



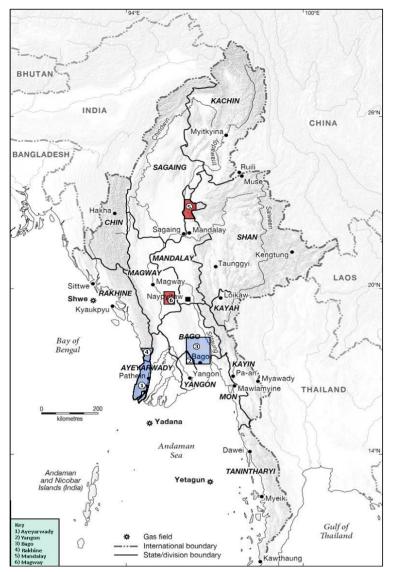


Darwin Initiative Annual Report Annual Report No.4 for Yr3 (Apr 2023 – Mar 2024)

Darwin Initiative Project Information

Project reference	27-012
Project title	Promoting Human-Elephant Coexistence Through Education and Seasonal Fencing
Country	Myanmar
Lead Partner	British Asian Trust with Elephant Family (BAT/EF)
Project partner(s)	Grow Back for Posterity
Darwin Initiative grant value	£365,335
Start/end dates of project	August 2020 – July 2024 (Yr2 extended to cover 2-years)
Reporting period with dates and number	Annual Report No.4 for Yr3 (Apr 2023 – Mar 2024)
Project Leader name	Belinda Stewart-Cox
Project website/blog/social media	www.growback posterity.com www.compassfilms.net www.britishasiantrust.org www.elephant-family.org
Report author(s) and date	

1. Project summary



Over 70% of Myanmar's population lives in rural areas and depends on the land for subsistence. Humanelephant conflict (HEC) threatens the lives and livelihoods of villagers and elephants in several areas of central Myanmar from retaliatory killings, crop damage and habitat loss and/or fragmentation. This problem was identified and well documented by project partners GBP (Grow Back for Prosperity) and CF (Compass Films), and underpinned our last Darwin project (24-024, 2017-20) which developed a Human-Elephant Peace (H.El.P) programme to begin embedding HEC mitigation strategies into government policy and practice. This project builds on the previous project's achievements, educating villagers about elephants, the causes of conflict (HEC), and how to stay safe living with elephants, thus turning fear into confident understanding, along with feelings of empowerment, whilst also instilling the concept of human-elephant coexistence (HECx) as a way of preventing elephants becoming defensive-aggressive.

However, raising awareness is not enough to maintain HECx or protect elephants if they forage on crops and threaten livelihoods. Therefore, this project also trains villagers to install safe, solarpowered seasonal electric fencing using a method pioneered by CCR (the Centre for Conservation Research) that CF/GBP have adapted for use in Myanmar. Most countries affected by HEC use electric fencing to stop crop-foraging, usually erecting permanent fences which block elephants year-round from customary feeding grounds and corridors. Working with CCR and the Smithsonian, the CF/GBP team implemented a pilot project in 2018-19 to find out whether seasonal electric fencing would work in Myanmar as well as in Sri Lanka. It did, and training courses were offered to HEC villages with which GBP had been working. This project had planned to introduce this fencing method into six areas of the central regions where HEC most often occurs, institutionalising it as a government programme to ensure sustainability and safeguard human and elephant lives and livelihoods, thus reducing retaliatory killings of elephants and the impoverishment of villagers. However, the military coup of 1-Feb-21 made our two most northerly target areas unsafe (Magway and Mandalay, marked in red on the map), and has deterred villagers from requesting government-approved loans, so we have focused on the growing problem of HEC in the four southern target areas (Ayeyarwady, Bago, Yangon, and Rakhine). Villagers now find their own funds to purchase fencing equipment which means that those who engage in this programme have a major problem with HEC are really committed to making it work. These changes are reflected in the revised logframe, approved in March 2024.

2. Project stakeholders/ partners

The plan to create this project's partnership with Grow Back for Prosperity (GBP) and Compass Films (CF) was planned in 2016 when Compass Film's director came to London to meet Elephant Family's then Head of Conservation to discuss working together to expand the newly established CF/GBP H.EI.P programme, piloted with funds from USFWS and Shared Earth, to tackling humanelephant conflict in Myanmar. This partnership was therefore responsive and participatory from the outset and has remained so ever since, with full partner involvement at every stage of planning, evaluations, and report writing, including this report, although the coup in Myanmar has made internet communication with GBP less easy. However, working with BAT/EF and Klaus Reisinger (CF) and Aung Myo Chit (AMC), we created an online data reporting system which the GBP team can in-fill from the field and complete, as needed, after each field trip. This has been a major capacity-building undertaking in difficult conditions, and is still a work in progress, but our in-person M&E meeting in February 2024 did reveal that GBP has greatly improved its data collection and processing practices. This year GBP's report to BAT/EF is more comprehensive and clearer (see annex). This report for DI uses that data as well as information learned during the most recent M&E visit.

Contact between the implementing partners and government agents at local, regional, and higher levels was developed over the course of the last Darwin project and has been maintained and expanded during this one (though mostly at a local level since the coup to safeguard the team and project participants). Initially, members of the Forest Department (FD), its Wildlife Conservation Division (WCD), and representatives of the Ministries of Education (ME) and Religious Affairs & Culture (MRAC) attended the H.El.P educational workshops simply to find out what GBP was up to, but they soon recognised the workshops' value. Nowadays, local conservation officials, teachers, school heads, monks and community leaders are significant aides to project planning and implementation and, importantly, to project continuity. Moreover, it is thanks to these relationships and the trust they engendered that villages now report the appearance of strangers thought to be poachers, usually to GBP but also to local government representatives as well, overcoming their customary wariness of officialdom. Contact between GBP and villagers continued by telephone during covid and immediately after the coup and continues, even now, in remote target areas if it is suddenly risky for GBP to travel there, or if the team is simply not able to get there e.g. during monsoon months.

For the fence-training programme, the Elephant Emergency Response Units (EERU) which is now under ministerial control reporting directly to MONREC, became the main implementing partner with FD officials joining from Yr.2.2. EERU is now responsible for addressing human-elephant conflict on behalf of the government, while district FD officials focus on illegal logging and forest encroachment. Both can now deliver fence training autonomously as well as the associated HEC education. This EERU/FD collaboration is beneficial as the head of the unit takes charge of any reporting required at higher levels of government and maintains contact on behalf of the project with the CBD & CITES focal point in the Forest Dept.

Last year, when it began working in Rakhine, GBP trained a local NGO, the Rakhine Conservation Association (<u>RCA</u>), to work with it delivering HEC education workshops and fence training to local communities. Working with a local NGO makes sense in a politically restless area in case the junta restricts GBP's access. At least, then, the RCA and local EERU team can keep going.

One challenge faced by GBP, our in-country partner, is the regular transfer of local government officials to new postings, which means forging new relationships with the replacements. This was even more challenging following the coup, but because good relations were already established with key individuals at local level (the coup mostly disrupted officials at higher levels), GBP has been able to continue the project, albeit with modifications. In fact, the turnover of government

personnel can be advantageous if supportive officials are promoted to key positions in the regional or national offices. In the past, this helped GBP promote the Human Elephant Peace (H.EL.P) programme at higher levels which, in turn, prompted a request to provide materials for permanent exhibits at the new Elephant Museum in Yangon and, in 2020, helped GBP acquire the coveted status of a National NGO.

We cannot know what personnel changes the political situation may cause longer-term, but partners continue to monitor the situation. Many senior officials were part of the ousted regime and most have left or been removed from office. For example, the Minister of Forestry was replaced by his permanent secretary who was supportive of H.El.P. activities and approved the fencing and education activities. All agreements obtained before the coup remain valid and field permits are issued by local officials if needed. Those relationships allow the project to continue.

The fact that GBP has been able to continue working on this project with relatively little disruption is evidence of its effective collaborations. Additional evidence is provided in the appendices by the photographic record of project activities, month by month. No part of this project is, or can be, planned from the UK apart from the annual M&E visit. GBP must, necessarily, take the lead in planning activities in the field.

3. Project progress

A reminder: due to challenges caused by the Covid pandemic in April 2020 (which postponed the project start to August 2020), and the Myanmar coup in February 2021 (disrupting most things), we requested a 1-year extension, splitting Yr2 into two years. We notified Darwin of the delay start-date and requested a no-cost extension to project activities, making some slight adjustments to the logframe, which were approved. This report covers year 3, which means the project has been going for almost 4 years. A final report will be due in October 2024.

The source for all figures cited in this report is the online project database, which is filled in by GBP team members, when and wherever possible from the field, a facility introduced in 2022. The entries are checked within a few days of entry by GBP's data manager so discrepancies can be raised with the relevant team member and clarified or corrected quickly. Every month, AMC also looks over the records and Klaus Reisinger checks them quarterly, so project reporting has become easier and timelier. In 2023, we introduced a reporting form linked to the logframe (Activity Logframe Report, Annex 18) which is steadily improving reporting practices. The database itself is designed around the numbered activities in the logframe. This year, GBP has produced its own M&E report (Annex 19) along with a score of other appendices (including a monthly photo record of project activities) from which information for this Darwin report is taken as well as insights learned during our 5-day in-person team review in Feb 2024.

3.1 Progress in Carrying Out Project Activities

Output 1: Saving Lives

Human-Elephant Conflict education events originally scheduled for the northern provinces of Mandalay/Magway were moved to new areas of Ayeyarwady, Yangon, and Bago. This year, GBP was again able to hold workshops for educators in new target areas, reaching 313 school-heads (50 male, 263 female) and 12 university lecturers (two male, ten female) in Yangon province and 15 lecturers, with 250 students (BSc, MSc+PhD) at Pathein University in Ayeyarwady province (*Ann.18 1.1-1.3 and Ann.19 p1*). Four of the Pathein University students are working with GBP to collect data to publish papers as part of their degree courses (*see Section 11. For details*).

In Yr3, GBP/collaborators held HEC education workshops in 105 communities in three provinces, directly reaching 10,727 adult villagers (4,435 men, 4,981 women) and 1,198 students (582 male and 616 female) plus 113 teachers, school-heads, FD staff, and monks (*Ann.19 p2*). In Rakhine, a

local NGO (<u>RCA</u>), trained by GBP in Yr2, is currently working with GBP to deliver this training – a precaution in case it becomes unsafe for GBP staff to go there. Every student gets an HEC education kit (an extra 4,000 booklets and 2,000 elephant games were printed in Yr3 bringing the total since 2020 to $30,000^+$ kits). We know from previous surveys that students share their kits with at least three friends/family members, so the total number of people informed is far higher.

This year, 1,027 pre- & post- workshop survey forms were filled in Yangon and Ayeyarwady provinces by roughly equal numbers of men and women (497 men, 530 women). To date, 2,488 survey forms have been collected, representing 7.6% of participants (*Ann.18 1.4-1.5 / Ann.19 p2*). No data is available from the Rakhine workshops yet as they are too recent, and Bago had one HEC education before a fencing course. Both areas experience political tension from time to time.

Surveys that have been analysed reveal a high level of basic knowledge about elephants and HEC as well as some consistent weaknesses. In Yangon division, 1,160 people responded accurately to 85% of the pre-workshop survey questions, and 90% post-workshop - a 5% increase in awareness. In Ayeyarwady division, 1,328 respondents improved their awareness by 3% (from 89-92% correct answers). Awareness about HEC is already high in these target areas because some respondents attended workshops in our previous Darwin project or learned about elephants and HEC from other villagers who had attended them. Topics that were less well understood included the legal status of elephants and penalties for killing one, the role of elephants in the ecosystem, the importance of forest for people and wildlife, measures to avoid HEC and, most of all, the intelligence of elephants. GBP's education team has modified its presentations to give more time to those topics, thus addressing the awareness gap (*Ann. 19 p2-5*).

In Yr3, villagers saw 539 elephants, mostly near fenced fields where they approached from nearby woodland. Comparing sightings recorded since 2018 suggests there is no drop in the number of elephants moving through the target landscape. Farmers have been reminded that fields near elephant habitat are especially vulnerable and need caution and careful guarding (*Ann.19 p6*).

Eight people were killed by elephants in 2023-24 in Yangon (n=2) and Ayeyarwady (n=6) divisions, all but one outside the project area. Most of the victims were intoxicated, walking at night in areas where elephants often roam. One man in Yangon division died at dawn while harvesting cashew nuts in his orchard. Another walked up to an elephant even as villagers tried to alert him. This informs us that more villages would benefit from attending an HEC awareness-raising programme to learn about personal responsibility in elephant areas.

Three elephants died outside, but near, the project area in Year3, only one of them intended. A female elephant, aged about 30, was electrocuted on 15-Oct-23 in Yangon's Thaikkyi township by a farmer using an inverter instead of an energizer. He is now in police custody and will be severely punished because his action was evidently deliberate. This news, widely shared, has alerted even more people that a proper training in electric fence management is worthwhile. In Tharpaung township, a young elephant drowned in Bawmi creek on 21-Nov-23, considered a natural death. And, on 29-Jan-24, an adult male elephant also died of natural causes in a shrimp pond in Ngwe Hsaung township, both in Ayeyarwady province (*Ann.19 p7*).

In early 2023, there was a spike in elephant deaths from poaching outside the project area when China re-opened its border with Myanmar after Covid. GBP responded by sending its education team into those areas to provide anti-poaching outreach. A reward of 3m kyats (£1,000) was also established - a huge amount for villagers - for information leading to a poacher's arrest. These two actions paid off and elephant poaching returned to zero within a few months (Ann.19 p6).

Compass Films (KR) and GBP (AMC) speak at least twice a week when each has access to the internet. They review the education and fencing activities to decide how to modify the programme in response to any problems (*Ann.19 p7*) and, in Q1 2024, to prepare information for this annual report (*Ann. 18*). For 9-days in August 2023, they launched the H.El.P programme in Bardia NP (Nepal) with funds from USFWS and Shared Earth, reviewing the teaching materials in detail. They concluded that the materials were still relevant and effective and that HEC education should continue to precede fence training (*Ann.18, 1.8-9*). In March 2024, GBP's director and its data manager met the project leader and M&E specialist for a detailed review of progress.

Output 2: Protecting Livelihoods

In Yr3, 4,000 copies of the seasonal electric fencing manual for trainees were printed in Burmese after being field-tested and revised, as needed, in Yr2. With match-funds from USFWS, Compass Films also produced a training video which was trialled and proved both helpful and popular. Together, the manual and video reduce the training courses from 4-days to 3-days (Ann.18, 2.3).

When covid restrictions meant GBP could train only 15 people per course rather than the 30 proposed, there was an unexpected benefit. It forced the team to identify farmers who really needed fences around their fields and who were sufficiently committed to erect and manage them properly. This is done through an interview with a cost-benefit analysis for any farmer asking for training. As a result, 100% of trainees have reached the standard required for certification instead of only 30% as expected. In Yr3, 15 fence training courses were held for 209 people, of whom 179 were male, 28 were female, and two were Forest Department officials. Since 2020, a total of 444 people were trained, all of them gaining certification. So, although the total number of people trained so far is less than originally planned, 444 trainees have been certified as fencers to date which is more than the 30% (324) anticipated by project end. (*Ann.19 p9*)

Every village that asks for a training course is first given an HEC education workshop to make sure they have the basic necessary understanding about elephants, their ecology and behaviour, as well as the human contribution to HEC. After that, the fencing team interviews 10-20 people to find out if they qualify for the training course. In Yr3, 466 farmers were interviewed (377 men, 89 women) in three provinces (Yangon, Ayeyarwady, Rakhine) with 444 selected for training. Most of them had problems with elephants ranging from small to moderate to major (*Ann.19 p10*).

From 2021, 30 training courses have led to 88 seasonal electric fences being installed around paddy (n=33), sugarcane (n=19), cassava (n=6), orchards (n=20), and houses (n=10) in four target provinces, along with three government fences (elephant camps) and eight community fences, bringing the total to 99 (*Ann.19 p17*). This represents a significant over-achievement – the original plan was to install 15 community fences – thanks to the hugely positive response from villagers.

In Yr3, GBP and its EERU government partner made 539 fence monitoring trips to check 649 fences in three provinces (Yangon, Ayeyarwady, Bago), checking each fence installation, management, and maintenance. Farmers were given advice on how to improve management for 65 fences.

Farmers recorded 539 sightings of elephants at or near the fences with elephants touching the fence 271 times and breaking them 165 times (137 times in Yangon province but only 17 times in Ayeyarwady and 11 times in Bago provinces. Most elephant incursions can be explained by a lack of fence guarding or maintenance on the day of the breach. Ayeyarwady farmers are more diligent in maintaining fences, but Yangon farmers are more diligent at guarding them with the result that, despite having more fences broken by elephants, less of the crop is eaten (*Ann.19 p16*).

Crop-foraging is one of four HEC impacts noted by villagers. Others include house damage, lack of safety, and fear of death. In Ayeyarwady province, 90% of 201 respondents ranked elephants as the main problem compared to 68% of the 240 respondents in Yangon province. Likewise, more

respondents in Ayeyarwady (84%) thought electric fences could protect their lives and livelihoods compared to 56% in Yangon province. The percentage willing &/or ability of respondents to give both money and labour for fences was correspondingly different. In Rakhine, the elephant problem was ranked 'moderate' by a majority of respondents, but a notably higher percentage thought electric fences would help (92%) and were willing to give money (96%) and labour (100%) to erect them. However, the number of respondents in Rakhine was lower (25). *Ann.19p10-13*

The increase in yields before and after setting up seasonal fences in Ayeyarwady and Yangon provinces was 91% for paddy rice (the staple crop) and 63% for sugarcane (a cash crop). In the past they lost 50-60% of their crop – sometimes 100% of paddy - so they are delighted with this significant improvement in their livelihoods. Most farmers recover the cost of fencing within the first year, but smaller farmers take 2-3 years to do so. For example, Oh Nal Pin paddy fields were visited by elephants every year, forcing farmers to abandon them for several years. After training in July 2022, they erected fences in September that year and in 2023, they harvested 1,500 bags of paddy (50kg/bag) for the first time in six years. Their farmland is exceptionally fertile with yields three times above average. Since 2023, no elephant has entered their fields (*Ann.19 p14-15*).

In addition to protecting livelihoods, this fencing programme is delivering two other benefits. One is that farmers no longer collude with poachers to remove problem elephants. They are now more likely to report the presence of poachers having learned of their value in the HEC education workshops. As a result, elephant deaths in the project area have plummeted. The other is that some of the GBP trained fencers are finding employment by setting up fences for other farmers and showing them how to manage and maintain them *Ann.19 p17*.

Output 3: Building Capacity

Four members of the project team (two from GBP, two for BAT) met for a week in February 2024 to review project progress, activity by activity, making sure that GBP would be able to complete the Activity Logframe Report (*Ann.18*) and produce its own comprehensive M&E report (*Ann.19*) with associated tables, graphs, and appendices to facilitate the writing of this report for Darwin. This new system is still a 'work in progress' and CF provided significant input, but the fact that it was achieved is a milestone in GBP capacity development. Appendices 1-21 also provide tables, maps, and graphs from which the data was extracted for *Annex 18+19*, including historical data on human and elephant deaths, HEC education feedback surveys, elephant encounters during the current project, fence training numbers along with maps of fenced fields and elephant sightings, records of fence monitoring, and crop yields. Quarterly reports were also sent to BAT in Yr3.

This project has also developed the capacity of the local government representatives (EERU & FD) who participate in the HEC presentations and fence training, helping to deliver the workshops and fencing courses, initially as trainee trainers, but increasingly as trainers and quality overseers. The salaries of the EERU trainees are paid by MTE/FD, but field costs are covered by GBP. In effect, EERU staff have been seconded to GBP so that the education and fence training programmes can continue as planned with a local, low key government presence – a benefit in tense times and much appreciated by them. EERU's involvement in the education and fencing activities, including monitoring, is key to the project's longer-term sustainability.

Likewise, GBP has trained, and works alongside, the Rakhine Conservation Association partners delivering HEC education and fence training courses in southern Rakhine as well as monitoring fence management and maintenance thereafter.

Output 4: Sharing Knowledge

After the coup, GBP avoided using Facebook for security reasons. Instead, staff sent texts to colleagues and project participants. But since 2023 Facebook is again in use, albeit cautiously, but TV broadcasts are still off limits due to political tension. In Yr3, posts were uploaded to Facebook 54 times. Surprisingly, 52% of GBP's FB visits are from India. Project findings are also shared, via FB, with participant communities throughout the year, and the fence monitors share updates and information with villagers on every visit. On 26-Mar 2024, CF & GBP reviewed their media outputs to date and adjusted their national PR strategy. CF will edit project videos for use on Facebook. GBP is now posting project news roughly once a week (see Ann.19 p.18 for examples).

In Yr3, 22 meetings were held with government officials at village and township levels to help them further understand the aim and objectives of the H.El.P programme. And on 17-Mar-24 and 25-Mar-24, presentations were also given to the Yangon provincial governor and Forest Department to discuss a proposed reforestation and rewilding project (*Ann.19 p20*).

On 14-Mar-23, Belinda Stewart-Cox, gave a presentation about the project at the Asian Elephant Specialist Group conference in Delhi on behalf of GBP's director, Aung Myo Chit (AMC), who had to cancel his trip at short notice. Five days later, on 19-Mar-23 she gave another, more detailed presentation, which was followed by a discussion about HEC mitigation methods, to the Elephant Conservation Group meeting in Corbett NP, India. Later that year, on 16-Nov-23, AMC gave a presentation at the International Elephant Foundation Conference in Chiang Mai, Thailand.

A local CBO partner (H.El.P Sri Lanka), registered in 2019 and trained by the H.El.P Myanmar partners, has been providing HEC education workshops in multiple HEC hotspots in central Sri Lanka. In 2024, this programme will introduce seasonal electric fence training as well.

In October 2023, AMC, together with Klaus Reisinger (CF) and leaders of GBP's education and fencing teams, held a 10-day pilot project in Nepal to introduce the H.El.P programme to 26 government officials and villagers from Bardia NP in collaboration with local NGO Ujyalo Nepal. Funds were provided by the US Fish & Wildlife Service. This pilot project proved so successful that, in 2024, the Myanmar programme is now being replicated in Bardia NP as H.El.P Nepal.

Facilitated by Belinda Stewart-Cox, AMC, and Klaus Reisinger joined representatives from Laos and Thailand at an Elephant Rewilding Workshop convened by the Royal Elephant Reintroduction Foundation in Sublanka Elephant Reserve from 2-5 April 2024. AMC gave a presentation about GBP's H.El.P activities in Myanmar and future plans to incorporate community-managed habitat restoration and rewilding into the programme (*Ann.19 p.20*).

3.2 Progress Towards Project Outputs

Output 1: Saving lives - Awareness about HEC is improved for at least 30,000 villagers in 180 villages in three regions and the rates of injury or death are reduced through the application of improved awareness.

To date, GBP has held HEC education workshops in 279 villages, reaching 32,727 people (2,567 male students, 2,666 female students, 12,813 adult men, 14,060 adult women and 621 officials) in four provinces (*Annex 19 p.1*). These figures are recorded at the start of every HEC workshop. The project has already reached its target in this respect.

The records of elephant and human deaths recorded by villagers in/around the target areas (*Annex 4*) and given to GBP since 2012 show a significant drop in elephant deaths from a high of over 20 in 2015 when poaching for skin was rampant, to almost none except for a brief spike in 2022 when China re-opened its border after Covid (*Ann.19 p7*). Of the deaths recorded over 10 years, most were near, but not in, the project areas.

Although overall numbers are relatively low, human deaths in/around the target areas have also dropped from 6-8/year to 2-3/yr and are usually associated with inebriation. Most human deaths in the last 4-years have also been in villages that were not part of the project and had therefore not learned to avoid conflict from a H.El.P human-elephant coexistence workshop (*Ann.19 p.7*).

Relevant appendices for this output include the following forms (with copies in English as well as Burmese), and tables. The data itself is logged into GBP's data bank from which the summarised tables in *Ann.19* are produced.

- Annex 1: Table of HEC education workshops held from 2021-2024
- Annex 2: Pre-education workshop assessment form
- Annex 3: Post-education workshop assessment form
- Annex 4: Elephant observation forms by villagers
- Annex 21: H.El.P elephant safety booklet for Myanmar (English version)

Output 2: Protecting Livelihoods - A seasonal system of crop protection is established in 10 villages in three regions wherein FD trainers, supported by GBP, train and certify villagers in the fencing method who then install at least 15 community-based seasonal electric fences which are maintained by villagers and allow elephants seasonal access to habitual areas.

This output is also well on track to achieve its aims. Fence training has been given in areas of Yangon and Ayeyarwady provinces where GBP raised HEC awareness between 2017-20 under the last Darwin (24-024) as well as in other HEC areas of those regions. In 2023, two new provinces were added - Rakhine and Bago – where villagers attend HEC education workshops before any fence training. So far, GBP has held 30 fence training courses in four regions, although most of them have been in Ayeyarwady and Yangon provinces. A total of 444 people were trained to install, maintain, and manage seasonal electric fences, all of them gaining certification. Of these, 257 men, 51 women, and 19 government staff were trained by GBP and 114 men and 29 women were trained by FD & EERU staff with GBP supervision. Although the number of people trained is less than originally planned, the number certified as fencers is far higher than the 30% (i.e. 324) anticipated because government restrictions mean few people can attend the courses so farmers are carefully selected for their commitment and need (*Ann.19 p9*).

So far, 88 seasonal electric fences have been installed around paddy (n=33), sugarcane (n=19), cassava (n=6), orchards (n=20), and homesteads (n=10) in four target provinces, along with three government fences (elephant camps) and eight community fences, i.e. a total of 99 (*Ann.19 p17*). Apart from a few villagers who have bought higher quality Gallager energizers with an interest-free loan from GBP, every one has paid for their own fencing materials since none of the project participants either expects, or wants, any loan or hand-out from a government organisation and this project is not offering to pay for fencing materials. As a result, this is a purer form of farmer/ community self-help than many projects in other countries.

So far, we have comparative data from the 2022-23 harvest season for the fenced fields in Ayeyarwady and Yangon provinces; 33 of them surround paddy rice and 14 surround sugarcane. To date, the increase in paddy yield has been 91% (compared to 50-100% loss in the past) and for sugarcane 63% (*Annex 12*). Overall, therefore, we are on track to achieve this output.

Relevant appendices for this output include the following:

- Annex 5: Form for villagers to record their fence maintenance activities & elephant sightings
- Annex 6: Form to record individual attendance on each fence training course
- Annex 7: Form for individual fence training participants to complete
- Annex 8: Pre- & post- fence training feedback survey form
- Annex 9: Records of the fence maintenance forms filled in by villagers

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- Annex 10: Patrol form & checklist completed by fence monitors
- Annex 11: Elephant sightings filled in by fence monitors from village data sheets
- Annex 12: Income from paddy and sugarcane pre & post fencing for Yr3
- Annex 13: Interview form for individual farmers pre-course selection process
- Annex 14: GPS maps of fenced fields In Yangon & Ayeyarwady provinces with geo-locators
- Annex 15: Seasonally fenced fields yield data 2021-2022-2023
- $_{\circ}\,$ Annex 24+25: Seasonal fencing manuals in English & Burmese

Output 3: Building Capacity - The capacity of key partners to implement effective project monitoring and evaluation is strengthened.

This output is certainly being achieved, though not quite as intended. The covid pandemic and the coup meant we could not hold an M&E training workshop at project outset. In Feb 2023, BAT representatives, with Klaus, managed a 6-day visit to see a fence training course and hold the long-awaited monitoring & evaluation training workshop – the latter supported by Keith Lindsay online as he could not join us in person.

Since then, scores of online capacity-building sessions have been held between CF and GBP (averaging two a week) and BSC also participated in various online meetings. Topics ranged from reporting activities, improving the data-recording and logging system, and planning HEC education and fence training sessions. There was also notable progress in making GBP's accounting system more timely and secure. The new system has been fully adopted by all GBP staff. The system for logging photos with associated dates and captions has also been improved.

We have also developed the capacity of local government representatives (EERU & FD) who participated in the HEC presentations, helping to deliver the workshops as trainee trainers. And GBP has also trained members of the Rakhine Conservation Association (RCA) to work with it in that region. The M&E report (Annex 19), together with the Activity Logframe Report (Annex 18) and supporting appendices 1-17 provided by GBP working with CF support this statement.

And, in Nepal, working through the Nepal Trust for Nature Conservation (NTNC), CF and GBP have trained members of Ujyalo Nepal, the NGO working in/around Bardia National Park, to deliver the H.El.P programme using materials (*Annex 20+25*) from this project translated and adapted.

Output 4: Sharing Knowledge - *skills and lessons learned in this project are shared locally, nationally, and internationally via print, broadcast, and social media.*

Apart from sharing HEC awareness materials with villagers and project associates at every education event, this has been disrupted. After the coup, social media platforms were so closely monitored that most people, including GBP, thought it wiser to stay offline. The project shifted to a low profile, low media presence, while remaining active in villages. However, GBP did keep its website up-to-date with photos, activity reports and articles of interest and in the last year, it is again posting once a week on Facebook (*Annex 19, p18-19*). However, it is still unsafe to provide broadcast material for national TV which is why this activity was removed from the logframe.

Otherwise, the project is well on track to fulfil this output. Over 30,000 HEC education kits have been printed and dispersed to families in 279 villages since project output but, since 2023, DVDs are not included in the kits because video material is now available online. The fencing manual has been field-tested and finalised in Burmese, English and Nepali and is also available online, removing the need to print hard copies. Feedback is regularly provided to participant villagers, both via Facebook and every time the education or monitoring teams visit villages. To date, AMC has also given feedback presentations to 23 community leaders in Yangon, Ayeyarwady and Bago provinces (*Annex 17*) and will do the same in Rakhine province next month.

AMC also gave presentations to regional government officials in Yangon, including the Forest Department, and to three international meetings; in Nepal in October 2023 (to government and NGO collaborators in the newly launched H.El.P programme), in Chiang Mai in Nov 2023 (the International Elephant Foundation conference); in Sublanka NP in Mar 2024 (a habitat restoration and elephant rewilding workshop hosted by the Royal Elephant Reintroduction Foundation). In February 2023, the project leader also gave presentations on behalf of GBP at the Asian Elephant Specialist Group conference and at the Elephant Conservation Group meeting which followed the AsESG meeting. These five meetings offered an opportunity to discuss the H.El.P project with people working on human-elephant conflict mitigation, including diverse members of the Specialist Group (*Annex 16*).

Project datasets have not yet been archived with any national institution because none can take them at present but Pathein University, Ayeyarwady province, has become involved with the project and four students are collecting data for their higher degrees and will publish their findings as papers in due time. Their topics are:

- 1. Wild elephant seasonal movements around electric fences
- 2. Knowledge, attitude and behaviour change after participation in the H.El.P education
- 3. Costs, benefits, and challenges of seasonal electric fencing in practice
- 4. Size does matter; crop damage by elephants, birds, rats, and insect from interview surveys

Relevant appendices for this output include the following:

Annex 16: Feedback meetings at local, regional & international level Annex 17: Feedback meetings with villagers

3.3 Progress Towards the Project Outcome

Project Outcome: In six regions of high biodiversity and human-elephant conflict, a programme of co-existence education plus skills training in seasonal electric fence management provides an effective model for nationwide application.

In spite of the challenges arising from covid and the coup, but helped by the one-year extension, this project is making very good progress against all its outputs and is certainly providing a effective model for nationwide application when the civil conflict allows safe access in all wild elephant areas of the country. The indicators to be reached by project end are the efficacy of the HEC education workshops and the seasonal electric fencing, so human losses are reduced by 50% and crop losses by 70% at fenced sites. These targets are being achieved.

Historical data on human/elephant deaths and HEC in the target areas needed as baseline for this indicator is being collected cumulatively as/when GBP engages new target areas. A final comparison will be possible at project end. Happily, empowering villagers by teaching them about elephants and how to avoid conflict proving beneficial. Knowledge and confidence are key to human-elephant coexistence. The indicators are adequate for measuring the intended outcome.

The in-country partners have adapted well to the civil conflict affecting some areas of Myanmar, making notable progress despite the challenges of the last three years.

3.4 Monitoring of Assumptions

Outcome level Assumptions

Assumption 1: Villagers confirm their interest in using the seasonal fencing crop-protection method to village leaders or the GBP team.

Comment: This assumption is very clearly holding true. Villagers have shown themselves to be extremely keen to join this programme. Eighty-one communities requested fences in Yr2.1, after

doing a cost-benefit analysis with GBP, only a quarter of those were financially viable. In Yr2.2, even more villagers asked for fences, but only eight went ahead after doing a cost-benefit analysis, but another 27 went ahead independently, 14 of them with the help of certified GBP fencers. Additional worrying proof that villagers are interested in using the seasonal fencing method to protect their crops is the number of farmers in areas not currently targeted by the project who have installed fences without being trained – occasionally with distressing consequences. One man in 2022 electrocuted himself when he inadvertently fell into a pond while holding a live wire, and in 2023, there have been two cases of elephants being electrocuted because the farmers used an inverter instead of an energizer. Sad though they are, these incidents are widely publicised via phone and social media, alerting farmers to the dangers of insufficient knowledge. When it hears that farmers are using inverters, GBP invites them to join its H.EI.P programme and receive both HEC and fence training.

Assumption 2: Forest Dept. honours its promise to assign 12 staff (4/year) to become trainers in seasonal electric fencing and covers operational costs.

Comment: This assumption is also holding true. To date, MONREC has sent 27 members of the Elephant Emergency Response Unit (EERU) which is responsible for elephants and HEC to be trained by, and work with, the project in different areas. Members of the EERU teams in target areas have attended HEC-awareness and electric fence training courses and now help train villagers in HEC awareness, how to install safe fences, manage and monitor them.

Assumption 3: It is possible to clearly establish a link between the level of HEC and project mitigation efforts. The HEC level will be determined through a 3-factor measure (crop/property damage/elephant deaths) and human deaths.

Comment: This assumption is still valid although we are finding that there were/are fewer human and elephant deaths than we expected in the target areas. Even so, when deaths do occur, almost all of them are outside project areas. Data on crop yields before/after erecting electric fences (*Annex 13*) certainly demonstrate the efficacy of our project intervention.

Assumption 4: Covid outbreaks do not stop GBP from carrying out an effective work programme.

Comment: this has held true. Even in 2020-21 when covid was at its worst and GBP was confined to Yangon for varying periods, it managed to modify its work programme to keep going and has managed to attain most of the targets set for each year.

Assumption 5: The military coup does not prevent field activities throughout the target HEC areas or the involvement of key government staff at local level.

Comment: The coup has not prevented field activities in the current target HEC areas and we do not expect it to do so, even if opposition continues to make remoter areas unsafe to visit. Nor has it stopped the EERU teams from participating in the project. Their involvement is key because they operate at local level and are welcome in villages even though its director reports, as necessary, to government higher-ups to share project progress which means GBP does not have to do so. It is very unlikely that outlying conflicts will stop GBP doing any fieldwork at all.

Output level Assumptions:

Assumption 1: Villagers see value in attending the HEC safety education workshops.

Comment: The assumption is clearly holding true. So far, the project has reached 279 villages and 32,727 community members overall. We know from previous surveys that student participants share their knowledge and materials with at least three friends/family members, so the total number of people reached directly and indirectly is even higher. GBP is often asked by villagers to conduct HEC or fence training in their villages. The former always precedes the latter.

Assumption 2: Learning about elephants/causes of HEC/how to avoid it facilitates more confidence and positive attitudes.

Comment: This assumption is holding true. Although the number of human deaths is relatively low, those that are killed by elephants are nearly all from villages that have not learned about HEC and how to avoid it, suggesting that this project's H.El.P workshops are working. And if the regularity of calls reporting elephant sightings is anything to go by, participants are engaging actively in the project, which suggests a positive feeling of confidence, optimism, and well-being.

Assumption 3: Villagers use HEC measures taught in education workshops.

Comment: This assumption is holding true. In the 4-years before the last DI project (2012-18), 43 people were injured or killed in and around what are now project areas. In the next 6-years (2018-24), 35 were killed, often while tipsy, all but two outside the target villages (*Ann.19.p7*). Antipathy towards elephants is much reduced in participant villages such that none has been killed in the project area. Where possible, villagers now store paddy away from their houses, in a separate structure, or they extend their electric fence to incorporate the entire homestead.

Assumption 4: In target areas, all HEC incidents & elephant encounters are recorded.

Comment: As far as we know this assumption is holding true as villagers engage more and more and other villages join the project. In Yr1 seven sightings of 3-10 elephants were reported, with four groups coming within 10m of a fenced field. In Yr 2.1, 217 signs or sighting were reported. In Yr2.2, 149 sightings of 3-7 animals were reported around the villages or near fences. And in Yr3, 539 elephants were seen, many of them approaching fenced fields from nearby woodland. Villagers are also reporting elephant deaths in and beyond the project villages.

Assumption 5: Villagers continue to want to train in seasonal electric fence methods.

Comment: This assumption is only too true. More villages request electric fence training than GBP can currently deliver. The fence training programme is being implemented in areas of Yangon and Ayeyarwady where GBP raised HEC awareness between 2017-20 under the previous Darwin project (24-024) and in new HEC areas of those regions under this project. And in 2023, some villages were added in southern Rakhine and Bago where access is possible.

Assumption 6: Enough villagers meet the criteria needed for professional certification.

Comment: This assumption is more than true. Because government restrictions limit each training course to 15 people, GBP is implementing a strict selection process using individual interviews and a cost-benefit assessment to find out whether the applicant demonstrates sufficient commitment and need. We expected only 30% of trainees to qualify for certification. In fact, 100% have qualified because of the screening process and their determination to succeed.

Assumption 7: Villagers appreciate the need to record data accurately and consistently.

Comment: This seems to be true. The records to date are encouraging. The fencing protocols, instruction manual and data collection forms, available in Burmese, are being used by villagers and by the field teams. The online activity reporting system has been improved over two years, and the entries are checked soon after they are logged by GBP's data manager so that discrepancies can be corrected quickly. Villagers use the forms they are given, and because of logistical constraints in remote field areas, the fencing team still handwrites its training, monitoring, and survey records, logging them into the database from their phones at the end of each day, but the education team can usually log activity data online from settlements.

Assumption 8: Elephants perceive and respond positively to reduced levels of HEC incidents and the changed nature of the landscape with seasonal electric fences.

Comment: As far as we can tell thus far this holds true. There are no reports of elephants being unduly aggressive. In Yr1, a bull elephant was seen touching an electric fence but not breaking it. In Yr 2.1, there were 217 sightings of elephants but no data is given for fences broken. Yr2.2, there were 149 sightings, many of the elephants following fence lines, but only 10 fences broken. And in Yr3, there were 539 sightings with 271 elephants touching fences and breaking them 165 times. So the numbers of elephants seen near fences are up, as are the number of fences broken, but is this because more fields are fenced, because elephants are learning to break them, or because some farmers are complacent about guarding, thinking that electric fences alone will protect their crop? The Pathein University students' research will tell us more.

Assumption 9: GBP can recruit & retain 4 new staff (3 for M&E, 1 for communications) for project duration, at least.

Comment: This assumption holds true which is remarkable given how many people have fled the country to avoid the civil unrest or conscription. But GBP has a dedicated and loyal team.

Assumption 10: *Villagers accept the need to maintain the performance/efficacy of fences and do so consistently & diligently.*

Comment: This assumption appears to be true although there are differences between farmers in the diligence with which fences are guarded and maintained. In some cases, lessons may be learned the hard way when a field fence is broken. A total of 99 fences are now operational, three of them guarding government elephant camps, 10 surround homesteads and the rest are protecting crops - mostly paddy, but also sugarcane, cassava, and fruit. In the last year, the GBP/EERU monitoring team made 556 trips to inspect 649 fence sites, advising the owners on best practices for safety and maintenance. The overall effectiveness of the fences, as indicated by the increase in crop yields (*Annex 12*), does suggest that, in general, villagers do recognise the need to maintain their performance consistently and diligently.

Assumption 11: Elephants continue to come into, or move through, the areas targeted for seasonal fencing.

Comment: This assumption is true. Sightings around fenced fields have increased markedly in the last three years (see Assumption 8 above) and many of the records note that the elephants approach the fields from the forest or scrubland nearby (*Ann.10*).

Assumption 12: *MITV/MRTV and local press continue to want to broadcast/ publish H.EI.P films, stories and photos*

Comment: MRTV/MITV would like to broadcast H.El.P project videos as they did during our last Darwin project, but as both stations are controlled by government, GBP engage with them. Both channels do still show old programmes about elephant, dolphin, and bird conservation which were made by CF before the coup. This poses more problems than benefits at present.

Assumption 13: Villagers see the value in VODs and use them.

Comment: The fencing manual and other online videos produced by CF with match-funding from USFWS and Shared Earth are now available via GBP's website and Facebook page and are often visited, as much by people in India (52% of visits) as by people in Myanmar (*Annex 19 p18*).

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

Intended impact: Human-elephant co-existence is achieved in Myanmar by institutionalising an HEC mitigation programme that safeguards the lives and livelihoods of rural communities and elephants as well as their habitations nationwide.

This project is having an impact on biodiversity conservation in the following ways:

- HEC education: these awareness-raising events use audience-educator interactions and audio-visual aids/games to share knowledge about elephants (behaviour, ecology, needs) and some of the anthropogenic causes of HEC. Education kits, comprising two info-games and a booklet, are shared with students and feedback tells us that these are used repeatedly by individuals/groups in each household. Feedback over the years also reveals that participants become more sympathetic, or at any rate less antagonistic, towards elephants. The beneficial impact of these workshops appears to be lasting as only two participant villagers have been killed since 2018 and others continue to report suspicious poaching activity in their area (see below). Raised awareness about elephants and HEC is also motivating villagers to want to take on the extra cost in time and money of fencing their properties so this is a progressive evolution of interest, engagement, and coexistence.
- Fence training: Village that request electric fencing host an HEC education event before GBP's fence team works with farmers/community leaders to do a cost-benefit analysis. If it becomes clear that an electric fence is financially worthwhile, fence trainees are given a manual that includes information about elephants (behaviour, ecology, needs) so they are reminded when, why and which elephants are likely to raid crops. Understanding elephants better clearly does make participants less antagonistic towards them, particularly if their crops are successfully protected. So far, no elephant has been killed by electrocution in target areas indicating that the certified farmers who have erected fences are doing so correctly. One elephant was electrified last year by a farmer using an inverter instead of an energizer but this happened outside the project area and was done by someone untrained.
- **Reduced poaching**: During our last Darwin project (2017-20), GBP received an increasing number of calls from villagers who had attended an HEC education workshop reporting suspicious activity in or near their community which they thought might be poachers. GBP shared the reports with the Forest Dept and encouraged villagers to continue reporting such incidents to them or, better still, directly to FD. As a result of this growing 'neighbourhood watch' by project participants, no elephants have been killed in target areas after an HEC education workshop there. Even during the covid crisis, villagers continued to call GBP when suspected poachers were seen in/near their village with the result that, in the last four years, although poaching of some animals continues for food, no elephant has been reported killed in areas where GBP already has an established relationship, whereas there have been reports of poaching elephants in areas outside our project zone, especially after China opened its border after covid. This is encouraging as it suggests that the HEC education workshops do have a lasting impact in changing attitudes in favour of elephants (*Annexes 18 + 19*).
- Sharing knowledge more widely: The project plan to produce film for national TV broadcast and live streaming via social media was halted by the coup, but videos and illustrated activity reports are shared widely via SMS and are posted on the GBP website and Facebook page. In the last two years, AMC, GBP's director, and BSC, project leader, have given five powerpoint talks about the project to international audiences and BSC wrote one article about the project for the project <u>websites</u> and another for the <u>BCF/Darwin</u> website. Most exciting of all is the fact that, from 2022, this H.El.P project is being replicated, with local implementing NGOs trained by CF and GBP, in HEC hotspots in eastern-central Sri Lanka, and in Nepal around Bardia National Park.

Impact on human development and well-being (poverty alleviation): Evidence so far suggests that this project is having a hugely positive impact on human development and wellbeing. It is teaching villagers how to avoid death and injury from elephants, and thus the temporary or permanent loss of a bread-winner, and it is teaching male and female farmers how to install and manage seasonal solar-powered electric fences to protect their crops and, if need be, their houses. These skills are empowering. According to several women spoken to during the project leader's annual M&E visit in 2023, they are less fearful of being visited at night by hungry elephants and therefore sleep well and feel more cheerful, benefiting their mental health. So far, the fences are deterring elephants, and even after breaking a fence, elephants do not always enter protected fields because they are guarded by farmers who make their presence known with shouting and other noises. So, as well as preventing the diminution of livelihoods that crop losses represent, positive project impacts so far are boosting villagers' confidence which is itself an element of wellbeing. By project end, we will be able to calculate the extent to which all fences have reduced crop damage over time, bearing in mind the elephants often stop being afraid of deterrents. We will also be able to calculate the total income that has been saved by all fences, thereby contributing to poverty alleviation. The data on improved crop yields so far (Annex 12) are encouraging.

4. Project support to the Conventions, Treaties or Agreements

GBP's director did have regular contact with the CBD & CITES focal points (and their successors) on his trips to Naypyidaw, the administrative capital, but these visits have stopped since the coup. Instead, contact is maintained by the head of the Emergency Elephant Response Unit (EERU), a partner and strong supporter of the project. AMC does report to the head of the Forest Department in Yangon who also oversees the Wildlife Conservation Department, so support does continue indirectly.

In general, this project does directly support the implementation of the CBD, in particular Myanmar's national implementation through the Myanmar National Biodiversity Strategy and Action Plan. This action plan was linked directly to the Aichi Targets, including Action 12.1.1 "Pilot and scale up conservation and research initiatives for priority species." By embedding the HEC education and seasonal electric fence programme into the government system, this project does provide a mechanism to adopt an approach nationwide that, over time, should reduce further fragmentation of elephant landscapes and through-routes while also averting conflict between people and elephants.

Indirectly, this project is also contributing to CITES by educating villagers on the illegality of elephant poaching during HEC education workshops/fence training while also encouraging them to report poachers and elephant deaths. Elephants are poached in Myanmar and their products are transported illegally across the border to China and elsewhere but, to date, no elephants have been killed in project areas. In rural communities, villagers do not normally report poaching out of fear that they will be blamed. The penalty for killing an elephant (a sentence of 7-10 years) is strictly enforced and villagers are afraid to risk that. By building trust with communities, GBP acts as an intermediary between villagers and authorities, enabling reporting of activities that contravene CITES, thus ensuring more effective enforcement. This had already started to happen under the previous Darwin project (24-024) and continues now despite the coup.

5. Project support for multidimensional poverty reduction

Outputs 1 & 2 are directly helping to reduce poverty. The HEC education workshops teach villagers how to stay safe in the vicinity of wild elephants so that no one in the family, particularly no breadwinner, is killed or injured so badly that they cannot farm or generate their usual income. So far, only two people have been killed by an elephant since 2018 in villages that joined the H.El.P Project 27-012 (2024) Annual Report for Yr3 to Darwin Initiative from British Asian Trust/Elephant Family 16 programme. The fence training component helps participant farmers protect their crops, houses, and grain stores from elephants, all of which tend to be raided at night. Crop loss represents a double loss; food and income. Most crops cultivated by farmers, particular the staple crop rice, is a family's food supply, and any surplus is sold with cash crops to provide money.

So far, electric fences installed under this project are deterring elephants from protected fields but have not blocked them entirely; in Yr1, elephants were seen seven times near fences but no fence was broken. By Yr3, 4-years later, elephants were seen 539 times, and broke fences 137 times but on 60 occasions, the crop loss was negligible because farmers on watch deterred them swiftly. Overall yields were significantly higher than in the past (*Annex 12*) when some rice fields were wholly consumed by elephants. More fences being broken, may mean more elephants are learning to break them, but may also reflect the fact that there are more fences to break.

The project is also contributing to poverty reduction indirectly by raising awareness of the value of elephants and their habitat to the ecosystem in general, thus encouraging environmental protection. By requiring up to 12 villagers/households to work together to manage and guard community electric fences, we are also fostering more collaborative community management.

6. Gender Equality and Social Inclusion (GESI)

The project management team has had several discussions on how to involve women as well as men in all areas of project work and to ensure, at the very least, that women do get the opportunity to engage with this project along with men. Every project partner has a gender equality policy in place and this is translating into project practice in two ways:

- Local team members: Under GBP's policy of gender equality, women and men can apply for all positions available under this and other projects i.e. the HEC education teams, the fencing teams, the M&E team and the communications role. GBP did find it difficult to recruit women to its field teams, because the job entails travelling to remote areas, spending many days away from home, and living alongside male colleagues. None of these conditions are culturally normal for women. However, GBP is now recruiting and training people from the project area, where possible, and two of its fence trainers are now women, both with degrees from a local university. The Communications and M&E manager roles are held by women as these jobs are office-based with only brief field visits to familiarise themselves with project activities. GBP's local partners, including MTE and the Forest Dept, are aware of its gender equality policy and hope that female representatives of those organisations will join its own training teams, but it cannot insist. Government employees in provincial areas tend to be men if the job involves travel away from the office.
- **Project participants**: The gender of participants at every HEC education event is recorded and there is always a notable number of women (usually over 50% if the workshop is held during the day). Many school-heads and teachers attending HEC presentations are also women. In Yr2.1, 4,284 (52%) of the 8,233 adult villagers attending the HEC education events were women. In Yr2.2, 1,171 (47%) of the 2,474 adults at HEC education events were women, as were 790 (50%) of the 1,578 students. And last year (Yr3), 616 (51%) of the 1,198 students and 4,981 (53%) of the 9,416 adults attending HEC workshops were women. So women made up 52% of all adult attendees (n=20,123) at HEC education events in the last three years, and every year, HEC safety education workshops are provided for young people in target villages.
- Increasing the number of professionally qualified women fencers: In Yrs 1+2.1, GBP trained 8 women as fencers, all of whom achieved the standard needed for certification. In Yr2.2, another 35 women were trained, and certified, 15 of them at a women-only training course, organised to encourage women to train as fencers. Two of those women, both based in HEC-affected villages, have since been recruited by GBP as fencing trainers, teaching both men

and women. And last year, another 28 women became qualified fencers out of 179 trainees. To date, 449 villagers have been certified as fencers, 17% of them (n=73) women. These women are now installing and maintaining fences around crop fields, and around homesteads to protect the crops that are stored and enable their family to sleep well. When elephants break into kitchens or granaries to steal food, women and children are most at risk.

Please quantify the proportion of women on the Project Board ¹ .	The Project Board is 25% women and 75% men, with one woman (Belinda and the second sec
Please quantify the proportion of project partners led by women, or which have a senior leadership team of at least 50% women ² .	Compass Films senior management is 100% women, BAT is 50%.

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

This project is not overtly addressing unequal power relationships or seeking institutional and societal change as that could be unwise at a time of political upheaval but it is demonstrating that women can be equally effective in the 'masculine' roles of trainer and fencer.

7. Monitoring and evaluation

With the help of Dr Keith Lindsay, the independent M&E specialist who evaluated EF's 2017-20 Darwin project (24-024), the project partners used the logframe to highlight data that must be collected (as noted in measurable indicators & means of verification). The partners then designed forms for the field teams and villagers to recording the data needed to assess project impacts:

1. An HEC education feedback questionnaire to assess participant knowledge of and attitudes towards elephants as well as their corresponding empowerment and confidence before and after the workshop (*Annex 2&3*).

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

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

- 2. A form to profile farmers, their land, crops, income, experience of crop raiding, wild elephants and HEC, their attitude towards elephants, their financial and practical willingness or ability to help manage an electric fence (*Annex 13*)
- 3. A form to monitor electric fence while it is in place, recording elephant sightings, elephant responses, whether the fence was touched/broken, and management actions (*Annex 11*).

GBP also created a spreadsheet, now a database, in which its team logs data from these forms along with other data (e.g. number/gender of participants at workshops or courses). This is shared with CF to monitor progress and provide figures for reports. Because the database is unwieldy to review, it has separate worksheets for the activities of each output. This makes reviewing data manageable and ensures that the information we need for M&E is collected and recorded.

When GBP adds data to the database, the worksheets are automatically updated with information relevant to them. This system was started in Yr.2.1 and is still a work in progress, being improved as issues arise, but it does allow us to collaborate remotely on reports. It also helps the GBP team better understand the requirements of an effective M&E process and the data needed to evaluate the impacts of project interventions. All this was addressed during the M&E training workshop in Feb23 reinforcing the GBP team's understanding of the purpose and processes of M&E, and again at the M&E review in Feb24.

In Yr2.1, BSC created a reporting sheet, using Excel, which contains the annual activity information against the logframe. GBP filled in the information needed from Yr2.2 and Yr3 (*Annex 18*). Given Myanmar's weak internet, this smaller file is easier to share back and forth, with queries and corrections, than the database itself. It also focused GBP's mind on M&E reporting requirements and has therefore helped strengthen the organisation's capabilities. GBP and CF have used this form, and the other appendices, to produce their own M&E report (*Annex 19*) for BAT/EF.

This M&E process has been entirely collaborative which is remarkable given the constraints we are dealing with, not least Myanmar's intermittent internet making it slower to communicate. Other qualitative indicators of achievement include the fact that district and regional officials as well as villagers continue to support and work with GBP to implement this project. This, as much as anything, demonstrates the strength of the relationship GBP has with its local partners.

8. Lessons Learned

In the 'Detail Notable Problems' section of the Yr2.2 (2022) half-year report we noted that the coup in Myanmar continued to affect project implementation. The project strategy and activities have had to adapt to an evolving situation. GBP has been able to continue operating effectively by working locally and keeping out of the limelight. All lessons listed in the annual reports of the previous two years are still valid. They were:

- Lesson 1: Meet in person if you can. Virtual meetings/exchanges are not satisfactory substitutes for meeting in person and going on field visits where project activities and M&E needs can be reviewed if queries or issues arise. The virtual collaboration made necessary by covid and the coup was only possible, and effective, because key partners spent time together on previous evaluation trips and had a strong and comfortable relationship. Without those, managing this project over the last four years would have been much more difficult.
- Lesson 2: Develop an accounting system that is easy to keep up to date. Although we were able to respond swiftly to the financial audit sprung on us by Darwin last year, we realised that GBP could improve its accounting system by incorporating it into the project database. Now all costs and associated receipts are uploaded into the system by GBP staff at any site that has a mobile signal or internet. This saves a lot of time and makes year-end accounting much easier.

- Lesson 3: Develop robust relationships with the local communities and local government representatives with whom you engage. In spite of difficulties experienced over the last four years, GBP kept the project going by adapting to the changing situation. This was only possible thanks to the strong and effective relationships it had established with local and regional government officials and members of the target villages. Without trust and commitment key characteristics of those relationships this project would have been in trouble. As it is, GBP has done well to keeping it going more-or-less as planned while also meeting the target figures.
- Lesson 4: Learn to walk a political tightrope if necessary. Since the coup, GBP has steadfastly stayed out of politics in keeping with its NGO status. It maintains its neutrality by engaging at local level only, i.e. with community or township leaders rather than top officials. This has paid off as the democratic rebels, coup authorities and villagers continue to support the project. Initially, villagers feared that GBP staff might be informants and were wary of giving historic HEC data in new target areas, but once villagers got to know the team, they cooperated fully.
- Lesson 5: Be aware of the different experiences and perspectives of the project management team. The mindset of project implementors and project managers is different. Implementors work on the ground, in the field, face-to-face. They know if things are going well or not, and the reasons may be qualitative. Project managers are removed from this practical involvement and may not have first-hand experience of the project areas. It can be hard, especially remotely, to explain the data needs of an M&E programme, including the need to evaluate the impact of the main project interventions which are not the same as the activities that help achieve those interventions. It takes time to understand each other's perspective, especially when there are language differences and communication is remote. It helps to have people on the management team with relevant field experience to liaise between project administrators who know procedures, and implementors who know field needs. Our team is nicely balanced.
- Lesson 6: Develop an easy reporting system as part of capacity building. The need for clarity, consistency and comprehensive data is difficult for GBP to fulfil. This challenge was addressed by creating a database designed to match logframe activity points, thus making it simpler to link data to its reporting requirement. This year we also designed a reporting spreadsheet that records the information provided for every annual report against each logframe activity, thus reminding GBP what data is needed for each one. This helped, but still needs practice.
- Lesson 7: Keep log-frames clear and simple to streamline data recording. Log-frames need to be sufficiently detailed and comprehensive, but also simple enough to make data recording easy. When designing the spreadsheet/database, we realised that data from different activities and measurements overlap, meaning that some entries are either duplicates or redundant.

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

In response to the review of Yr.2.1's annual report, we clarified five points in the Yr.2.2 one:

- The project officially started in August 2020, but some activities are season bound and had to begin two months before using match funding from USFWS and Shared Earth.
- All output assumptions were reviewed in Yr2.2's annual report.
- We explained the link between the Myanmar Timber Enterprise and the CBD and CITES focal points in the Project Stakeholders/Partners section of the annual report.
- References to visiting Sri Lanka for training were removed from the logframe.
- Output 4 and relevant indicators were revised so that the project can still demonstrate it has met them.

The reviewer of Yr2.2's annual report made 10 comments. Here are our responses:

- GBP/CF produced an M&E report for Yr2.1's annual report but because Yr2.2 was a split year, thought it best to wait and provide a more complete Yr3 report (Ann. 19).
- The authorities and pro-democracy activists do know about this project but leave it be because GBP does not make big public statements on any topic so as not to alienate either side or draw criticism from overseas commentators of the regime. Avoiding public opinion, avoids problems. Project activities are shared with participant villagers and FB but have no affiliation with either side of the conflict.
- GBP will continue to operate with permissions at community and township level, which are proving adequate and successful, until such time as a more formal agreement at a higher administrative level becomes possible and worthwhile.
- GBP and CF both have safeguarding policies in place and these are regularly reviewed with
 project staff. Prior to every field trip, GBP's director evaluates the security risk to field staff
 based on information from community leaders and village-based staff as well as official
 information on temporary closures in specific areas due to military activity. AMC then
 discusses any risk with KR who has 10-years of experience as a war correspondent in dozens
 of conflict zones and is thus able to guide GBP to ensure that precautions are taken to ensure
 the safety of project staff and participants. So far GBP has not experienced any serious threats
 thanks, in part, to selecting safe target locations and avoiding higher risk areas.
- GBP is making it possible for female villagers to train as seasonal electric fencers and, in their local area, two trainees have since become province-based lead trainers of male and female trainees with male staff in supporting roles. This is working well, and it is currently neither viable nor necessary to have a women-only field team with so few project staff in total.
- The reviewer asked us to consider youth specific activities or trainings (i.e. vulnerable groups) that could reduce risk and increase awareness, demonstrating social inclusion beyond women. In fact, around a quarter of our HEC safety education workshops are held in schools, targeting students (male and female) aged 8-18, or thereabouts, and their teachers. The other HEC workshops are held in community centres with young villagers also attending, often for the second time if they have already participated in a workshop at the local school.
- Because the Myanma Timber Enterprise is on the American and European embargo list, its elephant unit (EERU) now reports directly to the Ministry, as does the Forest Department. GBP has no official MOU with either organisation since that is not possible at present, but both organisations collaborate at district level, sending local staff to HEC education sessions and fencing courses, some of whom then join GBP's training and monitoring teams.
- The reviewer notes that outcome indicators were reduced with a change request (though two others were added) and wondered if they could be broken down to be region specific. At present, it would be more meaningful to breakdown by low vs higher risk areas, and even then, not necessarily useful as the project needs to be flexible while civil strife persists. Most target areas are now in Yangon and Ayeyarwady provinces which are safer. The situation in Bago and Rakhine is fluid.
- Because Output 4 has been much disrupted, the reviewer suggested modifying the broadcast components to reflect what is possible. This was done under the change request of Mar2024.

10. Risk Management

There is no new risk this year. GBP has already adapted to the possibility that its access to Rakhine may sometimes be restricted by training a local NGO to work with it.

11. Sustainability and Legacy

Our stated exit strategy is: This project will reach a stable and sustainable end-point because key components will be embedded in the government system before project end. Forest Dept. staff will be trained to implement HEC safety education training as well as seasonal electric fence training, thus allowing the department to take ownership of both processes. This mainstreaming of HEC mitigation ensures long-term sustainability and a clear exit strategy. The practical safety steps imparted to villagers by the HEC education workshops will not be lost, once learned, because elephants pose a constant threat to them and their children. This safety-promoting knowledge is reinforced by discussions and information-sharing within/between households and communities, as well as by villagers reviewing educational kits + online videos. Similarly, training in seasonal electric fence installation, provided villagers have the means to buy the equipment, will become standard practice in areas shared with elephants. If fences are installed and managed properly, farmers will be able to keep their crops. Training manuals and videos on demand will be available post-project. GBP staff will develop skills in communication and M&E; the challenge is retaining them in-house and ensuring that fence safety standards and protocols are maintained by farmers.

As far as we can tell at present, this exit strategy and legacy are still broadly valid and will continue to be valid so long as it is possible to implement project activities in safe areas. Villagers and local government officials are as keen on this project as the GBP team and will, it seems, do what they can to help ensure that it keeps going whatever the conditions. The challenge will be ensuring that farmers who were recently trained as fencers but do not have a year or two of supervision will remember to follow the safety and efficacy protocols they were taught.

In response to Yr1's annual report, the reviewer noted that we had not commented on how likely it is that our outputs, outcome, and impacts will be sustained such that they become a lasting project legacy. We have no doubt the project outputs will be sustained because they all involve the acquisition of knowledge and skills which, once learned, will not be unlearned because they are valuable enough to be practiced by all those who acquire them, whether to protect their lives or their livelihoods. So far, all the signs are that the outcome (nationwide application of the H.EL.P coexistence programme of HEC education and seasonal electric fencing) will be sustained, partly because it is proving effective and is favoured by villagers, and partly because the government partner responsible for HEC mitigation (EERU) is incorporating this training into its own work programme. Therefore, we do expect this project to further the impact it aims to achieve.

Although not funded by Darwin but by USFWS, the Myanmar H.El.P programme of education and seasonal electric fencing is also being implemented in Sri Lanka by Sunel Rambukpotha who established a local NGO called <u>H.EL.P. Sri Lanka</u> in 2019. And last year, Compass Films and GBP worked through the National Trust for Nature Conservation, Nepal, to train members of <u>Ujyalo</u> <u>Nepal</u> (Bright Nepal), a local NGO based near the Bardia National Park, in the same programme.

12. Darwin Initiative Identity

Darwin's name and logo are already well known in Myanmar because they were so widely seen on thousands of project products (presentations, TV films, media reports, posters, booklets, DVDs, board games, t-shirts, notebooks, uniforms, publications) distributed at every level of engagement, from local to national, during our previous Darwin project. Many of these items are still out there, and are still being used. The same materials are being used in this project and are also distributed to village and project associates during project activities.

Because the coup created so much political tension in Myanmar, GBP has stopped visiting senior officials in Naypyidaw, the national capital, but it does still give presentations to lower-level officials in the target regions, all of whom know who the donors are as that is of interest to them.

- Websites, social media: BAT & EF note Darwin and UK Government support online via their websites (BAT 68,681, EF 6,735 Feb-Mar24) and social media (BAT IG=17,879, LinkedIn =18,085, Twitter =12,252, FB=11,199; EF: IG=41,650, LinkedIn=1,451, Twitter=24,489, FB =128,255, all to supporters worldwide. Darwin and UK Aid are also credited on EF's website in 'What We Do' in Myanmar. DI's logo is also displayed on GBP's website and project vehicles. GBP has a H.EI.P Facebook page (the most used social media platform in Myanmar) onto which it posts weekly. GBP also provides project activity reports in Burmese with the continuous presence of Darwin logos on all visual and textual publications. A link to Darwin UK is also provided on GBP's Facebook page.
- NGO & field team recognition: As this project builds on previous GBP/Elephant Family work in Myanmar also supported by Darwin Initiative, there is already clear recognition by all the field teams of the DI/UK government support. This is still emphasised at all outreach events and on project materials. Moreover, the continued support of this project by the British and American governments via DI and FWS grants programmes is enormously appreciated by the project team and beneficiaries when so many donors, and INGOs, have abandoned the country, making villagers and elephants victims of the civil unrest twice over.
- National recognition/awareness: MONREC (Ministry of Natural Resources & Environmental Conservation), the Forest Department, Myanmar Timber Enterprise (MTE) and Forest Police are all aware of Darwin UK funding for this project.
- **T-Shirts & teaching materials**: The Darwin Initiative logo is highly visible on tens of thousands of educational materials (board games, information booklets, DVDs, notebooks, TV broadcasts) and banners used at education and training events as well as on vehicles, uniforms and t-shirts used by GBP field teams.

13. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?		Yes, by CF & GBP	
Have any concerns been reported in the past 12 mor	Have any concerns been reported in the past 12 months		
Does your project have a Safeguarding focal point?			
Has the focal point attended any formal training in Not since 15 Ma		arch 2023	
the last 12 months?			
What proportion (and number) of project staff have	received formal	Past: 70% [5]	
training on Safeguarding?		Planned: 0%	
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses.			
No issue in the last 12 months.			
Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify.			
 GBP & CF review the security situation in Myanmar before every field trip to ensure the safety of the field teams. 			
 Please describe any community sensitisation that has taken place over the past 12 months; include topics covered and number of participants. None to date 			
 Have there been any concerns around Health, Safety and Security of your project over the past year? If yes, please outline how this was resolved. Civil unrest that might lead to safety or security issues has been accommodated by 			

focusing on HEC villages in politically low-risk areas

14. Project expenditure

Project spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total DI Costs (£)	Variance %	Comments (explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				Actual bank charges for the transactions were GBP less than anticipated.
Travel and subsistence				Additional travel costs were incurred as the field team had to monitor 99 fences instead of the planned 15 fences.
Operating Costs				Due to political restrictions, the planned project expenses on digital media worth were not possible and cloud storage costs were 50% less than expected
Capital items (see below)				Camping supplies worth were not required in the end and th actual cost of 80ha of electric fencing was less than expected.
Others (see below)				Educational DVDs were not required as the films were posted online for viewing.
TOTAL	£121,673.00	£112,312.40		

Table 2: Project mobilised or match-funding during the reporting period (1Apr23 – 31 Mar24)

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)	match funding to CF		Grants from Shared Earth and USFWS No. F19AP00359
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices, and the project (£)	to CF to this H.El.P programme to Sri Lanka & Nepal while also developing the Myanmar project (2024-2027)		Grant to CF from USFWS (#FWS-IA2024002438) and Shared Earth to share with NTNC, Ujyalo Nepal, GBP Myanmar & H.EL.P. Sri Lanka

15. Other comments on progress not covered elsewhere

Nothing to add. All progress has been amply documented.

16. OPTIONAL: Outstanding achievements or progress of your project so far

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

The principal achievement of this project has been to demonstrate that well-designed HEC awareness-raising <u>does</u> promote human and elephant safety, and that teaching farmers to install seasonal electric fences to protect their crops is cheaper and more effective than government agencies or NGOs installing permanent electric fences for them. Besides wasting money, fixed electric fences installed by people other than those who directly benefit from them are not as well managed or properly maintained are therefore not as effective. The seasonal electric fencing system of this project could be applied to any HEC-affected area elsewhere in Asia or Africa.

Another achievement, in a culture that is still quite traditional, is enabling rural women to train as electric fencers and for two of them to become lead trainers, teaching both men and women with equal success.

And finally, in the view of its partners, the simple fact that the GBP has kept field activities going, by adapting judiciously, is a major achievement. This has been achieved in spite of testing, often frustrating circumstances caused by civil unrest, which include issues of safety, the near total absence of internet during daylight hours and, most recently, searing temperatures of 45° and air-conditioning systems that fail for want of electricity.

File Type (Image / Video / Graphic)	File Name or File Location	Caption including description, country and credit	Social media accounts and websites to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
Images and videos can be provided if DI does decide to use this information for publicity				

Project summary	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
Impact Human-elephant coexistence is achieved in Myanmar by institutionalising an HEC mitigation programme that safeguards the lives and livelihoods of rural communities and elephants as well as their habitations nationwide.	Despite the financial and time costs entailed, farmers in other HEC areas constantly ask GBP to teach them to protect their families and their fields from elephants. (3.1+ 3.2 above and Annex 18+19)	
Outcome: In four regions of high biodiversity and human-elephant of management provides an effective model for nationwide application.	conflict, a programme of coexistence education plus skills training	in seasonal electric fence
Outcome Indicator 0.1: HECx effective: By end Yr3, villagers who participated in HEC education workshops and seasonal electric fencing plots have 50% reduction in human losses and 70% reduction in crop losses at the fenced sites; Baseline = 0.	 In Yr3, 10,614 villagers (adults and students) in 279 villages in 4 regions attended HEC education workshops (<i>Annex19 p2</i>). Eight people were killed, only one from a target village (<i>Annex19 p7</i>). In Yr3, 209 villagers were trained, and certified, to install and manage electric fences, Crop yields after the last harvest were 91% (paddy) and 63% (sugarcane) higher than previous yields (<i>Annex 19 p.15-16</i>) 	In the next 4-months, GBP will continue HEC safety education workshops in target areas safe to visit, holding events in all HEC villages in need of fencing. Work will focus on HEC in Yangon and Ayeyarwady provinces and in Bago & Rakhine if they are safe.
Outcome Indicator 0.2: Fencing system embedded By end Yr3, a seasonal fencing programme in 12 districts/3 regions is managed by government partners. <i>Baseline = 0</i>	Two government partners, EERU & the Forest Dept. are now working as trainers and fence monitors in 13 target districts in four regions with &/or supervised by GBP (<i>Annex 19.p9</i>)	Training will continue. If it is not safe for GBP to go to Bago or Rakhine, trained government & NGO (<u>RCA</u>) partners will do it.
Outcome Indicator 0.3: Elephant use of corridors shared with people is sustained Rates of HEC-linked killings of elephants reduce by 50% while sightings of elephants moving target area through remain at or above baseline. <i>Baseline = cumulative from village profiling data</i>	In Yr3, elephants were seen 539 times by villagers, mostly near their crop fields. One elephant was electrocuted outside the project area by a farmer using the wrong equipment. No elephant deaths occurred inside any project area (<i>Ann.19 p7</i>).	GBP and local collaborators will continue to record elephant sightings and deaths in target areas.

Annex 1: Report of progress and achievements against logframe for Financial Year 2022-2023

Output 1: Saving lives - Awareness about HEC is improved for at least 30,000 villagers in 180 villages in three regions and the cost to human lives is reduced.

Output indicator 1.1 - Feelings of Empowerment:	Casual feedback suggests more confidence with elephants	In the next 4-months, GBP will
By end Yr3, 70% of education workshop participants in all gender	but the surveys are done before & right after HEC workshops	have analysed all education
and age-groups express more confidence about their relationship	and we found during the previous DI project that the question	feedback surveys to highlight
with elephants and their ability to mitigate HEC. <i>Baseline</i> = 0.	about confidence drew too many 'not sure' replies to be useful	feelings of confidence
Output indicator 1.2 - Harm Reduced : By end Yr3, 30% drop in human death/injury in all gender/age groups by elephants in target communities. Baseline = cumulative based on village profiling historical data	In Yr3, eight people, all men, were killed by elephants, all but one outside the project areas. Six were drunk, walking at night in areas elephants often roam. One died harvesting cashew nuts at dawn. Another walked too close to an elephant by accident, though villagers tried to warn him (<i>Annex19 p7</i>)	In the remaining project period, GBP will continue to compile all historical data to compare it to current data in target villages, separated by gender/age if poss.

Output 2. Protecting Livelihoods:

A system of seasonal crop protection is established in three regions wherein Forest Dept trainers, supported by GBP, train and certify villagers in the fencing method who then install at least 15 community-based seasonal electric fences, which are maintained by villagers and allow elephants seasonal access to habitual areas.

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Output indicator 2.1 - Villagers trained - By end Yr3, 1,080 villagers (at least 20% women) are trained in seasonal electric fencing protocols by 3 teams of FD/GBP trainers (12 FD/8 GBP) <i>Baseline</i> = 0 men+0 women.	In Yr3, 207 villagers attended 15 fence training courses - 179 men, 28 women (16%), with two FD staff members. Two lead trainers were women. One GBP team oversaw four EERU/FD training teams in the four target regions (<i>Annex 18.p8</i>).	In the remaining four months, before the monsoon starts, GBP and its local partners will train others, including in Rakhine.
Output indicator 2.2 - Trainee certification : By end Yr3, 30% of trained villagers in target areas (inc. women) acquire professional certification as seasonal electric fencers. <i>Baseline=0</i>	Because of GBP's careful selection process using interviews and cost-benefit analyses of fencing need, 100% of trainees qualify for certification. To date 350 village men and 73 women (17.2%) are certified, along with 21 FD/EERU staff (total=444) - 100 more than the expected (<i>Annex 18.p8</i>).	More trainees will qualify in the next 4-months. We have trained fewer people than planned (444 instead of 1,080) coz of coup limits, but more have qualified.
Output indicator 2.3 - Fences installed : By end Yr3, at least 15 temporary electric fences are installed by certified trainees in target communities. <i>Baseline=0</i>	88 seasonal electric fences have been installed by certified trainees in target communities from 30 training courses held to date. Ten of these are community fences (<i>Annex 18.p14</i>).	Fences will be installed in new sites for the next harvest season, some re-installed in old sites.
Output indicator 2.4 - Crop-loss reduced : By end Yr3, crop-loss (measured in acreage/baskets of rice, converted to monetary value) is reduced by 70% in 10 villages & 15 fenced sites. Baseline = cumulative based on farmer profiling & historic yields	Crop loss 2020-23 has been reduced by 91% from 33 paddy fields (from previous losses of 50-100%) and 63% from 19 sugarcane fields 2022-23. Some fields are more fertile than others, others may be better protected (<i>Annex 18 p15-16</i>).	Analysis for the final report in October 2024 will be completed for all crops and may compare maintenance and guarding.
Output indicator 2.5 - Elephant sightings : By end Yr3, elephant sightings in habitual areas continue at baseline levels. Baseline: cumulative based on village profiling & historic data	Recorded sightings of elephants have increased from 7 sightings of 7-10 elephants in Yr1 to 539 sightings in Yr3, mostly near fences (<i>Annex 18, 1.7</i>).	Sightings will continue to be recorded by villagers

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Output 3. Building capacity - The capacity of key partners to implement effective project monitoring and evaluation is strengthened			
3.1 M&E training : at Yr1 start, at least 4 key project staff engage in workshop, led by M&E specialist, and finalise project monitoring & implementation protocols. <i>Baseline: 0 staff familiar with M&E</i>	Done remotely in Yr1 involved 66 calls with BAT/EF and CF partners working together with the GBP director, who then convened virtual meetings with key members of his team to decide project protocols (<i>last year's DI report</i>).	In-person M&E sessions were held in 2022 and another, with the M&E consultant, in 2024. No more due in this project period.	
3.2 GBP skills : By Yr3, GBP demonstrates it has acquired the skills to train trainers, monitor activities, analyse impacts (HEC attitudes, incidents, crop-loss). <i>Baseline: limited skills evident</i>	GBP has demonstrated these skills by training FD & EERU trainers as well as its own, monitoring activities and producing an M&E report that analyses impacts (<i>Annexes 1-26</i>).	A clearer, more detailed M&E report will be prepared for the final report due in October 2024.	
3.3 Fences maintained : Community-based seasonal electric fences (5/Yr2, 10/Yr3) effectively maintained by villagers, supervised and monitored by GBP/FD from Yr2. <i>Baseline</i> = 0	The fences being installed by qualified trainees have been maintained with varying degrees of effectiveness, monitored by FD/EERU with GBP and faults corrected where necessary.	A final M&E report will include a monitoring by the supervisors & maintenance by villagers.	
3.4 Elephant sightings/signs are mapped in target areas and 15 fenced community fields from Yr2. <i>Baseline</i> = 0	The maps of the fenced fields in all four target provinces also mark where elephants were seen (<i>Annex 14</i>).	Any more fields that are fenced will also be mapped.	
3.5 GBP communication skills using social media is demonstrated from Yr2. <i>Baseline</i> = 2017-20 project 24-024	Now that GBP can use FB again, it posts news about project activities weekly (<i>Annex 9 p18-19</i>), as well as fencing guides	Postings will continue to report project activities	
Output 4. Sharing knowledge - The skills and lessons learned in this project are shared locally, nationally, and internationally			
4.1 HEC awareness kits (30,000, with printed materials) dispersed to families in 180 villages by end Yr3. Baseline=0	To date, 31,000 HEC education kits have been dispersed to 278 households (<i>Annex 18 1.4</i>)	Kits are given to students when HEC sessions are held in schools	
4.2 Fencing manual developed and printed and by end Yr3 1,500 manuals dispersed to trainees and key officials. Baseline=0	4,000 fencing manuals were printed in April 2023 and given to trainees and trainers.	More will be dispersed at future fence training courses	
4.3 Sharing findings/lessons learned from 15 fenced community fields with target communities in four regions at village meetings by end Yr3. <i>Baseline=0</i>	The GBP team gives feedback to participant communities whenever they meet but AMC has also held 23 feedback meetings with villages and school staff (<i>Annex 17</i>)	GBP will continue to give regular feedback to communities in all four target regions.	
4.4 Government feedback presentations given to senior officials annually. <i>Baseline=0</i>	AMC held 24 meetings with senior officials at local levels (township, district, province) in the last year (<i>Annex 16</i>)	Likewise, GBP team leaders will meet officials as/when needed	
4.5 International presentation about project processes, findings and lessons learned shared with at least one international forum, by end Yr3. <i>Baseline=0</i>	Five presentations were delivered at international fora: two by BSC at AsESG & ECG meetings when AMC could not attend, three by AMC in Thailand (x2) and Nepal (<i>Annexes</i> 26+27)	No more presentations at international fora are planned in the remaining project period.	

4.6 Project datasets archived with national institutions - FD, university, GBIF, searchable, secure database. Baseline = 0

Full dataset not yet archived as no suitable location available but Pathein University students are now using data for MSc's.

Data and findings will be made available via publications.

Annex 2: Project's full current logframe with modifications agreed in August 2020 and March 2024

Project summary	SMART Indicators	Means of verification	Important Assumptions
Impact: Human-elephant coexisten livelihoods of rural communities an	nme that safeguards the lives and		
Outcome: In four regions of high biodiversity and human-elephant conflict, a programme of coexistence education plus skills training in seasonal electric fence management provides an effective model for nationwide application.	 01. HECx effective: By end Yr3, villagers who participated in HEC education workshops and seasonal electric fencing plots have 50% reduction in human losses and 70% reduction in crop losses at the fenced sites; <i>Baseline = 0</i>. 0.2 Fencing system embedded: By end Yr3, a seasonal fencing programme in 12 districts of 3 regions is managed by government partners. <i>Baseline = 0</i> 0.3 Elephant use of corridors shared with people is sustained: Rates of HEC-linked killings of elephants reduce by 50% while sightings of elephants moving target area through remain at or above baseline. <i>Baseline = cumulative from village profiling historical data</i> 	 0.1.1 Analysis of HEC-impact assessment data on elephant encounters/HEC and at fenced sites from target communities over 3-yrs records deaths/injuries and extent/ economic values of crop loss. 0.2.1 From Yr2, project teams assess effectiveness of training villagers in temporary electric fencing with GBP assisting only. 0.2.2 From Yr1, fencing certificates issued to farmers by FD/GBP. 0.3.1 Records collected by GBP/FD/ and villagers in target communities of incidents/encounters of elephants attempting to enter farms, and of sightings when they pass by. 	 Villagers confirm their interest in using the seasonal fencing crop-protection method to village leaders or the H.El.P team. Forest Dept. honours its promise to assign 12 staff (4/year) to become trainers in seasonal electric fencing and covers operational costs. It is possible to establish a link to between level of HEC and project mitigation efforts. The HEC level is determined through a 3-factor measure; crop and property damage, elephant deaths, and human deaths. Covid outbreaks do not stop GBP from carrying out an effective work programme. The military coup does not prevent field activities throughout the target HEC areas

			or the involvement of key government staff at local level.
Output 1: Saving lives Awareness about HEC is improved for at least 30,000 villagers in 180 villages in three regions and the cost to human lives is reduced.	 1.1 Feelings of empowerment: By end Yr3, 70% of education workshop participants in all gender and age-groups express more confidence about their relationship with elephants and their ability to mitigate HEC. <i>Baseline = 0.</i> 1.2 Harm reduced: By end Yr3, 30% drop in human death/injury in all gender/age groups by elephants in target communities. <i>Baseline =</i> <i>cumulative based on village</i> <i>profiling historical data</i> 	encounter/HFC data from target	 6) Villagers see value in attending the HEC safety education workshops. 7) Learning about elephants/ causes of HEC/how to avoid it facilitates more confidence and positive attitudes. 8) Villagers use HEC measures taught in education workshops. 9) In target areas, all HEC incidents and elephant encounters are recorded
Output 2. Protecting livelihoods: A system of seasonal crop protection is established in three regions wherein Forest Dept trainers, supported by GBP, train and certify villagers in the fencing method who then install at least 15 community-based seasonal electric fences, which are maintained by villagers and allow elephants seasonal access to habitual areas.	 2.1 Villagers trained: By end Yr3, 1,080 villagers (>20% women) are trained in seasonal electric fencing protocols by 3 teams of FD/GBP trainers (12 FD/8 GBP) Baseline = 0 men+0 women. 2.2 Trainee certification: By end Yr3, 30% of trained villagers in target areas (inc. women) acquire professional certification as seasonal electric fencers. Baseline=0 	 2.1.1 Training implementation reports with details of participants/ trainers. 2.2.1 Record & photos of villagers receiving certificates awarded by FD/GBP in accordance with agreed standards of professional attainment. 2.3.1 Record of fenced plots with maps, photos, equipment specifications and installers names. 	 10) Villagers continue to want to train in seasonal electric fence methods 11) Enough villagers meet the criteria needed for professional certification 12) Villagers appreciate the need to record data accurately and consistently. 13) Elephants perceive and respond positively to reduced levels of HEC incidents and

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	 2.3 Fences installed: By end Yr3, at least 15 temporary electric fences are installed by certified trainees in target communities. Baseline=0 2.4 Crop-loss reduced: By end Yr3, crop-loss (measured in acreage/baskets of rice, converted to monetary value) is reduced by 70% in 10 villages & 15 fenced sites. Baseline = cumulative based on farmer profiling & historic yields 2.5 Elephant sightings: By end Yr3, elephant sightings in habitual areas continue at baseline levels. Baseline: cumulative based on village profiling & historic data 	 2.4.1 M&E analysis of HEC-impact monitoring data collected by villagers with FD/GBP at fenced sites. 2.5.1 HEC-impact assessment forms of village monitors, analysis of data by GBP's M&E team. 	changed nature of the landscape with seasonal electric fences.
Output 3. Building capacity: The capacity of key partners to implement effective project monitoring and evaluation is strengthened.	 3.1 M&E training: at Yr1 start, at least 4 key project staff engage in workshop, led by M&E specialist, and finalise project monitoring & implementation protocols. <i>Baseline: 0 staff familiar with M&E</i> 3.2 GBP skills: By Yr3, GBP demonstrates it has acquired the skills to train trainers, monitor activities, analyse impacts (HEC attitudes, incidents, crop-loss). <i>Baseline: limited skills evident</i> 	 3.1.1 Report by M&E specialist, record of attendees & agreed M&E project protocols (who will do what, when. 3.2.1 Project reports with outcomes of each activity, data sets processed and analysed, key partner feedback. 3.3.1 Field reports from FD; GBP analysis of fence performance & maintenance, impact on crop-loss. 	 14) GBP can recruit & retain 4 new staff (3/M&E, 1/comms) for project duration, at least. 15) Villagers accept the need to maintain the performance/ efficacy of fences and do so consistently & diligently. 16) Elephants continue to come into, or move through, the areas targeted for seasonal fencing.

	3.3 Fences maintained : Community-based seasonal electric fences (5/Yr2, 10/Yr3) effectively maintained by villagers, supervised, and monitored by GBP/FD from Yr2. <i>Baseline = 0</i>	 3.4.1 HEC-impact assessment forms of villagers/FD, analysis of data by GBP, with maps/graphics. 3.5.1 Communications strategy; record of publications via social media. 	
	 3.4 Elephant sightings/signs are mapped in target areas and 15 fenced community fields from Yr2. Baseline = 0 3.5 GBP communication skills social media is demonstrated from Yr2. Baseline = 2017-20 project 24-024 		
Output 4. Sharing knowledge The skills and lessons learned in this project are shared locally, nationally, and internationally	 4.1 HEC awareness kits (30,000 printed materials) dispersed in 180 villages by end Yr3. Baseline=0 4.2 Fencing manual developed and printed and by end Yr3 1,500 manuals dispersed to trainees and key officials. Baseline=0 4.3 Sharing findings/lessons learned fm 15 fenced community fields with target communities in four regions at village meetings by end Yr3. <i>Baseline=0</i> 4.4 Government feedback presentations given to senior officials annually. <i>Baseline=0</i> 	• • •	17) Villagers see the value in VODs and use them

4.5 International presentation about project processes, finding and lessons learned shared with	
at least one international forum by end Yr3. <i>Baseline=0</i>	,
4.6 Datasets archived from project with national institution FD, university, GBIF, searchable secure database. <i>Baseline</i> = 0	

Activities

Output 1: Saving lives

- 1.1 Educational kits (30,000) produced for HEC awareness/mitigation workshops
- 1.2 Training in the delivery of HEC awareness/mitigation workshops held for any new GBP education team members.
- 1.3 HEC mitigation workshops (3-5/year) held for teachers/headmasters in three new target regions to introduce them to the methods and materials.
- 1.4 HEC awareness/mitigation workshops at <60 schools/year in three new regions (Total=180)
- 1.5 Conduct pre and post-workshop surveys to assess the efficacy of each HEC awareness/mitigation workshop by gender and age.
- 1.6 Analyse feedback surveys from education workshops and produce summary reports to feed back to the education team
- 1.7 Log elephant encounter/injury data from participant communities and analyse it annually to monitor impact of HEC safety education
- 1.8 Every 3-4 months (sooner if problems arise) CF/GBP evaluate delivery of HEC mitigation workshops to identify any modifications needed
- 1.9 At year end, CF/GBP review/adapt the content of HEC educational kits as needed to meet new/changing requirements/realities for Yr2 or Yr3

Output 2: Protecting Livelihoods

- 2.1 Yr1: Working with CF/CCR, GBP/FD fencing team modifies the CCR seasonal electric fencing protocols & guidelines to suit Myanmar
- 2.2 Training Yrs1-3 Region 1: GBP/FD Training Team1 (TT1) trains 6x15 villagers, installing two training fences around vulnerable crops in separate districts. Yrs 2+3, TT1, now led by FD trainers but supervised by 2xGBP trainers, trains another 6x15 villagers/year, setting up two more training fences in different districts. By end Yr3, Region1 will have training/demonstration fences in six districts. Yrs 2+3, this training process repeated in Regions 2+3 with GBP training FD staff to establish a training team (TT2+TT3) for each region.
- 2.3 Assessing & monitoring Yrs1-3: each crop-season, supervised by GBP/FD training team, fence trainees in each region maintains training-demo f fences to ensure they work properly and to enable evaluation of their efficacy at reducing crop-raids. They will also record data on elephant sightings. As part of the certification process, trainees are monitored by GBP/FD on their ability to maintain fences effectively.
- 2.4 Community fences: From Yr 2: certified fencers will install at least 5 community-based solar-powered temporary electric fences per year around crop-fields (5-40ha.) vulnerable to elephants in 2-districts (total by end Yr3=15). GBP/FD trainers will be available to advise (location/ installation/maintenance) and supervise monitor the HEC-mitigation efficacy of the fences and ensure they are properly installed, maintained, and dismantled at the end of the crop season.

Output 3: Building Capacity

- 3.1 Inception/M&E workshop (3-days) at project onset, with all project teams, finalise M&E protocols, baselines, train GBP's M&E recruits, agree appropriate safeguarding/ethics/gender equity policies for GBP [led by independent M&E consultant].
- 3.2 GBP M&E team collate historical data available on human HEC casualties in target areas and recorded elephant sightings/crop-raiding data
- 3.3 HEC safety education workshops monitored through feedback questionnaires Yrs1-3
- 3.4 Elephant encounters recorded in target communities by villagers/GBP/FD; both harmful HEC incidents (human death) and harmless sightings
- 3.5 Training of villagers in seasonal fencing is evaluated via feedback questionnaires at end Yrs1-3
- 3.6 Seasonally installed training fences monitored for effective maintenance & HEC-mitigation impact in Yrs1-3 (in 3 regions)
- 3.7 From Yr2, seasonal community fences monitored for effective installation, maintenance & impact (region 3 = post-project)
- 3.8 Incidents with & sightings of elephants recorded and mapped in area of training fences and, from Yr2, community fences in target areas
- 3.9 GBP M&E team collates & analyses data from Outputs 1+2 and produces timely reports for feedback to project partners

Output 4: Sharing knowledge

4.1 With CF, GBP's communications staff plans a TV, press & social media strategy, producing a working schedule

4.2 Following the agreed schedule, GBP comms staff implements the agreed TV, press & social media strategy, including printing education kits

4.3 GBP's communications staff keeps a record of all TV, press and social media outputs and achievements

4.4 GBP's communications staff works with the field teams to share project findings and lessons learned with target communities in four regions

4.5 Every year, GBP director &/or communications staff gives a presentation about project aims, activities and results to senior government officials

4.6 The GBP director gives at least one presentation about this project at a relevant international meeting

4.7 GBP arranges regular feedback to share project findings with participants

4.8 Senior GBP representatives give annual presentations to senior government officials

4.9 Project implementing team arrange to give presentations at relevant international meetings

4.10 Data shared, as/when appropriate, by GBP on a secure, searchable database

Annex 3: Standard Indicators

Table 1 Project Standard Indicators (green shading highlighting core indicators)

DI SI#	Name of indicator Units Disaggregation No. people completing the structured and relevant electric fence training (not inc. trained trainers) People Village men		Year 1 Total	Year 2.1+2.2 Total	Year 3 Total	Total to date	Total planned during project	
DI-A01			Village men	36	43+112	179	370	
DI-A01	(ditto)	People	Village women	2	5+35	28	70	
DI-A01	(ditto)	People	FD/EERU staff (male)	8	4+7	2	21	
DI-A03	No. local/national organisations with improved capability/capacity as a result of project	Orgs	GO (2), NGO (2)	3	3	4	4	4
DI-A04	No. people reporting they are applying new capabilities (skills/knowledge) 6m⁺ after training	People	Male (GBP)					
	(ditto)		Female (GBP)					
	(ditto)		Fencing villagers					
	(ditto)		RCA (male)					
DI-A05	No. of <u>trained HEC + fencing trainers</u> delivering further training by project end	No. trainees trained	GBP (male)					
	(ditto)	HEC+fence	GBP (female)	0	2	2	2	
	(ditto)		EERU+FD (male)					
	(ditto)		RCA (male)					
DI-A06	No.people with improved access to HEC safety awareness for improved wellbeing	People	Adult men		1,303	4,435		
	(ditto)		Adult women		1,171	4,981		
	(ditto)		Male students		788	582		
	(ditto)		Female students		790	616		
	(ditto)		Teachers+monks					
DI-A07	No. Gov Orgs/Depts with enhanced awareness and understanding of biodiversity/poverty issues	Orgs/Depts	FD+EERU+ Min. Edu.+Monk Dept	3	3	4 +Min Ed	4	4

DI SI#	Name of indicator	of indicator Units Disaggregation		Year 1 Total	Year 2.1+2.2 Total	Year 3 Total	Total to date	Total planned during project
DI-A11	No. sustainable livelihood enterprises that are profitable at least a year after establishment	No. by fenced crops	Paddy	0			99	Can't say. Depends on political situation
			Sugarcane	0				
			Orchards	0				
DI-A12	Annual turnover of established sustainable livelihood enterprises in project's final year	GB£/year	Paddy	0				TBC for final report
			Sugarcane					
			Orchards					
DI-B10	Number individuals/households adopting livelihood improvement practices coz of project	Number people						TBC for final report
DI-C01	No. of best practice guides/knowledge products published and endorsed	Fencing manuals	Language versions (English, Burmese, Nepali)	1	2	3	3	3
DI-C10	No. of case studies published	Number		0	0	0	0	1
D1-C11	Average monthly # of website visitors	Number	BAT					TBC final report
			EF					
			GBP					
DI-C12	Social media presence	Number	IG BAT					TBC final report
			IG EF					
			Twitter BAT					
			Twitter EF					
			LinkedIn BAT					
			LinkedIn EF					
			FB BAT					
			FB EF					
			FB GBP					
DI-C14	No. decision-makers attending briefing events	Number	Events					TBC final report

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DI SI#	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2.1+2.2 Total	Year 3 Total	Total to date	Total planned during project
		No. GO people						
			No. NGO people					
DI-C15	No. media related activities	Number	Intl. internet					TBC final report
			Natl. FB postings					
DI-C17	No. unique papers submitted to peer reviewed journals	Number	Journal	0	0	0	0	1

Table 2Publications

Title	Туре	Detail	Gender of Lead Author	Nationality of Lead Author	Publishers	Available from
Protecting the lives and livelihoods of people & elephants in Myanmar (*)	Article for online blog	Belinda Stewart- Cox, March 2023	Female	British	British Asian Trust / Elephant Family, UK	www.britishasiantrust.org www.elephant-family.org www.growbackposterity.com (in Burmese)
Facilitating Human- Elephant Coexistence (*)	Article for BCF/DI Newsletter	Belinda Stewart- Cox, February 2024	Female	British	Darwin Initiative	https://www.darwininitiative.org.uk/news/2024/01/12/facilitating- human-elephant-coexistence/

Annex 4: Appendices providing information for this report

Annex 1. H.El.P elephant safety education workshops Yr3 (logframe ref 1.4) Annex 2: Elephant safety education POST-workshop survey form English (logframe ref 1.5) Annex 3: Elephant safety education PRE-workshop survey form English (logframe ref 1.5) Annex 4: Elephant observation forms filled in by villagers (logframe ref 1.7) Annex 5: Fence maintenance/elephant sightings form filled English (logframe ref 2.1 + 2.5) Annex 6: Fence training courses attendance forms Burmese & English (logframe ref 2.2) Annex 7: Fence participant trainee information form Burmese & English (logframe ref 2.2) Annex 8: Pre-fence training course survey form Burmese & English (logframe ref 2.2) Annex 9: Completed fence maintenance forms filled by villagers (logframe ref 2.3) Annex 10: Completed fence monitoring forms filled by supervisors (logframe re 2.3) Annex 11: Human-elephant sightings/contact forms filled by supervisors (logframe ref 2.5) Annex 12: Spreadsheet with incomes from paddy rice & sugarcane (logframe ref 2.4) Annex 13: Interview questionnaire for individual farmers in English (logframe ref 2.1) Annex 14: Maps of fences installed in Yangon and Ayeyarwady provinces (logframe ref 2.3) Annex 15: Combined fence yield data for 20021-2022-2123 (logframe ref 2.4) Annex 16: AMC's meetings at local, regional & international level (logframe ref 4.4 + 4.5) Annex 17: AMC's feedback meetings with villagers (logframe ref 4.3) Annex 18: Report against logframe activities Yrs.1-3 (summary data for this report) Annex 19: H.El.P partners M&E report (2024) for BAT/EF and Darwin Annex 20: Report, with photos, of the pilot H.El.P training project in Bardia, Nepal Annex 21: H.El.P safety booklet about elephants in English (logframe ref 1.1 + 1.2) Annex 22: H.El.P safety booklet about elephants for Sri Lanka (bonus associated activity) Annex 23: Monthly photographic record of activities in Yr3 (all logframe outputs) Annex 24: Seasonal electric fencing manual in Burmese (logframe ref 4.2) Annex 25: Seasonal electric fencing manual in English (logframe ref 4.2) Annex 26: AMC's presentation to the I.E.F. conference, Chiang Mai (logframe ref 4.5) Annex 27: BSC's presentation (1st/last page) at AsESG & ECG conferences (logframe ref 4.5) Annex 28: BSC's article for the BAT/EF websites and IG feed Annex 29: BSC's article for the new DI website

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Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the correct template (checking fund, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	x
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