

Darwin Initiative Main: Annual Report

To be completed with reference to the “Project Reporting Information Note”:
(<https://www.darwininitiative.org.uk/resources-for-projects/information-notes-learning-notes-briefing-papers-and-reviews/>).

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

Submission Deadline: 30th April 2023

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

Darwin Initiative Project Information

Project reference	DIR28S1\1174 (29-018)
Project title	Promotion of coexistence in human-elephant conflict hotspots in Northeast India
Country/ies	India
Lead Partner	British Asian Trust
Project partner(s)	Aaranyak
Darwin Initiative grant value	£585,619
Start/end dates of project	01 June 22/31 March 25
Reporting period (e.g. Apr 2022 – Mar 2023) and number (e.g. Annual Report 1, 2, 3)	1 June - 31 March, 2023 Annual Report 1
Project Leader name	Belinda Stewart-Cox
Project website/blog/social media	
Report author(s) and date	BAT: Belinda Stewart-Cox, Auro Shashwat, Ellie Jones; Aaranyak: Bibhuti P Lahkar, Alolika Sinha, Zakir Islam Bora

1. Project summary

Human-elephant conflict threatens lives/livelihoods of people and elephants in North East India. The states of Assam and Meghalaya are a stronghold of Asian elephant population; nonetheless there is an upsurge of human-elephant conflict (HEC) incidents in the state, claiming 800 and 66 human lives in Assam and Meghalaya, respectively, during a period 10 years. HEC leads to crop and property damage, impacts people’s safety and security, and thus, is highly detrimental to their overall wellbeing. HEC affected communities are mostly marginalised, belonging to rural areas, and HEC further compromises their lives and livelihoods. The British Asian Trust (BAT) and partner Aaranyak developed this project to mitigate HEC with multi-stakeholder and multi-pronged approaches. Through this project, we aim to facilitate human-elephant coexistence in major HEC hotspots in Assam and Meghalaya (see Figure 1 and 2 below for target village locations). The project will empower communities through: education on the importance of elephants and their habitat, HEC, and how to protect people/property/elephants/biodiversity; tools to support protection, such as temporary solar-powered electric fences, solar street lights and capacity building; and support for supplementary livelihoods. Thus, the project will reduce poverty by protecting lives/livelihoods/property and increasing incomes, while protecting elephants/reducing biodiversity loss.

Figure 1. Target villages across five districts (Jorhat, Majuli, Sivasagar, Dibrugarh and Tinsukia) in eastern Assam

Map of project sites in 5 districts of state of Assam, India

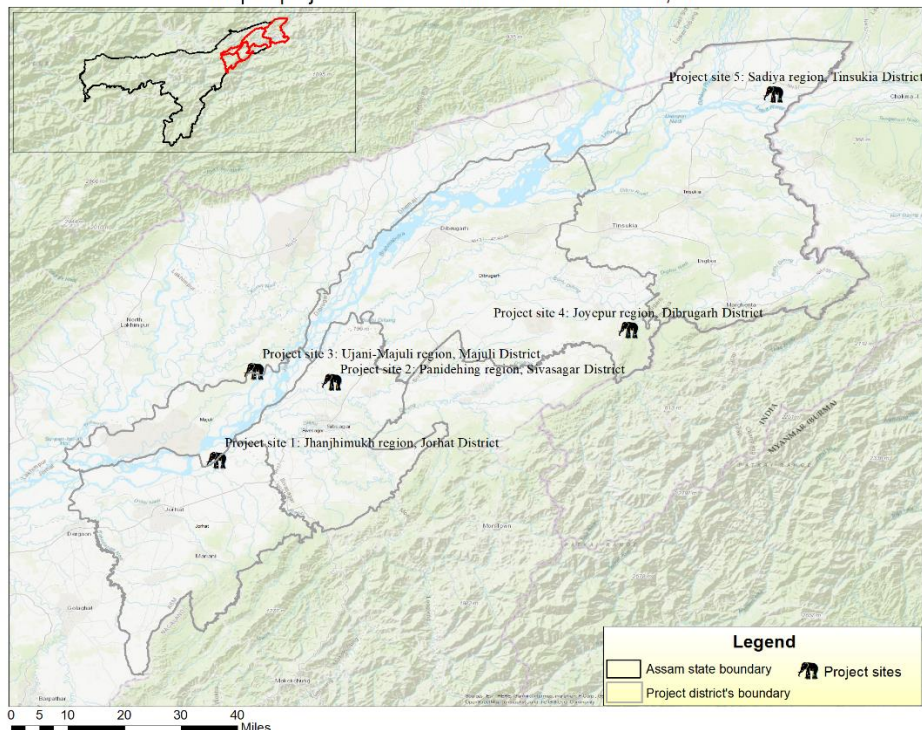
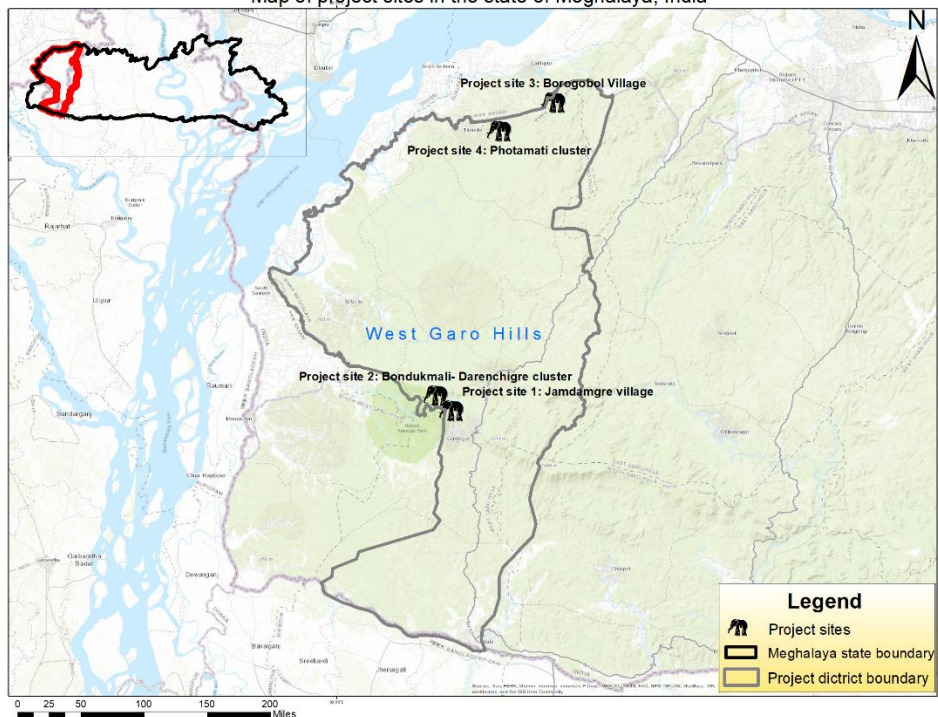


Figure 2. Target villages in West Garo hills District of Meghalaya

Map of project sites in the state of Meghalaya, India



2. Project stakeholders/ partners

BAT is working with our local partner, Aaranyak, to implement the project activities on ground. Our staff in India and our partner, Aaranyak, work in close collaboration. We conduct regular field visits, interact with the relevant stakeholders, especially target communities, and discuss issues, challenges and way forward in a consultative manner. BAT, as Project Lead, is responsible for the overall Programme and Grant Management, which includes monitoring and data verification, as well as capacity building and regional/cross sectoral learning. Aaranyak, as the implementing partner, is responsible for on-ground implementation of project activities, local stakeholder management, and monitoring and evaluation. The partners are working closely together on the continual adaptive management of the project implementation, holding regular reviews of project data and feedback, to ensure the project design and delivery responds to learning and changes in context.

The project is not just a collaboration between BAT and Aaranyak, but with the local communities and other key stakeholders, particularly local government. We have been collaborating with local communities in the development and delivery of the project from the beginning. Local community leaders, youth groups, Village Development Committees and other community members worked alongside the project team to identify target villages and were both surveyed and surveyors as part of the Rapid Rural and Participatory Assessments to build evidence around the specific local problems related to HEC. Community members are also active project participants, providing their local knowledge to inform the project design and delivery, as well as participating in data collection, acting as 'Village Champions' (more below), and installing fences. The project team holds regular village meetings to keep everyone updated on the project progress and collect feedback.

The project also works with government line departments, civil administration, village committees, and educational institutes. In fact, the civil administration from West Garo hills district in Meghalaya took a keen interest in the project and advised the project team to concentrate our work in only one of the districts in Meghalaya, rather than the two planned during project design based on ground realities.

In both the states of Assam and Meghalaya, the primary government line department, i.e. Forest Departments, are closely involved in implementing the activities. Aaranyak holds frequent meetings with the relevant authorities to apprise them of project progress and seek their guidance, wherever required. Also, we ensure that we invite relevant officials for all meetings and interactions with the community.

We have also been in direct communication with other departments and establishments like Agriculture, Assam Power Distribution Company Ltd. (APDCL), Rural Self Employment Training Institute (RSETI), Krishi Vigyan Kendra (KVK), Dibrugarh University and others, since the commencement of the project. In an exemplary approach, we have partnered with Sonowal Kachari Student's Union - an indigenous socio-cultural students union of Sonowal Kacharis (one of the oldest and most indigenous communities in Assam) - to conduct an orientation workshop with newly appointed 'Village Champions' from project villages in Assam. It is noteworthy to mention that most of the selected village champions were those that had been motivated during the visits to assess the initial "buy-in" in selected villages in eastern Assam.

In addition, the team would like to highlight its ability to mobilize village leaders to promote engagement with the project, including the "Gaon Pradhans" (village heads). In Sadiya, the easternmost part of Assam, we were able to reach out to "Na-Sadiya Panchayat" (Village Council in Panchayat Raj System of Governance in India) members. The President of Na-Sadiya Panchayat (this panchayat includes 21 local revenue villages in Sadiya) also attended one of our community meetings in Padumphula village in Sadiya, where the projects handed over around 30 handheld flashlights to villagers as a mitigation tool.

3. Project progress

3.1 Progress in carrying out project Activities

Output 1: Profiling the problem and building evidence

A.1.1. Inception Meetings: Completed

Two inception meetings were organised for eastern Assam and Meghalaya in August and September, 2022 respectively (See figures 3 and 4 below). The inception meetings were organised to discuss the project and knowledge-sharing for better implementation and engagement of all the stakeholders. The meeting in eastern Assam had participation from Government Line departments, such as the Forest and Agriculture departments, as well as local NGOs, Krishi Vigyan Kendra, Gyan Bani Radio station, Rural Self Employment Training Institute(RSETI), Assam Agribusiness, Rural Transformation Project (APART), Dibrugarh University faculty and students, Faculties of Digboi College, Dibru College, Gargaon College, local conservationists, local communities, representatives from Aaranyak and BAT.

The inception meeting for Meghalaya was conducted at the Circuit House in Tura of West Garo hills wherein the Deputy Commissioner (DC) of West Garo hills, senior officials from Forest Department, Police Department and representatives from various Government Departments, local communities, NGOs, conservationists attended it. More than 50 people attended the workshop.

During both the meetings, we apprised the attendees regarding the project work, work of Aaranyak and BAT, and had an open interaction to understand: the current HEC status in the region, the measures that local communities adopt to cope with the conflict scenario, and identify the gaps for intervention. A thorough discussion with the stakeholders helped identify the villages (n=20) where the project will be implemented in the districts of Majuli, Jorhat, Sibsagar, Dibrugarh and Tinsukia of eastern Assam and West Garo hills of Meghalaya. A matrix was developed and followed to finalise all these villages.



Figure 4. An inception workshop was held in Circuit House, Tura, West Garo hills to apprise the Government Line Departments, Villagers about the project. Clockwise: Deputy Commissioner (IAS), West Garo hills, talking about convergence of project activities with existing Government schemes; Team Aaranyak speaking about the project; Block Development Officer, Govt. of Meghalaya sharing her thoughts; an interaction with Aaranyak officials

During the discussion with the DC and the senior forest officials of West Garo hills, they suggested implementing the project work in only one district of Meghalaya (the West Garo hills), as the majority of HEC incidents occur in that region. This change was approved by the Darwin Initiative in December 2022 and the outcome target for the project revised to six districts.

A.1.2. Mobilisation Meetings: Completed

The project team conducted mobilisation meetings in all the 20 selected villages of eastern Assam districts (n=16) and West Garo hills district of Meghalaya (four villages) to explain the project and gain 'buy-in' (See figure 5 below). A discussion was held with village heads, different committees at village levels and community members. This was followed by a Rapid Rural Appraisal (RRA) in all the villages.



Figure 3. An inception workshop was held in Dibrugarh to apprise the Government Line Departments, Villagers about the project, which was attended by representatives from 5 districts in eastern Assam. Clockwise: B bhuti P Lahkar, Aaranyak; Sub-Divisional Agriculture Officer, Govt. of Assam sharing her thoughts on HEC; Auro Shaswat, BAT; Alolika Sinha conducting the workshop.

A.1.3 - A.1.4 Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA): Completed

In each village, initially an RRA was conducted, followed by PRA, to gain an insight on the socio-economic status of the community members, patterns of HEC incidents that cause damage and loss to the villagers, identify existing practices of HEC mitigation by local communities, and its effectiveness. The PRA was conducted using a questionnaire, village resource mapping using google maps, and village resource mapping based on people's knowledge of their village (See figures 5 and 6 below). The PRA surveyed 683 people across the 20 villages of which 58.57% were male and 41.43% female.



Figure 5. Snapshots of mobilisation meetings held in West Garo Hills' villages in Meghalaya in presence of Range Officer, Ms. Jezebel and her team from Meghalaya Forest Department.

During the survey, it was found that villagers in both Assam and Meghalaya mostly use traditional means to deter and protect themselves from elephants, such as noise deterrents (shouting, beating tin cans and drums, and bursting firecrackers). Interestingly, in one of the villages of eastern Assam (Majumelia, Jorhat district), firecrackers are set off inside pipes in order to amplify the sound. In Majuli, the community uses groups of tractors to chase the elephants away and large groups of around 100-150 people charge towards the elephants to scare. Other deterrents used, include various forms of lighting such as fire torches, burning tires, and chargeable battery torches. In villages of Jorhat district, bright halogen lights installed on motorbikes are also used. In West Garo hills, on the other hand, villagers will leave their homes and take refuge in safer places for hours, before returning.



Figure 6. Project team conducting Participatory Rural Appraisal in villages using a questionnaire, village resource mapping using google maps, and village resource mapping based on people's knowledge of their village.

A.1.5. Elephant and HEC Monitoring: Ongoing

The project team is gathering information on elephant movement around the villages and presence of other wildlife, assessing the HEC incidents occurring in the villages using standard datasheet for quantification. From the secondary information gathered from the local communities, we have plotted the elephants' entry-exit points to the villages from nearby forested areas (figure 7). In the last 10 months, a total of 24 different incidents of HEC were recorded from project villages (Table 1 – Annex 4).

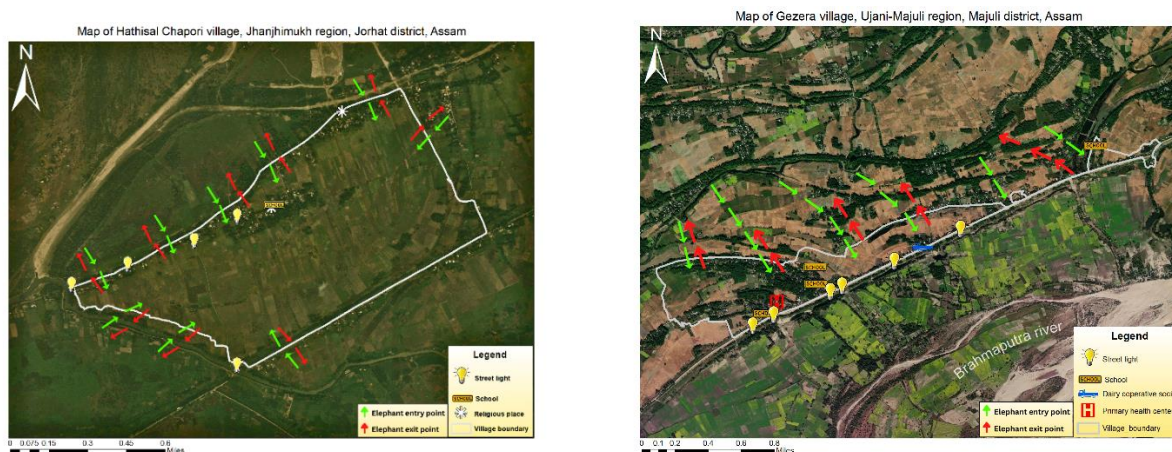


Figure 7. Maps showing locations wherein elephants enter and exit the villages.

A.1.6. Data analysis and report writing: Ongoing

The project team has analysed the data collected over the past 10 months and will subsequently share the findings with concerned stakeholders. The information could not be shared with stakeholders at the end of the year as planned, due to an important harvest festival in the region. We will share the findings in Q1-Y2. The information is available on request.

Output 2: Promoting security for people and elephants by raising awareness

A.2.1: Recruiting Village Champion: Completed

The team, while conducting RRA and PRA surveys, held discussions with villagers on the plan to establish a cohort of village Champions to help educate other villagers in their community. Initially, from each village three people were selected, and were orientated on the possible work that a 'Village Champion' needs to carry out to support the project team in promoting coexistence. Based on the interest, skill and time commitments, we selected 20 Village champions, of which 16 are men and four women (Annex. 2)

A.2.2 – A.2.3: Conduct Workshops to Develop Education Material: Completed

A series of brainstorming workshops were conducted with in-house experts to identify the best suited education material. Thereafter a formal workshop was conducted on "Developing Education and Outreach Strategy to facilitate HEC" at Dibrugarh University. The workshop was attended by eminent educationists and conservationists. Based on the discussions, hand-painted posters with information on elephant ecology, conservation need and mitigation of HEC have been designed for use during outreach events and wider dissemination (See figure 8 below).



Figure 8. One of the education materials in local Assamese language describing elephant's movement ecology.

A.2.4: Train Champions: Ongoing

An orientation was conducted in eastern Assam to brief the village champions on their roles and responsibilities, which include conducting outreach activities and liaising with HEC affected people in their villages. An orientation for village champions of west Garo hills will be conducted early next quarter. The orientation has been delayed due to changes in project design to implement the activities in only one district. Moreover, due to the remote location and language barriers in this area, the project faced some staffing issues in the beginning, which also contributed to delays. However, we now have an established team in Meghalaya and we're also conducting more frequent visits to the project sites there to provide additional support to the team. The training of Village Champions in Meghalaya is scheduled in Q1, Y2.



Figure 9. Village champions were selected based on the interest of people to volunteer for the project, and knowledge. Post selection an orientation programme was conducted in basecamp in Dibrugarh.

A.2.5 – A.2.7: Conduct awareness events and working with village champions to monitor impact

As per the project timeline, these activities are scheduled in Q1, Y2.

A.2.8: Workshops for Media: Ongoing

The first workshop, scheduled in Y1, was conducted for media personnel on “Biodiversity Conservation and Human-Wildlife Coexistence” at Sivsagar Commerce College to generate awareness about elephants and HEC, to facilitate positive reporting on conflict issues, and promote coexistence. The first workshop was conducted on 26 February 2023 in collaboration with Sivsagar College, which was attended by more than 50 local journalists and students of mass communication of the college (Annex 4). Bijay Sankar Bora a senior journalist and consultant with Aaranyak spoke on the importance of positive media coverage of HEC, which can draw the attention of the policymakers. He further stated that synergy among all the stakeholders is essential, including media personnel, to promote coexistence. During the interactive session, the participants shared their thoughts on the importance of sensitizing people and counselling HEC-affected people. It was also found that the data on human and elephant deaths from the district needs to be revisited and cross-checked for accuracy.



Figure 10. Media workshop organised in Sibsagar Commerce college for local journalists. Clockwise: Jayanta Pathak speaking on the purpose of the workshop; Bibhuti P Lahkar talking about HEC scenario; Bijay Sankar Borah speaking on the importance of positive coverage by media; Attendees interacting with the experts.

Output 3: Protecting livelihoods and assets

A.3.1: Dialogues with target communities to share best practices: Ongoing

Throughout the last year, we have held at least 26 informal discussions with community members, village committees as well as with local forest offices to understand the need for mitigation tools to minimise HEC. Mitigation tools will be provided to villagers to help address accidental encounters with elephants, as well as build rapport and cultivate the relationship between the team and the community members further. In each village with every visit by project team, we discussed the best practices based on local circumstances to reduce crop and property damages caused by elephants.

Through the collaborative sessions, a number of mitigation interventions were identified to be implemented within target villages, including improving lighting to avoid accidental encounters with wildlife, an early-warning WhatsApp group, and educational posters on elephant behaviour. Poor lighting at night was identified as a critical issue leading to accidental and dangerous encounters with elephants across all villages. As such, the project team chose this as a good entry-level activity to win the trust of the community needs, before initiating other mitigation interventions.

Based on the above assessment, 90 solar streetlights were installed in villages of eastern Assam (Plate 8). The solar streetlights were placed strategically to maximise the detectability of the wildlife based on the inputs of the local villagers. In addition, a total of 75 rechargeable torchlights were provided to the villagers of eastern Assam districts, and in West Garo hills’ villages as mitigation tool (Figure 12 below). Another 10 solar streetlights will be installed during the first quarter of year 2 in West Garo hills’ villages.

The mitigation interventions have been delayed in Meghalaya due to the decision to implement activities in only one district. Moreover, due to the remote location and language barriers in this area, the project faced some staffing issues in the beginning, which also contributed to delays. However, we now have an established team in Meghalaya and are conducting more frequent visits to the project sites there to provide additional support to the team.



Figure 11. Solar-street lights transportation, and installation at strategic locations in villages which can minimise accidental encounters with wildlife by increasing the visibility in the area.



Figure 12. The project team providing the villagers with rechargeable torch lights as mitigation tool.

A.3.2 – A.3.3: Establishing a Village Fence Committee (VFC) and Seed Funding for VFC

As per the project timeline, these activities are scheduled in Y2 and Y3.

A.3.4 – A.3.5: Form and train Rapid Response Units (RRUs): Ongoing

We have started work towards forming RRUs, with volunteers from local communities. The RRUs will act as an “early warning system” by monitoring elephant movement in their vicinity and sending out alarms to the villagers, alerting them on elephant presence. As per the workplan, these activities are due in Q1, Y2.

A.3.7: Provide gear to RRUs and Anti-depredation squads

As per the project timeline, these activities are scheduled Q1, Y2 onwards.

A.3.8: Solar-Powered manual in local languages Assamese: Ongoing

Aaranyak’s initiative of installing local community-operated solar-powered fences in other parts of Assam has been effective in reducing HEC. Based on the experience and learning, a draft manual on installing solar-powered electric fences was prepared in local Assamese language, which is currently under review by the experts. Completion of the document has been delayed slightly due to local festivities. In addition, translation of the manual to local Boro language in Meghalaya was also delayed due to the change to implementation in only one district in Meghalaya. However, the team has identified that the local Garo community mostly speaks English, so a translation is not required. It will be completed in Q1,Y2.

A.3.9 – A.3.10: Install 120km of solar-fence and establish a system to assess its effectiveness

As per the project timeline, these activities are scheduled Q1,Y2 onwards.

Output 4: Promoting livelihoods

A.4.1: Assessment of markets: Ongoing

This activity was planned for Q4, Y1; however, our desk research and field research into potential interventions with the community did not produce the expected results. Hence, the project team took a call to take more time to work with the community to identify the potential commodities first. Thereafter, a market assessment will lead to better results, as well as long-term sustainability. A “willingness” survey is also underway to understand the local community’s interest in livelihood options. During our discussion on project progress, we decided that this activity was best suited for Q3,Y2.

A.4.2: Beneficiary Selection: Completed

Target households have been selected based on the PRA exercise and socioeconomic surveys. We developed a set of criteria for beneficiary selection, such as low income, dependency on the forest/forest products, landless people, disabled people, and women-headed households, which were further verified in field. An exception was made to include the families of village champions in the list to compensate them for their pro-bono services. Based on these criteria, a total of 600 individual households were selected.

A.4.3 – A.4.8: Livelihoods capacity building, materials, evaluation and documentation

As per the project timeline, these activities are scheduled in Y2,Y3.

Output 5: Sharing knowledge and building capacity

A.5.1: Share findings with local communities: Ongoing

The surveys pertaining to PRA and profiling of villages have been completed in Q4,Y1. We are working on data compilation and shall hold village level meetings to share the findings in Q1,Y2. This could not be completed in Y1, as it coincided with an important community harvest festival in the region and the community could not be assembled to share the findings as scheduled.

A.5.2 – A.5.4: Prepare reports, conduct workshops and exchange visits

As per the project timeline, these activities are scheduled in Y2-Y3.

However, the IUCN Human-Wildlife Conflict Mitigation Guidelines were launched at the IUCN SSC Human-Wildlife Conflict and Coexistence Conference in Oxford from 30 March – 1 April 2023. These guidelines are key to the successful implementation of the project. As such, BAT took the opportunity to build the profile of the project among sector stakeholders through participation and attendance at the conference. BATs trustee, Ganesh Ramani, delivered a keynote address on human-wildlife coexistence, highlighting BATs focus on this work. The conference also offered an opportunity to the team to interact and learn from leading researchers and professionals in this field and also share about this project.

3.2 Progress towards project Outputs

Output 1: Profiling the problem and building evidence: *Specific data gathered and analysed for the 6 target districts, including on the human population and local biodiversity, focusing primarily on elephants, HEC, and other rare species*

This output has been progressing steadily and is on track, with 20 villages now selected across six districts and information gathered and analysed to understand the specific issues relating to HEC in target communities. Villages were selected based on the following four pre-set criteria: (i) a revenue village close to elephant habitat, elephant corridor and protected areas; (ii) frequent/high intensity HEC incidents including crop and property damage, human injuries and deaths, and retaliatory elephant killings in the last five years; (iii) low economic background (have financial/emotional difficulty in recovering the losses) of the HEC affected people; (iv) people supportive towards conservation efforts to safeguard biodiversity.

We have also completed the Rapid Rural Appraisals (RRA), followed by Participatory Rural Appraisals (PRA), in each of the villages to understand the patterns/ impacts of HEC, socio-economic profiles of target communities, including livelihood activities and income levels. This included reviewing HEC records from local news and Forest Dept records.

The team has plotted the seasonal movement patterns of elephants, based on information gathered from the local communities in the past 10 months. We will continue to collect information on the spatial and temporal movements of elephants and other key species to complete this activity by Q4,Y2.

Output 2: Promoting security for people and elephants by raising awareness: *Knowledge and understanding of elephants, HEC and strategies to improve safety/security is increased for at least 50% of households in 20 villages across 6 districts (n=2600 households)*

As per the workplan, the project team have focussed on establishing baselines, as well identifying and bringing on board Village Champions. Currently, we have 20 village champions (16 men and 4 women), who have all been provided with an initial orientation on how to conduct their duties. The training in Meghalaya has been delayed slightly, due to the change to one target district, and staffing issues. It is now scheduled in May 2023 and will be completed in Q1,Y2

We have also prepared an illustrations-based IEC material in local Assamese language to convey general information on elephants, their ecological and cultural significance. Final approvals are pending and will be given in Q1, Y2 – delayed due to local festivities and staff holidays. Nonetheless, the project remains on track to deliver the regular community-level outreach events from Q1,Y2 to reach the 100,000 people across the 20 communities.

Output 3: Protecting livelihoods and assets: *A system of seasonal crop protection is established in 20 target villages, involving the installation of temporary fencing and the formation of local Rapid Response Units (RRU)*

The project has faced two minor challenges/unexpected developments, which led to a slight delay in achieving output indicator 3.1 (60 people trained as trainers to install, monitor and maintain safe and effective seasonal solar-power fences) by Q4,Y1. The first was the slight delay in conducting project activities because of the flooding in Assam and the involvement of relevant government officials in flood relief work. The second unexpected development, while a big win for the project, has led to a change in planned implementation of the project. We planned to work in two districts in Meghalaya, but following the strong recommendation from senior government officials, we decided, with approval from Darwin, to work

in only one district in Meghalaya. This activity will now be completed in Q1, Y2. This will also lead to a delay in achieving Indicator 3.2 (120km of seasonal solar-powered fencing installed and materials required for crop and village protection - powerful torches and/or solar lights - being used by vulnerable households) by Q1, Y2. Indicator 3.2 will now be completed in Q2, Y2.

Output 4: Promoting supplementary livelihoods: *Income generation support through training opportunities and access to finance facilitated for 600 households in 20 target villages.*

The majority of activities under Output 4 are due from Q3, Y2 onwards. However, we have completed the baselines and identified 600 households who we will work with to promote supplementary livelihoods. Target households have been selected based on the PRA exercise and socioeconomic surveys (as outlined under update on Activity 4.2 above).

Output 5: Sharing knowledge and building capacity: *Skills, learning and best practices derived from this project, and from other national and international HEC projects, are shared locally, regionally and internationally to inform and capacity-build project partners and other human-wildlife coexistence (HECx) facilitators in India and elsewhere.*

Again, the majority of activities under this indicator are planned for Y2 onwards. The project team have also been delayed in sharing the findings with the target community at the end of the year this year (indicator 5.1), due to the activity coinciding with an important community harvest festival in the region and the community could not be assembled to share the findings as scheduled. Nonetheless, we identified an important knowledge sharing and capacity building opportunity in Y1, with the participation in and support of the IUCN SSC Human-Wildlife Conflict and Coexistence Conference in Oxford from 30 March – 1 April 2023. As mentioned above, the IUCN Human-Wildlife Conflict Guidelines were launched at the conference. The Government of India have also released their own set of guidelines to mitigate human-wildlife conflict and promote coexistence. We have been following the development of both guidelines as our representatives are members of the IUCN AsESG and Government of India guideline committees. Our approach to date has been in line with both guidelines. Going forward, we aim to further socialise the IUCN guidelines in the project areas and identify areas of convergence between the IUCN and Government of India guidelines so that we may better engage with both groups and identify approaches that are best suited for long term sustainability. Our Project Leader, along with our project partner, Aaranyak, also participated in the IUCN Asian Elephant Specialist Group Meeting in India in February 2023. The meeting offered an opportunity to discuss the project with the members of the Specialist Group and also understand the efficacy of different human-elephant conflict mitigation approaches utilised across the elephant range states.

3.3 Progress towards the project Outcome

Project Outcome: *Effective application of IUCN Guidelines-based HEC mitigation model in 6 HEC-prone districts in Assam/Meghalaya, resulting in increased incomes for 600 households and improved protection for Asian elephants/other rare species.*

In spite of some initial delays faced by the project, it is making good progress against four of the five Outputs, with minor delays to Output 3. Based on progress to date, we believe we remain on track to achieve the outcome targets by project end. Key progress towards the project outcomes include:

- Establishing a robust baseline
- Engaging and achieving buy-in from key stakeholders, including government departments, civil administration, academia, media, and the local communities themselves
- Establishing the project across all 20 target communities, engaging communities in the collection of vital profiling data to understand the local issues and community demographics through RRAs and PRAs
- Recruiting and orientating 20 Village Champions in disseminating human-wildlife coexistence education
- Delivering entry-level mitigation activities, identified by the communities to build trust and buy-in
- Selecting 600 households to be supported to adopt supplementary livelihoods.

3.4 Monitoring of assumptions

Assumption 1: *Local communities and relevant households cooperate on collecting the information needed and engage with the project aims.*

Comments: The RRAs and inception workshops, combined with Aaranyak's rapport with the local forest departments, have paved the way for building strong relationship with local communities. Overall, the people in target villages are cooperating and providing support to promote coexistence. Community

participation in RRAs {360 community members (M:65.5%; F:34.5%)}, PRAs {683 community members (M:58.57%; F:41.43%) is good. Our approach of collaborating closely with people (project team members, village champions) from the local villages have helped in gaining local communities' trust. The regular interaction and visits, transparency about what can be done and what are our limitations, have all built the trust with the local communities and in turn they are cooperating effectively.

Assumption 2: *Covid restrictions will not seriously impact project activities.*

Comments: So far, the Covid restrictions have not impacted the project activities significantly.

Assumption 3: *Stakeholders are supportive of the project initiatives and volunteer to collaborate with staff and field workers.*

Comments: This is evident from the participation of the Government line departments, local organisations, and local communities during the inception workshops, RRAs {360 community members (M:65.5%; F:34.5%)}, PRAs {683 community members (M:58.57%; F:41.43%) and other social surveys. We held an inception meeting in each State and more than 50 peoples participated in them to know about the project, share their views and also extend their support for its success. The selected village champions have also agreed to work voluntarily for the cause of promoting coexistence.

Assumption 4: *Local communities will participate and accept the skill development training options and practice the supplementary livelihood options.*

Comments: The local communities are supportive as evident from their participation in "willingness" surveys to best describe their interest in supplementing their livelihood opportunities. 250 households participated in these surveys held across nine villages in Assam.

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

Intended impact: *Human-elephant coexistence enabled at landscape level in Northeast India by safeguarding the lives and livelihoods of people and elephants, resulting in improved welfare of communities and biodiversity protection.*

During the first year of the project, a baseline was established through data collection and collation, that has helped in understanding the intensity and causes of HEC in hotspots in Northeast India. In the past 10 months, 24 HEC incidents have occurred in the villages of eastern Assam resulting in damage to crop and property and one human death. The RRA and PRA have also helped to generate invaluable data around the support needed by the affected local communities to enable coexistence. The data generated, as well as evidence of the impact of interventions implemented to solve these challenges during this project, will not only contribute to biodiversity conservation and improve the development and well-being of local communities in the target areas for this project, but provide evidence for wider scale up at a whole landscape level.

Although it is very early days, the project is already having an impact in these areas in the following ways:

- **HEC education:** Educating villagers about elephants/causes of conflicts/ways to avoid harm will help garner more positive behaviour towards elephants, resulting in reduced deliberate killings of elephants and other species, and finally contribute towards conservation. Our surveys have demonstrated that currently communities are using noise, lights or moving away to safer areas as mitigation tools. They also showed interest in receiving training on setting up temporary solar-powered fences. Our surveys have indicated that people are not applying for compensation for crop/property damage, as they have not received any in the last 5 years. Moreover, the IUCN Guidelines on HEC mitigation, as well as the Government of India guidelines to mitigate human-wildlife conflict and promote coexistence, were released earlier this year. Going forward, we aim to further socialise the IUCN guidelines in the project areas and areas of convergence between the IUCN and Government of India guidelines so that we may better engage with both groups and identify approaches that are best suited for long term sustainability.
- **Livelihood opportunities:** Complementing livelihood opportunities of local communities with skill development and supporting them with effective HEC mitigation tools will have a positive impact on people's wellbeing and alleviate poverty. Moreover, these tools will help the community renegotiate their relationships with wildlife and foster coexistence, which can be a continuous process. During project implementation, the team decided to work with the community to identify the potential commodities first and then do a market assessment. By choosing to collaborate with the community, we will generate better engagement with the community and also give them a platform to voice their choices. Also, our "willingness" survey to understand the local community's interest in livelihood options will ensure better buy-in when we roll out the activities. These minor tweaks to project delivery will create a positive impact on the minds of the community.

4. Project support to the Conventions, Treaties or Agreements

The Project directly supports the Convention on Biological Diversity by contributing towards the achievement of Target 4 of the Global Biodiversity Framework. It is the first time that an internationally accepted framework explicitly states to effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence. Our RRAs and PRAs have made initial steps to raise awareness about biodiversity, thereby contributing towards India's National Biodiversity Action Plan and Convention on Migratory Species. The Government of India guidelines on human-wildlife conflict and coexistence were launched in March 2023. As we progress, we will build convergence between the IUCN and the Government of India guidelines through our approach.

Contributions towards the SDGs will begin once we start activities to promote supplementary livelihoods, thereby contributing towards ending poverty, zero hunger. We are already prioritising gender equality in project implementation and taking steps towards life on land through our awareness programmes.

Lastly, we supported the IUCN SSC Human-Wildlife Conflict and Coexistence Conference in Oxford from 30 March – 1 April 2023 and representatives from the project attended and contributed towards the IUCN AsESG meeting held in India in February 2023.

5. Project support to poverty reduction

Human-elephant conflict incidents mostly occur in rural areas, where the HEC affected people are from low economies. Through this project we aim to alleviate poverty by supplementing livelihood opportunities of 600 households in six districts of two states. By the end of the project, 30% increase in annual income is predicted for each beneficiary household. Besides, direct increase in income, the indirect benefits include reduction in HEC incidents (~40 % from crop & property damages; ~70% fewer human deaths due to HEC), skill-development to augment livelihood, providing market-linkages and building confidence. To achieve this outcome, in the first year of project implementation we have established the baseline and selected a group of beneficiaries, who will benefit from our livelihood activities. Our surveys show that no alternative cash crop is currently cultivated in the villages. In one village (Charguwa Grant), people have even abandoned cultivable paddy lands due to crop foraging by elephants. Activities to promote supplementary livelihoods are scheduled in Y2.

6. Gender equality and social inclusion

We strive for achieving gender equality while implementing all our activities, right from recruiting project personnel, selection of village champions, participation in social surveys and other committees planned to be formed during the project. During the PRA exercise, 41.43% respondents were women. During the beneficiary selection, women-headed households were prioritised. We will further continue to work on this in the activities planned for the next year.

The gender norms in the target location for the project mean that very few female candidates applied for roles within the project team in the field. In order to promote a greater gender balance, partner Aaranyak is trying to prioritise female staff at their head offices. BAT's staff supporting the project are also predominantly female.

Please quantify the proportion of women on the Project Board ¹ .	The Project Board is 50% women and 50% men, with two women (Belinda Stewart-Cox, BAT, Project Lead and Alolika Sinha, Aaranyak, Biodiversity Lead) and two men (Dr Bibhuti Lahkar, Aaranyak Project Lead and Auro Shashwat, BAT, Conservation Programme Manager)
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women ² .	BAT's senior management team are 57% women (4 women, 3 men) Aaranyak's senior management has 20% women (5 women, 18 men).

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.

7. Monitoring and evaluation

We have used the logframe to highlight the data that was needed (as noted in the measurable indicators and means of verification) and then designed our RRA and PRA forms for the field teams to use for recording the data needed to assess this project's impacts. The forms can be found in Annex 4.

We also keep digital records of the data so that it can then be shared and reviewed at regular intervals for monitoring and reporting purposes. We are also exploring cloud options to directly log data from the field using locally available Management Information System (MIS) software.

The project team holds weekly meetings to assess the progress in conducting activities, and hence project progress and performance against the log frame, and timetable. Subsequently the Partner organisation have monthly meetings to apprise each other on project progress measured against log frame, timetable and budget. Since the implementation of the project, three project visits were made by British Asian Trust officials/Project leader to monitor the project.

Moreover, Aaranyak has constituted an independent team for Project Monitoring and Evaluation, which sits every six months for evaluation. One of the team members visited field sites to monitor the project progress, and help establish partnership.

The system is a work in progress and is being improved as issues are identified from the field. The process has also helped the team to better the requirements of a good M&E process and the data needed to evaluate the impacts of project interventions.

The process described has been entirely collaborative. Other qualitative indicators of achievement include the fact that district officials as well as community members are continuing to support and/or work with us to implement this project as best they can. This, as much as anything, demonstrates the strength of the relationship Aaranyak has established with its local partners.

8. Lessons learnt

While the project is active for less than a year, there have been learnings in the project initiation phase that have helped the project design. One of the biggest learnings came from our government stakeholders. During the project initiation meeting, they suggested that the project focus on only one district in Meghalaya as most of the HEC incidents were localised in that district. Also, the distances between the two districts and the rugged terrain would make project delivery inefficient. The project team their inputs onboard, verified them in the field and included them in project design, with formal approval from Darwin. While we could have had more concrete discussions on this during project design, this would have increased undue expectations amongst our stakeholders, which could have impacted relationships going forward.

The second lesson came during our market assessment activity. Our desk research and field consultations with the community into potential interventions demonstrated that we need to conduct further consultations before exploring potential commodities. Hence, the project team took a call to first conduct a willingness survey. Thereafter, a market assessment will lead to better results, as well as long-term sustainability. Hence, a "willingness" survey is underway to understand the local community's interest in livelihood options. Till date, we have consulted 250 households across nine villages in Assam.

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

N/A

10. Risk Management

No new risks identified in the last 12 months that were not previously accounted for.

11. Other comments on progress not covered elsewhere

N/A

12. Sustainability and legacy

Our exit strategy was as follows: By the end of this project, villagers in 20 target communities, who learned about elephants and avoiding HEC are likely to share their knowledge, so that more households will adopt the HEC mitigation measures promoted by this project. The trained HEC champions in every village will also continue to raise awareness by sharing knowledge about elephants, tactics for avoiding HEC, and the

value of biodiversity conservation. The trained fencers in every village, as well as informed fence committee members, will continue to install, maintain, monitor and remove seasonal fences when and where needed by community members to reduce livelihood damage by elephants.

Community RRU teams will continue to manage an HEC-alert network to warn villagers of the presence of elephants and ensure their safe passage, reducing the defensive-aggressive reactions in people and elephants that tend to exacerbate HEC. A hundred households will continue to generate supplementary incomes from the enterprises established under this project, and trained individuals, most of them women, may use their knowledge to start other enterprises and/or share their skills with other villagers. Aided by the HEC-mitigation champion and village committee members, community members will continue to access government loan/compensation schemes which can be used to finance more micro-enterprises.

Aaranyak will maintain its involvement with the target communities and associated district officials, but will advise or supervise, rather than manage, giving assistance as needed to help activities become embedded in communities' own cooperative systems.

As far as we know, this exit strategy and legacy is still valid and will continue to be valid so long as it is possible to implement project activities. Community members and local government officials are very keen on this project and will, it seems, do what they can to help ensure that it keeps going whatever the conditions.

13. Darwin Initiative identity

Darwin's name/logo are already well known in India because they have supported several projects in the past. Moreover, during project initiation, we had regular meetings with senior government officials at the state, district and local levels in the target areas.

In the UK, regular updates are sent to the British Asian Trust Board and networks of ambassadors, among whom there is a high-level of interest and pride in this work.

We regularly share updates about the project on our social media handles and tag the Darwin Initiative (now Biodiversity Challenge Funds) handles. The project activities when published on social media handles, or published in local news and media acknowledges the support of the Darwin initiative (Annex 4). The IEC (Information Education Communication) materials published for conducting outreach activities also have the logo of the Darwin Initiative.

- **Websites, newsletters and media:** The British Asian Trust notes the support of Darwin and the UK Government online and in e-newsletters sent to more than 15000 supporters worldwide. BAT and Aaranyak staff also post regular updates on LinkedIn, Twitter and Instagram that have a combined following of over 65000. Also, funding from Darwin is highlighted in press interviews given by the team (Annex 4).
- **NGO & field team recognition:** As this project builds on our previous work in India, there is clear recognition across the field teams of the Darwin Initiative and the UK Government support. This continues to be emphasised at all outreach events and on project materials.
- **T-shirts and banners:** The Darwin Initiative logo is highly visible on t-shirts used by the field team and banners used at workshops and training sessions.

14. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	No
Have any concerns been investigated in the past 12 months	No
Does your project have a Safeguarding focal point?	Yes [REDACTED]
Has the focal point attended any formal training in the last 12 months?	Yes [15 March 2023]
What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 70% [16] Planned: 30% [6]

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

Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify.
Yes, we are going to organise a refresher safeguarding course during the next M&E visit of the Project Leader.

15. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2022 – 31 March 2023)

Project spend (indicative) since last Annual Report	2022/23 Grant (£)	2022/23 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Monitoring & Evaluation (M&E)				
Others (see below)				
-TOTAL	159,589	159,656	+0.0004%	

Table 2: Project mobilising of matched funding during the reporting period (1 April 2022 – 31 March 2023)

	Matched funding secured to date	Total matched funding expected by end of project
Matched funding leveraged by the partners to deliver the project.		
Total additional finance mobilised by new activities building on evidence, best practices and project (£)		

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

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

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

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

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2021	Actions required/planned for next period
<p>Impact</p> <p>Human elephant coexistence (HEC) enabled at landscape level in Northeast India by safeguarding the lives and livelihoods of people and elephants, resulting in improved welfare of communities and biodiversity protection.</p>		<p>Sensitising villagers about elephants/causes of conflicts/ways to avoid harm through community interactions and RRAs and PRAs has initiated steps towards a more positive behaviour towards elephants, and other key species.</p>	
<p>Outcome</p> <p>Effective application of IUCN Guidelines-based HEC mitigation model in 6 HEC-prone districts in Assam/Meghalaya, resulting in increased incomes for 600 households and improved protection for Asian elephants/other rare species.</p>	<p>0.1 Community engagement and empowerment: By end Y3, 600 households experience a 75% reduction in human deaths/serious injury. <i>Baseline: 24 HEC incidents occurred in the villages of eastern Assam in the form of crop and property damages and one human death.</i></p> <p>0.2 Protecting livelihoods and assets: By end Y3, 600 households experience a 40% reduction in property damage (i.e., to major structures - granary, house, shop - that is crucial to people's lives and livelihoods) and a 30% reduction in crop loss. <i>Baseline: 24 HEC incidents occurred in the villages of eastern Assam in form of crop and property damages and one human death.</i></p>	<p>20 target villages across the six districts have been selected and key profiling activities (to understand income levels, frequency and responses to HEC, and other relevant data) carried out, alongside engagement activities with local communities, relevant local government and civil administration, as well as media to generate buy-in for the project.</p> <p>Baselines have been carried out.</p> <p>Entry-level activities to build trust with communities have been a success as well.</p> <p>600 households have been identified and are in the process of working with them and the local communities to identify supplementary livelihoods.</p>	<p>Going forward, we will train our village champions to help deliver our outreach programme in each target village to raise awareness about elephants, how to avoid HEC and raise awareness about conservation.</p> <p>We will train the community to set up seasonal solar-powered fences and also start installation of up to 120kms of non-lethal, solar powered fences.</p> <p>We will also conduct capacity building programmes for supplementary livelihoods for the already identified 600 beneficiary households and provide the material to implement them.</p> <p>Lastly, we will continue to monitor elephant movement/ behaviour through direct observations and indirect evidences.</p>

	<p>0.3 Livelihoods promotion: By end Y3, 600 households experience 30% increase in household annual income. <i>Baseline: Average Annual Income per household = 35,000 INR (Aaranyak data from west Assam)</i></p> <p>0.4 Biodiversity protection: By end Y3, 40% fewer elephant killings in target areas and 20% increase in sighting/signs of key species. <i>Baseline: 16+ elephants died between 2018-2021 in the target districts of Assam; hunting levels of key species TBC.</i></p>	<p>Seasonal movement patterns of elephants have been plotted and will continue to be monitored</p> <p>We are confident that this project will achieve its outcomes.</p>	
<p>Output 1.</p> <p>1. Profiling the problem and building evidence: Specific data gathered and analysed for the 7 target districts, including on the human population and local biodiversity, focusing primarily on elephants, HEC, and other rare species</p>	<p>1.1 By Q3-Y1, 20 target villages experiencing high levels of HEC, are actively engaged in the project. <i>Baseline: 0</i></p> <p>1.2 By Q4-Y1, 20 target villages profiled, with findings informing planning, implementation and evaluation of project interventions. <i>Baseline: 0</i></p> <p>1.3 By Q4-Y2, information compiled on the spatial and temporal movements of elephants and other key species. <i>Baseline: 0</i></p>	<p>20 target villages are identified, and social surveys completed to gain insight on socio-economic profile, HEC status, and appropriate mitigation measures to inform project implementation and identification of beneficiaries.</p> <p>Collection of information on elephant movement and other key species presence through village consultations during questionnaire surveys and ground truthing in the area is ongoing. The team has already plotted the seasonal movement patterns of elephants based on information gathered from the local communities in the past 10 months. This information will help us understand the challenges the community is facing with regards to crop foraging by elephants and will also help us prioritise areas to install the seasonal solar-powered fences.</p>	
<p>Activity 1.1</p>	<p>Completed</p>	<p>This activity is complete.</p>	

<p>Conduct an inception meeting in each district (n=7) for the project implementing team and government stakeholders (Forest Dept and District officials) to discuss/agree a project plan, identify 20 target villages, sources of existing information on the chosen sites, and plan to collect additional necessary information.</p>		
<p>Activity 1.2 Conduct an outreach and mobilisation meeting in each of the selected villages (n=20) to explain the project and gain ‘buy-in’. The meetings will include village heads, Panchayat members, village development committees, youth club members, women Self Help Groups (SHGs), teachers, farmers etc. We will aim to reach at least 20% of the population of each village. By involving various representatives within the communities, we will ensure the entire population of the village is reached. These meetings will also be used to identify and recruit village volunteers (10 per village) to help carry out the profiling surveys.</p>	Completed	This activity is complete.
<p>Activity 1.3 Conduct a ‘Rapid Rural Appraisal’, a socio-economic survey, in each village as part of the outreach and mobilisation meetings. The information gathered will be used to develop community profiles (including, number of women-headed household, daily-wage earners, farmers with their own land, landless farmers etc.), establishing the baselines and providing an understanding of the dependence of each community on natural resources shared by both people and elephants, as well as their culture and history. This will be followed by Participatory Rural Appraisal (PRA) among the surveyed household to verify the information provided to us.</p>	Completed	This activity is complete.
<p>Activity 1.4 Conduct Participatory Rural Appraisal (PRA) questionnaire-based surveys to verify data socio-economic data gathered and data on HEC pattern, damage and loss to farmers, existing practices of HEC mitigation, and its effectiveness. Based on the RRA information gathered, the project team will select representatives of different demographics (women-headed households, daily wage earners, landed farmers, landless farmers etc.) and conduct surveys through project team members and volunteers. The women-headed houses will be given priority.</p>	Completed	This activity is complete.

<p>Activity 1.5 Establish a system to monitor elephant movement/behaviour through sightings/signs reported by villagers (to be verified by Aaranyak and the village ‘champion’ see 2.1 below) and fence guards/monitors. Project team members and volunteers will gather information from local communities on elephant movement in the vicinity, follow the tracks and signs of the elephants to gain an understanding on the routes that elephants use to move for at least year. Data gathered will include elephants/key species from sightings/signs around villages, HEC patterns, human deaths/severe injuries from HEC, damage to property and crop loss with estimates of cost; existing practices of HEC mitigation, and their effectiveness.</p>	<p>From the secondary information gathered from the local communities based on their observations, and encounters till date we have plotted the elephants’ entry-exit points to the villages from nearby forested areas (Fig. 3). In the last 10 months, a total of 24 different incidents of human-elephant conflict were recorded from project villages (Table 1 – Annex 4).</p>	<p>The project team will continue gathering information on elephant movement around the villages and presence of other wildlife, assessing the HEC incidents occurring in the villages using standard datasheet for quantification.</p>
<p>Activity 1.6 Analyse the data gathered, prepare GIS maps, write reports, and disseminate the results to concerned stakeholders (including to village meetings).</p>	<p>The project team has analysed the data collected over the past 10 months and has compiled the information in the Annual Report due at the end of April. This will subsequently be shared with concerned stakeholders. The information could not be shared at the end of the year as the stakeholders were busy due to an important harvest festival in the region and they could not be assembled to share the findings as scheduled.</p>	<p>The project will organise village meetings to share the findings in Q1-Y2.</p>
<p>Output 2. Promoting security for people and elephants by raising awareness: Knowledge and understanding of elephants, HEC and strategies to improve safety/security is increased for at least 50% of households in 20 villages across 6 districts (n=2600 households)</p>	<p>2.1 By Q2-Y1, one champion (n=20) recruited for each target village and trained to record data, help undertake outreach activities and serve as primary contact for village HEC activities. <i>Baseline: 0</i></p>	<p>We have identified one champion per target village. They have also received an initial orientation on how to conduct their duties. The training in Meghalaya has been delayed due to changes in project design and due to staffing issues. Currently, we have 20 village champions (16 men and 4 women). We have also prepared an illustrations-based IEC material in local Assamese language to convey general information on elephants, their ecological and cultural significance. Final approvals are pending and will be given in Q1-Y2 – delayed due to local festivities and staff holidays. The</p>

	<p>2.2 By Q4-Y1, education materials (print, audio, video) produced in local languages and used for HEC outreach to 100,000 people in 20 target communities. <i>Baseline: 0</i></p> <p>2.3 By end Q2-Y3, at least 1200 households have adopted HEC mitigation measures promoted by the project to reduce impacts on people and elephants. <i>Baseline: 0</i></p> <p>2.4 By Q3-Y3, 50% of 2600 households (n=1,300) in 20 villages have increased knowledge and understanding of elephants/their needs, other key species, and are committed to their safety. <i>Baseline: TBC Y1</i></p>	<p>aim is to reach 100,000 people in 20 target communities. We will achieve this through our regular community-level outreach events that are scheduled from Q1-Y2.</p>	
<p>Activity 2.1. Recruit a ‘champion’ for each village (n=20) to help coordinate, organise surveys, gather data, and liaise with those affected by HEC. Champions will largely be selected from the volunteers who support with the socio-economic surveys and will be chosen based on their interest in the work, literacy, dedication to the cause and communication skills.</p>	<p>Completed</p>	<p>This activity is complete.</p>	
<p>Activity 2.2. Meetings led by the Project Team with relevant specialists to develop an education strategy, module, timetable, and materials to raise awareness.</p>	<p>Completed</p>	<p>This activity is complete.</p>	
<p>Activity 2.3. Develop printed/audio/visual IEC (Information, Education, Communication) materials in Assamese and Garo plus other local languages as needed, these will be disseminated through trainings and events in local communities, as well as on social media. We aim to reach 100,000 people across a variety of channels.</p>	<p>Completed</p>	<p>This activity is complete.</p>	

<p>Activity 2.4. Train village champions to help deliver the outreach programme to raise awareness about elephants, avoiding HEC, and conservation.</p>	<p>An orientation programme was conducted in eastern Assam to brief the village champions on their potential roles and responsibilities, which include conducting outreach activities, liaise with HEC affected people in their villages.</p> <p>The orientation programme in Meghalaya has been delayed due to changes in project design to implement the activities in only one district. Moreover, due to the remote location and language barriers in this area, the project faced some staffing issues in the beginning, which also contributed to delays. However, we now have an established team in Meghalaya and we're also conducting more frequent visits to the project sites there to provide additional support to the team.</p>	<p>An orientation programme for village champions of west Garo hills will be conducted in Q1-Y2.</p>
<p>Activity 2.5. Conduct awareness events in each target village (via village organisations). At least six events will be conducted per village (n=120) over an 18-month period (Q1, Y2 – Q2, Y3. The events will involve adults and youth, but with separate events for women to ensure they also learn how to avoid HEC and receive a basic first aid training in case of hurt. We aim to reach at least 70% of the village population (n=1,800 households) over the six events.</p>	<p>Not due in Y1</p>	
<p>Activity 2.6. Working with the village champion, establish a system to monitor whether targeted households adopt best practices to minimise/avoid HEC.</p>	<p>Not due in Y1</p>	
<p>Activity 2.7. Hold a workshop for media personnel to generate awareness about elephants and HEC to facilitate positive reporting on conflict issues</p>	<p>Not due in Y1</p>	

<p>Activity 2.8. Hold a workshop for media personnel to generate awareness about elephants and HEC to facilitate positive reporting on conflict issues.</p>	<p>The workshop scheduled in Y1 is complete.</p>	<p>In the second year, we will continue with the workshops for media personnels in different target districts.</p>
<p>Activity 2.9. Conduct a series of Q&A radio shows (at least five) with local radio stations to raise awareness about elephants, and develop a short film, on HEC mitigation and the role people play.</p>	<p>Not due in Y1</p>	
<p>Output 3. Protecting livelihoods and assets: A system of seasonal crop protection is established in 20 target villages, involving the installation of temporary fencing and the formation of local Rapid Response Units (RRU)</p>	<p>3.1 By Q4-Y1, 60 people (3 per village) trained as trainers to install, monitor and maintain safe and effective seasonal solar-power fences. <i>Baseline: 0</i></p> <p>3.2 By Q1-Y2, 120km of seasonal solar-powered fencing installed and materials required for crop & village protection (powerful torches and/or solar lights) being used by vulnerable households. <i>Baseline: 0</i></p> <p>3.3 By Q1-Y2, 10 RRU teams formed, trained and operating an HEC alert-network using the best practice approach to facilitate safe passage for elephants. <i>Baseline: 0</i></p>	<p>The project faced two minor challenges/ unexpected developments. The first was the slight delay in conducting project activities because of the flooding in Assam and the involvement of relevant government officials in flood relief work. The second unexpected development, while a big win for the project, has led to a change in planned implementation of the project. We planned to work in two districts in Meghalaya, but following the strong recommendations from Senior Govt. Officials, we decided, with approval from Darwin, to work in only one district in Meghalaya. This has led to a delay in achieving Indicator 3.1. This will now be completed in Q1-Y2. This will also lead to a delay in achieving Indicator 3.2. Indicator 3.2 will now be completed in Q2-Y2.</p>
<p>Activity 3.1. Hold one community dialogue in each target village (n=20) to share best practices to mitigate and reduce crop-raiding and damage to property (including grain stores). During each community dialogue at least 70% of the HEC affected households will be represented, as well as</p>	<p>Completed</p>	<p>This activity is complete.</p>

different committees such as the village defence committee, village development committee, village panchayat members, and village heads.		
Activity 3.2. Under the village committee, establish a village fence committee (VFC) to take responsibility for managing and maintaining the solar fences	Not due in Y1	
Activity 3.3. Seed funding (approximately GBP300) and support to VFC to set up revolving funds for fence maintenance post the project period and install new fences	Not due in Y1	
Activity 3.4. Form Rapid Response Units (RRU), one per village (n=20) comprising 10 members, training them in non-aggressive methods of deterrence and involving them in alerting villagers to the presence of nearby elephants through app technology.	Project team is working to identify community members and form RRUs and train them to mitigate HEC	Project team will train them to mitigate HEC.
Activity 3.5. Provide training, assisted by trained RRU members, for government anti-depredation squads on basic elephant ecology and behaviour, causes of HEC, and involve them in monitoring elephants and HEC so as to improve their own practices and performance and help reduce conflict	Project team is working to identify community members and form RRUs and train them to mitigate HEC	Project team will train them to mitigate HEC.
Activity 3.6. Produce a best practice manual for members of the RRUs and government anti-depredation squads	Project team is working to identify community members and form RRUs and train them to mitigate HEC	Project team will train them to mitigate HEC.
Activity 3.7. Provide the RRUs/ADS with field gear, and villagers with torches, solar street lights (if appropriate) and first aid kits to help them facilitate safe passage for elephants and to monitor HEC.	Kits provided to villagers, anti-depredation squads as mitigation tools.	Project team will train them to mitigate HEC.
Activity 3.8. Produce a manual in Assamese and Garo on how to install, manage and maintain a solar-powered fence so that it is effective at protecting crops but also safe for people, livestock and wildlife. To be used by fencing trainers, fence owners, fence committee members.	The finalisation of the document has been delayed due to local festivities. Translation of the manual to local Boro language in Meghalaya is pending. This has been delayed due	Project will finalise the manual in Assamese and translate the manual to local Boro language for Meghalaya.

		<p>to changes in project design, which led to implementation in only one district in Meghalaya. Lastly, the team has identified that the local Garo community in Meghalaya mostly speaks English, so a translation is not required. It will be completed in Q1-Y2.</p>	
<p>Output 4. Promoting supplementary livelihoods: Income generation support through training opportunities and access to finance facilitated for 600 households in 20 target villages.</p>	<p>4.1 By Q3-Y2, 600 individuals (80% women) complete at least 1 skills-based training. <i>Baseline: 0</i></p> <p>4.2 By Q3-Y2, 100 households supported to adopt tried-&-tested alternative cash crop cultivation (e.g., turmeric, <i>Hololoma aromatica</i>, citronella, citrus plants, common flax/sesame) <i>Baseline: 0</i></p> <p>4.3 By Q2-Y3, 70% increase in applications to government for compensation, loan schemes and other benefits by target community members. <i>Baseline: Our surveys indicated less compensation applied for in case of crop/property damage, as they have not received in the last 5 years.</i></p>	<p>Output 4 activities are due in Q3-Y2. However, we have completed the baselines and identified 600 individual households for promoting supplementary livelihoods. Target households have been selected based on the Participatory Rural Assessment (PRA) exercise and socioeconomic surveys. We have developed a pre-set of criteria to select beneficiaries, such as low income, dependency on the forest/forest products, landless people, disabled people, women-headed households, etc. which were further verified on field. An exception was made to include the families of village champions in the list to compensate them for their pro-bono services towards the project.</p>	
<p>Activity 4.1. Assess markets, value chains, micro-finance opportunities and viable supplementary livelihood options for HEC-affected people in target villages. The project team will conduct qualitative and quantitative assessments to identify the viable livelihood options for villages, taking into consideration the communities' culture and</p>		<p>This activity was planned for Q4, Y1; however, our desk research and field truthing of potential interventions with the community did not produce the expected</p>	<p>A "willingness" survey is underway to understand the local community's interest in livelihood options. Thereafter, we will conduct a market assessment.</p>

<p>lifestyle, as well as resources and market viability. The qualitative data will be collected through questionnaires, interviews and observations. Quantitative data will include information like local product prices.</p>	<p>results. Hence, the project team took a call to work with the community to identify the potential commodities first. Thereafter, a market assessment will lead to better results as well as long-term sustainability. Hence, a “willingness” survey is underway to understand the local community’s interest in livelihood options. During our discussion on project progress, we decided that this activity was best suited for Q3-Y2.</p>	
<p>Activity 4.2 Conduct consultation workshops to select beneficiaries to be supported with supplementary livelihood opportunities.</p>	<p>Completed</p>	<p>This activity is complete.</p>
<p>Activity 4.3. Conduct capacity-building training programmes on the supplementary livelihood options for the registered beneficiaries.</p>	<p>Not due in Y1</p>	
<p>Activity 4.4. Support the trained beneficiaries by providing the materials and tools needed to implement their livelihood option as well as hand-holding them.</p>	<p>Not due in Y1</p>	
<p>Activity 4.5. Provide help to the beneficiaries to establish a system to process, add value and market the products they develop through this project..</p>	<p>Not due in Y1</p>	
<p>Activity 4.6. Link the livelihood beneficiaries with appropriate government schemes facilitated by Aaranyak, the village champion and literate members of the village committee.</p>	<p>Not due in Y1</p>	
<p>Activity 4.7. Conduct annual evaluation and impact assessments.</p>	<p>Not due in Y1</p>	
<p>Activity 4.8. Document the case studies and share knowledge with other stakeholders.</p>	<p>Not due in Y1</p>	
<p>Output 5. Sharing knowledge and building capacity: Skills, learning and best practices derived from this project,</p>	<p>5.1 By Q4-Yr3, 3 meetings held (one at end of each year) with each target community (total=60) to</p>	<p>This Output has had mixed progress. Indicator 5.1 – share findings with each target community at the end of each year – has been delayed as the activity coincided with an important community harvest festival in the region and</p>

<p>and from other national and international HEC projects, are shared locally, regionally and internationally to inform and capacity-build project partners and other human-wildlife coexistence (HECx) facilitators in India and elsewhere.</p>	<p>share project findings, lessons learned and results. <i>Baseline = 0.</i></p> <p>5.2 By Q3-Y3, analysis of HEC and HEC mitigation strategies in project area, with case studies and learning collected during the project, effective for enabling coexistence shared and published. <i>Baseline: 0</i></p> <p>5.3 By Q4-Y3, lessons learned from this project shared through online/offline (n=10) workshops with partner organisations, HECx, practitioners and decision makers. including representatives of Government agencies who have a role to play in mitigating HEC such as Forest Department, Civil Administration, Assam Power Corporation etc <i>Baseline: 0</i></p> <p>5.4 By Q4-Y3, decision makers who develop mitigation strategies (such as Ministry of Forest & Environment, Project Elephant) are informed about successful strategies for HEC, informing India’s National HWC Mitigation Strategy and Action Plan, and its Guidelines for HEC Mitigation targeting <i>Baseline: 0</i></p>	<p>the community could not be assembled to share the findings as scheduled. Nonetheless, we identified an important knowledge sharing and capacity building opportunity in Y1. The project supported the IUCN SSC Human-Wildlife Conflict and Coexistence Conference in Oxford from 30 March – 1 April 2023. A BAT Trustee also delivered a keynote address at the conference, highlighting the significance of this project within the organisation. The conference also offered an opportunity to the team to interact and learn from leading researchers and professionals in this field and share about this project. Our Project Leader, along with our project partner, Aaranyak, also participated in the IUCN Asian Elephant Specialist Group Meeting in India in February 2023. The meeting offered an opportunity to discuss the project with the members of the Specialist Group and also understand the efficacy of different human-elephant conflict mitigation approaches utilised across the elephant range states.</p>
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	<p>5.5 By Q3- Y2, knowledge and best practice on HEC mitigation through livelihood interventions and installation of seasonal solar-fence in different geographies is shared and put into practice by project personnel</p> <p><i>Baseline: 0</i></p>	
<p>Activity 5.1. The project team will join a village meeting to share findings from project activities with local communities. Meetings will be joined in every village at the end of each project year (n=60)</p>	<p>The surveys pertaining to PRA and profiling of villages have been completed in the last quarter of Y1. We are working on data compilation and shall hold village level meetings to share the findings in quarter 1 of second year. This could not be completed in Y1 as it coincided with an important community harvest festival in the region and the community could not be assembled to share the findings as scheduled.</p>	<p>The project team will repeat the same exercise next year.</p>
<p>Activity 5.2. To prepare reports/journal articles.</p>	<p>Not due in Y1</p>	
<p>Activity 5.3. Conduct workshops/sessions to share our findings, and learning with practitioners in order to institutionalise them and ensure sustainability.</p>	<p>Not due in Y1</p>	
<p>Activity 5.4. Conduct an exchange study-trip programme of the project personnel to/from BAT Darwin Initiative in Myanmar to learn and share knowledge</p>	<p>Not due in Y1</p>	

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

Project summary	SMART Indicators	Means of verification	Important Assumptions
<p>Impact: Human elephant coexistence (HEC) enabled at landscape level in Northeast India by safeguarding the lives and livelihoods of people and elephants, resulting in improved welfare of communities and biodiversity protection.</p>			
<p>Outcome: Effective application of IUCN Guidelines-based HEC mitigation model in 6 HEC-prone districts in Assam/Meghalaya, resulting in increased incomes for 600 households and improved protection for Asian elephants/other rare species.</p>	<p>1. Community engagement and empowerment: By end Y3, 600 households experience a 75% reduction in human deaths/serious injury. <i>Baseline: 24 HEC incidents occurred in the villages of eastern Assam in the form of crop and property damages and one human death.</i></p> <p>2. Protecting livelihoods and assets: By end Y3, 600 households experience a 40% reduction in property damage (i.e., to major structures - granary, house, shop - that is crucial to people's lives and livelihoods) and a 30% reduction in crop loss. <i>Baseline: 24 HEC incidents occurred in the villages of eastern Assam in form of crop and property damages and one human death.</i></p> <p>3. Livelihoods promotion: By end Y3, 600 households experience 30% increase in household annual income. <i>Baseline: Average Annual Income per household = 35,000 INR (Aaranyak data from west Assam)</i></p> <p>4. Biodiversity protection: By end Y3, 40% fewer elephant killings in target areas and 20% increase in sighting/signs of key species.</p>	<p>0.1 & 0.2</p> <ul style="list-style-type: none"> o Official records of the Forest Department providing number of human fatalities, injuries and data on property loss. o Conflict assessment report based on IUCN guideline template, photos, and survey verification by project team. <p>0.3</p> <ul style="list-style-type: none"> o Project reports with analysis of socio-economic data gathered via surveys & questionnaires of income changes prior to and as a result of the project. <p>0.4</p> <p>Official records of the Forest Department and verification by project team from survey data collected at project start & end.</p>	<p>Raising local awareness about elephants, their ecology & needs, and the causes of HEC, while also improving livelihoods and reducing the severity of HEC, will result in fewer elephant deaths.</p> <p>Raising household incomes and requiring project participants to sign a pledge to protect wildlife / nature (e.g. not kill rare species or engage in illegal logging) will help improve biodiversity at landscape level and protect other threatened species e.g. rhino, buffalo, hog deer, leopard, primates.</p> <p>Evidence of the successful implementation of this approach, shared with and by key stakeholders, will facilitate replication of this model in other HEC hotspots in Northeast India</p> <p>All the stakeholders, including relevant government departments, will support project activities to help reduce HEC.</p> <p>Relationships among the partners and all key stakeholders remain constructive throughout.</p>

	<i>Baseline: 16+ elephants died between 2018-2021 in the target districts of Assam; hunting levels of key species TBC.</i>		
<p>Outputs:</p> <p>1. Profiling the problem and building evidence: Specific data gathered and analysed for the 6 target districts, including on the human population and local biodiversity, focusing primarily on elephants, HEC, and other rare species</p>	<p>0.1 By Q3-Y1, 20 target villages experiencing high levels of HEC, are actively engaged in the project. <i>Baseline: 0</i></p> <p>0.2 By Q4-Y1, 20 target villages profiled, with findings informing planning, implementation and evaluation of project interventions. <i>Baseline: 0</i></p> <p>1.3 By Q4-Y2, information compiled on the spatial and temporal movements of elephants and other key species. <i>Baseline: 0</i></p>	<p>1.1 List of villages, GPS locations, relevant official records, village agreements to engage in project.</p> <p>1.2 Reports from surveys, patterns/impacts of HEC, socio-economic profiles of target communities inc. livelihood activities, income levels, sources of protein, HEC records of Forest Dept, Yr2 workplans for target areas.</p> <p>GIS maps of current land use, seasonal movement patterns of elephants & other key species.</p>	
<p>2. Promoting security for people and elephants by raising awareness: Knowledge and understanding of elephants, HEC and strategies to improve safety/security is increased for at least 50% of households in 20 villages across 6 districts (n=2600 households)</p>	<p>2.1 By Q2-Y1, one champion (n=20) recruited for each target village and trained to record data, help undertake outreach activities and serve as primary contact for village HEC activities. <i>Baseline: 0</i></p> <p>2.2 By Q4-Y1, education materials (print, audio, video) produced in local languages and used for HEC outreach to 100,000 people in 20 target communities. <i>Baseline: 0</i></p> <p>2.3 By end Q2-Y3, at least 1200 households have adopted HEC mitigation measures promoted by the project to reduce impacts on people and elephants. <i>Baseline: 0</i></p>	<p>2.1</p> <ul style="list-style-type: none"> o Names, photos, attendance records; training reports o Field reports, photos, and monitoring by the project team <p>2.2</p> <ul style="list-style-type: none"> o Copies of education materials; all posted on Aaranyak website. o Project social media pages created/kept updated, print and broadcast media reports shared on social media pages. <p>2.3 & 2.4</p> <ul style="list-style-type: none"> o Pre/post outreach evaluation of the same people to assess changes in knowledge gained. 	<p>Stakeholders are supportive of the project initiatives and volunteer to collaborate with staff and field workers.</p> <p>The selected local champions engage in project activities as per their agreed role.</p>

	<p>2.4 By Q3-Y3, 50% of 2600 households (n=1,300) in 20 villages have increased knowledge and understanding of elephants/their needs, other key species, and are committed to their safety. <i>Baseline: TBC Y1</i></p>	<ul style="list-style-type: none"> ○ Reports of changes in attitudes and behaviour of households <p>Reports from the M&E teams (both project and external)</p>	
<p>3. Protecting livelihoods and assets: A system of seasonal crop protection is established in 20 target villages, involving the installation of temporary fencing and the formation of local Rapid Response Units (RRU)</p>	<p>3.1 By Q4-Y1, 60 people (3 per village) trained as trainers to install, monitor and maintain safe and effective seasonal solar-power fences. <i>Baseline: 0</i></p> <p>3.2 By Q1-Y2, 120km of seasonal solar-powered fencing installed and materials required for crop & village protection (powerful torches and/or solar lights) being used by vulnerable households. <i>Baseline: 0</i></p> <p>3.3 By Q1-Y2, 10 RRU teams formed, trained and operating an HEC alert-network using the best practice approach to facilitate safe passage for elephants. <i>Baseline: 0</i></p>	<p>3.1</p> <ul style="list-style-type: none"> ○ Record of training sessions with names, photos, best practice manual, record of fences installed in Yr2 by trained fencers. ○ Record of village fence committees established and operational. <p>3.2</p> <ul style="list-style-type: none"> ○ Maps with GPS coordinates of fenced sites, photos of installed fences, audio-visual feedback from farmers. ○ Record of torches/ solar lights provided with records, reporting outcome, when used. <p>3.3</p> <ul style="list-style-type: none"> ○ Named photos of RRU team members, records of HEC alerts sent, RRU incident reports <p>Best practice manual for RRU teams</p>	<p>HEC continues to be a problem and target communities remain keen to use the HEC mitigation methods proposed and agreed.</p> <p>Target community farmers remain keen to participate in erecting and maintaining solar-powered fences as per the agreed protocols, and to help train others.</p> <p>Target community members are willing to form and implement RRU teams as per the agreed protocols to promote safety and reduce HEC.</p>
<p>4. Promoting supplementary livelihoods: Income generation support through training opportunities and access to finance facilitated for 600 households in 20 target villages.</p>	<p>4.1 By Q3-Y2, 600 individuals (80% women) complete at least 1 skills-based training. <i>Baseline: 0</i></p> <p>4.2 By Q3-Y2, 100 households supported to adopt tried-&-tested alternative cash crop cultivation (e.g., turmeric, <i>Hololoma aromatica</i>, citronella, citrus plants, common flax/sesame) <i>Baseline: 0</i></p>	<p>4.1: Training reports, list of participants, photos, participant feedback, pre/post training survey and end of project survey</p> <p>4.2</p> <ul style="list-style-type: none"> ○ Field reports/photos of alternative crops planted; maps with GPS location of the cultivated areas ○ Increased income generation verified through <i>bona fide</i> documented proof. 	<p>Local communities will participate and accept the skill development training options and practice the supplementary livelihood options.</p> <p>Beneficiaries supported through this project will agree to sign a conservation pledge not to kill any key species or cause deliberate harm to biodiversity (e.g. through illegal logging).</p>

	<p>4.3 By Q2-Y3, 70% increase in applications to government for compensation, loan schemes and other benefits by target community members. <i>Baseline: TBD Y1</i></p>	<p>4.3: Official documents for any financial assistance applied for or provided to target community members by Government depts or finance institutions.</p>	
<p>5. Sharing knowledge and building capacity: Skills, learning and best practices derived from this project, and from other national and international HEC projects, are shared locally, regionally and internationally to inform and capacity-build project partners and other human-wildlife coexistence (HECx) facilitators in India and elsewhere.</p>	<p>5.1 By Q4-Yr3, 3 meetings held (one at end of each year) with each target community (total=60) to share project findings, lessons learned and results. <i>Baseline = 0.</i></p> <p>5.2 By Q3-Y3, analysis of HEC and HEC mitigation strategies in project area, with case studies and learning collected during the project, effective for enabling coexistence shared and published. <i>Baseline: 0</i></p> <p>5.3 By Q4-Y3, lessons learned from this project shared through online/offline (n=10) workshops with partner organisations, HECx, practitioners and decision makers. including representatives of Government agencies who have a role to play in mitigating HEC such as Forest Department, Civil Administration, Assam Power Corporation etc <i>Baseline: 0</i></p> <p>5.4 By Q4-Y3, decision makers who develop mitigation strategies (such as Ministry of Forest & Environment, Project Elephant) are informed about successful strategies for HEC, informing India's National HWC Mitigation Strategy and Action Plan, and its Guidelines for HEC Mitigation targeting <i>Baseline: 0</i></p>	<p>5.1: Report with photos of each community feedback meeting</p> <p>5.2 & 5.3</p> <ul style="list-style-type: none"> ○ Hardcopies and softcopies of the articles/reports available in publications &/or on Aaranyak website ○ Record/photos of sharing events <p>5.3 & 5.4 Record of presentations given at relevant national (e.g. India HEC mitigation and HECx workshops) and international (e.g.AsESG/other) meetings.</p> <p>5.5 Reports on project exchange from personnel in India and Myanmar</p>	<p>Useful lessons emerging from this project will be of interest to/adopted by other conservation practitioners and HEC-affected communities.</p>

	<p>5.5 By Q3- Y2, knowledge and best practice on HEC mitigation through livelihood interventions and installation of seasonal solar-fence in different geographies is shared and put into practice by project personnel</p> <p><i>Baseline: 0</i></p>		
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Activities (each activity is numbered according to the output that it will contribute towards, e.g. 1.1, 1.2 and 1.3 are contributing to Output 1)

Output 1: Profiling the problem and building evidence

- 1.1 Conduct an inception meeting in each district (n=6) for the project implementing team and government stakeholders (Forest Dept and District officials) to discuss/agree a project plan, identify 20 target villages, sources of existing information on the chosen sites, and plan to collect additional necessary information.
- 1.2 Conduct an outreach and mobilisation meeting in each of the selected villages (n=20) to explain the project and gain 'buy-in'. The meetings will include village heads, Panchayat members, village development committees, youth club members, women Self Help Groups (SHGs), teachers, farmers etc. We will aim to reach at least 20% of the population of each village. By involving various representatives within the communities, we will ensure the entire population of the village is reached. These meetings will also be used to identify and recruit village volunteers (10 per village) to help carry out the profiling surveys.
- 1.3 Conduct a 'Rapid Rural Appraisal', a socio-economic survey, in each village as part of the outreach and mobilisation meetings. The information gathered will be used to develop community profiles (including, number of women-headed household, daily-wage earners, farmers with their own land, landless farmers etc.), establishing the baselines and providing an understanding of the dependence of each community on natural resources shared by both people and elephants, as well as their culture and history. This will be followed by Participatory Rural Appraisal (PRA) among the surveyed household to verify the information provided to us.
- 1.4 Conduct Participatory Rural Appraisal (PRA) questionnaire-based surveys to verify data socio-economic data gathered and data on HEC pattern, damage and loss to farmers, existing practices of HEC mitigation, and its effectiveness. Based on the RRA information gathered, the project team will select representatives of different demographics (women-headed households, daily wage earners, landed farmers, landless farmers etc.) and conduct surveys through project team members and volunteers. The women-headed houses will be given priority.
- 1.5 Establish a system to monitor elephant movement/behaviour through sightings/signs reported by villagers (to be verified by Aaranyak and the village 'champion' see 2.1 below) and fence guards/monitors. Project team members and volunteers will gather information from local communities on elephant movement in the vicinity, follow the tracks and signs of the elephants to gain an understanding on the routes that elephants use to move for at least year. Data gathered will include elephants/key species from sightings/signs around villages, HEC patterns, human deaths/severe injuries from HEC, damage to property and crop loss with estimates of cost; existing practices of HEC mitigation, and their effectiveness.
- 1.6 Analyse the data gathered, prepare GIS maps, write reports, and disseminate the results to concerned stakeholders (including to village meetings).

Output 2: Promoting security for people and elephants by raising awareness

- 2.1 Recruit a 'champion' for each village (n=20) to help coordinate, organise surveys, gather data, and liaise with those affected by HEC. Champions will largely be selected from the volunteers who support with the socio-economic surveys and will be chosen based on their interest in the work, literacy, dedication to the cause and communication skills.
- 2.2 Meetings led by the Project Team with relevant specialists to develop an education strategy, module, timetable, and materials to raise awareness.

- 2.3 Develop printed/audio/visual IEC (Information, Education, Communication) materials in Assamese and Garo plus other local languages as needed, these will be disseminated through trainings and events in local communities, as well as on social media. We aim to reach 100,000 people across a variety of channels.
- 2.4 Train village champions to help deliver the outreach programme to raise awareness about elephants, avoiding HEC, and conservation.
- 2.5 Conduct awareness events in each target village (via village organisations). At least six events will be conducted per village (n=120) over an 18 month period (Q1, Y2 – Q2, Y3). The events will involve adults and youth, but with separate events for women to ensure they also learn how to avoid HEC and receive a basic first aid training in case of hurt. We aim to reach at least 70% of the village population (n=1,800 households) over the six events.
- 2.6 Working with the village champions, establish a system to monitor whether targeted households adopt best practices to minimise/avoid HEC. The project team, in collaboration with local champions, will monitor the targeted households through direct observation (for example, whether the households are still using illegal electric fences, harming elephants using spears while chasing away) and secondary information gathering (for example, complaints from Village Heads, members of Village Defence parties)
- 2.7 In consultation with the project M&E specialist, establish a system to monitor the impact of awareness-raising activities, conducting assessments to reveal their effectiveness so that the approach, or activities, can be modified if necessary.
- 2.8 Hold a workshop for media personnel to generate awareness about elephants and HEC to facilitate positive reporting on conflict issues, and to help modify the aggressive methods often used by the government anti-depredation squads which can cause elephants to become aggressive. Aaranyak has an established platform “Media for Conservation” and will use this network to ensure participation of the media personnel. The project team will work with the local correspondents from our project area and conduct workshops in each district.
- 2.9 Conduct a series of Q&A radio shows (at least five) with local radio stations to raise awareness about elephants, and develop a short film, on HEC mitigation and the role people play.

Output 3: Protecting livelihoods and assets

- 3.1 Hold one community dialogue in each target village (n=20) to share best practices to mitigate and reduce crop-raiding and damage to property (including grain stores). During each community dialogue at least 70% of the HEC affected households will be represented, as well as different committees such as the village defence committee, village development committee, village panchayat members, and village heads.
- 3.2 Under the village committee, establish a village fence committee (VFC) comprising at least 20 members to take responsibility for managing and maintaining the solar fences. The VFC’s primary role will be the proper maintenance of the fence, actively taking part in installation/ de-installation / re-installation of the seasonal fences. The committees will be responsible for collecting money from each household protected by the fence during the project period for maintenance of the fences post-project.
- 3.3. In year 3, VFC will be supported to set up a revolving fund with seed funding of approximately GBP300 from the project to sustain the fences post the project period and install new fences
- 3.4 Form Rapid Response Units (RRU), one per village (n=20) comprising 10 members, training them in non-aggressive methods of deterrence and involving them in alerting villagers to the presence of nearby elephants through app technology.
- 3.5 Provide training, assisted by trained RRU members, for government anti-depredation squads on basic elephant ecology and behaviour, causes of HEC, and involve them in monitoring elephants and HEC so as to improve their own practices and performance and help reduce conflict.
- 3.6 Produce a best practice manual for members of the RRUs and government anti-depredation squads.
- 3.7 Provide the RRUs/ADS with field gear, and villagers with torches, solar street lights (if appropriate) and first aid kits to help them facilitate safe passage for elephants and to monitor HEC.
- 3.8 Produce a manual in Assamese and Garo on how to install, manage and maintain a solar-powered fence so that it is effective at protecting crops but also safe for people, livestock and wildlife. To be used by fencing trainers, fence owners, fence committee members.
- 3.9 Install up to 120kms of non-lethal, solar-powered, seasonal fences based on site need and the movement of elephants.

3.10 Working with the village champion, farmers and fence committee, establish a system to collect and collate data on the effectiveness of the solar fences, reporting the results and making them available.

Output 4: Promoting supplementary livelihoods

4.1 Assess markets, value chains, micro-finance opportunities and viable supplementary livelihood options for HEC-affected people in target villages. The project team will conduct qualitative and quantitative assessments to identify the viable livelihood options for villages, taking into consideration the communities' culture and lifestyle, as well as resources and market viability. The qualitative data will be collected through questionnaires, interviews and observations. Quantitative data will include information like local product prices.

4.2 Conduct consultation workshops, at least two in each village (n=40), to select beneficiaries from 600 households to be supported with supplementary livelihood opportunities.

4.3 Conduct capacity-building training programmes on the supplementary livelihood options for the registered beneficiaries. The focus and duration of the training will depend on the viable livelihood options identified and selected by the beneficiaries. Based on the different supplementary livelihood options (for example, pig farming, pisciculture etc.) selected, we will arrange capacity building training. Households, rather than individuals, will be selected for support to counter drop-outs. Any individual from each of 600 selected households aged 18 or above can participate and engage in the livelihood opportunities.

4.4 Support the trained beneficiaries by providing the materials and tools needed to implement their livelihood option, as well as hand-holding support. Specific materials will depend on the livelihoods selected; for example, if we are supporting a household with pig farming, the project will provide them with at least two piglets and veterinary treatments, as well as support to access markets. The beneficiary will provide the food and shelter.

4.5 Provide help to the beneficiaries to establish a system to process, add value and market the products they develop through this project.

4.6 Link the livelihood beneficiaries with appropriate government schemes facilitated by Aaranyak, the village champion and literate members of the village committee.

4.7 Conduct annual evaluation and impact assessments to measure project progress and performance against outputs and outcomes

4.8 Document case studies and other qualitative data, including quotes, videos and photographs, including feedback from project staff as part of regular review sessions, to inform project delivery/adaptation and share as part of knowledge and capacity building activities to profile the project, raise awareness, and improve best practice,

Output 5: Sharing knowledge and building capacity

5.1 The project team will join a village meeting to share findings from project activities with local communities. Meetings will be joined in every village at the end of each project year (n=60)

5.2 Preparation and publication of five reports/journal articles, sharing the learning and findings from the project. Reports/articles will be shared on partners' websites and disseminated through partners' social media and networks. In particular, BAT will share with our thousands of partners and supporters across the South Asian diaspora, philanthropy, private sector, government and civil society in the UK and South Asia.

5.3 Hold workshops/seminars to share project findings and lessons learned with practitioners in order to institutionalise them and ensure sustainability. 10 online/offline workshops/seminars will share learning with different or combined stakeholder groups (including civil society practitioners, funders, and policy makers) and three workshops will be held to specifically inform India's National HWC Mitigation Strategy and Action Plan, and its Guidelines for HEC Mitigation

5.4 Conduct an exchange study-trip programme of the project personnel to and from BAT's HEC intervention in Myanmar (Darwin 27-012) to learn and share knowledge on successful implementation of holistic HEC projects involving livelihood interventions and seasonal solar fencing.

Annex 3: Standard Indicators

Table 1 Project Standard Indicators

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-A04	No. of households in 20 villages have increased knowledge and understanding of elephants/their needs, other key species, and are committed to their safety.	Number of people reporting that they are applying new capabilities (skills and knowledge) 6 (or more) months after training.	People	Gender; Age Group; Stakeholder group: Indigenous Peoples, Local Communities, Nationals, public sector, civil society, private sector;	0				1300 households
DI-A05	No. of people trained as trainers to install, monitor and maintain safe and effective seasonal solar-power fences.	Number of trainers trained reporting to have delivered further training by the end of the project.	People;	Training typology (biodiversity, sustainable development, finance, programme management, safeguarding, gender etc.). DIA05 Number of trainers trained reporting to have delivered	0				60

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
				further training by the end of the project. People; Number trained Gender; Age Group; Stakeholder group: Indigenous Peoples, Local Communities, Nationals, public sector, civil society, private sector.					
DI-B09	No. of households have adopted HEC mitigation measures promoted by the project to reduce impacts on people and elephants.	Number of individuals / households reporting a decrease in unsustainable practices as a result of project activities.	People/ Households	None	0				1200 households
DI-B10	No. of households supported to adopt tried-&-tested alternative cash crop cultivation (e.g., turmeric, <i>Hololoma aromatica</i> , citronella, citrus plants, common flax/sesame)	Number of individuals / households reporting an adoption of livelihood improvement practices as a result of project activities	People/ Households	Gender; Age Group;	0				100 households

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-D04	Percentage reduction in elephant killings in target areas and percentage increase in sightings/ signs of key species	Stabilised/ improved species population (relative abundance/ distribution) within the project area.	% Increase; Area (ha or km2)	Flora/Fauna/Fungi.	0				40% reduction in elephant killings and 20% increase in sightings/ signs of key species
DI-D15	No. of households experience a 75% reduction in human deaths/ serious injury	Net change in incidences of human wildlife conflict.	Number	Conflict typology	0				600
DI-D16	No. of households experience a 30% increase in household annual income	Number of households reporting improved livelihoods.	Households	As measured through household surveys, livelihood metric (income, education, health etc.).	0				600

Table 2 Publications

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

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the correct template (checking fund, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	Yes
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	Yes
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	N/A
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you need to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	Yes
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 16)?	N/A
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	