




## Darwin Initiative Main: Final Report

### Darwin Initiative Project Information

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Project title	Halting Biodiversity Declines through Enhanced Community Wellbeing in Indonesia
Country/ies	Indonesia
Lead organisation	Yayasan IAR Indonesia (YIARI)
Project partner(s)	
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Project Leader name	Karmele Llano Sanchez
Project website/blog/social media	<a href="https://www.internationalanimalrescue.or.id">https://www.internationalanimalrescue.or.id</a>
Report author(s) and date	 30 <sup>th</sup> June 2023

### 1 Project Summary

Poverty, marginalisation and lack of opportunity drive small-scale yet pervasive deforestation, forest degradation and biodiversity loss across much of Indonesia. Agricultural encroachment, illegal logging and hunting are contributing to the gradual erosion of ecosystems and biodiversity in the Batutegi Protection Forest (BPF - 58,174 ha, Lampung Province, Sumatra) and the Bukit Baka Bukit Raya National Park (BBBRNP - a 181,000 ha national park in West Kalimantan).

A socio-economic study of the communities neighbouring BBRNP revealed that approximately 79% of households were living in poverty and facing inadequate access to employment, education, and healthcare. The significant majority (92%) of respondents surveyed resorted to taking out loans, when possible, to cover essential expenses like medical care (35%), education (25%) and food (21%). In pursuit of immediate income, local residents often engaged in illegal logging within the park, with impoverished families disproportionately relying on unsustainable practices to meet their basic needs. The local orangutan population in the area has suffered a drastic decline and was almost decimated due to hunting, with only six nests observed in 2015, compared to a notably larger viable population present 30 to 50 years ago. Furthermore, it was found that almost half (42%) of the community members lacked 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 on coffee cultivation is the main threat endangering the persistence of the protected forest. Drivers are much the same as in BBRNP, with poverty, lack of opportunity and weak local forest governance being the most important. Local laws have not been adequately socialised, 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.

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

This Project worked closely with local communities and government representatives, academic institutions, and farming and healthcare professionals to improve the monetary and non-monetary well-being of ~5,000 women and men in ways that value and strengthen direct links between human prosperity and ecosystem protection. The project also contributed to the increase of wild Bornean orangutans and the maintenance of at least six other threatened species populations.

## **2 Project Partnerships**

### BBBRNP Landscape:

The project's successful outcomes were largely attributed to our partnership with the Bukit Baka Bukit Raya National Park Authority (BBBRNPA). A close collaboration was maintained with the BBRNPA throughout the project duration, characterised by regular bi-annual and annual evaluation meetings to monitor and evaluate our joint Collaborative Work Plan. These meetings allowed us to assess agreed performance targets against project activity outputs. Based on our accomplishments and challenges during implementation, we collectively devised and agreed upon new targets and activities for the subsequent annual Work Plan. The BBRNPA expressed satisfaction with collaborative achievements and officially approved the 2024 Cooperative Working Plan. One significant achievement was the structured coordination that facilitated smooth project implementation and quick resolution of issues. Although the partnership yielded notable successes, hurdles were encountered, particularly in obtaining the necessary permit from the Ministry of Environment and Forestry (MoEF) for reintroducing orangutans in 2024 due to various governmental barriers. From this partnership, we learned the importance of regular evaluations and the need for flexibility in adapting our plans to meet evolving conservation needs.

In addition to BBRNPA, new partnerships were established to support various aspects of the project. For instance, we forged cooperation agreements with the Melawi Education Department, ensuring support for our educational initiatives. Seven local schools have partnered with YIARI to include the Computer Training programme in their curriculum. Support for the scholarship programme was secured from the Emmaus Boarding House in Nanga Pinoh, which provides facilities, coaching, and skills programs. Local schools in Nanga Pinoh, such as Setia Budi Middle School, Bhakti Setiya High School, and Santa Maria High School, offered official administrative support and transparency in government assistance for YIARI's educational programme. Additionally, community support was bolstered by the village head and school principals, who provided facilities for our After-School programme, which included literacy classes and environmental educational activities. An individual donor, Mrs. Lina Kartasmita, contributed reading books, stationery, toys, and bags for our educational programmes.

The partnerships formed during this project have been instrumental in achieving our conservation and community development goals. Regular evaluation meetings with BBRNPA ensured the achievement of joint goals and facilitated the design of future plans. Collaboration with local schools and community leaders resulted in a significant enhancement of educational opportunities for local children.

As reported previously, the healthcare component of our project faced a setback as our partner, Health in Harmony, and its sister organisation, Alam Sehat Lestari (ASRI), closed their operations in BBRNP, discontinuing this aspect of the project.

A major challenge encountered in working within the BBRNP was the difficulties in obtaining permits from the MoEF for the reintroduction of orangutans in 2024.

#### BPF Landscape:

In the BPF landscape, the main partners included KPH Batutegi and the Provincial Forestry Service Lampung. These partners were actively involved throughout the project, particularly in planning the programme's activities. The initiation of the programme, proposed by YIARI, was presented to these partners during formal meetings where decisions on target locations for activities were made. Although partners were not directly involved in writing the final report, they provided valuable input.

A notable achievement was the alignment of the programme with the Indonesian government's policy on social forestry, aimed at reducing poverty, unemployment, and inequality in forest area management. The Lampung Province Forestry Service played a critical role as a policy maker, supported by KPH Batutegi as the area manager. However, challenges included staff changes and capacity limitations, addressed through regular training and mentoring. This experience highlighted the importance of capacity building and continuous support for local partners.

The partnership with Lampung University (UNILA) was also crucial. UNILA provided human resources for research activities and supported programme implementation. Coordination with UNILA was positive, with students regularly supporting the programme through internships, research, and voluntary involvement in routine activities. The university's involvement included participation in the Social Forestry Working Group, which reflected their commitment to the programme. A liaison lecturer from UNILA's forestry department facilitated monthly communication and coordination, ensuring smooth collaboration.

An achievement of this partnership was the significant contribution of UNILA students and faculty in the research components and in the implementation of the programme. Challenges included ensuring that students and new staff were adequately prepared, which was managed through training and continuous mentoring.

In this final project year, new partnerships were also established in Batutegi. The Agriculture Office-Animal Husbandry Sub-sector of Pringsewu Regency provided livestock assistance to the Project. We have also collaborated with the Wildlife Conservation Society (WCS), which provided phenology training and mentoring to local staff and students. The SMART Patrol Working Group assisted with SMART Patrol implementation, and the University of Padjadjaran (UPAD) supported various project activities. These partnerships were crucial in providing technical expertise and resources, enhancing the project's overall impact.

Looking forward, these established partnerships will continue beyond the Project's completion. Formal cooperation agreements, subject to periodic assessments, will be maintained for defined durations (e.g., yearly, five years) to guarantee long-term sustainability. The ongoing collaboration between YIARI and partners in Lampung is expected to persist, providing continuous backing for social forestry initiatives. The strong

community involvement and positive academic collaboration provide a solid foundation for future success and sustainability.

All agreements and partnerships' documentation can be found in [REDACTED]

### 3 Project Achievements

#### 3.1 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.**

Overall, this project has **directly assisted 4,945 local women, men and children** through sustainable livelihoods, capacity building, service-learning programmes, healthcare and job creation, achieving **165%** of the original target ([REDACTED])

Five community development schemes were developed and implemented during the course of this programme, generating income and supplies for the assisted farmers. The Vegetable Boat Initiative (VBI), Sugar Cane Processing Programme, Sustainable Farming Programme and Aquaculture Programme in BBBRNP and the Agroforestry and Agro-silvopastoral system programme in BPF engaged a total of 584 households (285 women and 296 men). All the programmes were operational at the end of the Project and carried out independently or with minimal assistance from Project staff ([REDACTED])

Since the start of this Project, 13,699 agroforestry seedlings have been planted in the multiple-use zone of BPF (11,139 seedlings only in 2023), involving 86 farmers across 226 ha. The seedlings' survival rate was 78%, i.e., 10,685 of the planted seedlings have survived, surpassing our initial target (3,000 seedlings) by 256% (**indicator 1.1**, [REDACTED])

In BBBRNP, YIARI employs 68 full-time staff members from our target communities through co-funding arrangements, with one project staff position supported directly by the Project to carry out our conservation activities within the National Park and in collaboration with the local communities. Furthermore, for each biannual orangutan reintroduction event, over 30 daily workers from the nearby communities (financed by this grant) were hired. In BPF, YIARI has employed three new full-time local staff and hired eight local staff on a regular basis (financed by this grant) to carry out project activities ([REDACTED]) Across the two landscapes, 42 additional jobs and work opportunities were created due to this Project, surpassing our target of 20 additional jobs by 105% (**Indicator 1.2**). These new jobs have generated an additional annual income of £209,863.52 or an average of £3,086 per person.

Both language and computer literacy programmes have improved the capacity of 502 children [412 children (209 girls and 203 boys) in BBBRNP and 90 children in BPF] and 30 adult women from our target communities in BBBRNP ([REDACTED]) While the project did not achieve the intended participation level for adult women (set at 100 women per **Indicator 1.3**) it exceeded its target for children by 240% (from initial target of 120 children). The shift to focus on more children came in part at the request of adult women in the community. Moreover, 68% of the students (n=184) have progressed to Middle and Advanced levels, while all computer training participants (n=274) now possess a solid grasp of fundamental computer concepts in BBBRNP landscape ([REDACTED])

During this Project, we have provided 28 secondary and college education scholarships (F=14, M=3), of which 23 are currently still running [seven junior high school, nine senior high school and seven college scholarships]. This has surpassed our target by 40% (20 scholarships, **Indicator 1.4**). In addition to our formal education scholarships, we have also launched a new programme, the KAHIU scholarship, which aims to provide non-formal education to out-of-school youth aiming for them to build successful and sustainable careers. This non-academic programme equips the recipients with crucial soft skills (e.g., financial literacy, communication, video editing, photography, computer basics, English, basic welding engineering, and driving) and in-depth training in organic agriculture, conservation, animal welfare. In addition (and as a direct response to social problems detected across target communities in BBR) safeguarding and other issues were discussed by trained professionals with participants. These included raising awareness around sexual abuse, domestic violence against women and children, and other safeguarding issues, the importance of one's mental health, how to stay safe from online fraud and what constitutes corruption). Two editions of this programme have now been run, building the capacity of 35 youth, 15 youth from BBR target communities and the other 20 from forest-edge communities in Ketapang district (co-funding) (■■■■■ ■■■■)

Although the healthcare programme with our partner organisation ASRI had to be discontinued in the second year of our Project, the project had already reached its target in the first year of the Project. A total of 3,325 people received healthcare assistance in BBRNP, surpassing the target by 66% (2,000 people, **Indicator 1.5**, ■■■■■ ■■■■)

In BBRNP, 159 local farmers improved capacities in sustainable agriculture (32 men and 73 women) and rubber production (38 men and 16 women) (■■■■■ ■■■■). Additionally, all 264 farmers (261 men and three women) enrolled in the community development programme in BPF were trained and/or mentored in sustainable agroforestry (i.e., nursery building and maintenance, production of organic fertilizers, plant grafting, etc). Of these farmers, 136 participated in the Field School, receiving more intensive training in sustainable agroforestry practices and mentoring on specific issues. Additionally, at least ten local women were trained in making seedling pots from weaving leaves and bamboo fibres– this allowed for a significant reduction in plastic used in the tree nursery (■■■■■ ■■■■). In the two landscapes, **295 farmers (331 men and 102 women)** had their capacity built throughout the project, surpassing our target by 64% (180 farmers, **Indicator 1.6**). In addition, **36 local staff and 73 university students** (42 men and 31 women) from UNILA and other three universities/institutes were trained and/or mentored in wildlife monitoring and other field techniques (■■■■■ ■■■■). The university students participated in a variety of research and training activities, including extensive training in SMART Mobile, GIS, and camera trap usage. They were involved in data analysis using Avenza Maps, ArcGIS, and QGIS, as well as conducting fieldwork such as patrolling protected habitats, observing Sumatran slow lorises, herpetofauna, and insects, and participating in primate and bird surveys. The students also engaged in conservation efforts like making organic compost, setting up tree nurseries, identifying various species (butterflies, bats, dragonflies, soil macrofauna, ants, and siamangs), and planting *ficus* trees. They provided education to local communities, assisted farmers with organic fertilizer and pesticide production, and took part in conservation camps and educational activities at the Taman Baca. University students took part in internships, volunteering, expeditions and field training programmes as well as conducted their research for undergraduate thesis which resulted in the publication of 10 scientific articles and eight undergraduate theses published and other publications on BPF biodiversity and ecosystems (■■■■■ ■■■■)

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

This output has been fully achieved, with communities feeling more embedded and empowered in the local natural resources governance through a series of activities.

In BBRNP, community members from Nusa Poring village co-drafted the Village Environment Regulation (PerDes) through a series of focus group discussions with the village government. After being co-drafted by selected community members, the Village Regulation No.01 of 2023 concerning the Management of the Mentatai River Watershed in Nusa Poring Village was ratified by the Village Government and the competent authority which regulates the management and utilisation of the Mentatai Watershed. This regulation aims to ensure sustainable utilisation and protection of the watershed. Our initiative focuses on enforcing the PerDes through participatory development practices, legal support and community education. After its enactment, M&E survey was carried out in February 2024 through focus group discussions with farmers and the public; the survey identified the need for the government to be more active in conducting comprehensive awareness raising and educational outreach about the PerDes to ensure that all community members fully understand the regulations and their role in sustainable watershed management. Awareness raising of the PerDes was carried out in April and May 2024 for a total of 158 people (101 men and 57 women) from five sub-villages in two different events. The community responded positively to the regulations outlined in the PerDes, engaging in constructive discussions with local leaders during the sessions. Challenges identified included the need for informational signboards to reinforce awareness of the PerDes and the establishment of final disposal sites for inorganic waste to prevent river pollution. Plans are underway to address these needs and extend the dissemination efforts further within the community of Nusa Poring (■■■■■).

In BPF, the existing AD/ART or Articles of Association and Bylaws (guidelines that contain regulations for all GAPOKTAN or Tenant Farmer Associations in carrying out their activities) were socialised with the community through a series of focus group discussions and informal gatherings. These efforts have resulted in 98% of the local people interviewed (i.e., 260 people from our three target GAPOKTANs) now demonstrating increased knowledge about the law on forest use—what is legal and what is illegal. We have thereby reached our target (**Indicator 2.1**). In addition, the 'Long-term Plan for Forest Management' (RPHJP) for BPF, developed by KPH with assistance from YIARI, has been approved at the District Level by the Lampung Forestry Service and currently waiting for final approval from the central government in Jakarta (KLHK) (■■■■■).

Thirty-seven kilometres of the BPF core forest block (74% of the total length) has now been demarcated with the active involvement of the local communities. Through participatory mapping and boundary demarcation, a new boundary of the core forest block has been agreed upon, increasing the original area by 385 ha in the finalised long-term management plan (RPHJP 2024-2033). Initially, the core forest block of Way Sekampung had an area of 10,825 ha; now, the core forest block covers a total area of 11,212 ha. This core zone expansion was achieved by carrying out ground checks to identify intact forest areas outside the core zone that farmers were not utilising. The agreement has been reached with the support of the local tenant farmers. A total of 564 *ficus sp.* seedlings were planted and still survive along 23km of the boundary; the remaining 14km were marked using signposts (■■■■■). Due to the effects of El Niño and Climate Change, Lampung experienced a prolonged dry season this past year, which resulted in numerous seedlings dying due to lack of water, which is why the completion of boundary demarcation was delayed. The demarcation team, therefore, focused on prioritising the installation of information signboards along the border and at

key routes leading to the forest. All 200 tenant farmers active along the core zone boundary were engaged regarding the border's location and the prohibition of logging, hunting and other illegal activities, reaching our target (**Indicator 2.2**). Formal awareness raising events were conducted with 127 tenant farmers, whereas 73 others were engaged informally in the field.

Monthly joint patrols have been carried out during the Project period, involving 10 KPH Batutegi officers, 29 local people (15 GAPOKTAN members, 13 local farmers and one student) and 13 local YIARI staff, meeting our target (**Indicator 2.3**). During the course of the Project, the patrol team carried out 339 days of patrol, resulting in 1,938 hours of monitoring and 1,209 km patrolled. A total of 39 tenant farmers from 3 GAPOKTANs and 10 KPH Batutegi staff were trained in SMART. Additionally, we have been engaging with KPH Way Waya—which manages the Protected Forest bordering the northern side of the BPF's forest core block. A total of 28 KPH Way Waya officers were trained in SMART and AVENZA map application use and have been mentored in SMART patrols by our team (■■■■■).

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

The wildlife consumption and health survey, completed in the first quarter of 2023, revealed key insights and was discussed with 63 villagers through four focus group discussions (26 participants) and a Church gathering led by a Catholic priest (37 participants). The YIARI team of veterinarians conducted 180 door-to-door visits to highlight the risks of zoonosis transmission associated with wildlife contact, hunting, and consumption. This initiative reached approximately 181 villagers and resulted in the vaccination of 529 dogs against rabies. A total of 244 villagers were sensitised to these issues (**Indicator 3.1**, ■■■■■).

From September 2023 to February 2024, a follow-up survey involved 145 community members from the nine target sub-villages in BBR to evaluate their understanding of zoonotic disease transmission and environmental health. Data collection used random sampling, semi-structured interviews with 25 questions, and informal open discussions for a comprehensive narrative. The findings indicate a significant increase in awareness: 66% of villagers now recognise the risks associated with wild meat consumption, and 70% understand the connection between forest health and human health. The community responded positively to the rabies vaccination project, with nearly all respondents acknowledging its importance for human and animal health. These results demonstrate a substantial improvement in the villagers' understanding of zoonotic risks and the interconnectedness of wildlife, environmental, and human health, especially considering the initially low awareness levels recorded in the first survey (■■■■■).

Due to conducting our End-of-Project surveys regarding our community development efforts and service-learning programmes, dedicated surveys have yet to be explicitly conducted to gauge the knowledge of our target households regarding species safeguarded by Indonesian law and cultural (Adat) regulation (**Indicator 3.2a**). However, we can provide insights through our initiatives as a significant number of individuals have been exposed to, and now have an awareness of, protected wildlife under Indonesian and *adat* (customary) laws. This includes all participants in our service-learning programmes (n=632), those involved in the awareness-raising activities (n=203), and our 68 full-time staff members. The dissemination of this information took place through various channels such as informal education sessions, interactive discussions, community engagements like door-to-door visits, focus group discussion during our vaccination project, and through an informal curriculum touching upon topics like the function of wildlife in nature, understanding protected and endangered species,

specifically those in BBRNP, wildlife crime and law protecting wildlife. Although these interactions were not part of a structured questionnaire-based survey, they have effectively contributed to increasing awareness and understanding among the mentioned groups regarding the importance of protecting wildlife and the implications of wildlife crime.

During the previous reporting period, a socio-economic and awareness survey conducted with 232 farmers from the three target GAPOKTANs in BPF revealed encouraging results. An impressive 98% of the respondents knew that hunting is prohibited within the Batutegi forest core zone, surpassing our initial target of 80% (**Indicator 3.2b**). Furthermore, 99% of the farmers acknowledged that logging, land clearing, and land burning are illegal activities in the area. Regarding their attitudes and willingness to act, 99% expressed a commitment to avoiding hunting and land clearing within the forest core zone. Additionally, 52% indicated a readiness to report any illegal activities they observed, and 10% were interested in joining the Forest Protection groups (Pamhut). These results underscore the farmers' strong awareness and proactive stance towards conserving the Batutegi forest (■■■■■).

One scout group and three local youth groups are now actively engaged in both landscapes, demonstrating a significant increase in knowledge about biodiversity and ecosystems, meeting our target (**Indicator 3.3**). In the BPF landscape, the scout Saka Wanabakti group and the Pro-Conservation Youth Forum are actively engaging in various conservation activities alongside the Taman Baca's (Reading Club) children, who are involved in these activities in addition to their regular classes at the Village Library (■■■■■). In the BBR landscape, the religious youth group in the Sekujang sub-village has undertaken diverse community activities focused on environmental conservation and spiritual growth. Their initiatives included planting 737 native fruiting tree seedlings, such as durian, tengulan, rambutan, cempedak, and pelaik, across different locations with the involvement of several youth and community members. They also organised Easter events, focus group discussions, educational sessions, and school outreach events incorporating biblical teachings on environmental stewardship, reaching over 280 people (■■■■■).

The Saka Wanabakti Batutegi group has engaged seven youths in learning, campaigning, and action focused on conservation. The group concentrated on strengthening membership and conducting school outreach among local high school students from two schools. Six sessions supplemented regular meetings to enhance organisational skills and knowledge and deepen understanding of conservation practices. The group also participated in collaborative conservation activities, raising awareness about tiger and primates conservation (including small apes), reaching a total of 145 students only in 2023 (■■■■■).

The Pro-Conservation Youth Forum in Tanggamus Regency has become a dynamic platform promoting environmental stewardship among young people from diverse communities. The forum has involved 33 youths from 14 different communities in impactful activities such as planting multi-purpose tree species, installing camera traps, and providing biodiversity education during the Indonesian Primate Day event. The forum also conducted a successful clean-up and educational campaign for World Plastic Bag Free Day, where 47 participants learned about waste issues and carried out environmental activities (■■■■■).

The Taman Baca or Reading Club, located at the Jalosi Sanak Negeri Village Library, supported by YIARI, has continued to engage children in the BPF landscape to build their capacity in several different skills and conservation knowledge. With an average of 48 young visitors attending weekly sessions and over 90 children enrolled, Taman Baca offered a diverse range of activities, including reading, traditional dance, games, and



educational programmes focused on biodiversity and environmental stewardship. Collaborative efforts with groups like Saka Wanabakti enriched the educational experience, introducing children to new perspectives and fostering a deeper connection with nature (■■■■). These activities not only enhanced awareness about plant and animal life but also instilled a strong sense of environmental responsibility, as reflected in community feedback highlighting positive changes in attitudes towards wildlife (■■■■).

Across both landscapes, **2,577 children and adults were reached through our environmental awareness activities**, surpassing our initial target of 220 children and women (**Indicator 3.4**, ■■■■). In the BBR landscape, 571 children and youth (278 girls and 233 boys) and 60 adults (53 women and seven male) participated in YIARI's environmental educational activities. Based on 127 pre-and post-tests, 84% display a moderate to high understanding of biodiversity and ecosystem services (54% scored high and 30% moderate in the post-test) ■■■■. In the BPF landscape, a total of 2,006 children and adults (~63% female) participated in our environmental education activities. Pre- and post-activity tests revealed high retention rates, with 92% of the youth displaying a good understanding of the topics taught. Additionally, BPF has been a hub for youth and students to learn more about the forest and its biodiversity and practice their learning through the establishment of the Conservation and Research Camp in the forest's core block (■■■■).

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

Since the start of the project, we have reintroduced 24 orangutans in BBRNP, almost meeting the target (30 individuals, **Indicator 4.1**). The survival rate of our reintroduced orangutans since the beginning of these reintroductions in 2016 still remains at 97%, with no confirmed deaths during this Project period. Additionally, five successful wild births (three males and two females) from reintroduced mothers were registered during this Project, with the most recent birth recorded in June 2024.

Of the 75 orangutans reintroduced since 2016, 50 were monitored consistently, and comprehensive behavioural and movement data were collected for these individuals for 70,400 follow-up-hours, with an average of 8 hrs 33 mins ( $\pm$ SD = 2.89) per follow day (■■■■).

### **3.2 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.***

***Indicator 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.

Throughout our project, significant strides were made toward achieving economic improvement goals across both landscapes. By the end of the project, **a total of 693 households**, representing approximately 2,772 women, men, and children, were positively impacted economically through our sustainable livelihoods programmes and job creation linked to conservation, surpassing our ambitious target of 600 households (**Indicator 0.1**, ■■■■).

In the BBRNP landscape, 320 households, (283 female and 37 male direct participants), benefited economically from sustainable livelihoods initiatives, with 33 of these being ex-loggers. This equated to approximately 1,696 individuals seeing improvements in their livelihoods (based on the average family size of 5.3 individuals).

Since the project's inception, these initiatives generated a substantial extra income of IDR 1,079,372,500 (■■■■), translating to an average annual extra income of IDR 1,405,432 (■■■■) per capita for the Project's entire period. This represents an 11% increase from the baseline average income of 1.1 million IDR per month. The average extra income per capita increased considerably in 2023 (IDR 2,499,844 [■■■■] per annum for 181 people) and again in 2024 (Jan-Apr), when at least 165 households received an average annual extra income of IDR 6,287,370 (■■■■) (■■■■ ■■■■).

A key component of our success in BBBRNP was the VBI, a simple but effective market-access initiative which enrolled a total of 157 households (148 women and nine men). The VBI has significantly transformed the economic landscape for local families by offering a sustainable alternative to logging. This programme has enabled local women to generate substantial and consistent additional income for their households, driving away the men from logging in the forest. Previously, female farmers faced either high transportation costs (IDR 120,000 to IDR150,000 per trip (■■■■), respectively) or exhausting 9-hour walks to reach the markets. Now, each selling trip takes only a few hours to get to the markets, and husbands actively help prepare vegetables for sale, reducing the time and motivation for logging activities. All participants interviewed (70 people) reported improvements in non-monetary aspects such as enhanced knowledge, societal change, and environmental benefits and stewardship—achieved through ongoing socializations with project participants in the importance of conserving the forest and wildlife. Moreover, 97% experienced monetary gains and all participants expressed a willingness to continue their involvement and share their learning within their communities (see M&E section below, ■■■■ ■■■■). The VBI alone generated IDR 976,944,000 ■■■■ in additional income, with participants averaging IDR 3,336,883 (■■■■) annual income in 2023 for 124 households. The initiative proved financially viable, as the collected fees (IDR 79,410,000 [■■■■]) surpassed the operational costs (IDR 29,640,000 [■■■■]). The management of these costs is overseen by the boat driver., who received financial literacy training from the YIARI team, and the Community Development manager also supervised these transactions ■■■■ ■■■■.

Our Sustainable Agricultural Programme also made a significant impact in BBBRNP, benefiting 85 participants (18 men and 67 women). These farmers cultivated 29.6 hectares of previously non-productive land, producing 2.1 tons of vegetables and cereals, generating IDR 69,109,500 (■■■■) in total income. The average income per capita in 2023 was IDR 593,793 (■■■■) for 47 people. In just the first four months of 2024, this programme yielded an extra IDR 23,987,500 (■■■■) with each farmer earning an average of IDR 282,206 (■■■■). Additionally, our Sugar Cane Production programme has empowered 70 local women and men from logger families, who collectively produced 911 kg of sugar, generating IDR 30,850,000 (■■■■) with each farmer earning an additional IDR 312,515 (■■■■) in 2023 (34 people) ■■■■ ■■■■.

Training on Rubber Production engaged 54 farmers (16 women and 38 men). Post-training monitoring of six farmers revealed that the use of the 'umbrella'<sup>1</sup> could increase their earnings by 43%, boosting their average monthly income from IDR 502,000 (■■■■) to IDR 718,000 (■■■■) due to increased productivity. Additionally, the aquaculture programme engaged three men who generated a total income of IDR 2,470,000 (■■■■) by selling the fish (■■■■ ■■■■).

In the BPF landscape, our Community Development Programmes (i.e., sustainable agrosilviculture and agrosilvopasture programmes) engaged 264 farmers (261 men and 3 women) over the course of the Project. This led to an estimated annual income increase of IDR 102,062,700 (■■■■), marking a ■■■■ increase in family income. The preliminary

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<sup>1</sup> The 'umbrellas' are plastic devices attached to rubber trees to shield the cups that collect the tapped rubber resin from rainwater.

extra income/cost reductions generated to the farmers came from the market value of the 23 goats (Rp. 29,500,000.00 [REDACTED]), 8,741 seeds provided ([REDACTED]), field school results, such as the production of organic fertilizers and pesticides (Rp. 25,600,700.00 [REDACTED]), and the selling of 7,270 ecopolybags (Rp. 21,360,000.00 [REDACTED]). Our end-of-project survey revealed that 44% of 98 interviewed farmers reported increased income. Additionally, 95% of interviewees received seeds, seedlings, fertilizers, and tools, enhancing future income opportunities (see M&E section below, [REDACTED]).

The application of sustainable agroforestry practices has not only facilitated forest rehabilitation but also aligned with the economic interests of local farmers. Key to this initiative has been the establishment of eight nurseries by farmer groups and the production of high-quality seedlings for forest restoration. In 2023 alone, these nurseries, managed by 86 active members, sowed a total of 11,139 seeds, with a 79% survival rate. This effort has contributed significantly to soil conservation and the restoration of the forest's ecological function.

In parallel, the agro-silvopastoral component has seen notable success in integrating livestock into farming systems. Initiated in late 2022, this program has expanded the local goat population by 130% over 13 months despite challenges such as animal mortality. Managed with regular veterinary support from YIARI and the local Pringsewu Regency Agriculture Service, the programme ensured the health and productivity of the livestock while also enabling the collection of significant amounts of solid and liquid manure. This manure is then repurposed into organic fertilisers, enhancing soil fertility and supporting sustainable agricultural practices. Additionally, training sessions on livestock management and the production of fermented feed have empowered farmers with practical skills, fostering greater self-reliance and community cohesion. Together, these agroforestry initiatives have not only enhanced monetary benefits to the farmers but have also bolstered soil quality and, in the long term, reduced the need for additional agricultural land.

***Indicator 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).*

Overall, our project has assisted in improving the well-being of **~4,606 impoverished women, men, and children** [~4,151 people in BBRNP and ~455 people in BPF] through our community development programmes, access to education, healthcare, and employment opportunities, surpassing our initial target by 207% (**Indicator 0.2**, [REDACTED]).

In the BBR landscape, our service-learning programme has had a profound impact on its 631 participants, with 241 surveyed individuals reporting significant improvements in computer literacy, reading fluency, and interpersonal skills. These participants, mainly motivated by their own interests and engaging for over a year, have acquired vital skills and effectively put them into practice, notably by teaching these skills to younger children. The programme has contributed to enhanced social interactions, increased self-assurance, and positive attitude changes. Feedback from all interviewed participants confirmed that the programme met their needs, showing unanimous enthusiasm to continue their involvement, engage others, and participate in further initiatives. The community response has been encouraging, with participants showing a growing commitment to environmental stewardship despite encountering some ongoing challenges. The programme's effectiveness is underscored by the widespread demand for its continuation and expansion, with aspirations for additional educational opportunities and scholarships reflecting its transformative impact in the community ([REDACTED]). For more detailed information, refer to the End-of-Project survey.

Although discontinued during our Project’s second year, the healthcare programme has significantly positively impacted the lives of the villagers, assisting over 3,000 people gain access to proper healthcare (██████). Our project has also assisted local communities in pursuing careers and access employment opportunities in wildlife conservation for 109 (42 supported by this grant) local people. A survey of 105 current and ex-YIARI’s local staff in BBRNP showed that 68% had some level of understanding of conservation issues. Of the 47 ex-YIARI’s local staff interviewed, 34% have continued with careers away from unsustainable labour such as illegal logging, mining and palm oil workers (██████ Programme Annual Evaluation).

In the BPF landscape, a total number of ~455 people (~343 men and ~112 women) have been involved in agro-biodiversity capacity building and access to resources and educational activities (Annex 5. 2). Over the course of the project, 264 farmers were involved in capacity-building activities. Additionally, approximately 90 children living in the buffer zone of BPF have improved literacy, environmental knowledge, traditional dance and other skills through the Reading Club or Taman Baca programme. A survey with the enrolled farmers (98 individuals) revealed that 74% of them reported improvements in multi-dimensional well-being aspects such as an increase in knowledge (70%), social cohesion (7%) and environmental benefits (4%) (see end-of-project survey below, ████████).

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

Throughout the course of the Project, **a total of 342 farmers were involved in forest governance** in some capacity. For example, farmers regularly participated in activities such as joint SMART patrols, camera trap monitoring activities, boundary demarcation activities and the community-led patrol teams (Pamhut) (██████).

Although the desired target of 700 farmers was not reached (**Indicator 0.3**), the Project has strengthened local governance as a whole, with a comprehensive outreach strategy engaging farmers in sustainable practices and the wider community in the maintenance of forest boundaries. Significant efforts were concentrated in key areas such as the Way Sekampung and Batulima core zone forests, where the project team, local community members, farmers and KPH, alongside the SMART patrol team, conducted educational sessions and carried out boundary demarcation. These activities helped to reinforce the message that forest governance can only be successful as a joint endeavour. These initiatives were well received. For example, Pak Dayat (chairman of the Sumbur Makmur GAPOKTAN) stated that, “the assistance from YIARI to local farmers has had many benefits, particularly in providing the knowledge of how to cultivate agricultural land in an environmentally friendly way which also provides sustainable income”. In addition, Mrs. Sariatmatun (a member of Sumber Makmur) stated: Fertilizer has always been difficult to obtain and expensive in price, now since the assistance from YIARI and KPH Batutege, I am able to make it myself and apply it to my land”.

Regular patrols and community meetings fostered an environment of active participation and mutual respect, and helped to integrate local insights and needs into forest management strategies. For example, prior to these socialisations, many farmers had a tendency to be passive or apathetic towards illegal activities committed by people outside of the community or farming groups. Often, the farmers were often blamed for these crimes by KPH Batutege. The farmers’ active steps to patrol the area turned out to be effective in preventing illegal activities carried out by parties outside the group and has since resulted in better relations between the farmers and KPH Batutege.

Additionally, local tenant farmers improved capacity in forest monitoring tools (including SMART, Avenza map application, and camera trapping) (██████). These combined

actions have created a robust and inclusive governance system that not only secures a high-biodiversity forest area but has also encouraged local communities to become more involved in conservation.

Our survey conducted with 260 farmers in 2022 revealed significant insights into their participation in Forest Management group activities. Remarkably, 88% of the farmers interviewed said to be actively engaged in these group meetings, with the highest level of involvement seen in discussions on regulations (33%). Meetings focused on socialising the AD/ART or Articles of Association and Bylaws (regulations for GAPOKTANs) were particularly well-attended as they provide a platform for farmers to exercise control over managed resources and contribute to group decision-making. The survey also highlighted areas where engagement could be improved. Participation in meetings specifically addressing Forest Management (20%) and Institutional matters (19%) remains relatively low. This lower attendance is not due to a lack of interest or initiative from the farmers but was often a result of logistical challenges such as farmers being away when these discussions occurred. Moreover, 12% of farmers reported never attending group meetings. This was largely attributed to the significant distance between their homes and the meeting venues or inadequate communication about meeting schedules due to limited communication channels (██████████). Addressing these barriers will be essential to ensure that all farmers have the opportunity to participate fully in the governance of their local forest resources in the future.

***Indicator 0.4*** *The number of illegal activities in the Batutegi 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)*

The overall Encounter Rate ([ER], number of incidents per hour of patrol) of illegal activities decreased by 66% since the beginning of the Project [from 0.24 in 2021 to 0.08 in 2023]. Compared to our baseline data in 2019 (ER=0.18), illegal activities decreased by 55%. Therefore, we have surpassed our target of 50% decrease in illegal activities (**Indicator 0.4**, ██████████, SMART Patrol Data).

The instances most commonly detected during the Project period were agricultural encroachment (ER=0.037) and hunting (ER=0.027). To a lesser extent, the patrol team encountered signs of extraction of Non-Timber Forest Products or NTFP (ER=0.008), logging (ER=0.006), forest and land fires (ER=0.002), and signs of mining and drilling (ER=0.0005). Alternatively, the patrol team also recorded the number of people encountered in the forest engaged in illegal activities (ER=0.023) as well as encountered work tools and equipment (e.g., saws, digging tools, snares etc) (ER=0.015).

When compared to previous years before the start of this project (Jan-19 to Sep-21), hunting—which was the illegal activity most commonly encountered in the forest (ER=0.081)—, and the illegal extraction of NTFP—mainly of bamboo crystal— (ER=0.020) were the activities that reduced the most—66% and 58% decrease respectively. Illegal logging and mining also reduced significantly (47% and 43% respectively). Encroachment, decreased by 13% when compared to the period prior the project starting. The number of people encountered in the forest increased significantly (68%). As patrol mandates have become smarter during the project period due to more intensive monitoring, mapping of access routes and hotspot locations, and the integration with other forest monitoring tools, such as satellite image inspections, deforestation alerts and camera traps, this increase in the number of perpetrators detected might be related to more efficient and targeted responses to illegal activities in the forest. Two illegal activities encountered prior the start of the project were absent during this project period: illegal fishing and road opening (██████████, SMART Patrol Data).

***Indicator 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)*

Forest Cover Loss data was obtained from the Hansen's Global Forest Change<sup>2</sup> database and the results of the RADD Forest Disturbance Alert analysis between 2000 and 2023. Annual Forest Cover Loss estimates fluctuate considerably between years due to natural and human induced climate changes, among other factors. Therefore, annual Forest Cover Loss during the project period (2022-23) was compared to a baseline of 20 years (2001-2020) and 6 years (2015-2020) annual average before the start of the project.

Forest Cover Loss for BPF core forest block (Way Sekampung) during the project period (2022-23) was of 185 hectares (29 ha of primary forest and 157 ha of secondary forest) or about 1.65% per year, this represents a 55% reduction of forest cover loss compared to the 20-years average baseline (413 ha) and 43% reduction compared to a 6-years average baseline (325 ha) [REDACTED].

**Indicator 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.

In BBRNP, 209 wildlife species have already been recorded. RAI remained consistent for two threatened species (i.e., *Diplogale hosei* and *Macaca nemestrina*), increased for four threatened species (i.e., *Pongo pygmaeus*, *Cynogale bennettii*, *Neofelis diardi*, and *Arctictis binturong*), and decreased for four other threatened species (i.e., *Manis javanica*, *Catopuma badia*, *Helarctos malayanus*, *Sus barbatus*). Therefore, of the ten threatened species monitored, six have remained stable or increased RAI [REDACTED].

However, it is important to consider that a non-drastic decrease in RAI could also be attributed to factors other than a decline in population size, such as seasonal variations (like in mini-masting at the end of 2023/beginning of 2024) or a shift in the movement patterns of the species concerned. Additional data and analysis would be needed to determine whether it is solely due to a change in population numbers or if other factors, like changes in behaviour or habitat use, are contributing to the observed decrease in abundance.

In BPF's core block Way Sekampung, there has been an increase in species RAI based on the 29 species of mammals, 12 species of birds and 2 species of reptiles monitored through camera traps. Comparing 2023 RAI data with our baseline (2018), the population of Sun bears (*Helarctos malayanus*), Sunda pangolins (*Manis javanica*), Siamangs (*Symphalangus syndactylus*), Sunda clouded leopard (*Neofelis diardi*), Malayan tapir (*Tapirus indicus*) and White-crowned hornbills (*Berenicornis comatus*) has increased. The only endangered species which population seem to have decreased during the Project period was of Sumatran tigers (*Panthera tigris sondaica*). Other significant species documented included the Sunda stink-badger (*Mydaus javanensis*), yellow-throated marten (*Martes flavigula*), and various civets (Viverridae).

Additionally, wildlife monitoring through camera trap has been also carried out in the Rindingan area. A total of six camera traps were installed in this area, predominantly installed along potential wildlife paths, enhancing the likelihood of capturing images of the target species. In the Rindingan forest landscape, the camera traps recorded 18 species, including a mix of mammals, primates, and birds. Key species captured included the clouded leopard, golden cat (*Catopuma temminckii*), sun bear, and Sumatran striped rabbit (*Nesolagus netscheri*). Additional notable species included the Malayan weasel (*Mustela nudipes*) and the Sumatran Mountain goat (*Capricornis sumatraensis*), which

<sup>2</sup> [REDACTED]

were not recorded in the Way Sekampung landscape. The presence of these species in Rindingan suggests that the different environmental conditions, such as denser vegetation and higher elevation, influenced species distribution ( [REDACTED] [REDACTED] ).

### **Monitoring and Evaluation:**

#### **End-of-Project Survey BBRNP - Community Development:**

A total of seventy participants from the VBI programme were interviewed, comprising 59 women and 11 men. The participants were evenly distributed across different age groups: 14 individuals were young adults (aged 20-35), 15 were adults (aged 36-50), and 11 were old adults (>50 years old). Over half (66%) of the respondents had received education only up to elementary school level (with 30% having no formal education). Fifty-three per cent had been active participants in the VBI throughout the entire three-year programme duration. All participants had undergone training on planting and fertiliser production. An overwhelming majority of the respondents (93%, 65 participants) stated that the knowledge gained from the training was 'highly beneficial' to them, with the remaining participants acknowledging its usefulness. The primary reason cited by participants (96%) for their enrolment in the programme is the provision of facilities, resource access, and economic benefits. As reported by the farmers, the VBI offers cost-effective and safer alternatives, enabling them to transport larger quantities of vegetables to markets, thereby increasing their profits. When asked if the programme was suitable to their needs, all (100%) participants unanimously indicated that the programme met their requirement: 97% (68 individuals) stated that the programme had increased household income, while the remaining 3% (2 individuals) mentioned that it had assisted them in meeting their daily needs. Furthermore, all (100%) respondents reported that the programme had delivered various benefits (social, environmental, and health), along with economic advantages for themselves, with 97% affirming its positive impact on the community's economy. Nearly all (n=69) respondents, stated that the 'supplementary income' generated by the programme was utilised to fulfil their family's daily necessities, with one participant mentioning using it to cover their children's educational expenses as well.

All the respondents said that there were changes in the people around them as a result of the Community Development Programme, with the majority (97%) saying that changes relied on the access to facilities and empowerment of the community as a whole. All of the respondents also said that they intend to disseminate the knowledge gained during the programme to the other members of the community. All respondents said that they will apply the knowledge gained and 97% said that they have already applied it. The respondents also said in unanimity that their family, neighbours and friends were supportive of them participating in the programme. All respondents expressed their desire for more livelihood programmes in the future.

Every participant confirmed their continued practice of collecting vegetables (mainly ferns), fruits, and wood from the forest. Additionally, all respondents are actively engaged in sugar cane production. When asked about their efforts toward environmental conservation, each individual reported planting fruit trees and timber trees, with one response mentioning the cultivation of rubber trees as well.

Recommendations for the ongoing community development programme included requests for support in seed collection, expanded training opportunities, marketing assistance, and the establishment of more cooperative groups (67%). One respondent proposed the inclusion of an additional boat for transporting goods beyond vegetables, suggesting an expansion of the programme's logistical capabilities.

Survey data and report can be found in [REDACTED] [REDACTED] .

#### **End-of-Project Survey BBRNP – Educational Programme:**

Of 631 individuals enrolled in YIARI's service-learning programme in BBBRNP, 241 participants were interviewed. The survey revealed a significant impact on the community, with 92% voluntarily joining the programme and over 89% participating for more than a year. The programme notably enhanced crucial skills, with 61% showing improvement in reading fluency and 35% gaining proficiency in computer literacy. These skills were transferred widely, with 95% of participants assisting in the teaching of younger children. Noteworthy shifts in attitudes were observed, with 72% participants reporting higher social integration.

All participants confirmed that the programme effectively met their needs, with 100% expressing eagerness to continue, invite others, and engage in future initiatives. Community feedback was overwhelmingly positive (100%), and 82% reported that their families abstained from illegal practices. Furthermore, 70% demonstrated environmental consciousness by taking measures to prevent pollution. Participants (20%) also expressed a strong interest in scholarships and additional educational opportunities.

Survey data and report can be found in [REDACTED].

#### End-of-Project Survey BPF – Community Development:

A total of ninety-seven farmers enrolled in YIARI's Community Development programme in BPF from the three target GAPOKTANs were surveyed through structured interviews (questionnaires), and Focus Group Discussions (FGD). Purposive random sampling was used to ensure respondents have relevant experience and knowledge of the programme. The respondents exhibit a diverse range of demographic characteristics. In terms of ethnicity, the majority identified as Javanese (46%). Age-wise, a significant portion fell within the adult category (26-45 years, 57%). In regard to education levels, a majority has completed primary education (57%), while those with diplomas were the least represented (1%). Gender distribution skewed heavily towards males, comprising 98% of the respondents.

The survey revealed that 89% of the respondents were involved in various community assistance activities facilitated by YIARI, such as forest protection and biodiversity surveys, indicating high levels of engagement from the farmers. The duration of involvement varied, with 38% of respondents having participated for one year and 37% for 3 years.

The programmes were well-received, with 97% of the respondents indicating that the activities met their expectations and needs, and wish them to continue. This alignment is likely due to the participatory approach to planning, where discussions between YIARI, KPH, and the farmers helped tailor the activities to the local context. Consequently, 91% of respondents said they were ready to continue participating and 90% of respondents would encourage other farmers to participate in the activities.

YIARI's efforts encompassed a broad range of activities, from institutional discussions and nursery establishment to livestock management and field schools. Notably, 77% of respondents were aware of these programmes. The most commonly attended activities were institutional discussions (29%) and nursery-related activities (22%), and livestock management activities (5%).

The programme delivered tangible benefits, such as distributing seedlings (79% of respondents received seedlings). The emphasis on physical benefits enhanced the programme's attractiveness and perceived value among the farmers. The majority of the farmers (97%) engaged in planting MPTS (Multipurpose Tree Species) seedlings over the past three years, with a total of 13,654 seedlings planted. 48% of seedlings came from YIARI-supported nurseries, while 43% were sourced independently by farmers. This indicates a growing capability among farmers to sustain nursery activities independently.



Moreover, 93% of respondents reported being able to manage nurseries independently, attributing their skills to the training received from YIARI.

Forty-two percent of respondents owned livestock such as goats, chickens, cattle, and fish, while 52% of respondents had successfully applied the training in livestock management, and 97% recognize the importance of integrating livestock into their farming practices.

The majority of the farmers (79%) have learned how to make organic fertilizers and pesticides. However, 70% still rely on chemical products to some extent, highlighting opportunities for additional support. Despite the current reliance on chemicals, 91% of respondents were interested in fully transitioning to organic materials, driven by the benefits observed. The heavy reliance on chemical products is probably due to habit and also a lack of confidence in the effectiveness of organic alternatives. It is hoped that over time, the farmers will be able to observe the results of using organic products and their confidence and willingness to apply them will increase.

Farmers actively participated in group meetings, which played a crucial role in fostering community spirit and ensuring the success of collective initiatives. Regular participation in these meetings reflects a commitment to collaborative problem-solving and learning. The respondents acknowledged the importance of group work for achieving common goals. This collective approach enhanced the effectiveness of interventions and supports knowledge sharing. The existing group dynamics were generally positive, with respondents indicating that the groups function well. Continuous efforts were made to address any issues and improve group cohesion. The farmers expressed a desire for ongoing support and development opportunities. They were optimistic and willing to co-create new initiatives that YIARI and KPH Batutegeji might be able to support in future.

Survey data and report can be found in [REDACTED].

### 3.3 Monitoring of assumptions

#### Outcome assumptions:

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

Comments: No major changes have occurred in the structure of the Provincial Forestry services during the course of this Project.

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

Comments: Relationships between these different partners and stakeholders have remained good and have been further strengthened throughout the duration of the Project.

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

Comments: No new unplanned events have created extra pressure in BPF during the course of this Project.

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 has strengthened farmer groups that can collaborate with and support KPH to help protect the forest through community-

based patrols (Pamhut) and has set a communication forum to help coordinate. YIARI also expanded efforts into the Rindingan forest area along with KPH Batutegi and increased collaborations with KPH Way Waya—which manages the bordering forest of Way Waya on the northern side of Batutegi's Way Sekampung Forest block.

### **Output 1 assumptions:**

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

Comments: Communities have remained engaged and formed additional community groups, with 11 farming groups formed throughout the Project.

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

Comments: We could observe an increase in the participation of our target communities in the local economy through sustainable livelihoods. For example, through the VBI, 23 farmers (91% women) who had never sold their crops in the market before joined the programme and made their first sales thanks to the boat service. Additionally, several farmers in BPF have independently grown seedlings through the use of organic fertilizers and pesticides.

### **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 Batutegi was 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: Mutual trusts have been ensured throughout the Project period. Meeting and work collaborations with the Lampung Province Forestry Service was held during this Project. Regular meetings and Focus Group Discussions with farming groups was held. No issues were identified.

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

Comments: No staff that recently received training was transferred. Refresher courses were carried out in the past year.

### **Output 3 assumptions:**

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

Comments: There has been increased awareness among the farmers in BPF as highlighted by our End-of-Project survey. However, there is still some resistance towards the shift to organic and more sustainable practices in farming.

### **Output 4 assumptions:**

Assumption 11: Orangutans reintroduced into BBRNP demonstrate successful adaptation and reproductive abilities post-reintroduction.

Comments: Previous reintroduction have shown a 3% mortality in eight years displaying favourable ecological adjustment and maintain health, consistently monitored through behavioural observations and health assessments. Notably, the observation for five

successful wild births further support this assumption. Concerns regarding potential maternal rejection among rehabilitated females orangutans have not materialised, as evidenced by their exceptional maternal instincts toward their offspring, as substantiated by our Mother-Offspring Dyad Behaviour datasets.

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

Comments: No recorded case of orangutans being hunted in our target area throughout the Project period.

### 3.4 Impact

**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.

Our project has made significant progress in advancing biodiversity conservation and alleviating poverty in our two target landscapes, BBRNP and BPF. These accomplishments are substantiated by compelling evidence, including quantitative data from satellite imagery, reports from SMART patrol, wildlife monitoring data, and socio-economic surveys. These data demonstrate significant reductions in illegal activities and deforestation rates in BPF and increased community buy-in and support for conservation efforts in BBRNP. Qualitative feedback from community members highlights the transformative impact of educational, healthcare, and livelihood programmes.

The summary of our impact includes:

- The project has substantially impacted 693 households across our two target landscapes, representing approximately 20% of all households. By the end of the project, all five community development programs were operational, independently conducted or with minimal assistance from project staff. This success underscores the Project's effectiveness in fostering self-reliance and sustainable approaches.
- Successful reintroduction efforts and effective monitoring of the Bornean orangutans in BBRNP have led to a nearly 50% increase in the observed population. Post-reintroduction monitoring has shown a remarkable survival rate of 97%, and five wild-born infants from reintroduced mothers demonstrating the establishment of a self-sustaining orangutan population.
- In BPF, extensive efforts to demarcate and protect the core forest block have resulted in an expanded and well-defined protected forest area. Through participatory mapping and boundary demarcation, the core forest block was increased by 385 hectares, reinforcing the local authorities and community commitment to ecosystem protection.
- Through the community-based forest management and protection efforts implemented in the project, significant accomplishments have been achieved in safeguarding BPF. Notable outcomes include a reduction of forest loss on the core forest block by 55-44% and an overall decrease of 66% in illegal activities within the forest.
- Our environmental education and awareness programmes reached a broad audience of over 2,500 individuals, surpassing our initial targets and embedding a deeper understanding and appreciation for biodiversity and ecosystem services within the communities. These programmes, combined with our healthcare and outreach initiatives, contributed to promoting forest conservation and reducing illegal and unsustainable practices in the forest.

- Furthermore, our project's impact has extended to safeguarding and maintaining the key wildlife populations. While the potential decline of certain species, such as the Sumatran tiger population in BPF, warrants further investigation, most of our indicator species populations have shown consistent stability and even growth throughout the Project duration.

## **4 Contribution to Darwin Initiative Programme Objectives**

### **4.1 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 their biodiversity. 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 critical 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.

In April 2023, the Lampung Forestry Service and YIARI presented the findings of the biodiversity survey from KPH Batutege and the conservation strategy being implemented in the area to the Directorate General of Nature Resources and Ecosystem Conservation. It was recommended that due to the successful results achieved from the conservation approach taken in BPF, this approach should be adopted and replicated in other KPH managed areas across Indonesia.

## 4.2 Project support for multidimensional poverty reduction

Our project has made a positive impact on human development and poverty alleviation. By 2024, we enhanced the financial and non-monetary well-being of 4,945 individuals through the implementation of improved agroforestry systems, educational initiatives, healthcare services, and enhanced employment opportunities. These interventions have resulted in a fundamental shift for many community members from unsustainable to sustainable livelihood strategies.

Through the provision of education on existing regulations, ecosystem services awareness, and facilitating resources to support sustainable practices, YIARI helped farmers enhance their economic benefits while promoting their active involvement in preserving the ecological balance of the forest. With 76% of the Batutegi KPH area under cultivation by farmers, primarily growing monoculture coffee, the region faces significant challenges such as water shortages in dry seasons and erosion and landslides during rainy seasons. By taking a comprehensive approach to address these challenges, our project integrated human development efforts with environmental conservation, ensuring that the empowerment of local communities aligns with broader sustainable development goals, thus offering long-term benefits to the communities.

Our initiatives to enhance primary and secondary education also targeted underlying causes of poverty within these communities. By 2024, our educational programmes improved computer literacy and reading proficiency for 272 children, youth and adult women, equipping them with essential skills for future career opportunities beyond unsustainable natural resource exploitation. This advancement in education is expected to have lasting benefits, open up better employment prospects and break the cycle of poverty for these families.

The implementation of sustainable livelihood schemes has increased the family income of 584 households by an average of 4-11%. These income-generating initiatives not only provided immediate financial relief but also fostered long-term economic stability and self-sufficiency for ~20% of the families residing in our target landscapes. The VBI has facilitated more accessible access to local markets, thereby further enhancing the economy prosperity of these communities. Additionally, the creation of job opportunities linked to conservation efforts has played a significant role in the alleviation of poverty for 109 local households.

Over the course of the project, we have empowered over 460 local people by providing them with essential skills crucial for their economic advancement and the sustainable development of their communities. This includes training in sustainable agriculture/agroforestry practices, as well as wildlife and forest monitoring tools. By learning to manufacture their organic fertilizers and pesticides, farmers have not only gained independence from external suppliers but have also reduced their expenses, improved soil quality, increased crop yields, and contributed to conservation efforts by enhancing overall environmental quality and diminishing the need for expanding agricultural lands.

The effectiveness of our support to farmers and local communities is substantiated by the findings from our End-of-Project surveys. The majority of participants expressed high satisfaction levels (ranging from 90-100%) across various aspects of our programmes. Furthermore, over 76% reported that they acquired important and valuable knowledge, and between 93-100% expressed a keen interest in continuing with our various programmes, highlighting the positive impact and relevance of our interventions.

### 4.3 Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board <sup>3</sup> .	54% women (n=7) from a total of 13 core project staff.
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women <sup>4</sup> .	<p>No complete staff records could be obtained from our project partners.</p> <p>For KPH Batutegei Lampung Province, from the 18 staff members, 3 are women (17%): 1 Forestry Police (PolHut) and 2 in Administration. In the Lampung University (UNILA), our two project partners are women lecturers. We estimate that approximately 50% of the senior leadership in UNILA are women.</p> <p>In Bukit Baka Bukit Raya National Park Authority (BBBRNPA), there are 6 full-time staff (1 head of Park, 1 deputy head of park, 1 head of resort, 1 area conservation analysis, 1 M&amp;E, 1 administrative and reporting) of which one is a woman (17% women representation).</p>

<b>GESI Scale</b>	<b>Description</b>	<b>Put X where you think your project is on the scale</b>
<b>Not yet sensitive</b>	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
<b>Sensitive</b>	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.	
<b>Empowering</b>	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	
<b>Transformative</b>	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	X

Our project has been designed with a strong emphasis on gender equality and social inclusion, specifically targeting women and local indigenous communities. By creating women-farming groups and empowering women through initiatives like the Vegetable Boat Initiative as well as engaging women in literacy and computer learning, we have

<sup>3</sup> A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

<sup>4</sup> Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

significantly improved their access to education and development opportunities. Our inclusive approach, which involves focus group discussions and community meetings, ensures that women and marginalized groups actively participate in decision-making processes. This has allowed us to address their unique challenges and aspirations effectively, resulting in increased household incomes and reduced reliance on unsustainable activities. One notable achievement is the positive response from women participating in the Vegetable Boat Initiative, with all interviewed participants expressing that the program met their needs and showing interest in its continuation and expansion. This success underscores the transformative nature of our Project for women and impoverished rural communities.

#### 4.4 Transfer of knowledge

- Results of our long-term orangutan reintroduction and educational programme in BBRNP have been presented in the International Primatology Society (IPS) Conference held in Kuching, Malaysia in August 2023<sup>5</sup>.
- A documentary of the sustainable agroforestry programme with farmers in BPF were produced<sup>6</sup> and presented at university campuses and public places followed by discussion sessions.
- Project activities and updates are regularly shared on YIARI's website<sup>7</sup> and through YIARI's UK partner organisation's (International Animal Rescue) social media accounts.
- Batutegi and BBRNP Projects have featured in local media platforms<sup>8</sup>, international media platforms<sup>9</sup> and official governmental websites<sup>10</sup>.
- Twenty-one scientific publications produced and published in peer-reviewed journals (10), undergraduate theses (8), a field guidebook (1), and national seminars (1). Additionally, five undergraduate theses are currently in preparation (██████████).

#### 4.5 Capacity building

- Our Biodiversity Supervisor, Mr Umar Fhadli Kennedy, has recently become part of the BEAT Southeast Asia team, supported by The K. Lisa Yang Center for Conservation Bioacoustics at Cornell University. This collaborative effort aims to assist young professionals from Southeast Asia who are in the early stages of their careers, enhancing their research skills, fostering the development of innovative tools and partnerships, and establishing a global network of individuals proficient in sharing bioacoustics best practices. Mr Kennedy's successful inclusion in this initiative is attributed to his extensive experience with YIARI in biodiversity monitoring within the BBRNP and YIARI's other forest projects. Mr Kennedy will also spearhead a bioacoustics project in BBRNP in 2025. The

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<sup>5</sup> <https://primatesmalaysia.org/home/ips-mps-2023-highlights/>

<sup>6</sup> <https://www.youtube.com/watch?v=R6GG4bfOZ-0>

<sup>7</sup> <https://internationalanimalrescue.or.id/>

<sup>8</sup> e.g., <https://www.kompas.id/baca/english/2023/09/28/en-mengintip-markas-pasukan-penjaga-hutan-lindung-batutegi> ; <https://interaktif.tempo.co/proyek/laung-konservasi-batutegi-lampung/> ; <https://en.antaranews.com/news/235321/west-kalimantan-releases-five-orangutans-into-national-park>

<sup>9</sup> e.g., <https://news.mongabay.com/2024/01/sumatra-coffee-farmers-brew-natural-fertilizer-as-inflation-bites/>

<sup>10</sup> e.g., <https://www.dishut.lampungprov.go.id/detail-post/pendampingan-yayasan-inisiasi-alam-rehabilitasi-indonesia-yiari-di-uptd-kph-batu-tegi> ; <https://kmisfip2.menlhk.go.id/news/detail/1348>

project will involve training key personnel as well as BBRNP staff, with the aim of leveraging bioacoustics as a tool for biodiversity monitoring and conservation efforts in the region.

- Mr Umar Fhadli Kennedi and Mr Ujang participated in a 7-day course held at the University Indonesia (UI), collaboratively organised by faculty member of UI the University of Kent. The training focused on camera trapping identification techniques and data analysis using 'R' programming. The purpose of the training was to enhance their skills in standardizing data sets and data analysis procedures. Additionally, the course aimed to improve their proficiency in conducting wildlife research utilising (original field) camera trapping technology and advanced data analysis methods.
- Aris Subagio, Batutegi's Biodiversity Coordinator, has become a regular guest lecturer at the University of Lampung regarding the use of camera traps. Every year, Aris trains new students in practicum activities on the use of technology in wildlife monitoring (Camera traps, GPS, SMART etc). In addition to Aris, Ahlan (Batutegi staff from the local community) assists Aris during the training sessions at UNILA.
- Nedi, who began at YIARI as a field guide with some local knowledge of plants, has become a botanist and is now deemed to be an expert in plant identification. He often assists teams of researchers from universities (UNILA and UNAS) in identifying plant species in Batutegi. Nedi also oversees the phenology plots at the Batutegi Research Camp.

## **5 Monitoring and evaluation**

No major changes were made to the project logframe during its course. In 2023, small amendments to the logframe were approved, which updated project baselines and introduced a new indicator (1.6) to track the addition of a project activity (rubber extraction training). Additionally, computer literacy was incorporated into indicator 1.3 to address the need for enhancing the skills of local children and women, alongside language literacy. Indicators 2.1 and 3.2a were slightly revised to better reflect our expanding scope of work. For example, while initially focusing on community involvement in village regulations to engage farmers in BPF, our project team identified the necessity to protect the watershed in Nusa Poring, BBRNP landscape. This prompted us to involve community members in co-drafting village regulations, subsequently rectified by the local government.

Overall, our project's indicators were effective in measuring outputs, outcomes, and impacts. Our three End-of-Project surveys conducted with participants proved invaluable in assessing local community perceptions of the project and its overall impact on their wellbeing. External evaluation of our project was carried out in March 2023 by external consultants hired by Darwin and verbal advice incorporated in our projects activities and M&E plan.



## 6 Lessons learnt

Over the course of this project, several key lessons have emerged that can inform future Darwin Initiative projects and contribute to the wider program's success. These lessons encompass administrative, management, technical, and monitoring and evaluation (M&E) aspects.

What Worked Well:

- The integration of sustainable agricultural practices with biodiversity conservation initiatives was highly effective. This approach served as an excellent entry point to engage communities in forest and wildlife protection, build trust, gain their buy-in, and jointly tackle poverty reduction and sustainability goals. This balanced approach resonated well with our target local communities, as evidenced by their overall satisfaction with our project.
- Strategies that involved local communities in decision-making processes and project implementation yielded positive results, although participation levels could be improved further. This approach not only enhanced project ownership but also ensured the sustainability of interventions beyond the project's lifespan.
- Targeted capacity-building efforts, including training sessions, mentoring during practical applications (e.g., Field School) in agroforestry, were instrumental in empowering local farmers. This approach significantly enhanced their skills and knowledge, leading to tangible improvements in agricultural practices in a short period. While the income increase observed during the project period was modest due to the longer time required for agroforestry practices to yield income (i.e., such the harvest of avocado fruits and areca nuts), extra income generation was already evident in the ~2.5 years since the program's start. This practice is expected to yield a greater income after the termination of the project.
- The ability to adapt project activities in response to unforeseen challenges, such as climate variability and logistical constraints, proved crucial. Flexibility in planning and implementation allowed the project to maintain momentum and effectiveness despite external pressures.
- Engaging and developing existing educational initiatives proved to be highly effective. For example, our collaboration with the local Taman Baca (reading club) transformed it into an education centre providing environmental information and activities to engage youth including recycling and wildlife identification. Moreover, through partnerships with local schools, we trained teachers and incorporated computer lessons into their school curriculum. This approach ensured sustainability of the programme by leveraging existing community structures.
- Over the years we have developed a strong, trusting relationship with the Lampung Forestry Service, which has been crucial for our project's success. When asked why the Forestry Service wants to work with YIARI during the evaluation, the answer was that YIARI is the most 'ethical' NGO they have worked with. Frequent and open communication, from planning to evaluation, has further strengthened the relationship. The Head of the Forestry Service Lampung has recently recommended expanding our work to other areas outside of BPF.
- Our approach to engaging and gaining trust from farming groups and community members have worked very well. This has been a gradual process that has taken time. From the beginning, the project was careful not to raise expectations of financial support, instead it focused on raising capacity and knowledge of farming methods and/or targeted assistance such as market access (provision of a boat – with a business plan to continue paying for its maintenance and running) or sugar cane processing machines. We were also careful not to present ourselves as

farming/livelihoods experts, instead we conveyed to them that we were there to learn with them and provide assistance. We worked with the materials and resources they had available and adapted the methods currently being used. Our softer approach and long-term commitment have resulted in high levels of engagement and trust amongst the three groups.

#### What Didn't Work Well:

- Dependence on boats for accessing local markets yielded some unforeseen challenges. Prolonged dry seasons in West Kalimantan meant boats used to navigate and transport vegetable farmers to the markets were unable to run when water levels dropped below a certain level. Activities were therefore disrupted during the prolonged dry season.
- Some farmers showed inconsistent participation in training sessions, citing logistical barriers and scepticism about immediate benefits. This highlighted the need for more targeted approaches with both short-term and longer-term benefits to sustain interest.

#### Lessons Learned:

- The impact of climate variability, such as prolonged dry seasons and increased forest fire risks, underscored the importance of robust climate resilience strategies. Future projects should incorporate adaptive measures and contingency plans to mitigate such risks effectively.
- Maintaining consistent communication and highlighting incremental successes are critical for sustaining farmer motivation and engagement in long-term projects. Celebrating small achievements helps build trust and demonstrates tangible benefits over time.
- The success of certain interventions, like the 'umbrella' method in rubber farming, warrants scaling efforts to reach a broader community. Identifying and leveraging successful pilot initiatives can accelerate adoption rates and amplify project impacts.

#### Recommendations for Future Projects:

- Enhance participation and effectiveness by adopting flexible training schedules and incorporating local perspectives. Provide clear evidence of long-term benefits and fostering peer-to-peer learning networks to sustain farmer interest and commitment.
- Implement early warning systems and community-based fire prevention strategies in forest landscapes prone to fire risks. Proactive measures can help minimize the impact of wildfires on biodiversity and community livelihoods.

## **7 Actions taken in response to Annual Report reviews**

Below we address the reviewer's questions:

- 1- Darwin standard indicators have not been included, and Annex 3 is missing. Does the project have a risk matrix?

As discussed with Darwin contact person before, our initial proposal did not include standard indicators or a risk matrix as it was not a requirement for Darwin projects at our application stage.

- 2- Strengthen the Darwin Initiative Identity where possible.

Darwin Initiative Identity has now been strengthened through the acknowledgement of funding in an international conference (IPS), at YIARI's website and in the documentary film produced.

- 3- Programme evaluation visit from Darwin Initiative results should be incorporated when available.

Verbal advice given during the evaluation was taken onboard immediately, however written Programme Evaluation results were never received and thus could not be incorporated in the final report.

- 4- The Ministry of Environment and Forestry is the Indonesian CBD, CITES, and UNFCCC national focal point. Has the project been in touch with the focal point? Do we have examples of whether we have been in touch with MoEF about any aspects of this project?

Our project has actively engaged with MoEF on various aspects. For example, during our biannual and annual evaluations of the collaborative programme with the MoEF and the provincial representative from BBRNPA, we discuss specific targets, indicators, and outputs related to each of our objectives. Furthermore, these discussions extend to financial matters, including our donor support system, where we deliberate on financial support, duration of funding, indicators and targets for each supporting entity. This collaborative dialogue with the BBRNPA demonstrates our commitment to transparency, alignment with national conservation priorities, and effective utilisation of resources to achieve the desired conservation outcome.

BPF is a Protection Forest and not a conservation area, therefore, it not directly under the management of MoEF. However, there are some central government policies that are adopted in BPF, such as the MoEF's Social Forestry Scheme to which we support. In addition, a report submitted to the Directorate General of Nature Resources and Ecosystem (KSDAE-KLHK), by the Lampung Forestry Service (*Dinas Kehutanan Lampung*), featured biodiversity data collected by YIARI and KPH Batutegei, which provided evidence that BPF was an area with a High Conservation Value (HCV). This report represents a form of participation in fulfilling the MoEF's policies relating to biodiversity.

- 5- The reviewer notes that given indicators have been largely met or exceeded, the project could look to challenge itself over the coming year to increase its targets.

Although targets were not formally increased, the project did continue to challenge itself as is evident from the final achievements.

- 6- Safeguarding policy has not been included in reporting.

A copy of our safeguarding policy has now been included [REDACTED] [REDACTED]

- 7 - The projects approach to monitoring and evaluation is deemed adequate but could be strengthened through collection of more qualitative data (stories, interviews, focus groups) to better understand project impacts, combining quantitative monitoring data with qualitative insights provides a richer picture of impact.

A collection of testimonies and personal stories was included in our last report but has been updated and included once more in the final reporting attachments ([REDACTED], [REDACTED] - Testimonies).

## **8 Sustainability and Legacy**

Our project was meticulously designed to maximize capacity building and knowledge transfer among civil society and government partners, ensuring that key activities would be sustained beyond the project's lifespan. Throughout the project, we created numerous opportunities for communities to cooperate directly with government agencies and access available networks and resources. Examples of support given included: The Forestry Service provided Sumber Makmur farmers grass cutters after witnessing the enthusiasm of its members in making organic fertilizer; access to Multi-Purpose Tree

Species (MPTS) seedlings was provided to Gapoktans by KPH at the BPDAS nursery (Watershed Management Center) Lampung; and a number of farmers were able to receive access to business credit from banks with a *persil* guarantee (Land Management Permit Certificate). These opportunities not only empowered local communities but also fostered strong relationships between them and the government, enhancing the project's sustainability.

With the cessation of Darwin Initiative funding, we have taken steps to ensure that project staff and resources are effectively transitioned to sustain the project's momentum. Key project staff have been integrated into YIARI's operational budget where their expertise can continue to support ongoing initiatives. Resources developed during the project, such as equipment, tools, training materials and educational modules have been handed over to local partners, ensuring their continued use by community groups, educational institutions, and local government.

Efforts to promote the project's work and ensure its legacy have been extensive. Regular public awareness campaigns through local media, community meetings, and school programs have highlighted the project's achievements and the importance of sustainable practices. Strengthening partnerships with local government, educational institutions, and community groups has ensured a broad-based support network for the project's continuation. Comprehensive documentation of the project's methodologies, successes, and lessons learned has been shared with stakeholders through documentaries, media articles, reports, scientific publications and presentations in national and international conferences. By making our project successes and challenges publicly available, we ensured that the knowledge gained can inform future projects and initiatives within the region and beyond.

Despite designing the project to minimize dependence on project facilitators, YIARI will continue to collaborate closely with local communities, partners, BBRNPA, and KPH to support project success over the medium and longer terms. This ongoing collaboration underscores our commitment to the project's objectives and ensures that the foundation we have built will continue to thrive. Our strategic integration of local resources, community engagement, and strong partnerships will ensure that the project's legacy endures, contributing to poverty reduction and biodiversity conservation for years to come.

## 9 Darwin Initiative identity

Darwin identity has been publicised in YIARI's informal talks and presentations about our Project and at:

- A presentation given at the IPB conference on 1 September 2022 (Bogor Indonesia)
- Two presentations given at the IPS conference in August 2023 (Kucing, Malaysia)
- Annual Monitoring, Evaluation and Learning (MEL) meetings with the BBRNP authorities.
- YIARI's website<sup>11</sup>
- Documentary film—A Green Rebirth—produced about the sustainable livelihood programme in BPF<sup>12</sup>

Upcoming Scientific Publication in Media Konservasi Journal entitled "Camera Trap Records of Sumatran Striped Rabbits (*Nesolagus netscheri*) in Batutegi Protection Forest, Lampung, Indonesia". The manuscript has already been accepted for publication.

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<sup>11</sup> <https://internationalanimalrescue.or.id/about-us/?lang=en>

<sup>12</sup> <https://www.youtube.com/watch?v=R6GG4bfOZ-0>

## 10 Risk Management

No risk has arisen during the implementation of the Project.

## 11 Safeguarding

<p>Has your Safeguarding Policy been updated in the past 12 months?</p>	<p>Yes. YIARI has incorporated a Fire Danger Rating into our Standard Operational Procedures (SOP) and displayed a sign at the staff entrance. This announcement raises staff awareness about fire risks. Additionally, regular meetings are now held to report incidents in the field and discuss solutions.</p>
<p>Have any concerns been investigated in the past 12 months</p>	<p>Yes.</p>
<p>Does your project have a Safeguarding focal point?</p>	<p>Yes. <i>Rikardus</i> [REDACTED]</p>
<p>Has the focal point attended any formal training in the last 12 months?</p>	<p>Yes, Rikardus has completed Health, Safety, Security and Environment National Standard Certification (HSSE).</p>
<p>What proportion (and number) of project staff have received formal training on Safeguarding?</p>	<p>Past: 70% [~140 staff members] Planned: 100% [~60 staff members]</p>
<p>Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses.</p> <p>Commitment of Project Leaders with safeguarding policies is essential to improve Health and Safety culture among staff members.</p>	
<p>Please describe any community sensitisation that has taken place over the lifetime of the project; include topics covered and number of participants.</p> <p>No community sensitisation was carried out specifically for safeguarding. On February 26, 2024, safeguarding training was held with project staff in Lampung and Ketapang on Fire Fighting &amp; Incident Management with the participation of 40 staff members.</p>	
<p>Have there been any concerns around Health, Safety and Security of your staff over the lifetime of the project? If yes, please outline how this was resolved.</p> <p>Yes, there has been an increase in the number of staff members stung by bees. To address this, the team is now providing special personal protective equipment and antihistamines to field teams working in high-risk areas.</p>	

## 12 Finance and administration

### 12.1 Project expenditure

Project spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total actual 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)				
<b>TOTAL</b>	139,251	139,259	100%	

Staff employed (Name and position)	Cost (£)
Dieka Pertiwi-Field Manager Kalimantan	
Robithotul Huda-Forest Governance Manager, Sumatra	
Muhidin	
Aji Mandala Putra-Sustainable Farming Coordinator Sumatra	
Ahlan-Conservation Field Staff	
Aris Subagio-Conservation Field Staff	
Deasy Erintan-Project Finance	
Rommy Kurniati-Consultant Community Assistance	
<b>TOTAL</b>	

Capital items – description	Capital items – cost (£)
<b>TOTAL</b>	0

Other items – description	Other items – cost (£)
Field equipment	
Field consumables	
Leaflet / stationary	
<b>TOTAL</b>	4,276

## 12.2 Additional funds or in-kind contributions secured

<b>Matched funding leveraged by the partners to deliver the project</b>	<b>Total (£)</b>
Oak Foundation	
Pro Wildlife	
Arcus Foundation	
US Fish and Wildlife Service	
<b>TOTAL</b>	

<b>Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project</b>	<b>Total (£)</b>
Oak Foundation (2025-2027)	
Arcus Foundation (2024-2026)	
US Fish and Wildlife Service (2024-2027)	
<b>TOTAL</b>	

### 12.3 Value for Money

We made sure to prioritise Value for Money (VfM) throughout our three-year project, emphasising our dedication to delivering service to both the community and wildlife. By meticulously managing our procurement practices through open three-way bidding, our goal was to enhance efficiency and effectiveness in resource allocation, ultimately maximising the value obtained from every investment. Additionally, we also maintained active performance management and monthly budget oversight conducted by our financial team. Through regular assessments that compared actual project expenditures to budget allocations, we ensured optimal resource allocation and cost-effectiveness, shaping decision-making across the Project cycle and in relation to ongoing expenses and evaluations. Our staff costs stayed within the established benchmarks in the specific landscapes.

The tangible outcomes of our commitment to VfM are evident in the substantial achievements in both landscapes. Notably, 693 households have economically benefited from our Project: 584 through our livelihoods programme and 109 through job creation. In BBR, this represented an 11% increase from the baseline and a 4% increase in family income in BPF.

Building on these achievements, there is great potential to leverage and replicate our success in two more landscapes: expanding to Way Waya Protection Forest at the northern side of BPF landscape and the Arabella Schawanner Landscape for BBR.

### 13 Other comments on progress not covered elsewhere

N/A

### 14 OPTIONAL: Outstanding achievements of your project (300-400 words maximum). This section may be used for publicity purposes.

Poverty, marginalization, and lack of opportunity drive small-scale yet pervasive deforestation, forest degradation, and biodiversity loss in Indonesia. Our project set out to demonstrate that a genuine understanding of local challenges, needs, and aspirations, combined with trust-building, long-term commitment, local expert facilitation, and a strong focus on improving wellbeing in ways that directly support biodiversity and ecosystem

health, could yield tangible outcomes for the Batutege Protection Forest (BPF - 58,174 ha, Lampung Province, Sumatra) and Bukit Baka Bukit Raya National Park (BBBRNP - 181,000 ha, West Kalimantan Province). Support from Indonesian government institutions was essential to achieve these results.

Over three years, nearly 5,000 people (with at least 50% being girls and women) benefited from improved healthcare, education, agricultural knowledge, and employment opportunities linked to natural resource management. During this period, deforestation rates and illegal activities in target areas were reduced by over 50%. Among the 51 species monitored (through relative abundance indices), 47 species remained stable or increased, while only 4 species experienced declines. The Bornean orangutan population in the target section of BBRNP nearly doubled through successful releases, achieving a 0% mortality rate, with released adults successfully reproducing in the wild.

The most successful livelihood interventions built on existing practices, providing simple yet effective tweaks to eliminate barriers, such as cheaper market access. The most successful education interventions were those that equipped participants with practical skills to enhance employability.

The project’s holistic approach was fundamental to its success. Communities are not homogenous entities, and while the underlying reasons for engaging in extractive uses of nature might be similar, different community members have diverse aspirations, preferences, and priorities. Consequently, a ‘one-size-fits-all’ approach would not have achieved the needed impact in this context. This tailored approach explains the extraordinarily high engagement rates in our project, the high levels of satisfaction among direct participants, and ultimately, the significant impact achieved for biodiversity.

Image, Video or Graphic Information: All images can be found in this link: <https://www.dropbox.com/scl/fo/skw5woga59bxsr66nhfr9/AKkl8FT51cwWyebTLPZLJcU?rlkey=ii1e7gfgxj6ujsl7ro0tf5rf0&dl=0>

<b>File Type (Image / Video / Graphic)</b>	<b>File Name or File Location</b>	<b>Caption, country and credit</b>	<b>Online accounts to be tagged (leave blank if none)</b>	<b>Consent of subjects received (delete as necessary)</b>
	Vegetable boat initiative	Farmers accessing the market through the Vegetable Boat Initiative in BBR, Indonesia, Credit: YIARI.		no
image	Cam trap tapir	Malayan tapir spotted through camera trap monitoring in BPF, Indonesia, Credit: YIARI		no
image	Farmers FGD	Ongoing farmers engagement through focus groups discussions and socialisations		no



		were key for our Project success, Indonesia, Credit: YIARI.		
image	Locals checking cam traps	Local farmers installing and checking camera traps, Indonesia, Credit: YIARI.		no
image	Orangutan&baby	Reintroduced orangutan and her infant at Bukit Bakat Bukit Raya National Park, Indonesia, Credit: YIARI.		no

## Annex 1 Report of progress and achievements against logframe for the life of the project

Project summary	Progress and achievements
<p><b>Impact</b></p> <p>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.</p>	<p>Our project made significant progress in advancing biodiversity conservation and alleviating poverty in both BBBRNP and BPF, impacting over 20% of households and fostering sustainable, self-reliant community development. Notable achievements include a nearly 50% increase in the Bornean orangutan population in BBBRNP and a 66% decrease in illegal activities and habitat encroachment within BPF.</p>
<p><b>Outcome</b></p> <p>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.</p>	<p>The project successfully protected our two target forests and key species through sustainable livelihoods and stronger governance, benefiting around 2,772 individuals economically and improving the well-being of approximately 4,606 people. Wildlife populations were monitored, with most threatened species showing stable or increasing numbers, contributing to overall biodiversity conservation.</p>
<p><b>Outcome indicator 0.1</b> 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 BBBR main villages and 3 million IDR in Sumatra). [In Mawang Mentatai village (n=102) 83 households [81%] are poor, in Nusa Poring village (n=138) 116 households [84%] are poor. 2019 survey data (n=240)]</p> <p>Note: New annual income baseline for BPF: ca. £680-830 per family or ~ £460-500 per hectare.</p>	<p><b>BBBRNP:</b> A total of <b>320 households (283 women and 37 men)</b> have received economic benefits from our Community Development Programmes in BBBRNP, representing approximately 1,696 women, men and children benefited economically by the Project. Since the beginning of the Project, IDR 1,079,372,500 (or ~£56,800) was generated as result of the programmes. This provides a rough estimate of IDR 1,405,432 (~£74) extra income per capita per year or 11% of the baseline average income (1.1 million IDR per month) (<a href="#">Annex 5. 3</a>).</p> <p><b>BPF:</b> A total of <b>264 farmers (261 men and 3 women)</b> were enrolled in the community development programme. Total annual income increase estimated in IDR 102,062,700 or ~£ 5,108. This represents a 4% increase in family income for an estimate total of 716 men, women and children (<a href="#">Annex 5. 4</a>).</p> <p><b>Target:</b> Achieved. Over the two landscapes, <b>693 households have benefited economically from our Project</b> (i.e., 584 households through our livelihoods programme and 109 through job creation, <a href="#">Annex 5. 9</a>).</p>
<p><b>Outcome indicator 0.2</b> 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).</p>	<p><b>BBBRNP:</b> A total of <b>~4,151 people</b> (~1,567 men and ~2,548 women) were involved in our service-learning programmes (i.e., scholarships, computer and literacy training etc.) or had received healthcare service (<a href="#">Annex 5. 5</a>, <a href="#">Annex 5. 7</a>).</p> <p>End-of-Project Survey: Out of 241 participants interviewed, 100% indicated improvements in non-monetary wellbeing (such as improved skills, reading fluency and ability to teach back to children), with 100% of the participants claiming the programme has met their needs. The entire participant pool (100%) reflected</p>

	<p>positive behaviour transformations, such as augmented personal confidence (21%) and increased sociability (34%). Furthermore, all participants (100%) affirmed their commitment to engaging in the service-learning programmes facilitated by YIARI and to share these benefits with fellow community members. Regarding influence in environmental practices, 70% demonstrated environmental consciousness by taking measures to prevent pollution. Participants (20%) also expressed a strong interest in scholarships and additional educational opportunities (<a href="#">Annex 5. 20</a>).</p> <p><b>BPF:</b> A total number of <b>~455 people (~343 men and ~112 women)</b> have been involved in agro-biodiversity capacity building and access to resources, forest governance and educational activities (<a href="#">Annex 5. 4, Annex 5. 6</a>).</p> <p>End-of-Project Survey: 74% of the 98 interviewed farmers reported increased in non-monetary benefits (wellbeing) such as increase in knowledge (70%), social (7%) and environment benefits (4%) (<a href="#">Annex 5. 21</a>).</p> <p><b>Target:</b> Achieved. A total of <b>4,606 women, men and children</b> had non-monetary aspects of wellbeing improved during the course of this Project. This has exceeded our initial target of 1,500 people by 207%.</p>
<p><b>Outcome Indicator 0.3</b> By Q1 2024, ~50% of Batutegei tenant farmers (~700 people) report increased involvement in forest governance issues (baseline to be established by Q1 2022).</p>	<p>A total of <b>342 tenant farmers (3 women)</b> were involved in actual governance-related activities, of whom 179 are currently active (<a href="#">Annex 5. 14, Annex 5. 26</a>).</p> <p><b>Target:</b> Not fully achieved. 48% of target farmers involved in governance activities.</p>
<p><b>Outcome indicator 0.4</b> 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).</p>	<p>The overall Encounter Rate (i.e., number of incidents per hour of patrol) of illegal activities <b>decreased by 66%</b> since the beginning of the Project [from 0.24 in 2021 to 0.08 in 2023] (<a href="#">Annex 5. 14, SMART Patrol Data</a>).</p> <p><b>Target:</b> Achieved. The decrease in illegal activities has surpassed our initial target by 32%</p>
<p><b>Outcome indicator 0.5</b> Forest cover loss in Batutegei is reduced by 20% (by Q4 2022) and 50% (by Q1 2024) (against a baseline deforestation rate of 3.5% per year)</p>	<p>Based on M&amp;E feedback from Darwin in March 2023, Forest cover loss was calculated for BPF target forest core block (Way Sekampung) between 2001 and 2023 based on data obtained from Hansen Global Forest Change analysis. An average baseline based on a 20 years period (2001-2020) and 6 years period (2015-2020) were calculated. Forest cover loss during the project period (2022-23) was of 185 hectares (29 ha of primary forest and 157 ha of secondary forest) (<a href="#">Annex 5. 22</a>).</p>
<p><b>Outcome indicator 0.6</b> Populations of threatened indicator species including Sumatran tiger (<i>Panthera tigris sumatrae</i>), sun bear (<i>Helarctos malayanus</i>), Bornean gibbon (<i>Hylobates albibarbis</i>), Sunda pangolin (<i>Manis javanica</i>) and Sunda</p>	<p><b>BBBRNP:</b> 209 wildlife species have already been recorded. RAI remained relatively stable for two threatened species (i.e., <i>Diplogale hosei</i> and <i>Macaca nemestrina</i>), increased for four threatened species (i.e., <i>Pongo pygmaeus</i>, <i>Cynogale bennettii</i>,</p>

<p>Slow Loris (<i>Nycticebus coucang</i>) 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.</p>	<p><i>Neofelis diardi</i>, and <i>Arctictis binturong</i>), and decreased for four other threatened species (i.e., <i>Manis javanica</i>, <i>Catopuma badia</i>, <i>Helarctos malayanus</i> and <i>Sus barbatus</i>). Therefore, of the 10 threatened species monitored, six have remained stable or increased RAI (<a href="#">Annex 5. 23</a>).</p> <p><b>BPF:</b> Overall, there has been an increase in species RAI based on the 29 species of mammals, 12 species of birds and two species of reptiles monitored in Way Sekampung forest block through camera traps.</p> <p>Comparing 2023 RAI data with our baseline (2018) the population of (<i>Helarctos malayanus</i>), Sunda pangolins (<i>Manis javanica</i>), Siamangs (<i>Symphalangus syndactylus</i>), Sunda clouded leopard (<i>Neofelis diardi</i>), Malayan tapir (<i>Tapirus indicus</i>) and White-crowned hornbills (<i>Berenicornis comatus</i>) has increased. The endangered species which population seen to have decreased is of Sumatran tigers (<i>Panthera tigris sondaica</i>) (<a href="#">Annex 5. 24</a>).</p> <p><b>Target:</b> Partially achieved. While we were able to observe an increase in some threatened species populations, a smaller number had decreased population levels (based on RAI results).</p>
<p><b>Output 1. By 2024, the wellbeing 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</b></p>	
<p><b>Output indicator 1.1</b> By Q4 2022, at least 3,000 seedlings of high value agroforestry species are planted in the multiple use zone of BT.</p>	<p>A total of <b>13,699 agroforestry seedling</b> have already been planted in the multiple-use zone of BPF since the start of this programme (11,139 seedlings only in 2023) involving 86 farmers across 226 ha. Survival rate of the seedlings was 78% (10,685 seedlings have survived) (<a href="#">Annex 5. 4</a>).</p> <p><b>Target:</b> 256% of the target achieved (based on survived seedlings).</p>
<p><b>Output indicator 1.2</b> By Q4 2023, new jobs for at least 20 additional community members will be created through the release and monitoring of 30 orangutan.</p>	<p><b>BBBRNP:</b> YIARI is currently employing 68 full time staff members from our target communities (co-funding) to carry out our programme activities in BBBR NP. Additionally, over 30 daily workers from the local communities are hired for each of our reintroduction events (twice every year).</p> <p><b>BPF:</b> YIARI employed 3 full-time local staff and 8 regular daily staff from our target farmers groups and communities to carry out forest monitoring and other activities during the course of this Project. Additionally, our project has benefited economically 61 other community members through the payment for daily services (<a href="#">Annex 5. 9</a>).</p> <p><b>Target:</b> Achieved. This Project had created 42 additional jobs and work opportunities, surpassing our target by 65%.</p>

<p><b>Output indicator 1.3</b> By Q4 2023, at least 100 adult women and 120 children access to literacy and/or computer courses.</p>	<p><b>BBBRNP:</b> A total of <b>412 children and youth (209 girls and 203 boys) and 30 adult women</b> have completed our literacy and computer literacy programmes. As a result, 68% of the literacy classes students (n=184) improved their level to Middle and Advance levels, and all computer training participants (n=274) have now a good understanding of computer basics (<a href="#">Annex 5. 5</a>).</p> <p><b>BPF:</b> About <b>90 children</b> participate in literacy classes at the Reading Club or Taman Baca (average of 48 children per day/class) (<a href="#">Annex 5. 6</a>).</p> <p><b>Target:</b> Nearly achieved. A total of <b>502 children and 30 adult women benefited by our literacy programmes</b>. Overall, we have exceeded (+142%) our target, although the number of adult women did not reach the individual target (-70%).</p>
<p><b>Output indicator 1.4</b> By Q4 2021, 20 students will receive scholarships to pursue secondary education.</p>	<p>Since the project started, <b>28 students have received our scholarships</b>. Currently, there are 25 students enrolled in the programme. KAHIU scholarship programme has benefited further 15 out-of-school youth from BBBRNP buffer (<a href="#">Annex 5. 5</a>).</p> <p><b>Target:</b> 140% of our target achieved.</p>
<p><b>Output indicator 1.5</b> By Q4 2023, at least 2,000 women and men receive low-cost healthcare in BBBRNP.</p>	<p>A total of <b>3,325 people received healthcare</b> assistance in BBBR NP (<a href="#">Annex 5. 7</a>).</p> <p><b>Target:</b> 166% of our target achieved.</p>
<p><b>Output indicator 1.6</b> By Q4 2023, at least 180 farmers have improved capacity in sustainable agriculture and rubber production.</p>	<p><b>BBBRNP:</b> A total of <b>159 local farmers</b> had their capacity improved in sustainable agriculture (32 men and 73 women) and rubber production (38 men and 16 women) (<a href="#">Annex 5. 3</a>).</p> <p><b>BPF:</b> All 264 farmers (261 men and 3 women) enrolled in our community development programme were trained and/or mentored in sustainable agroforestry during the course of this Project. Out of these farmers, 136 took part in the Field School, where they received more intensive training in sustainable agroforestry practices and mentoring on specific issues. Additionally, at least 10 local women were trained in eco-seedling pots making. A total of <b>274 farmers (261 men and 13 women)</b> with their capacity improved by the end of the Project (<a href="#">Annex 5. 4</a>).</p> <p><b>Target:</b> 164% of target achieved. A total of <b>295 farmers (331 men and 102 women) trained</b> from both landscapes.</p>
<p><b>Output 2. By 2024, communities feel empowered and more embedded in local natural resource governance through joint patrols with government authorities.</b></p>	
<p><b>Output indicator 2.1</b> By Q4 2021, village regulations and a development plan are socialized amongst the villagers</p>	<p><b>BBBR NP:</b> Nusa Poring Village Environment Regulation (PerDes) co-drafted by the active involvement of 24 community members, approved and socialized. The socialization of village regulations has been effectively conducted across multiple</p>

	<p>sub-villages, engaging a total of 158 participants (101 men and 57 women). These activities were warmly received by the community, who expressed approval of the new regulations. The sessions also facilitated open discussions, providing a valuable opportunity for residents to interact with the village head and officials, fostering a better understanding and acceptance of the village regulations (<a href="#">Annex 5. 11</a>).</p> <p><u>BPF</u>: Existing AD/ART regulations were socialized with the community through group discussions and informal gatherings, and the ‘Long-term Plan for Forest Management’ (RPHJP) approved by the Lampung Forestry Service. As a result, the 3 target GAPOKTANs (SM, WTL, &amp; ML) knows about forest use law (98% of 260 respondents) (<a href="#">Annex 5. 12</a>).</p> <p><b>Target:</b> Achieved.</p>
<p><b>Output indicator 2.2</b> By Q2 2023, the core area of Batutegi is demarcated and 100% of local tenant farmers active in that area understand where the boundary is.</p>	<p>New boundary has increased the core forest block by 385 ha (old core block 10,827 ha and new 11,212 ha in RPHJP 2024-2033). A total of 37km of BPF Forest Core block has been demarcated (23km through the planting of <i>Ficus sp.</i> seedlings planted and 14 km through the installation of signboards). This represents 74% of the total boundary being demarcated. 100% of the local tenant farmers were socialized about the boundary (200 farmers) (<a href="#">Annex 5. 13</a>).</p>
<p><b>Output indicator 2.3</b> By Q2 2022, joint community and forest management units carry out monthly SMART patrols inside and on the boundary of the core zone.</p>	<p>During the Project period (October 2021 – March 2024), a total of 339 days, 1,938 hours and 1,209 km were patrolled by the joint team, comprised of 39 active members (9 forestry police officers, 17 community members, and 13 YIARI staff).</p> <p>Patrol team active at the end of the Project: 10 KPH Batutegi officers, 28 KPH Way Waya officers, 29 local people (15 GAPOKTAN members, 13 local farmers and 1 student) (<a href="#">Annex 5. 14</a>).</p> <p><b>Target:</b> Achieved.</p>
<p><b>Output 3. By 2024, increased local community awareness of ecosystem services, biodiversity values and risks contribute to better natural resource management.</b></p>	
<p><b>Output indicator 3.1</b> By Q4 2022, the results of a survey on consumption of wildlife and health are discussed with respondents.</p>	<p>In BBBRNP, survey reported back to over 200 community members through four FGDs, church gathering and door-to-door socialisations (<a href="#">Annex 5. 15</a>).</p> <p><b>Target:</b> Achieved.</p>

<p><b>Output indicator 3.2a</b> By Q2 2023, at least 50% of target households are aware of which species are protected by Indonesian and cultural (adat) law (baseline to be established).</p>	<p>Almost all community members from three target sub-villages in BBRNP buffer know that hunting is illegal within the NP. Reduction by 13% in the number of hunters and loggers between 2021 and 2022 (<a href="#">Annex 5. 27</a>).</p> <p><b>Target:</b> Achieved.</p>
<p><b>Output indicator 3.2b</b> By Q2 2022 80% of target farmer households and local youth groups are aware that hunting is illegal in BPF (baseline to be established).</p>	<p>In BPF, 99% of tenant farmers are aware of the applicable rules (Hunting, logging, Encroachment, etc.) (<a href="#">Annex 5. 16</a>).</p> <p><b>Target:</b> Achieved.</p>
<p><b>Output indicator 3.3</b> By Q4 2023, 1 group of boy scouts and 3 local youth groups report greater knowledge of the benefits of biodiversity and ecosystem services (baseline to be established).</p>	<p>BBBRNP: One group of religious youth in Sekujang sub-village (<a href="#">Annex 5. 17</a>).</p> <p>BPF: Three Youth Community Groups formed: young scouts (<i>Saka Wanabakti</i>), the Conservation Youth Forum, and <i>Taman Baca</i> club (<a href="#">Annex 5. 6</a>).</p> <p><b>Target:</b> Achieved. One group of scouts and 3 local youth groups active in the two landscapes.</p>
<p><b>Output 4. By 2024, the Bornean orangutan population in BBR NP increases its viability and resilience.</b></p>	
<p><b>Output indicator 4.1</b> Rehabilitated (Critically Endangered) Bornean orangutans increase the existing population by at least 50% (baseline: 51 individuals) (target: 6-10 orangutan reintroduced in 2021-2022, 6-10 in 2022-2023, 6-10 in 2023-2024)</p>	<p>During this Project, we had successfully reintroduced 24 individuals in BBRNP increased the resident population by 47%. Since inception of our long-term Orangutan Reintroduction programme in 2016, a total of 75 orangutans have been reintroduced in BBRNP (41 females and 34 males) (<a href="#">Annex 5. 19</a>).</p> <p><b>Target:</b> Achieved. Orangutan population increased by 55% after considering wild births.</p>

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

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
<p><b>Impact:</b> 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.</p> <p>(Max 30 words)</p>			
<p><b>Outcome:</b> (Max 30 words)</p> <p>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.</p>	<p>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 BBBR main villages and 3 million IDR in Sumatra – 2019 survey data). <i>[In Mawang Mentatai village (n=102) 83 households [81%] are poor, in Nusa Poring village (n=138) 116 households [84%] are poor. 2019 survey data (n=240)]</i></p> <p>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, education and literacy,</p>	<p>0.1 End of project household survey results</p> <p>0.2 Project participatory impact assessments</p> <p>0.3 SMART patrol reports</p> <p>0.4 Forest loss assessments using satellite imagery (Global Forest Watch) data and drones.</p> <p>0.5 Camera trap surveys; Biodiversity survey reports</p>	<p>There are no major changes to the current management structure in Provincial Forestry Services.</p> <p>A productive and collaborative working relationship between YIARI, the Lampung Province Forestry Service (<i>Dinas Kehutanan</i>) and the local farming groups (<i>Kapoktan</i>) is maintained.</p> <p>No significant extra pressure is placed on Forestry or NP Service staffing through unplanned events.</p> <p>Local agencies remain committed to curbing illegal activities and are willing to commit resources.</p>



	<p>will be reported against pre-project levels (baseline to be established by Q1 2022).</p> <p>0.3 By Q1 2024, ~50% of Batutegi tenant farmers (~700 people) report increased involvement in forest governance issues (baseline to be established by Q4 2022)</p> <p>0.4 The number of illegal activities in Batutegi 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)</p> <p>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)</p> <p>0.6 Populations of threatened indicator species including Sumatran tiger (<i>Panthera tigris sumatrae</i>), sun bear (<i>Helarctos malayanus</i>), Bornean gibbon (<i>Hylobates albibarbis</i>), Sunda pangolin (<i>Manis javanica</i>) and Sunda Slow Loris (<i>Nycticebus coucang</i>) are shown to remain</p>		
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	<p>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.</p>		
<p><b>Outputs:</b></p> <p>1. By 2024, the wellbeing of ~3,000 impoverished women, men and children has improved through better managed agroforestry systems, access to education (especially women and children) and employment opportunities associated with wildlife reintroductions and monitoring</p>	<p>1.1 By Q4 2022, at least 3,000 seedlings of high value agroforestry species are planted in the multiple use zone of BT.</p> <p>1.2 By Q4 2023, new jobs for at least 20 additional community members are created through the release and monitoring of ~30 orangutan.</p> <p>1.3 By Q4 2023, at least 100 adult women and 120 children access to literacy and/or computer courses.</p> <p>1.4 By Q4 2023, 20 students receive scholarships to pursue secondary education.</p> <p>1.6 By Q4 2023, at least 180 farmers have improved capacity in sustainable agriculture and rubber production.</p>	<p>1.1 Seedling survival success surveys and reports.</p> <p>1.2 End of project household survey and YIARI Human Resource Department database.</p> <p>1.3 End of literacy course feedback form.</p> <p>1.4 Letters of acceptance from selected children.</p> <p>1.5 End of project household survey, list of patients treated.</p>	<p>Community members remain engaged in community groups surrounding BBBRNP.</p> <p>Local people re-invest benefits to support continued livelihoods improvements.</p>

<p><b>2.</b> By 2024, communities feel empowered and more embedded in local natural resource governance through joint patrols with government authorities.</p>	<p>2.1 By Q4 2021, village regulations and a development plan are socialized amongst the villagers.</p> <p>2.2 By Q2 2023, the core area of Batutegi is demarcated and 100% of local tenant farmers active in that area understand where the boundary is.</p> <p>2.3 By Q2 2022, joint community and forest management units carry out monthly SMART patrols inside and on the boundary of the core zone.</p>	<p>2.1 Draft plan.</p> <p>2.2 At least 60% of the protected forest zone has been demarcated with a natural boundary marker (stones or distinctive native shrubs).</p> <p>2.3 Project reports; statistical and Human Resource reports from the forest management unit.</p>	<p>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.</p> <p>Mutual trust between the Lampung Province Forestry Service and the farming groups in Batutegi is upheld.</p> <p>Government staff trained (old and new) in the SMART approach remain in key posts.</p>
<p><b>3.</b> By 2024, increased local community awareness of ecosystem services, biodiversity values and risks contributes to better natural resource management.</p>	<p>3.1 By Q4 2022, the results of a survey on consumption of wildlife and health are discussed with respondents.</p> <p>3.2a By Q2 2023, at least 50% of target households are aware of which species are protected by Indonesian and cultural (adat) law (baseline to be established).</p>	<p>3.1 Household surveys in target communities evaluate understanding of survey results.</p> <p>3.2 Household surveys evaluate understanding in target communities.</p>	<p>Increased awareness of legal obligations, potential benefits, and risks connected to nature degradation contribute positively to a shift in attitudes and behaviour.</p>

	<p>3.2b By Q2 2022 80% of target farmer households and local youth groups are aware that hunting is illegal in the Batutegi Protected forest (baseline to be established).</p> <p>3.3 By Q4 2023, 1 group of boy scouts and 3 local youth groups report greater knowledge of the benefits of biodiversity and ecosystem services (baseline to be established).</p> <p>3.4 By Q4 2023, 100 women and 120 children report greater knowledge of the benefits of biodiversity and ecosystem services.</p>	<p>3.3 Semi-structured interviews before and after involvement in project activities.</p> <p>3.4 Semi-structured interviews before and after involvement in project activities.</p>	
<p>4. By 2024, the Bornean orangutan population in BBRNP increases its viability and resilience.</p>	<p>4.1 Rehabilitated (Critically Endangered) Bornean orangutans increase the existing population by at least 50% (baseline: 51 individuals) (target: 8-10 orangutan reintroduced in 2021-2022, 8-10 in 2022-2023, 8-10 in 2023-2024)</p>	<p>4.1 Radio-tracking reports and behavioural observations.</p>	<p>Reintroduced orangutans adapt well and are able to reproduce after release in BBRNP.</p> <p>Hunting pressure on orangutan population remains low.</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)

- 1.1 Run participatory rural appraisals to understand community needs in more depth.
- 1.2 Provide training resources and support to successfully grow agroforestry seedlings for at least 100 women and men.
- 1.3 Provide agricultural training (including training in Best Practices in rubber production) and market systems support to 180 women and men.
- 1.4 Develop and implement action plans to improve production, storing, processing, packaging and selling of selected sub-sectors.
- 1.5 Train 20 community members and 6 government officials in wildlife monitoring.
- 1.6 Support community members to take part in and benefit from employment in the release and long-term monitoring of 30 orangutan.
- 1.7 Run literacy and computer courses for 100 women and 120 children.
- 1.8 Award scholarships for secondary education to 20 children.

2.1 Facilitate community meetings and provide support for socialization of community plans.

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.

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

2.4 Provide SMART patrol training for 10 tenant farmers and government stakeholders.

2.5 Support monthly SMART patrol activities.

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

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

3.3 Hold awareness raising sessions in collaboration with religious leaders and/or village heads to clarify which species are protected by national law.

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.

#### 4.1 Reintroduce and monitor ~30 Critically Endangered Bornean orangutan in BBR NP.

##### Monitoring and Evaluation:

- 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 will be used to monitor orangutan survival after release.
- Post-training evaluation forms will be used to assess effectiveness of training and awareness raising approaches.

## Checklist for submission

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:BCF-Reports@niras.com">BCF-Reports@niras.com</a> putting the project number in the Subject line.	yes
<b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:BCF-Reports@niras.com">BCF-Reports@niras.com</a> about the best way to deliver the report, putting the project number in the Subject line.	
If you are submitting photos for publicity purposes, <b>do these meet the outlined requirements (see section 10)?</b>	yes
<b>Have you included means of verification?</b> You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	yes
<b>Do you have hard copies of material you need to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	no
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 10)?	yes
Have you involved your partners in preparation of the report and named the main contributors	yes
Have you completed the Project Expenditure table fully?	yes
Do not include claim forms or other communications with this report.	