard school curriculum but that are important for their development and future careers (e.g., literacy, English skills and environmental science). The project nurtures education



and environmental education jointly supporting young people to succeed in their own lives while championing environmental issues from within their communities. The children who attend the After-School Programme not only acquire important skills for their future, but also acquire the skills to train and mentor others, so that the learning process can benefit a larger number of people.

During this reporting period, we engaged a total of 224 children from six sub-villages of Nusa Poring Village and Mawang Mentatai. Additionally, we have also started the After-School Programme in two other remote villages, namely Barasnabun and Teluk Payang villages, which are in the Rantu Malam area within the BBBRNP buffer zone.

After-School activities were carried out in the Rantu Malam area in October 2021 and February 2022 with a total of 309 students from four elementary and junior high schools in the area. The children watched movies with conservation messages and were engaged through fun arts and crafts and quizzes with an environmental theme. In addition, the children learned more about orangutans through video screening followed by a presentation by our team (Annex 4. 6).

#### BPF:

Two environmental education events were carried out in Batutege's communities (i.e., Jalosi Sanak and Gubuk Pelangi) with the participation of 69 children in total. Through reading activities, storytelling, quizzes, traditional dances, colouring and drawing competitions children learn more about the forest, wildlife and their protection status. In general, children were very enthusiastic to participate in these activities and show good retention of what they have learned about the environment. In addition, a 2-days Conservation Youth Camp was carried out in February 2022 with 20 school children (9 boys and 11 girls) where they learned more about the forest and agroforestry techniques. At the end of the Conservation Camp, participants were able to confidently talk about forest ecosystem services, graft seedlings in a plant nursery and carry out beekeeping and process honey (Annex 4. 16).

### **Output 4:**

#### 4.1 Reintroduce and monitor 30 Critically Endangered Bornean orangutans in BBBRNP.

In August 2021 (two months before the start of the project period), five rehabilitated orangutans were successfully released in BBBRNP and post-release monitoring has been carried out. From our baseline of 46 individuals, the orangutan population in BBBRNP has therefore increased by 30%. We expect the first reintroduction within this project period to happen in May or June 2022 to take advantage of increased food availability during those months. [YIARI monitors flowering and fruiting in phenology plots and uses those data to schedule reintroductions.]

### **3.2 Progress towards project Outputs**

**Output 1. By 2024, the well-being of ~3,000 impoverished women, men and children has improved through better-managed agroforestry systems, access to education (especially women and children), healthcare and employment opportunities associated with wildlife reintroductions and monitoring.**

In BPF, 4,877 seedlings with agroforestry value were produced by the community groups and 1,145 have now been planted (reaching just over 1/3 of our target to be met by end-2022). A total of 53 farmers (52 men and 1 woman) have directly benefited from our programme through capacity building, farming mentoring and the provision of seedlings and other supplies. Furthermore, ca. 100 people have already been engaged in agroforestry. Before this Project, no agroforestry activities had ever been carried out in the area. This project had initially planned agroforestry activities in BBBRNP (Indicator 1.1) since it was unclear at the time whether BPF farmers would welcome this type of initiative. However, through a series of meetings with farmer's groups, the project observed a genuine interest in implementing agroforestry practices, mainly linked to the likely benefits of tree cover to soil health and other crops, as well as increased income once trees start fruiting.

Although communities in BBBRNP have not yet started planting of agroforestry species, 136 people (30 men and 106 women)<sup>1</sup> are currently engaged in sustainable livelihoods approaches, including vegetable farming and sugar cane processing and are new skills in sustainable farming. A total of 78 people (29 men and 49 women) have received socialisation regarding our community development initiatives; and 65 people (38 men and 27 women) have received training (such as producing liquid organic fertilizer, catfish spawning methods, seedling Grafting and budding methods [Annex 4. 5 –F for a full list of trainings]). The impact of these initiatives is monitored through informal conversations with community members, field reports compiled by our field facilitators, attendance lists and post-training evaluations.

Three new temporary staff have been employed by YIARI to help with the post-release monitoring programme (this represents 15% of the target planned for Q4 2023). Additionally, YIARI currently employs 65 permanent staff members from our target communities in BBBRNP. With new reintroductions planned for the upcoming years, our target of 20 new local staff members is likely to be achieved (Indicator 1.2).

Literacy classes for a target 100 local women in BBBRNP have not yet started (Indicator 1.3), but are planned for July 2022. Computer lessons for 10 women and five female teachers have taken place however. Literacy classes for 188 young children have also taken place in response to requests from the community.

Eleven youth have enrolled in our scholarship programme this past year to pursue secondary education, which has met 55% of our target for Q4 2021 (Indicator 1.4, see Annex 4. 7). We expect the remaining scholarships to be awarded in the next project period. The project is in discussions to expand the scholarship programme to offer financial support and mentoring to some of the awardees to pursue undergraduate degrees. In addition, computer training has been rolled out to 83 school and out-of-school youths (49 girls and 34 boys).

With the help of our local partner ASRI, the project has provided health services to 1,224 people (749 women and 475 men) from Mawang Mentatai and Nusa Poring villages (Indicator 1.5), achieving over 60% of our target for Q4 2023. In addition, 67 YIARI Forest Guardians from 8 sub-villages have received discounted healthcare from ASRI.

## **Output 2. By 2024, communities feel empowered and more embedded in local natural resource governance through joint patrols with government authorities.**

Good progress has been made towards this output in the early stages of the project. In BPF, YIARI attended a meeting with KHP Batutegi and the Lampung Forestry Service (*Kepala Dinas*) on the First February 2022 to discuss the long-term Plan for Forest Management (*Rencana Pengelolaan Hutan Jangka Panjang 2023-2033*) and YIARI's role. The high-level strategy for the area was discussed which includes the village-level development plans and regulations (Indicator 2.1).

At the community level, a village development plan and governance strategy (*Anggaran Dasar/ Rumah Tanggaor ADRT*) has been established and endorsed by KPH and the farming groups ([Annex 4. 10](#)). This ADRT was an existing but overlooked set of regulations that have since been updated and strengthened. The ADRT, which covers farming group regulations and forest protection has recently been established and implemented in Sumber Makmur. YIARI are supporting the socialisation of these plans and regulations. The target for 2.1 has therefore been achieved.

Although no governance work was planned for this project in BBBRNP, Village Environmental regulations (*Perdes*) have been discussed with the local authorities and communities. Authorities have expressed the need for better regulations governing forest use and environment management. Over 58 community members have been actively involved in the discussion of a village land management plan and a working group has been created with village members in Nusa Poring for the discussion of a Village Environmental regulation draft. ([Annex 4. 11](#)).

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<sup>1</sup>38 women enrolled in cooperative farming; 44 people in *klotok* programme (3 men and 41 women); and 54 sugar cane processing (27 men and 27 women).

Through participatory mapping activities, 48 local farmers demonstrated clear understanding of the location of the core forest zone boundary (achieving 6% of the target for Q2 2023) and expressed commitment to respecting the boundary and protecting the forest. Demarcation of BPF boundary is planned to start in Q4 2022 (Indicator 2.2). No participatory mapping was ever carried out before and the progress on boundary demarcation and awareness are measured and monitored through reports from our field team.

Additionally, community members have taken an active role in the BPF management through SMART patrols. In the past 5 months, 27 community members have been actively involved in the discussion of the community patrol agenda and jointly patrols have been carried out monthly at an average rate of 10 patrols per month (exceeding the target in Indicator 2.3). Currently, four community members and 8 forestry police officers are active in the patrol team. SMART patrols have been carried out occasionally, on and off in BPF since 2015. However, it was only after 2021 that patrols began to happen regularly. All data collected during patrols are regularly uploaded to a dashboard (Annex 4. 13).

### **Output 3. By 2024, increased local community awareness of ecosystem services, biodiversity values and risks contribute to better natural resource management.**

A questionnaire for a comprehensive survey on wildlife consumption and health has been produced and interviews are planned to start in May 2022 (Indicator 3.1), making it possible to still achieve our target of discussing survey results with respondents by Q4 2022.

In BPF, during the various community meetings, FGDs, and education activities carried out with community farmers and youth groups, the topics of hunting and legality in PBF are regularly covered by the YIARI team. The community farming laws in PBF specify that hunting in the area is forbidden and is a punishable offence. During socialisation events regarding these laws, SMART Training and during SMART Patrols around the Core Zone with farming groups and members of KPH, the illegality of hunting is regularly brought up. Recently, during several socialisation events, our field staff had the opportunity to informally discuss perceptions and knowledge among farming groups regarding hunting in the area. All people that were interviewed during the meeting answered that they were aware hunting any wildlife in the Batutegi forest was illegal. Given attendance, we can estimate that at least 100 people know that hunting in BPF is illegal (15% of the target to be achieved by Q2 2022). A more structured survey of hunting awareness is planned to happen in June 2022 (Indicator 3.2a and b).

During this reporting period, a total of 1,000 children from both landscapes (911 in BBRNP and 89 in BPF) have been engaged in activities and events which showcase the benefits of biodiversity and forest ecosystem services (Indicator 3.3 and 3.4), while 87 women have engaged in socialisation and trainings related to sustainable farming practices. When the project assesses the effectiveness of these activities, it expects to greatly exceed the target of 1 group of boy scouts, 3 local youth groups, 100 women and 20 students reporting greater knowledge of the benefits of biodiversity and ecosystem services by Q4 2023. Photos and lists of activities carried out can be found in Annex 4. 6 and Annex 4. 16.

### **Output 4. By 2024, the Bornean orangutan population in BBRNP increases its viability and resilience.**

The project baseline for this output is now 51 as opposed to 46, as 5 orangutans were reintroduced 2 months before the start of the project. The reintroduction of 6-10 orangutans is planned to happen starting June 2022. While the target might be achieved by mid-2022, it is likely some of these reintroductions could run into 2023.

## **3.3 Progress towards the project Outcome**

**Outcome: By 2024, over 200,000 ha of forest and target species are protected through sustainable, locally-led and scalable livelihoods strategies, as well as stronger governance, benefitting ~3,000 women, men and children.**

*0.1 Ten percent of households (~300 women and men) by Q2 2023 and 20% of households (~600 women and men) by Q1 2024 report a 10% increase in income (average income is 1.1 million IDR in BBR main villages and 3 million IDR in Sumatra). [In Mawang Mentatai village 83 households [79%] are poor, in Nusa Poring village 116 households [79%] are poor.]*

Through the *klotok* initiative in BBBRNP, a total of 41 female farmers benefited by halving the transportation costs needed to reach the local market and therefore increasing their earnings by 9% [net average earnings IDR 734,000 (£40) [range of IDR 355,000 – IDR1,675,000 / £19 - £90, based on January 2022 data; transportation costs reduced from IDR 120,000 to 60,000 / £6 to £3]. As part of the project's Monitoring Evaluation and Learning (MEL), 33 women [15 from Sekujang, 8 from Nanga Dawai and 10 from Nusa Poring] were interviewed regarding their perceptions of the *Klotok* programme. All the interviewed women reported being very satisfied or satisfied regarding the programme's safety, SOPs, income increase, fulfilment of their needs and boat crew services (Annex 4. 5 -C).

The Sugar Cane Processing Programme has resulted in additional income for 54 families (27 men and 27 women) from Sekujang and Nanga Dawai sub-villages. Although these represent a more modest increase in ~2.5% of baseline monthly income, the project is expecting production to increase. Collectively, the *klotok* initiative and the Sugar Cane Processing have benefited 54 ex-loggers and 15 ex-hunters and have achieved ~23% of the target for Q2 2023.

*0.2 At least 20% of households (~600 women and men) by Q1 2023 and 50% of households (~1,500 women, men and children) by Q1 2024 report increases in non-monetary wellbeing (with at least half of increases being reported by women). Increased access to agro-biodiversity-based skills and resources, healthcare, education and literacy, will be reported against pre-project levels (baseline to be established by Q1 2022).*

Refer to Outputs 1 and 3 in Section 3.1. We estimate the project has increased non-monetary wellbeing of ~2,562 women, men and children<sup>2</sup>, through improvements in healthcare, education, and increased knowledge of sustainable farming practices and ecosystem services. This exceeds the final target (if participating community members report these increases when surveys take place).

*0.3 By Q1 2024, ~50% of Batutegei tenant farmers (~700 people) report increased involvement in forest governance issues (baseline to be established by Q1 2022)*

Currently, over 50 farmers in BPF are active in forest and land management activities and attend group discussions carried out by YIARI. This is 14% of our target set for Q1 2024. However, subsequent meetings are carried out by the respective *gapoktans* to reach an agreement with all farmers from the group. Therefore, it is likely that a larger number of farmers are becoming involved with forest governance even at this early stage of the project.

A village regulation on forest governance produced by the SM group was printed on a banner and then installed on a public board (see Annex 4. 10 -A).

*0.4 The number of illegal activities in Batutegei forest core zone is reduced by 20% (by Q2 2023) and 50% (by Q1 2024) (against a baseline of 98 incidents per year - 2019 data)*

Illegal activities in BPF have reduced by 8% when compared to the 2019 baseline. However, the encounter rate (ER) of illegal activities increased in 2021 by 19% when compared to 2020. This increase in wildlife crime encounters is due to an unexpected rise in demand for bamboo crystals across Sumatra for sale abroad. The market price for bamboo crystals has risen sharply to IDR 350,000 per kg and represents an easy form of income for local people who collect the crystals from the forest and sell them to dealers and exporters. As BPF is rich in bamboo crystals, an influx of people has been observed. To access the crystals from the roots, large expanses of bamboo have to be destroyed. Efforts to reduce this illegal activity through written warnings, banner installation and public outreach have been made and more severe actions are planned to be taken in the following months.

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<sup>2</sup> Agroforestry skills = 53 people (52 men and 1 woman); Sustainable Agriculture Skills > 80 people (~27 women); Healthcare ~ 1,224 people (749 women and 475 men) + 67 YIARI Forest Guardians (65 men and 2 women); Education (Children) = 1,000; Education (Women) = 15 (computer skills); SMART, camera trapping and wildlife monitoring training = 123 people

0.5 Forest cover loss in Batutegi is reduced by 20% (by Q4 2022) and 50% (by Q1 2024) (against a baseline deforestation rate of 3.5% per year)

This indicator has not yet been measured as the land cover map for 2021-2022 has not been produced yet. The map for 2021 is in the process to be finalised, whereas the 2022 map can only be made in 2023.

According to our baseline map produced in 2020, 40.1% of BPF are coffee plantations, 23.5% mixed crops and 19.8% primary forest. The 2020 forest cover map and land cover percentages can be found in the Annex 4. 17.

0.6 Populations of threatened indicator species including Sumatran tiger (*Panthera tigris sumatrae*), sun bear (*Helarctos malayanus*), Bornean gibbon (*Hylobates albibarbis*), Sunda pangolin (*Manis javanica*) and Sunda Slow Loris (*Nycticebus coucang*) are shown to remain stable against baselines (pangolin Relative Abundance Index [RAI]: 1.45, tiger RAI: 0.15, sun bear RAI: 0.34, loris encounter rate: 1.5 individuals/km, gibbon density: 4.52 km<sup>2</sup>) in surveys conducted by Q4 2022 and Q1 2024.

Population surveys of threatened indicator species in BPF will be surveyed through camera trapping. To ensure valid and accurate data is collected, the methodology for the camera trap survey has been discussed with local experts. A reassessment of previous camera trap survey results from 2017 to 2018 was carried out. A map and survey design for the new project was drawn up. The locations for the camera traps have now been identified and the camera traps are being installed according to the survey grid. Camera trap installations began in March and are planned to finish this month. A team comprising of local people and volunteers have been recruited and trained to help with the surveys. In total, 10 university students, two Forestry Police (*PolHut*) officers from KPH Batutegi, 77 local people and seven YIARI field staff have installed 47 camera trap units in the forest so far (Annex 4. 18). Once all the camera traps have been installed, they will be activated for 3 months (April-June 2022).

### 3.4 Monitoring of assumptions

#### Outcome assumptions:

Assumption 1: There are no major changes to the current management structure in Provincial Forestry Services.

Comments: Some changes to the structure of the KPH have occurred recently, but these have not had a detrimental impact on the project. These changes have been relatively beneficial. The head of KPH Batutegi became the Head of Forestry Services in the Lampung Province (*Kepala Dinas*) in December 2021. YIARI has always had a very good relationship with the new Kepala Dinas. The new Head of Batutegi is also very accommodating.

Assumption 2: A productive and collaborative working relationship between YIARI, the Lampung Province Forestry Service (*Dinas Kehutanan*) and the local farming groups (*Kapoktan*) is maintained.

Comments: Relationships between these different partners and stakeholders have remained good throughout.

Assumption 3: No significant extra pressure is placed on Forestry or NP Service staffing through unplanned events.

Comments: The increase in demand for bamboo crystals has increased some pressure on Batutegi's forest police. Measures are currently being taken to reduce this threat through stricter sanctions, increased community support and awareness through signboards.

Assumption 4: Local agencies remain committed to curbing illegal activities and are willing to commit resources.

Comments: KPH still commits to reducing illegal activities. However, there are resource issues (financial) and also capacity issues. The project is working to strengthen farmer groups that can collaborate with and support KPH to help protect the forest through community-based patrols. The project is planning to set up a communication forum to help coordination.

#### Output 1 assumptions:

Assumption 5: Community members remain engaged in community groups surrounding BBBRNP.



Comments: Communities have remained engaged and formed additional community groups.

Assumption 6: Local people re-invest benefits to support continued livelihoods improvements.

Comments: As a result of socializations carried out and the implementation of community development programmes based on a community shared business model, women felt empowered and, through their initiative, began to cultivate private land collaboratively. As a result of the *Klotok* programme and improved access to the local market, 3 families have started cultivating vegetables to sell at the market.

#### **Output 2 assumptions:**

Assumption 7: The level of commitment from the Lampung Province Forestry Service and the farming groups in Batutegi towards the joint development and implementation of a scalable livelihood strategy remains high.

Comments: The levels of commitment have remained high. The contents of the new long-term strategic plan for Batuegi remain in line with this project's goals.

Assumption 8: Mutual trust between the Lampung Province Forestry Service and the farming groups in Batutegi is upheld.

Comments: So far, mutual trust is still present. No issues have been identified.

Assumption 9: Government staff trained (old and new) in the SMART approach remain in key posts.

Comments: No staff that recently received training have been transferred. Refresher training was given in March.

#### **Output 3 assumptions:**

Assumption 10: Increased awareness of legal obligations, potential benefits, and risks connected to nature degradation contribute positively to a shift in attitudes and behaviour.

Comments: It is too early in the project to be able to test this assumption.

#### **Output 4 assumptions:**

Assumption 11: Reintroduced orangutans adapt well and can reproduce after reintroduction into BBRNP.

Comments: So far reintroductions have experienced zero mortalities, with good ecological adaptation and health levels, as assessed monthly through behavioural data and visual health checks.

Assumption 12: Hunting pressure on the orangutan population remains low.

Comments: No recorded case of orangutans being hunted in our target area.

### **3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation**

**Impact:** Large mature bio-diverse forests support healthy ecosystems and stable species populations because of increased local wellbeing, education and better health, which reduce dependence on exploitative uses of nature.

The project is exceeding expected targets for healthcare, education, environmental awareness raising and local governance components and on track to achieve planned targets on increasing incomes linked to agro-biodiversity based livelihoods. Over the following periods, the project will be able to test exactly to what extent these gains contribute to the persistence of these landscapes.

## **4. Project support to the Conventions, Treaties or Agreements**

This project aligns with Sustainable Development Goal (SDG) 1 by reducing the number of men, women and children of all ages living in poverty by identifying livelihood interventions that will provide access to natural resources, while protecting biodiversity, SDG 3 by contributing to improving access to healthcare in rural communities, SDG 4 by providing access to education to both children and women as a proven vehicle for sustainable development, SDG 5 by engaging women and ascertaining targeted livelihood interventions, SDG 12 by educating communities to understand the linkages between ecosystem health and human health and livelihoods, to reduce untenable resource use and degradation,

SDG 13 by supporting the protection of large and valuable carbon stocks and SDG 15 by protecting highly biodiverse and threatened terrestrial ecosystems.

Indonesia ratified the Convention on Biological Diversity in 1994 and its current National Biodiversity Strategic Action Plan (NBSAP) runs from 2015 to 2020. Overall, this project contributes to Indonesia's efforts to preserve natural forests and the biodiversity found within them. The Government of Indonesia has selected 49% of its forests for protection or conservation purposes intending to preserve them for the long term and both project landscapes contribute to this target. More specifically, this project contributes primarily to Article 8(d) by supporting the protection of two key forest ecosystems and working to maintain viable populations of species within them; 8(e) by supporting sustainable development in areas adjacent to protected areas to strengthen the ecological resilience of these areas; and 8(i) by enabling the conditions needed for compatibility between conservation of biological diversity and the sustainable use of its components by local communities. Furthermore, the project contributes to Article 10(c) by encouraging traditional agro-biodiversity-based livelihoods and the collection of non-timber forest products following traditional cultural practices and sustainable use. Moreover, the NBSAP identifies the lack of biodiversity data updates as an important challenge to managing its biodiversity effectively. By collaborating with park authorities, forest management units (district-level forest management authorities - *KPH*) and the Nature Conservation Agency (*BKSDA*), this project will provide regular updates in two important biodiversity areas that would otherwise lack resources to provide biodiversity data updates. The project contributes to another recommendation in the NBSAP, that of increasing awareness on the importance of biodiversity for the sustainability of human life through local-level education and engagement efforts.

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

Given we are reporting back on just 7 months of implementation, evidence of poverty reduction is limited. However, our activities supporting an improvement in primary and secondary education are tackling some of the root causes of poverty in these communities, while development of sustainable agricultural initiatives, increased access to local markets, health provision and job creation linked to wildlife reintroduction, SMART patrolling and long-term monitoring are contributing to poverty alleviation in the short, medium and longer term.

## **6. Consideration of gender equality issues**

The project is striving to address gender disparities in the two focal areas, by working towards proportional participation in activities and higher levels of female literacy. Additionally, we are co-creating livelihood opportunities with women's groups and other community representatives where women are able to participate fully and/or take the lead.

The project's strategy to reduce inequality is to:

- Encourage women to voice their opinions, needs and ambitions through focus group discussions, the results of which will be channelled back to the village government.
- Establish women's livelihoods groups where women will lead livelihoods initiatives, drawing on existing and newly acquired knowledge.
- Empower female heads of household, where possible, to have control of their lives and the decision-making process within their families and society.

We are building in the ability to collect and analyse gender-disaggregated data that is allowing us to keep track of and improve our efforts toward achieving more equitable involvement and project outcomes.

So far, women in BBRNP have reported that they are no longer only selling their own produce, but have also started buying and reselling vegetables from other hamlets (Guhung Bajang and Laman Mumbung) not directly involved in the programme. Some women have also reported that they are now getting some welcome help from their husbands with the cleaning, packing, and transporting of vegetables when they are going to market using the community boat. We are trying to understand the reasons behind this behaviour change, but it is perhaps linked to men in the community viewing this activity as increasingly significant in term of its contribution to household income.

## **7. Monitoring and evaluation**

Every six months, relevant project staff and partners meet and the project outcome and output indicators as set out in the log frame are discussed. At the end of each project year, the project staff will be monitored and evaluated and any necessary modifications and recommendations made to ensure they operate effectively. This will establish a model for future adaptive management of these teams.

YIARI also holds monthly meetings with the relevant project managers, the Programme Director and Programme Advisors to discuss recent progress, any obstacles encountered and short-term planning. These regular informal meetings provide a platform for free and open discussions between all relevant programme staff and each manager to personally reflect and evaluate the activities of their respective teams over the past month. Managers will be encouraged to participate in the problem-solving process and assist in the development of potential solutions to their specific problems to ensure that they feel fully involved and invested in the strategic planning process.

### Monitoring, Evaluation and Learning activities:

- End of project household surveys will be used to assess project impacts in increasing community wellbeing, reducing poverty, increasing awareness and reducing hunting of protected species.
- Camera trapping and biodiversity surveys will be used to monitor relative abundance indices and encounter rates of target endangered species.
- Global forest watch data and drone surveys will be used to monitor deforestation rates.
- Radio-tracking together with on-the-ground monitoring will be used to monitor orangutan survival after reintroduction.
- Post-training evaluation forms will be used to assess the effectiveness of training and awareness-raising approaches.

## **8. Lessons learnt**

Having a strong relationship with KHP has helped the project activities to run smoothly during this last project period. With the support from KPH, the farming groups were more trusting and open to YIARI's involvement and collaboration. This has been deemed as a success during this first period due to the enthusiasm displayed by the farming groups – particularly in Sumber Makmur. This relationship with KPH has been built up over the last 15 years and demonstrates the benefits of long-term commitment to landscapes.

### Challenges:

The unforeseen increase in demand for bamboo crystals in Sumatra has resulted in increased illegal presence and destruction of forests in the BPF towards the end of 2021. With such large groups of people entering the forest at one time, the Forestry Police were unable to deal with it safely. YIARI communicated with the Lampung Forestry Services and a more coordinated effort was taken which resulted in the apprehension of 23 people. Following this intervention, a gradual decrease in bamboo crystal collection has been observed.

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

This is the project's first Darwin Initiative review.

## **10. Other comments on progress not covered elsewhere**

Local people in BBRNP farm on lands 2-8 hours walking from their homes. Farmers have been unable to use the land close to their homes because of limited knowledge on how to fertilize soils and rotate crops. Travelling long distances leads to opportunistic hunting. The project's strategy is to support knowledge improvements in the production and use of organic fertilizers and organic compost, making farming close to home more profitable and minimizing threats to wildlife and the forest.

As part of the ‘Planetary Health Programme’ in BBRNP, YIARI vets have dewormed 36 domesticated animals in Beloyang; 17 in Gunung Bajang. and 5 in Juoi, and vaccinated 120 cats and dogs against rabies. YIARI veterinarians also undertook sessions with 40 community members to discuss the health of their livestock (pigs and goats) and domesticated animals (cats and dogs), zoonosis and general husbandry activities to keep themselves and their animals healthy.

## 11. Sustainability and legacy

This project was designed to maximise capacity building and knowledge transfer among civil society and government partners to sustain key activities beyond the lifespan of the project:

- All workshops and community engagement are as inclusive as possible to maximise opportunities for all, but the project is focusing particularly on women and children as these are key groups in both alleviating poverty and achieving positive impacts on biodiversity.
- Despite designing the project to minimise dependence on project facilitators, YIARI will continue to collaborate closely with the local communities, partners, BBRNP authorities and KPH to support project success over the medium and longer terms.

## 12. Darwin identity

We publicised the Darwin Initiative during our annual MEL with the BBRNP authorities. Other than this meeting, we have yet to publicise the Darwin Fund or the UK Government as our sponsors. Moving forward this will be done during our next MEL Scholarship meeting, future meetings with our *klotok* Programme, the One Health strategy with ASRI and any future BBRNPA meetings. Furthermore, when our publications are produced (scientific or otherwise) the Darwin Initiative logo will be used or acknowledged. Any material about this project will also display the Darwin Initiative logo.

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

COVID-19 has impacted our ability to prioritise the continuation of the local adult female literacy programme and therefore has been rescheduled for a later date. It had also impeded face-to-face government meetings in the initial two months of the project period only. Although much virtual contact has been made and meetings have been held, the restriction on gatherings and office hours has hampered our ability to engage directly with them. Furthermore, to safeguard our staff and reduce the spread of COVID-19, the movement of all Ketapang project staff to the field (and vice versa) has been done by YIARI ground transport only. This impacts the number of people, and also the time it takes, moving between the main office, field office and field sites.

## 14. Safeguarding

Please tick this box if any safeguarding or human rights violations have occurred during this financial year.

If you have ticked the box, please ensure these are reported to [ODA.safeguarding@defra.gov.uk](mailto:ODA.safeguarding@defra.gov.uk) as indicated in the T&Cs.

## 15. Project expenditure

**Table 1: Project expenditure during the reporting period (1 April 2021 – 31 March 2022)**

Project spend (indicative) since last annual report	2020/21 Grant (£)	2020/21 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	██████	██████	█	There was an underspend on salaries (██████) and partner costs (██████). Differences were due to

				YIARI internal salaries originally being calculated for 13 months rather than 6-months (this project period). The other underspend was due to internal administrative difficulties from UNILA, delaying the start of our collaboration.
Overhead Costs	■	■	■	
Travel and subsistence	■	■	■	
Operating Costs	■	■	■	
Capital items (see below)	■	■	■	
Others (see below)	■	■	■	
<b>TOTAL</b>	■	■		

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

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

N/A



[Redacted]

[Redacted]

[Redacted]

### Checklist for submission

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