





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

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Darwin Initiative Project Information

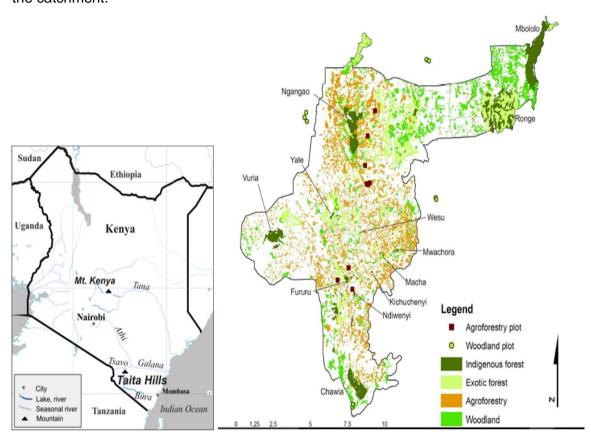
Project reference	28-022
Project title	Restoring the 'water tower' cloud forests of Kenya's Taita Hills
Country/ies	Kenya
Lead Partner	RSPB
Project partner(s)	Nature Kenya, Birdlife International, Plants for Life International (PLI), Kenya Forest Service (KFS), Dawida Biodiversity Conservation Group (DABICO), African Nature Concern
Darwin Initiative grant value	£442,127.00
Start/end dates of project	1 st September 2021 – 30 th June 2024
Reporting period (e.g. Apr 2022	April 2022 - March 2023
– Mar 2023) and number (e.g. Annual Report 1, 2, 3)	Annual Report 2
Project Leader name	Jake Zarins – Senior Species Recovery Officer
Project website/blog/social media	
Report author(s) and date	Jake Zarins & Paul Gacheru (with contribution of project partners) 28 th April 2023

1. Project summary

The aim of the project is to protect and expand the surviving fragments of forest in the Taita Hills in southern Kenya, safeguarding the unique biodiversity of these hills and improving local water security. Project activities include forest conservation and restoration, provision of water harvesting and storage infrastructure, and diversification of local livelihoods through the introduction of agro-forestry and other initiatives.

The Taita Hills cover an area of 35,000ha in southern Kenya, 50km south-east of the world-famous Tsavo West National Park. The Taita Hills historically formed an isolated island of moist, forested habitat in a region that is otherwise much dryer and more open – and have done so for millennia. As a result, they have some of the highest levels of endemism in the world and form an important part of the Eastern Afromontane Biodiversity Hotspot being recognised as a Key Biodiversity Area and an Endemic Bird Area. At least 28 species of plant and animal are unique to this area, and a further 22 are endemic to the wider region. Of the local endemics, 13 are globally threatened and three are Critically Endangered – namely the Taita apalis (*Apalis fuscugularis*), Taita thrush (*Turdus helleri apalis*), thrush and Taita warty frog (Callulina dawida).

The Taita Hills' serve as a vital water catchment for the expansive Tsavo ecosystem and the water catchment and biodiversity values vary heavily on the montane cloud forest habitat with which their upper slopes were once almost entirely covered. This habitat is now severely fragmented, with some 98% of it having been destroyed or degraded over the last 200 years. The remaining forest comprises 12 fragments that range in size from 1 ha to 220 ha and are restricted to the highest peaks and steepest slopes. This degradation has significantly reduced the water retention capacity of the Taita Hills with negative consequences for those that rely on the catchment.



Map of project area illustrating Taita Hills with spatial outlook of Forest Areas (Pellikka et al. 2009)

Protection of remaining fragments is weak because implementation of forest policy and law is hampered by limited capacity of Community Forest Associations. A recent study (Teucher et al, 2020) has shown that the natural forest cover has continued to decrease between 2003–2018. The devastating loss of cloud forest habitat is inextricably linked to high levels of poverty. Data summarised at https://devinit.org/data/spotlight-kenya show that, in 2016, 32.3% of people in Taita Taveta County – the county in which the Taita Hills lie – were living below the Kenyan poverty line, and that 38.9% were in food poverty (meaning that they were unable to consume the minimum daily caloric requirement).

More specifically, the three key drivers of forest and biodiversity loss in Taita have been identified as:

- a lack of income-generating opportunities, leading to a direct and heavy reliance on forests and forest products.
- poor farming techniques leading to low productivity which in turn has led to encroachment into forested areas, as bringing additional land into cultivation has been the only way for farmers to increase overall yields.

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¹ Schmitt et al 2020 (Link)

• the replacement of native forest with exotic plantations of faster growing species (cypress, eucalyptus, pine, Chinese camphor, Acacia mearnsii) for timber and wood production.

The project aims to restore forest function and biodiversity through two primary approaches:

Firstly, and through direct engagement with local communities the project will aim to diversify and improve livelihood opportunities which it is anticipated will reduce the pressure placed on forest habitats by encroachment or extractive activities. A key activity is to support agroforestry as an alternative to growing maize whilst community nurseries will produce native species for habitat regeneration as well as the cash crop fruit trees needed for agroforestry.

Secondly and in partnership with the Kenya Forest Service areas cleared of invasive and exotic plantation species will be re-established with native plant species so that remaining forest fragments can be improved, expanded, and where possible connected.

2. Project stakeholders/ partners

The Taita Hills restoration project involves a significant number of partner organisations and technical specialists. As lead partner the RSPB provides overall oversight of project implementation and liaison with the Darwin Initiative. During the reporting period, RSPB was responsible in convening partner meetings (virtual and in person) to assess implementation progress (see Annex 27 and Annex 28). Further to this, RSPB has provided co-financing to support project field staff and a number of project outputs including the contributions of PLI and the water balance assessment for the Taita Hills Forest by engaging water experts in UK contributing to Output 4- Lay foundations for long-term programme to monitor impacts of forest restoration and agro-forestry on Taita's 'water tower' function (See Annex 26)

The primary coordinator and lead on all in country project activities is Nature Kenya who bring a wealth of experience in delivering similar forest restoration projects from other parts of Kenya. Nature Kenya coordinates in country partners to support project implementation and the consolidation of information for reporting purposes. Nature Kenya supported capacity building of community forest associations (see Annex 1-7) and community livelihood initiatives (see Annex 10-24). They are supported in this work by a number of long-time expert collaborators with extensive history and experience of research and delivery in the Taita Hills and working as 'Species Guardian' for the Taita thrush and Apalis. The Species Guardian have worked for many years to identify the issues facing the remaining forest fragments and devised the restoration approaches which they are now assisting to bring to scale through this project and continued species targeted research work (see Annex 25).

Kenya Forest Service the lead government agency responsible for maintaining Kenya forest resource base supported the project implementation by supporting in the capacity building of five Community Forest Associations based in the Taita Hills Forest area (see Annex 3-4). As a result, 3 CFAs have advanced the process of reviewing Participatory Forest Management Plans (PFMPs). In addition, KFS provided technical expertise in guiding and training local community groups in tree nursery establishment management (see Annex 12) where 8 community led were supported to increase their seedling production to produce over 70,000 seedlings.

Plants for Life International (PLI) is an NGO based in Kenya and provides specialist technical support on botanical issues and are especially targeting the conservation of the endemic plant life of the Taita Hills Forests. Working collaboratively with local consultant Natural Africa Concern (one of the Species Guardians) two model tree nurseries were established to provide community learning areas and promote restoration of Taita Hills Forest vegetation. Practical training workshops on botanical knowledge and tree propagation have been held to increase the knowledge and skills of at least 15 local community members (see Annex 10)

Dawida Biodiversity Conservation Group (DABICO) is a community-based organisation and a Site Support Group for Nature Kenya who supported project implementation through community mobilisation and the capacity building of 8 community led tree nurseries which has enhanced the restoration efforts of Taita Hills forest (see Annex 13). Furthermore, DABICO members supported in direct forest restoration (see Annex 13) restoring 22ha of degraded

forest areas. DABICO support in Taita Hills Forest KBA annual monitoring where results are compiled in the Kenya KBA Status and Trends report (Link)

Birdlife International maintained the global World Bird Database where IBA/KBA State, Pressure and Response data is consolidated- which informs the Kenya KBA Status and Trends report (<u>Link</u>). Birdlife International provided linkages with regional and international initiatives i.e. Trillion Trees Initiative; where lessons were drawn on forest and landscape restoration.

3. Project progress

3.1 Progress in carrying out project Activities

During the reporting period of April 2022 - March 2023, and with all key foundational activities completed during year 1 the delivery of project activities broadly continued as pace and as planned. The extended drought that has been affecting Kenya for the past three years continued to present challenges with extremely unpredictable rainfall in Taita both complicating the timing of tree planting activities and enabling the conditions for forest fires to proliferate. (See annex 30 pg 2)

Progress in delivering the project Activities under each of the Outputs was achieved following as captured in the project work plan and detailed below;

Nature Kenya facilitated consultative meetings/forums of 3 Community Forest Associations (CFAs) to review Participatory Forest Management Plans (PFMP). As a result the capacity of 53 CFA members (33 men, 20 women) from the following 3 CFA management committees was strengthened; IYAWEMBI (forest fragments; Iyale-Wesu-Mbili), SUNDIFU (Forest fragments; Susi-Ndiwenyi-Fururu) and from NGACOFA (Ngangao Forest fragment)Training on Participatory Forest Management, Leadership and Governance was provided via a training workshop held on 6th-11th June 2022 facilitated by the Kenya Forest Service (Annex 1). This training was critical as part of the revision and updating of 3 Participatory Forest Management Plans (PFMPs) implemented by the 3 CFAs. As a result of the training, the 3 CFAs sent PFMPs revision/updating request letters to Kenya Forest Service (KFS) (Annex 2a-IYAWEMBI letter, Annex 2b-NGACOFA Letter, Annex 2c-SUNDIFU letter). These three Community Forest Associations convened site-based meetings coordinated by Kenya Forest Service (KFS) to restructure CFA management committees guided by new revised CFA national guidelines. These CFA committees would be responsible to coordinate the revision and updating of the PFMPs (Annex 3).

27 members of the local planning review teams (17 males and 10 females) representing Ngangao, Iyale-Wesu-Mbili, and Susu-Ndiwenyi-Fururu Community Forest Associations were trained by Kenya Forest Service on participatory forest resource and livelihood assessment in January, 2023 (Annex 4- Request Letter from CFC to KFS CCF on technical support) resulting to advancement in the review Ngangao, Iyale-Wesu-Mbili, and Susu-Ndiwenyi-Fururu participatory forest management plans(PFMPs) (Annex 5- Sample Reviewed PFMP of Ngangao CFA). The PFMPs include standard operating procedures that facilitate cooperation between CFAs, KFS and Taita Taveta County Government including monitoring plans to support the protection of the forest fragments.

In Y1, the Terms of Reference for Community Scouts, Standard Operating Procedures and Training materials for the community scouts were developed. To operationalize these, CFAs held community consultations where they identified and nominated 21 community scouts (Annex 6- Meeting minutes on selecting community scouts). The names were forwarded to relevant County Department and Kenya Forest Service. Vuria CFA and Chawia CFA have officially written request letters to the relevant departments and agencies to support them with technical training for the community scouts (Annex 7- Request letter from Vuria CFA to KFS on technical support). National elections in August 2022 led to a slowing of activities involving government related entities for some months before and after the elections which delayed the delivery of this training by KFS.

In collaboration with project partners Plants for Life International (PLI), Kenya Forest Service (KFS) and Taita Taveta County Government, Nature Kenya refined the forest restoration plans and restoration approaches for the targeted forest areas (**Annex 8- Update to the forest restoration action plan**) providing details of recommended site restoration best practice. With co-finance from Rain Forest Trust (RFT), Nature Kenya advanced the land purchase of one identified parcel in Msinduyi area by entering into a legal sale agreement to secure an additional 1.4ha of suitable forest habitat for the Taita Apalis (**Annex 9- Signed land sale agreement**).

The capacity of two model tree nurseries to act as community field learning sites was enhanced collaboratively with Plants for Life International (PLI) and Natural African Concern. As a result 9679 tree seedlings of 46 indigenous tree species varieties different species were propagated (see **Annex 10** *pg 9- Summary of tree species propagated*). Guided by the model tree nurseries, 8 community-led tree nurseries established in different forest fragments in Taita Hills Forest, capacity was strengthened resulting in the propagation of a total of 72,058 tree seedlings of 18 indigenous tree species (see **Annex 11**). Most of the seeds propagated into seedlings were collected from the existing forest helping ensuring genetic integrity of the trees used in forest restoration.

Nature Kenya organised and executed training events for members of local community groups to both manage these nurseries and carry out restoration activities. This included a community learning exchange program, whereby 15 community group representatives visited PLI's Botanical Garden in Brakenhurst to learn more on tree seedling propagation, tree nursery management and seed handling as well as to draw inspiration from being able to see a native forest restored overt the past 20 years (**Annex 10 pg 8**). In addition, and in collaboration with Kenya Forest Service- 8 site based trainings reaching 69 community members (38 males & 31 females) from the various community led tree nurseries were carried out to enhance overall capacity of locally led tree nurseries in Taita Hills (**Annex 12**).

As a result of this enhanced capacity in the production of tree seedlings and the enhanced skills acquired by local community groups on restoration best practice, the project team managed to restore 22ha of degraded forest areas by planting 30,972 seedlings representing 44 indigenous tree species (See Annex 10 pg 4 and Annex 13). These were planted in Chawia, Fururu, in Msidunyi/Vuria and lyale forest fragments. All restoration sites were maintained through the ongoing spot weeding and the removal of seedlings from exotic tree species such as *Acacia mearnsii* and *Eucalyptus saligna*.

Informed by restoration lessons generated from this initiative, Nature Kenya was able to share the lessons promoting forest and landscape restoration into forest policy at national and county level. Contributions were made to the finalisation of the National Forest and Landscape Restoration Implementation Plan-FOLAREP (Annex 14-Workhop on FOLAREP monitoring framework), which provide national guidance on restoration; we mainstreamed forest restoration in county policy processes (Annex 15 Comments on Taita Taveta CFSP). During International Day of Forest 2023, a public talk by Nature Kenya staff was made on importance of forest and restoration actions (Annex 16-membership banner)

Following from the results of the baseline assessment of livelihoods in the project area and livelihood enhancement plan completed in Y1, a suite of interventions have been implemented. Within the model crop tree nurseries established in Yr1at least 3,036 fruit trees of 5 different fruit species were raised by end of Y2 (Annex 10 pg 5). These include, Tree Tomato, Red Plum, Cape Goose Berry, Purple Passion Fruit, and Golden Passion Fruit. To augment crop tree production the eight community led tree nurseries also propagated these crop trees. 37 community members (21 male and 16 female) were trained on fruit tree grafting (avocado and macadamia trees) by the agricultural extension officers (Annex 17). As a result of 521 households benefited through on-farm grafting of 5,431 fruit trees (Macadamia and Avocado) by end of Y2 (Annex 18). These grafted trees will produce fruit more quickly that those grown directly from seed and also help ensure high quality and high yielding varieties can be ensured.

Work to address the water access needs of some of the projects target communities was initiated during the reporting period. A rapid assessment on the statuses of water provision and access to existing community water tanks or similar infrastructure around Vuria and Ngangao forests was carried out in June 2022. From this an implementation strategy was developed (Annex 19), and rolled out. In partnership with local administration, chiefs, and Taita Taveta Water services (TAVEVO), community forums were held for consultation on the water project implementation approach. As a result community led water project governance structures were set up and sites identified for where water storage facilities would have most impact and were technically and logistically feasible. TAVEVO engineers carried out viability assessment of all the sites identified, provided Bills of Quantities (BoQ's) for the work as well as technical oversight for setting up the necessary infrastructure (Annex 20). By end of Y2, 30,000ltr water storage and water distribution network was set up enhancing water accessibility by at least 300 households living adjacent Vuria forest (see Annex 21).

Nature Kenya implemented additional livelihood initiatives which included beekeeping, poultry rearing and ecotourism. A community apiculture enhancement plan was developed (Annex 22). As a result 29 apiarists (24 Males and 5 females) were supported to converge and share knowledge, experiences and challenges in apiculture and develop apiculture enhancement plans, 17 newly recruited apiarists (15 male and 2 female) were trained in basic apiculture and 35 apiarists supported with 35 bee suits. In poultry rearing, 78 community representatives (32 males and 46 females) were trained on poultry farming in collaboration with Taita Taveta County Agriculture extension officers. A total of 233 beneficiary households (123 men, 110 women) received 240 improved chicken breeds aimed at improving household well-being, diversifying household income generation initiatives that support in adaptation to climate change (Annex 23). Four community members (4men) participated in the hands-on training on bird identification aimed at enhancing birding as one of the ecotourism activities carried out in Taita Hills Forest (Annex 24)

Detailed species count and field monitoring assessment led by the field research team from African Nature Concern surveyed 4 main forest fragments (Mbololo, Ngangao, Vuria/Msindunyi, Chawia). Preliminary results show that a total of 7248 birds representing 56 species were detected during the point count surveys: 2606 individual representing 51 species in Ngangao, 1354 individuals representing 31 species in Mbololo, 2182 individual Representing 38 species in Chawia and 1106 individual representing 36 species in Vuria/Msidunyi. A total of 54 Taita apalis territories were documented during the 2022-2023 breeding season (Msidunyi 4, Ngangao 9 and Vuria 41). Observations indicate that birds in Msidunyi and Vuria appeared to have more nesting attempts following nest failures compared to those in Ngangao (Annex 25 pg 6). The Taita Thrush was encountered in 7 stations in Chawia, 100 in Mbololo (out of 200) and 39 in Ngangao (Annex 25 pg 4).

Working in collaboration with experts from the Kenya Water Towers Agency and a visiting hydrologist consultant from Arctium, a field visit was organised between 27th June 2022 and 2nd July 2022 where baseline data for the projects water balance study was collected (**Annex 26**). The initial water survey was aimed at laying foundation for a long-term program to monitor the impacts of forest restoration in the Taita Hills Forest, augmenting and enhancing the monitoring capacity of mandated local institutions like the Kenya Water Towers Agency.

The findings of the assessment identified limited opportunities for measuring changes in stream flow and as such necessitated a change in approach whereby data will now be collected to gauge volumes of precipitation originating from cloud/mist vs from direct rainfall.

The project was effectively managed with field monitoring visits made during the period of 27th June 2022 to 2nd July 2022 and 29th January to 8th February 2023. Project partner steering committee meetings were held on 4th July 2022 (**Annex 27**) and 6th Feb 2023 (**Annex 28**) discussing overall project implementation status and reviewers' feedback and approaches as well as ensuring issues or limitations experienced during project delivery are addressed and where possible improvements made. Further to these virtual and physical meetings, specific

topics have been discussed directly with relevant project partners as required and a mid-term evaluation conducted during the most recent field visit (Annex 29)

3.2 Progress towards project Outputs

To help achieve *Output 1- Protection of all surviving fragments of cloud forest and edge habitat in Taita is strengthened;* we progressed the review and updating of 3 Participatory Forest Management Plans (PFMPs)- *Indicator 1.1.* of lyale-Wesu-Mbili forests, Ngangao forest, Susu-Ndiwenyi-Fururu forest to guide work in and around the surviving fragments (*Annex 2a-IYAWEMBI letter, Annex 2b-NGACOFA Letter, Annex 2c-SUNDIFU letter*). The PFMP review process involved collaborative forest resource mapping and livelihood assessments with technical support from Kenya Forest Service (*Annex 4-request letter from CFC to CCF on technical support*).

The forest protection capacity of the local CFAs was increased through training- *Indicator 1.2;* whereby 53 CFA members (33 men, 20 women) from NGACOFA, IYAWEMBI, and SUNDIFU received training on Participatory Forest Management, Leadership and Governance via atraining workshop held on 6th-11th June 2022 led by the Kenya Forest Service (**Annex 1**). 27 members of the local planning review teams (17 males and 10 females) representing Ngangao, lyale-Wesu-Mbili, and Susu-Ndiwenyi-Fururu Community Forest Associations were trained on participatory forest resource and livelihood assessment (**Annex 3**).

As a result mentorship and support provided to the CFAs in Taita Hills Forest, implementation of forest conservation actions was recorded-*Indicator 1.3*. This was supporting forest restoration activities through tree growing (see **Annex 13**), forest protection through response to fire threat – establishment forest fire breaks in Iyale and Chawia forest and fighting fires Chawia, Iyale and Vuria forest (see **Annex 30**), and undertaking participatory forest disturbance survey documenting status of the different forest fragments.

To achieve *Output 2: Restoration of cloud forest habitat is initiated around key existing fragments;* in consultation with Plant Life International we refined the forest restoration plans*Indicator 2.1* and restoration approaches for the targeted forest areas (**Annex 8**) providing details of recommended restoration best practice. By applying different tactics of safeguarding identified High-priority habitats for Critically Endangered species- *Indicator 2.2*; with co-finance from RFT, Nature Kenya advanced land purchase of a parcel in Msindunyi/Vuria forest measuring 1.4ha by entering into a legal sale agreement (**Annex 9**).

The capacity of two model tree nurseries as community field learning sites was enhanced collaboratively with Plants for Life International (PLI) and Natural African Concern –*Indicator* **2.3**. As a result 9679 tree seedlings of 46 indigenous tree species varieties different species were propagated (see **Annex 10**). Guided by the model tree nurseries, 8 community-led tree nurseries in different forest fragments in Taita Hills Forest propagated a total of 72,058 tree seedlings of 18 indigenous tree species (see **Annex 11**).

Using tree seedlings propagated in different tree nurseries direct forest restoration was achieved –*Indicator 2.5*. In collaboration with Kenya Forest Service, Taita Taveta County Government and Natural African Concern a total area of 22ha (against a target of 20ha) of degraded forest areas of lyale, Msindunyi/Vuria, Ngangao were restored through planting 30,972 seedlings representing 44 indigenous tree species (see *Annex 10 pg 4 & Annex 13*). During the period January-March 2023, Taita hills forest fires occurred affecting 4 forest areas-lyale, Chawia, Susu, Vuria/Msindunyi. A total area of 56ha was affected (see *Annex 30*). Of these affected sites Vuria/Msindunyi forest area where forest restoration activities had take place in Y1 and Y2 of the project. A significant number of seedlings planted over the past 2 years as well as all naturally regenerating vegetation were destroyed despite the efforts of

community members to contain the fire (see Annex 30). Replanting has already occurred during recent rains in the hope these new seedlings can establish well.

We delivered actions towards achieving Output 3: Livelihoods of local communities are enhanced through climate resilience initiatives including agro-forestry, improvement of water storage infrastructure and diversification of income sources: utilizing model tree nurseries augmented by 8 community led tree nurseries, community mentorship and training on propagating an assortment of crop trees was achieved- Indicator 3.1., 37 (21 men,16 women) attended a community Trainer of Trainers event and were trained on fruit tree grafting (avocado and macadamia trees) by the Taita Taveta County Agricultural Extension Officers (Annex 17). The skills gained were cascaded to other local communities and 521 households benefited through on-farm grafting of 5,431 fruit trees (Macadamia and Avocado) by end of Y2 (Annex 18).

The project has improved community water access *Indicator 3.4*. by installing 30,000 litre of water storage capacity by tapping water from 2 permanent springs in Vuria forest. This is aimed at enhancing water accessibility of at least 300 households (Approx 1500 people) living adjacent to Vuria forest (Annex 21). Additional livelihood initiatives were developed and implemented- Indicator 3.5., which included beekeeping, poultry rearing and ecotourism.

We delivered actions contributing towards achieving Output 4- The conservation and livelihood impacts of the project are monitored and evaluated; were delivered. Detailed species field assessments led by the field research team surveyed 4 main forest fragments (Mbololo, Ngangao, Vuria/Msindunyi, Chawia) - Indicator 4.1. Results reported under activities(see Annex 25). Local Site Support Group -DABICO in collaboration with Community Forest Associations- Vuria, Iyale Ngangao, Chawia; carried out a routine community-led biodiversity survey documenting a total 28 species of birds- 11 forest specialist species (FF),8 forest generalist (F) species and 9 forest visitor species (f) in different forest vegetation types. Further data analysis is on-going to compare with other surveys.

The foundation of the long-term water balance study was established by carrying out baselines metrics - Indicator 4.4. Working in collaboration with experts Kenya Water Towers Agency and visiting hydrologist consultant from Arctium, a field visit was organised between 27th June 2022 and 2nd July 2022 where baseline data for water balance study was collected (Annex 26). It should be noted it was not possible to undertake this work earlier due to Covid related travel restrictions and priority commitments of the projects hydrologist.

To ensure that the project was effectively and efficiently managed-Output 5. a series of field visits to assess progress of implementation were undertaken by the core-project team during period of 27th June 2022 to 2nd July 2022 and 29th January to 8th February 2023. Project partner meetings were held on 4th July 2022 (Annex 27) and 6th Feb 2023 (Annex 28) A midterm review and evaluation was carried out assessing project delivery against the agreed log frame and to ensure all opportunities to maximise impact are being embraced (Annex 29).

3.3 **Progress towards the project Outcome**

Progress towards the project Outcome of- The cloud forest fragments that currently survive in Taita are protected and expanded through a combination of conservation and livelihood interventions, safeguarding their unique biodiversity and enhancing local is being made through strengthening sustainable forest management water security; capacity—revision of the three Participatory Forest Management Plans (see Annex 5) and implementation of the already operational forest management plans (Vuria Forest and Chawia Forest) are assisting communities take effective ownership over their forests to protect them and manage any extractive activities.. Implementation of the management plans is through forest restoration (Annex 13), forest protection (Annex 7) and monitoring. Restoration is making strong progress via enrichment replanting and removal of exotic species. Permanent

safeguarding of 1.4ha of suitable forest habitat was achieved through land purchase (Annex 9) ensuring forest land conversion to other land uses is halted. As a result of these interventions among others we expect that *mature cloud forest cover will be stabilized - Indicator 0.1*.

We progressed actions towards ensuring *cloud forest habitat is re-generating over an additional 60ha –Indicator 0.2.*, where by in Y2 we restored 22ha of degraded forest areas through enrichment planting with 44 indigenous tree species (see **Annex 10** pg 4, & Annex 13) and active maintenance restoration areas through weeding and extraction of exotic tree. As a result of this direct restoration efforts the project has now achieved 42ha of restored habitat by end of Y2. Some of this has had to replanted due to the fire in Msidunyi in March 23.

Biodiversity surveys were carried out over the course of Y2 assessing trigger bird species among others- Indicator 0.3. (see Annex 25). Data analysis is on-going to compare these results with other surveys and papers related to the populations of both the Taita Apalis and Taita thrush are being written Initial results suggest the Taita Thrush population has stabilised and may well be increasingly slightly with estimates of approx. 2500 individuals across the various forest fragments. The situation for the Taita Apalis however is less positive with counts suggesting the population continues to decline with estimates of between 80-100 individuals. The March fires destroyed 3 Apalis breeding territories – although thankfully the birds appear to have survived.

Community livelihoods were enhanced through a suite of interventions- Indicator 0.4., by end of Y1 at least 890 household were beneficiary of 6000 fruit tree seedlings (3000 avocado and 3000 macadamia). To enhance fruit trees productivity 521 households benefited through on-farm fruit tree grafting of 5,431 trees (Macadamia and Avocado) (**Annex 18**). An additional 3,036 fruit plant species of 5 different fruit species variety were raised in model tree nurseries and distributed to local community (**Annex 10** pg 5).

Work to enhance livelihoods of 250 households through provision of water tank and at least two other lo costs-high impacts intervention- Indicator 0.5., improved community water access by installing 30,000 litre of water storage capacity tapping water from 2 permanent springs in Vuria forest, benefiting at least 300 households living adjacent to Vuria forest (Annex 21). Additional livelihood initiatives strengthened where 117 households from 8 community groups were able to earn KSh. 798,560 (Annex 31) in Y2 from sale of tree seedlings to both the project and community members seeking to engage in agro-forestry. By end of Y2 the community groups had propagated 72,058 tree seedlings of 18 indigenous tree species (see Annex 11). 233 households received 240 improved chicken breeds (Annex 23). Bee keeping nature based enterprise was enhanced through training of community groups in beekeeping husbandry (Annex 22).

We carried out **desktop and field assessment on water balance towards achieving– Indicator 0.6.** A total of 22 natural springs from 3 catchments (Mwatate, Voi, Kisima) were assessed and water quality and quantity parameters collected (**see Annex 26**). As a result of this survey, designing a water balance study to assess capacity of forest in mist capture was done and equipment purchased (**Annex 26- pg 35-36**). Overall we aim to assess the contribution of forest restoration and crop tree planting towards the improvement of Taita water tower function.

3.4 Monitoring of assumptions

Assumption 1: Our Theory of Change proves to be correct, so that achievement of the Outputs described below does indeed yield the expected long-term benefits both for the forests of the Taita Hills and for the poor people who live around them

Comments: It is impossible to fully quantify this assumption given its long-term focus whilst the project is still ongoing.

Assumption 2: In particular, enhancement of livelihoods is effective in reducing dependence and therefore pressure on the forests

Comments: As above – this is a long-term assumption. Ongoing work to strengthen livelihoods and diversify agriculture leading to reduced pressures on remaining forest habitat or improving water security are not yet measured but based on existing literature and experience of Nature Kenya in other similar restoration projects, this assumption should hold true.

Assumption 3: Drought and/or fires do not prevent the delivery of our Outputs from leading to our Outcome

Comments: The prolonged drought experienced in the region has complicated planting efforts and compromised seedling establishment and also increased the risk of forest fire. During the reporting period, forest fire outbreaks occurred several times. As a result of effective community mobilisation through the Community Forest Associations, only one forest restoration area in Vuria/Msindunyi area out 5 forest fragments was affected by fire. This area has had to be replanted.

Assumption 4: Local communities and the county government remain supportive of forest protection and committed to delivering the PFMPs

Comments: Engagement of local communities in the project is extremely positive whilst the legislative framework in Kenya takes the protection of forests extremely seriously. A focus on community led forest management is ensuring communities understand and receive the benefits from the forest and therefore remain invested in protecting it from external entities.

Assumption 5: Covid-19 restrictions do not tighten to the point where they stop the project team implementing restoration activities effectively

Comments: Although Covid restrictions placed limitations on the project at the outset these issues were dealt with and are no longer of concern – assuming no new outbreaks.

Assumption 6: Extreme weather events, such as drought, do not significantly impact agro-forestry activities or the utility of the water tanks

Comments: As per assumption 3 – the prolonged drought has made life hard for all relying on agriculture in Kenya. However the Taita hills receive more precipitation than many other areas of the country and as such planting has been broadly unaffected. Water tanks have only recently been installed and will benefit from current rains in regards filling quickly.

Assumption 7: Communities are able to agree on which additional livelihood interventions would be most beneficial

Comments: Livelihoods assessment provided clear direction on priority interventions.

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

The desired project impact is to have Cloud Forest habitat restored at a landscape scale throughout Taita, bringing major benefits to both wildlife and people and providing a model for 'water tower' hill ranges throughout Kenya. We are contributing to achieving this impact by supporting the strengthening of community structures to have capacity around sustainable forest conservation and management (see **Annex** 1- 7). As a result of strengthening these community structures, the restoration of 22ha (Annex 10 & Annex 13) of forest area was achieved as well as safeguarding sensitive forest areas from fire (Annex 30), this will directly have positive impact on biodiversity conservation and improve forest capacity to provide vital ecosystem services. By providing the link between community development and well-being to forest health, community receptiveness to project interventions has been positive- 521 households have increase on-farm tree cover (see **Annex 18**); and 300 households agreed to an organised community water collection process (see Annex 21), bringing water access closer the community. These actions have incentivized community participation in forest management. Full assessment of impacts will only be possible as interventions are completed.

4. Project support to the Conventions, Treaties or Agreements

The project is supporting Kenya to meet its obligations under the following CBD articles in particular:

- Article 6b (integrate conservation and sustainable use into plans, programmes and policies)

 where recommendations have been made to Taita Taveta County policy (see Annex 32),
 and support to developed of 3 CFA participatory forest management plans has been advanced (see Annex 1-7).
- Articles 8d (promote the protection of ecosystems) and 8f (restore degraded ecosystems) the Taita Hills forest restoration strategy was updated (Annex 8) and implemented restoring 22ha in Y2 (see Annex 10 & Annex 13)
- Article 10d (support local populations to implement remedial actions) because we will take
 a strongly community-based approach and involve local people closely in project delivery. 8
 Community led tree nurseries and training has been rolled out-supporting community forest
 associations structures (Annex 11-13). In addition, community actively participated in
 mitigating threats to forest as a result of forest fires (Annex 30)

It will also contribute towards several Aichi targets, namely:

- 1 (make people aware of the values of biodiversity and how they can conserve it) (see Annexes 1-7)
- 2 (integrate biodiversity values into development and poverty reduction strategies (see Annex 20.21, 23, 31)
- 5 (reduce habitat loss, degradation, and fragmentation) (see Annex 13) where there has been direct restoration of degraded areas while increasing on-farm tree growing (see Annex 18).
- 12 (prevent the extinction of threatened species) (see Annex 9-safeguaring new land for conservation through purchase; Annex 10 & 13- contributing to direct forest restoration; Annex 25- confirmation that critically endangered species are present; and Annex 34-Identifying suitable areas to prioritise conservation efforts)
- 14 (restore and safeguard ecosystems that provide essential services, including services related to water). Linked with restoration actions described in Annex 13.

5. Project support to poverty reduction

Overall the project is supporting sustainable management and restoration of the Taita Hills forests. It is expected that maintaining and improving forest functions by provision of vital ecosystem services like water, pollination etc will indirectly contribution to poverty reduction

Building upon poverty reduction interventions carried out in Y1, during Y2, the project partners strengthened fruit tree productivity through building knowledge and capacity around grafting. 37 (21 men,16 women) community Trainer of Trainers were trained on fruit tree grafting (avocado and macadamia trees) by the Taita Taveta County Agricultural Extension Officers (see **Annex 17**). The skills gained were cascaded to other local communities reaching 521 households benefited through on-farm grafting of 5,431 fruit trees (Macadamia and Avocado) (see **Annex 18**). It is estimated fruit tree maturity timeline of between 2-5years depending on whether it is grafted or not (see <u>OxfarmKenya</u>). A mature macadamia tree can produce 180Kg of nut per season earning a farmer KSh.18,000 at KSh100/kg. Similar benefits will be derived from avocado fruit sale. In addition to income, we also see overall communal benefits through improved household nutrition.

We supported other Nature Based Enterprises which included Beekeeping, butterfly rearing, and tree nurseries where a total of 123 households earned KSh.1,063,360 from the sales of honey, butterfly pupa and seedlings (see **Annex 31**). An additional 233 Households benefited from chicken rearing (see **Annex 23**) aimed at improving the quality and productivity of poultry and therefore household well-being.

Improved water access to local community living adjacent to Vuria forest was achieved through installation of water tanks (see Annex 21). As a result at least 300 households will directly

benefit from water access and more beneficiaries though social institutions like schools and hospital.

All these activities will be increased and built upon in Yr 3

6. Gender equality and social inclusion

Although the project does not have any indictors or activities related specifically to gender equality the project has key principles of gender equality embedded within its design and delivery, namely:

- i) men and women have equal representation and say
- ii) restoration benefits will be equitably shared
- iii) restoration efforts will equitably compensate men and women.

In practise equal representation is somewhat complicated by the fact that the gender ratio in the CFAs and DABICO is currently about 2:1 (men:women) which aligns with Kenya's constitution whereby all forms of representation must involve at least one-third of each gender.

We have ensured that gender segregated data is captured in all meetings which are organised-for example 53 CFA members (33 men, 20 women) were trained on Participatory Forest Management, Leadership and Governance (see **Annex 1**); 69 community members (38 males & 31 females) were trained on tree nursery management (see **Annex 12**), as a result benefiting 117 community member (56 men, 61 women) (see Annex 31) to improve tree nursery management. Gender equality and social inclusion has been documented also in forest management activities for example in response to forest fires (see **Annex 30**) 62 members of Vuria CFA (35males and 27 females) actively participated in fire fighting. A total of 233 beneficiaries (123 men, 110 women) received 240 improved chicken breeds (see **Annex 23**)

Outside of immediately measurable levels of engagement it should be noted that improvements around water access are likely to be of most importance to women as traditionally the collection of water is an activity undertaken by women and/or children. By situating water storage – and in particular improved pipe networks – the amount of time taken to collect water will be significantly reduced as will the required to carry water long distances. This reduction in 'time poverty' will allow women and children to spend more time on other activities.

Please quantify the proportion of women on the Project Board ² .	The project steering committee has 6 members of which all are men
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 ³ .	2 of the 6 key partners are led by women and have substantial proportions of women within the senior leadership teams (RSPB and Birdlife) – although please note 3 of the other key partners providing specialist technical support are operating as NGO's or consultants with only 1 or 2 staff.

7. Monitoring and evaluation

Many of the outputs of the project are long term in nature given the time required for trees (both within forest restoration and agro-forestry) take time to establish and then to provide anticipated benefits. As such the current M&E focus is very much on the delivery of the specific and varied

² 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.

³ 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.

project activities and the 'Means of Verification' within the approved project Log Frame in many instances focus on comparative assessments at the start and conclusion of the project. This obviously limits the breadth of information available for reports such as this for some outputs and activities – but for the majority it should be evident that positive progress is being made.

As in country lead Nature Kenya are the partner with primary responsibility for the ongoing and day to day monitoring of the project. Nature Kenya has an internal monitoring and evaluation framework which guides on how projects delivery is assessed (see Annex 35 pg 5-6). This is done by the Program Support Manager supported by the Project Manager and Finance Manager with overall oversight of the Executive Director.

In the field sites Nature Kenya have two Taita based field staff (funded via the RSPB) who should assist in providing ongoing oversight and verification to the various project activities of partners.

The RSPB has undertaken two field visits during Yr2 as part of ongoing verification and monitoring and evaluation. Both visits were followed by detailed discussions with all project partners to ensure all involved are clear around identified issues or areas requiring improvement. Details of these discussions are formally minuted and followed up on to ensure progress. (see Annex 27-28). Similarly, an internal mid-term review was carried out assessing overall project delivery against both the log frame and broader expectations (see Annex 29). In particular this 'consultative' evaluation was undertaken with all key project partners involved in both field verification visits and detailed follow up meetings. As the evaluation shows the qualitative aspect of delivery beyond the specifics of the log frame are of key concern to the RSPB to ensure impact is maximised and also as this will help set the tone of how to build upon this project and hopefully develop compelling evidence to assist in the required scale up and continuation of the project.

8. Lessons learnt

This project in of itself is an amalgamation of many lessons learned from all involved parties based on experience gained from previous work in the Taita hills, similar montane restoration projects in Kenya and further afield.

Nature Kenya in partnership with the Taita Thrush/Apalis Species guardians (Dr Mwangi Githiru and Lawrence Wagura/African Natural Concern) and the RSPB have been working for many years in Taita and this project is based on scaling approaches of restoration developed and piloted over this time. Nature Kenya have delivered a range of related programmes across Kenya whilst PLI pioneered the restoration of native forests in Kenya via their work at Brackenhurst and the RSPB is delivering a comparable programme in St Helena – all of which contributed to the design of this project.

The accelerated delivery of Yr 1 activities necessitated due to Covid induced delays and disruption did however mean that work that had been planned to be delivered over 10 months ultimately had to be delivered in under six. Although this was achieved it did not allow much time for reflection or consultation between partners around how best to work together in maximising the opportunities presented by collaboration. Habits formed in Yr1 have been proven difficult to change during year 2 and as reflected in the mid term evaluation clear opportunities for improvement have been identified and communicated to all partners.

In particular investing the time to draw on the strengths and expertise of other partners is something that will be pushed hard during Yr 3 as such investment has proven to be extremely beneficial when considering the broader qualitative aspects of the project. As an example, with the assistance of PLI the two nurseries set up under this project are producing seedlings from 46 different species compared to the 16 species being produced by the other community led nurseries. The training services provide by PLI have now been adjusted to include teams involved in these nurseries and equally importantly local staff from KFS to assist in highlighting the importance of producing as diverse a range as possible of indigenous species.

Advocacy at both a national and local level has also presented itself as a clear area requiring additional focus and as such having indicators related to this within the formal project log frame would have been extremely useful to guide activities. This omission has been recognised and

efforts will be made to formalise how this work can be prioritised over the remaining period of the project.

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

Issues raised within last years annual report are as follows;

Recommendation 1: Include narrative description on progress towards outputs for all outputs (including Output 5) in the main report to ensure that all outputs such as output 5 are included.

Comment: Now included – this was only omitted last year as previous feedback had suggested Output 5 were primarily project management functions and should probably not have been included within the log frame

Recommendation 2: Provide as annexes minutes for meetings organised to manage / plan and monitor project progress.

Comment: Now included (see Annex 27-28). Quarterly meetings fell somewhat out of sync given the delayed start to the project. The 2 programme visits undertaken during Yr2 have proved invaluable in being able to have more nuanced and specific project discussions.

Recommendation 3: Develop a M&E system for the project ensuring indicating the extent to which measured outcomes and impacts can be attributed to the project.

Comment: See response submitted with half year report (see Annex 36)

Recommendation 4: Highlight some of the key lessons learnt from use of the of GIS and satellite imagery for habitat assessment based on the methodology and modelling used to assess and identify suitable Taita Apalis habitats across Taita Hill Forest.

Comment: In Y1, we piloted use of GIS satellite imagery in identifying suitable habitat for the Taita Apalis. Results based on ground truthed data, demonstrated a high level of accuracy in Taita Apalis occurrence Vs Habitat suitability. In this regard, using this methodology, up scaling it to the entire project area was done (see Annex 35)

Discussions are ongoing around how to use GIS to better tell the story of the threat, opportunities, and priorities within recovery of the Taita forests and to fully utilise the mapping data collected.

Recommendation 5: Develop an exit strategy for all activities initiated by the project.

Comment: Discussions have been initiated in Feb 23 around 'next steps' for the project. All partners are in full agreement that although an important contribution this project will not address the issues facing the forests of the Taita Hills or the rare endemic species found here. As such the project team is already considering options and opportunities to access longer term support to ensure the work can continue and be scaled up. As part of this work will be undertaken during the next year to develop a clear long term vision of what might be possible in Taita and the priority steps to make this possible.

10. Risk Management

No new risks have emerged over the past 12 months.

11. Other comments on progress not covered elsewhere

Origional plans around the process of setting up the water balance study which would provide a baseline to measure changing water retention of the Taita landscape as the native cloud forest recovers have had to be adapted. During the assessment visit of June/July 2022 it became evident that the majority of streams relevant to the project areas could not be monitored in the anticipated manner. Many are extremely shallow or dry up seasonally with others compromised via dams or other means of holding or diverting water which complicates basic water measurement approaches. With the anticipated methods of generating data not appropriate

alternative approaches will need to be used. These are documented in the Taita Hills Water Resource Desk Study Report (Annex 26) but in summary the study will now focus on using available climate data combined with a pilot study to try and determine how much of the water captured by the indigenous forest is from cloud/mist compared with rainfall.

A national logging ban has complicated negotiations with KFS to have further areas of exotic plantation land cleared. However KFS have a national allocation for exceptions to this ban and efforts will be made to secure permissions to clear a few key areas which would provide connectivity between forest fragments or where natural regeneration is occurring and can be maximised through the removal or felling of the remaining exotics.

12. Sustainability and legacy

During Y2 project implementation the project contributed to overall sustainability and legacy-we progressed towards finalisation of 3 Participatory Forest Management Plans (see Annex 1-5). In addition we mainstreamed lessons from the project into county policy process (see **Annex 15**- recommended prioritisation CFSP and **Annex 32**- Memoranda to Taita Taveta CIDP 2023-2027). Such policy and legislation should simplify the mainstreaming of restoration programs in the county.

Furthermore, Kenya launched National Tree Growing Restoration Campaign targeting to grow 15billion trees in 5 years (see Annex 32), that recognised the contribution of restoration programs that Nature Kenya is implementing. These programs are aligned with national forest and landscape restoration action plan responding to AFRI 100 and Bonn Challenge, that Kenya has target to restore 5.1million ha of degraded landscapes. As a result of this national movement of forest and landscape restoration, it will ensure sustainable exit strategy galvanised by strong community institutions in place supported by this project.

Within the project team discussions were initiated during the last programme/monitoring visit around the opportunities and needs for continuation of the programme as there is much more work to be done to ensure both the viability of Taita's forests and also to improve livelihoods and other key requirements for the communities living adjacent to the forests. The RSPB is already investing time and capacity in identifying future possible financing mechanisms to enable the work to continue and to be scaled up.

13. Darwin Initiative identity

We ensured that Darwin Initiative identity was publicised and promoted throughout the project implementation phase. In all presentations done, at community, county, national and global level, Darwin Initiative logo was present. In all published documents, Darwin Initiative was branded (see <u>Link</u>, <u>Link</u>). In Nature Kenya's website- Darwin Initiative is included as support to Nature Kenya's conservation program (<u>Link</u>).

An article was prepared for the Darwin newsletter connecting the work under this project with other related cloud forest restoration in St Helena being delivered by the RSPB and partners with funding from FCDO and building on previous projects.

14. Safeguarding

Has your Safeguarding Policy been updated in	Yes /No	
Have any concerns been investigated in the p	Have any concerns been investigated in the past 12 months	
Does your project have a Safeguarding focal point?	Yes/No The RSPB had investigations manage For the project Jake Zampoint	0

Has the focal point attended any formal training in the last 12 months?	Yes/No Internal RSPB safegua	arding training
What proportion (and number) of project staff training on Safeguarding? Has there been any lessons learnt or challeng Please ensure no sensitive data is included w No	ges on Safeguarding in th	Past: 0% Planned: 0% ne past 12 months?
Does the project have any developments or activities planned around Safeguarding in the		

Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify.

Not specifically. Birdlife have recently produced Safeguarding guidance for partners which has been shared with Nature Kenya as a BirdLife partner, however this does not currently include any training materials at this time. Investigations have been made around the possibility of sharing the RSPB's internal training modules with partners, but this is unfortunately not possible due to contractual limitations with the provider/developer. Nature Kenya and others have been made aware of free online courses that can be accessed via Kaya

A focus on building capacity around safeguarding was not included in project design, plans or budgets so the scope to address this topic in any meaningful way is somewhat limited.

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	147,795	147,796	0%	

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.		



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).

Cross learning and lesson sharing between two similar projects;

The Taita Hills Forest project and a project being delivered in St Helena work currently funded by FCDO (building upon work delivered with Darwin Plus support (DPLUS051 and DPLUS103)); have been working to develop opportunities for. technical exchange on cloud forest monitoring. Replication of lessons from St. Helena on topics such as undertaking water balance studies is being done within Taita Hills Forest project and exchange visits are being planned for this year. Although geographically distant, both projects demonstrate the benefits of healthy native cloud forests for both nature and people. A detailed article was published in the March 2023 edition of the Darwin Newsletter pg 11-12 (see Link)

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

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2023	Actions required/planned for next period
Impact Cloud forest habitat is restored at a lands major benefits to both wildlife and people hill ranges throughout Kenya.		Steps towards sustainable forest management was achieved through capacity strengthening of Community Forest Associations in Taita hill(see Annex 1-7); Restoration of 22ha of degraded forest areas was achieved in Y2 (Annex 10 pg 4, & Annex 13);	
Outcome The cloud forest fragments that currently survive in Taita are protected and expanded through a combination of conservation and livelihood interventions, safeguarding their unique biodiversity and enhancing local water security	0.1 Land cover assessment shows area of mature cloud forest stabilised over the course of the project at current 500 ha 0.2 Cloud forest habitat is re-generating over an additional 60 ha by the end of the project 0.3 Twice-yearly biodiversity surveys over the course of the project show that populations of key species at least remain stable in existing forest fragments and increase measurably in restoration areas 0.4 The livelihoods of c.3,600 people (from c.600 households) are enhanced by the end of the project through the provision of crop trees for agroforestry from Year 1 baseline 0.5 The livelihoods of c.1,500 people (from c.250 households) are enhanced by the end of the project from Year 1 baseline through the provision of water	 0.1.We carried actions towards stabilising area of mature forest through strengthening sustainable forest management capacity—supporting review of three Participatory Forest Management Plans (see Annex 5). Implementation of the management plans was through forest restoration (Annex 13), forest protection (Annex 7) and monitoring. Safeguarding of 1.4ha of suitable forest habitat was achieved through land purchase (Annex 9). Additional threat removal actions were carried out by increasing on-farm productivity through agro-forestry (see Annex 18) 0.2. Targeting to restore additional 60ha we restored 22ha of degraded forest areas through enrichment planting with 44 indigenous tree species (Annex 10 pg 4, & Annex 13) and active 	equipment to assess the mist capture and provisioning capacity of the Taita Hills water tower We will enhance livelihoods initiatives

tanks and at least two other low-cost, high-impact interventions

0.6 Initial findings obtained during the set-up of a water balance study using real, participatory, local data indicate that forest restoration and crop tree planting will lead in the longer term to improvements in Taita's 'water tower' function

- maintenance restoration areas through weeding and extraction of exotic tree. As a result of this direct restoration efforts we have achieved 42ha of restored habitat by end of Y2-(see Link)
- **0.3.** Biodiversity surveys were carried out over the course of Y2 assessing trigger bird species among others-Results show that a total of 7248 birds representing 56 species were detected during the point count surveys: 2606 individual representing 51 species in Ngangao, 1354 individuals representing 31 species in Mbololo, 2182 individual Representing 38 species in Chawia and 1106 individual representing 36 species in Vuria/Msidunyi (see Annex 25). addition, community-led In biodiversity monitoring survey was carried out documenting a total 28 species of birds- 11 forest specialist species (FF),8 forest generalist (F) species and 9 forest visitor species (f) in different forest vegetation types.
- 0.4. Targeting to reach 600 household through community livelihoods were enhancement intervention through crop trees, by end ofY1 at least 890 households were beneficiaries' variety of crop trees. To enhance fruit trees productivity 521 households benefited through on-farm fruit tree grafting of 5,431 trees (Macadamia and Avocado) (Annex 18). An additional 3,036

fruit plant species of 5 different fruit species variety were raised model tree nurseries and distributed to local community (**Annex 10** *pg 5*). These fruit plants variety include, Tree Tomato, Red Plum, Goose Berry, Purple Passion Fruit, and Golden Passion Fruit.

- **0.5.** Targeting to enhance livelihoods of 250houholds through provision of water tank and at least two other lo costs-high impacts intervention we improved community water access by installing 30,000 litre water storage tanks tapping water from 2 permanent springs in Vuria forest, benefiting at least 300 households living adjacent to Vuria forest (Annex 21). Additional livelihood initiatives strengthened where 117 households from 8 community groups were able to earn KSh.798,560 in Y2 from sale of tree seedlings (Annex 31). By end of Y2 the community groups had propagated 72,058 tree seedlings of 18 indigenous tree species (see Annex 11). 233 households received 240 improved chicken breeds aimed at improving household well-being, diversifying household's initiatives that support in adaptation to climate change (Annex 23). Bee keeping nature based enterprise was enhanced through training of community groups in beekeeping husbandry (Annex 22).
- **0.6.**We carried out desktop and field assessment on water balance towards achieving. A total of 22

	1.1 The Participatory Forest Management Plans (PFMPs) that have been written to guide work in and around the surviving fragments are reviewed and updated as necessary in Year 1, in consultation with the four Community Forest Associations (CFAs) involved in this work, DABICO, the Kenya Forest Service (KFS) and the Taita Taveta County Government 1.2 The forest protection capacity of the CFAs is enhanced by the end of the project from Year 1 baseline through the provision of training. 1.3 Additional, practical support is provided to the CFAs to enable them to develop and implement forest conservation action plans by the end of the project	management plan) 1.2. The forest protection capacity of the 53 CFA members (33 men, 20 wome SUNDIFU through training on Participate Governance in training workshop held training offered by the Kenya Forest Service planning review teams (17 males and 10 Wesu-Mbili, and Susu-Ndiwenyi-Fururu trained on participatory forest resource and 1.3. As a result mentorship and supporting forest, implementation of forest consessupporting forest restoration activities to forest protection through response to fire in lyale and Chawia forest and fighting find Annex 30), and strengthening forest sector community forest scouts) We facilitated consultative	With technical support from KFS forest ments was done (Annex 4-request letter). As a result, each of the 3 CFAs have ex 5- example draft Ngangao Forest local CFAs was through training- where en) from NGACOFA, IYAWEMBI, and ony Forest Management, Leadership and on 6th-11th June 2022 took part in the vice (Annex 1). 27 members of the local of females) representing Ngangao, Iyale-Community Forest Associations were and livelihood assessment (Annex 3). Out provided to the CFAs in Taita Hills invation actions was recorded-through through tree growing (see Annex 13), at threat—establishment forest fire breaks ires Chawia, Iyale and Vuria forest (see surity (Annex 7- CFA request on training).
Year 1. (PFMPs currently in draft and new Vuria/Msidunyi and Chawia; and complet fragments Iyale-Wesu-Mbili and Susi-Ndi	e but needing updating for forest	meetings/forums of 3 Community Forest Associations (CFA) to review Participatory Forest Management Plans (PFMP). As a result, the 3 CFAs sent PFMPs revision/updating request letters to Kenya Forest Service (KFS)	submit them to KFS

		(Annex 2a-IYAWEMBI letter, Annex 2b-NGACOFA Letter, Annex 2c-SUNDIFU letter). NGACOFA, IYAWEMBI, and SUNDIFU Community Forest Associations convened site based meeting coordinated by Kenya Forest Service to restructure CFA management committee guided by new revised CFA national guidelines. These CFA committees would be responsible to coordinate the revision and updating of the PFMPs (Annex 3). 27 members of the local planning review teams (17 males and 10 females) representing Ngangao, lyale-Wesu-Mbili, and Susu-Ndiwenyi-Fururu Community Forest Associations were trained by Kenya Forest Service on participatory forest resource and livelihood assessment in January, 2023 (Annex 4- Request Letter from CFC to KFS CCF on technical support)	
1.2	Complete organisational capacity assessments of four CFAs in Year 1.	Organization capacity assessment of four CFAs was carried out in Y1. As a result in Y2, we strengthened the capacity of 3 CFA management committees members; 53 CFA members (33 men, 20 women) IYAWEMBI (forest fragments; lyale-Wesu-Mbili), SUNDIFU (Forest fragments; Susi-Ndiwenyi-Fururu) and from NGACOFA (Ngangao Forest fragment) through training on Participatory Forest Management, Leadership and Governance in training workshop held on 6th-11th June 2022 took part in the training facilitated by the Kenya Forest Service (Annex 1).	Continued mentorship of the CFAs
1.3	Produce capacity enhancement plans for four CFAs in Year 1.	Completed in Y1.	

1.4 Update the PFMPs for the lyale-Wesu-Mbil and Susu-Ndiwenyi-Fururu fragments following consultation with community groups and other stakeholders in Year 2.	Updating of the PFMPs is on-going integrating updated data on livelihoods (Annex 5- Sample Reviewed PFMP of Ngangao CFA). The PFMPs include standard operating procedures that facilitate cooperation between CFAs, KFS and Taita Taveta County Government including monitoring plans to support the protection of the forest fragments.	Complete updating of the PFMPs
1.5 Develop Terms of Reference for Community Scouts in Year 1 (i.e. community members who will act as 'rangers' to help protect the forest).	Completed in Y1	
1.6 Develop and provide training materials and equipment for Community Scouts through the community groups (four CFAs and DABICO) in Year 1.	Completed in Y1	
1.7 Develop Standard Operating Procedures to facilitate cooperation between community groups and KFS, including a joint patrol plan, to enable more monitoring support of protected forest fragments by end Year 2.	Vuria and Chawia CFAs held community consultations where they identified and nominated 21 community scouts (Annex 6- Meeting minutes on selecting community scouts). The names were forwarded to relevant County Department and Kenya Forest Service. Vuria CFA and Chawia CFA have officially written request letter to the relevant department and agencies to support them with technical training for the community scouts (Annex 7-Request letter from Vuria CFA to KFS on technical support).	Collaboratively with KFS and Taita Taveta County Government we will catalyse roll out of the operating procedures by strengthening CFAs through training of the scouts among other actions outlined in the PFMPs which include monitoring and forest protection
1.8 Run at least 10 training sessions (e.g. on Participatory Forest Management, institutional governance, financial book-keeping, etc) and other meetings with community groups (CFAs & DABICO) over Years1 and 2.	In Y2-training sessions carried out were on Participatory Forest Management, Leadership and Institutional Governance of 3 CFAa where 53 CFA representatives (33 men, 20 women) were trained between 6 th -11 th June 2022 (see Annex 1). 27 members of the local planning review teams (17	Informed by capacity development plans- we aim to undertake additional training of CFAs and SSG in Y3.

		males and 10 females) representing Ngangao, Iyale-Wesu-Mbili, and Susu were also trained on forest resource mapping by KFS contributing to PFM proccess	
1.9 Repeat organisational capacity a the project.	ssessment for four CFAs at the end of	Completed in Y1	We will carry out capacity assessment of CFAs in Taita Hills Forest to guide capacity building plans
Output 2 Output 2: Restoration of cloud forest habitat is initiated around key existing fragments	2.1 Detailed forest restoration plans for the areas surrounding the lyale and Vuria/Msidunyi fragments are developed by the end of Year 1	or 2.1. In consultation with Plant Life International we refined the forest restorations and restoration approaches for the targeted forest areas (Anne st providing details of recommended restoration best practice.	
	2.2 High-priority habitats for Critically Endangered species are identified and mapped by Year 2 for targeted land purchase beyond the project to enable their restoration and/or secure their future	in Msindunyi/Vuria forest measuring 1.4ha by entering into a legal sale agreer	
	2.3 Two native tree nurseries are established by the end of Year 1, producing a total of 60,000 seedlings by the end of Year 3 2.4 At least 40 people (of whom at least 35% are women) from four different CFAs are trained to manage these nurseries by the end of Year 1, and at least another 40 people (≥35% women)	2.3. Capacity of two model tree nurseries as community field learning seedlings enhanced collaboratively with Plants for Life International (PLI) and African Concern. As a result 9679 tree seedlings of 46 indigenous tree s	
	are trained to carry out restoration activities by end of Year 2 2.5 Restoration work is implemented over an area of 20 ha per year (involving, as necessary, clearance of invasive or other non-native vegetation, enrichment planting with native tree seedlings and any other silvicultural	were carried out to enhance overall capa Hills (Annex 12). 15 community represe PLI Botanical Garden in Brakenhurst to le tree nursery management and seed hand	emales) of community led tree nurseries acity of locally led tree nurseries in Taita entatives participate in exchange visit to earn more on tree seedlings propagation,
	measures) 2.6 A Taita hills forest restoration plan	and Natural African Concern a total are forest areas of Iyale, Msindunyi/Vuria, N	a of 22ha of targeted 20ha of degraded

	ide post-project activities is loped by the end of the project and	Annex 13).	
integr	rated into CFA/KFS joint forest agement programmes	2.6. Lessons generated by implementation of the Taita hills forest restoration plan will guide post project activities. Overall, these lessons have been integrated into in Taita Taveta county policy processes (Annex 15 Comments on Taita Taveta CFSP) as well as the National FOLAREP Action Plan (Annex 14-Workhop on FOLAREP monitoring framework).	
2.1 Develop detailed forest restoration plans for lyale-Wesu-Mbili and Vuria/Msidunyi, in consultation with communities, landowners and local government by end Year 1.		In collaboration with project partners Plants for Life International (PLI), Kenya Forest Service (KFS) and Taita Taveta County Government, we refined the forest restoration plans and restoration approaches for the targeted forest areas (Annex 8- <i>Update to the forest restoration action plan</i>) providing details of recommended site restoration best practice.	We will continue to pegatiate with
2.2 Advance progress towards purchase of alre from existing baseline (10 ha owned/leased by I throughout the project [RT co-funding].		With co-finance from RFT, we advanced land purchase of one identified parcel in Msinduyi area by entering into a legal sale agreement to secure an additional 1.4ha of suitable forest habitat for the Taita Apalis (Annex 9- Signed land sale agreement).	We will continue to negotiate with landowners within the priority habitat area to secure more areas through land purchase
2.3 Identify and map further priority land parcels 1.	·	Following methodology defined in Y1, high priority habitat for Critically Endangered species-Taita Apalis were identified and mapped using GIS modeling (Annex 34) which constituted 9.5% of the project area	Prioritise identification of additional landowners that fall within the suitable habitat area or key connecting corridors
2.4 Develop a site management plan for the 10 Nature Kenya in Year 1 and implement manage		Site management plan was completed in Y1. During Y2 we carried out routine forest patrols which averted forest destruction especially as a result of forest fires (Annex 30) and forest restoration activities (see Annex 13-Msindunyi restoration)	Implementation of actions of the management which include, patrolling, forest restoration and biodiversity monitoring
2.5 Build two native tree nurseries to provide se in Year 1, and purchase seeds for these nurseri	•	To enable community-led forest restoration 8 community led tree	Collaboratively monitor and mentor community led tree nurseries to

	nurseries were supported with support of tree nursery materials i.e. potting tubes, farming equipment and training (Annex 19) and enhanced capacity for Kenya Forest Service tree nursery (see Annex 18- Acknowledgement letter from KFS on support provided). To enable learning and skills sharing on tree seedling production- two model tree nurseries were established with a total of 7,571 seedlings representing 44 indigenous tree species (see Annex 21). To complement and augment the restoration effort through indigenous tree seedling production to meet the restoration targets- we enhanced the capacity of the local Kenya Forest Service-led tree nursery with equipment Follow-up site-based training and mentorship on tree seedling production was carried out led	enhance tree seedling production
	by KFS and TTCG- documenting a total of increased seedling production up to 46,000 indigenous seedlings (Annex 19- report follow-up tree nursery survey). During the reporting period, 80 community members participated in training on tree growing demonstrated in the model tree nurseries.	
2.6 Create a database of species and number of seedlings in Year 1 to monitor nursery outputs over the course of the project.	Capacity of two model tree nurseries as community field learning site was enhanced collaboratively with Plants for Life International (PLI) and Natural African Concern. As a result 9679 tree seedlings of 46 indigenous tree species varieties different species were propagated (see Annex 10 pg 9-Summary of tree species propagated). Guided by the model	

2.7 Provide 8 training events for member these nurseries and carry out restoration		tree nurseries, 8 community-led tree nurseries established in different forest fragments in Taita Hills Forest, capacity was strengthened resulting to propagation of a total of 72,058 tree seedlings of 18 indigenous tree species (see Annex 11). Most of these seeds were collected from the existing forest 8 site based training reaching 69 community members (38 males & 31 females) of community led tree nurseries were carried out to enhance overall capacity of locally led tree nurseries in Taita Hills (Annex 12). 15 community representatives participated in exchange visit to PLI Botanical Garden in Brakenhurst to learn more on tree seedlings propagation, tree nursery management and seed handling (Annex 10 pg 8).	Training and mentorship of 8 community led tree nurseries and other community members to enhance forest and landscape restoration
2.8 Carry out clearance of invasive non-native vegetation and/or planting of native trees as required in sites identified in the restoration plan.		Clearance of invasive non-native vegetation and planting of native trees was achieved. We managed to restore 22ha of degraded forest areas by growing 16790 seedlings representing 44 indigenous tree species (See Annex 10 pg 4 and Annex 13). These were grown in Chawia, Fururu, in Msidunyi/Vuria and lyale forest fragments. All restoration sites were maintained through spot weeding and removal of exotic tree species seedling of Acacia mearnsii and Eucalyptus saligna.	We will support maintenance of research restoration sites by clearing seedling exotic tree species Negotiations will be held with KFS to attempt to get further areas of exotic species cleared
2.9 Develop a broader, longer-term resto in Year 3.	ration plan to guide post-project activities	Planned for Y3	
Output 3: Livelihoods of local communities are enhanced through climate resilience initiatives including agro-forestry,	3.1. A detailed livelihood enhancement plan is developed in consultation with communities and landowners by end of Year 1, linking provision of livelihood	3.1. Informed by detailed livelihood enhallivelihood benefits linked with forest pro (Annex 31). This includes community beekeeping ecotourism and butterfly rear	led tree nurseries, chicken rearing,

improvement of water storage infrastructure and diversification of income sources	benefits to support for forest protection and restoration efforts 3.2 Two crop tree nurseries (e.g. fruit, nuts, etc) are established in Year 1 to provide seedlings for agro-forestry 3.3 At least 15 crop trees of at least four species are provided to 300 households per year in Years 2 and 3 (giving a total of ≥9,000 trees and c.3,600 people), diversifying production and increasing on-farm tree cover in the project area 3.4 Two 50,000-litre water tanks are installed by the end of the project to provide water during the dry season, benefiting 1,200 people (including those using two schools and a dispensary) 3.5 Two additional livelihood initiatives are developed and implemented by the end of the project, in line with the livelihood enhancement plan, benefiting between 4-6 women's and youth groups and c.600 people from c.100 households (of whom c.50% will also benefit from the water tanks above)	species of 5 different fruit species were community led tree nurseries were supported forestry tree seedling. 37 (21 men,16 were trained on fruit tree grafting (avoc Taveta County Agricultural Extension Off 3.3. By end of Y1 890 household bene Y2, 521 households benefited through (Macadamia and Avocado) by end of Y2 tree cover and productivity. 3.4. Installing 30,000 litre water storage spring in Vuria forest was done end households living adjacent to Vuria forest	gs progressed. A total of 3,036 fruit plant be propagated. To augment this effort 8 oported to enhance production of agrowomen) community Trainer of Trainers ado and macadamia trees) by the Taita icers (Annex 17). Fitted from agro-forestry tree varieties. In a on-farm grafting of 5,431 fruit trees (Annex 18) aimed at increasing on-farm transing water accessibility to at 300 training water accessibility to at 300 training water and implemented which are developed and implemented which
3.1 Complete a targeted baseline assess project area, taking account of previous i economic data and community input, to libenefits under the project to support for f by end Year 1	initiatives and using existing socio- link provision of additional livelihood	Completed in Y1	End of project survey will be carried out in Y3
3.2 Develop a detailed livelihood enhance communities and landowners in Year 1, i	•	Completed in Y1	
3.3 Build two crop tree nurseries to provious forestry in Year 1, and purchase seeds for		Two crop tree nurseries were established by end of Y1 (Annex 10). In	

•	Y2, propagation of agro-forestry tree seedlings progressed.	
3.4 Create a database of species and number of seedings in Year 1 to monitor nursery outputs over the course of the project.	Database of species and number of seedling has been maintained and updated. In Y2 a total of 3,036 fruit plant species of 5 different fruit species were propagated These include, Tree Tomato, Red Plum, Goose Berry, Purple Passion Fruit, and Golden Passion Fruit (see Annex 10 pg 5).	Maintain the species data bases
3.5 Establish two agro-forestry demonstration plots in Year 2.	Two demonstration agro-forestry plots were established to provide community learning on management of agro-forestry on-farm activities. A total of 13 species of fruit trees have been propagated in the demonstration plots	
3.6 Facilitate meetings with Chief and CFAs in Year 1 to determine beneficiaries of agro-forestry initiative and plan a phased implementation for this initiative.	Completed in Y1	
3.7 Provide agro-forestry training and seedlings to CFAs in Years 2 and 3, using existing 'field schools' and the demonstration plots for the training.	37 (21 men, 16 women) community Trainer of Trainers were trained on fruit tree grafting (avocado and macadamia trees) by the Taita Taveta County Agricultural Extension Officers (Annex 17). As a result of the training 521 households benefited through on-farm fruit tree grafting of 5,431 trees (Macadamia and Avocado) (Annex 18).	We will collaborate with County agricultural extension officers to mentor and train local community on agroforestry tree grafting
3.8 Construct or purchase and install two community water tanks in easily accessible locations determined by community groups by the end of the project.	Installing 30,000 litre water storage tanks tapping water from 2 permanent springs in Vuria forest was done enhancing water accessibility to at 300 households living adjacent to Vuria forest (Annex 21).	We will complete setting up of other community water tanks collaboratively with Taita Taveta County Government
3.9 Implement two additional livelihood initiatives in line with the enhancement plan developed under Action 3.2 by the end of the project.	Additional livelihood initiatives were developed and implemented- which included beekeeping, poultry rearing and ecotourism (see Annex 23 & Annex 31).	Target to roll out the second livelihood initiative as guided by the enhancement plan

3.10 Establish mechanisms for generating income from the agro-forestry and other livelihood enhancement schemes through CFAs in Year 3, to sustain these schemes beyond the end of the project.		Planned for Y3	
3.11 Complete evaluation assessment of	•	Planned for Y3	
enhancement plan at the end of the proje			
Output 4: The conservation and livelihood impacts of the project are monitored and evaluated	4.1 Twice-yearly surveys are carried out of key endemics (e.g. Taita apalis and thrush) and other species selected for their indicator value, both in surviving forest fragments and in restoration sites	territories were documented during the 2022-2023 breeding season (Msidunyi 4 Ngangao 9 and Vuria 41). Observations indicate that birds in Msidunyi and Vuria appeared to have more nesting attempts following nest failures compared to those in Ngangao (Annex 25 pg 6). The Taita Thrush was encountered in Stations in Chawia, 100 in Mbololo (out of 200) and 39 in Ngangao. The thrush was encountered in 86 stations during Session 2 (Annex 25 pg 4). 4.2. Tree cover with the project landscape was assessed at the start of the project (9% of the land use is under indigenous tree cover, 26% under exotic tree cover and 18% under crop area was determined. The total area under tree cover was 35%) Y1 and reported against. End of project assessment will be carried out in Y3. 4.3. Livelihood assessment was carried out at the start of the project Y1. End of project assessment will be carried out in Y3. 4.4. Working in collaboration with experts Kenya Water Towers Agency and visiting hydrologist consultant from Arctium, a field visit was organised between	
	4.2 Tree cover (both native and crop) is assessed across the project landscape at the start and end of the project4.3 Livelihood assessments are carried out at the start and end of the project		
	4.4 A long-term water balance study is set up to monitor the impacts of forest restoration and agro-forestry on Taita's 'water tower' function		
	4.5 The impacts revealed by this monitoring work are evaluated and the findings are reported to Darwin		
4.1 Carry out biannual (twice/year) surveys of key endemics (e.g. Taita apalis and thrush) and other species selected for their indicator value in surviving forest fragments and restoration sites.		Biodiversity survey carried out of endemic species. A total of 54 Taita apalis territories were documented during the 2022-2023 breeding season (Msidunyi 4, Ngangao 9 and Vuria 41). Observations indicate that birds in Msidunyi and Vuria appeared to have more nesting attempts following nest failures compared to those in Ngangao (Annex 25 pg 6). The Taita Thrush was encountered in 7 stations in Chawia,	Undertake bi-annual bird surveys and Taita Apalis population monitoring

		100 in Mbololo (out of 200) and 39 in Ngangao (Annex 25 pg 4).	
4.2 Complete assessment of tree cover (both native and crop) across the project landscape at the start and end of the project		A completed in Y1 where land use land cover was determined - 9% of the land use is under indigenous tree cover, 26% under exotic tree cover, and 18% under crop area was determined. The total area under tree cover was 35%.	Carry out follow up tree cover assessment
4.3 Lay foundations for long-term programme to monitor impacts of forest restoration and agro-forestry on Taita's 'water tower' function		Baseline metrics of forest function as a water tower were assessed where 22 springs from 3 catchments areas of Taita hills forest were assessed (see Annex 26). Foundation of long term monitoring of water tower function has been set up methodology defined (See Annex 26 pg 35-36).	Roll out water monitoring equipment to assess water tower function
 4.4 Complete a detailed livelihoods assessment of the communities in the project area at the start and end of the project. 4.5 Complete evaluation of project's impact revealed by repeated monitoring work and report findings to Darwin in final project report. 		Start of project livelihood assessment achieved in Y1. Planned for Y3	End of project livelihood assessment to be carried out in Y3
Output 5: The project is managed effectively and efficiently	5.1 A start-up meeting involving all key project stakeholders is held within the first three months of the project and a plan is agreed for monitoring project progress 5.2 The core project team meets every quarter to discuss progress made and plan forthcoming work 5.3 The wider project team and relevant managers meet annually to share findings among all partners and discuss plans for the following year 5.4 An internal evaluation is undertaken at the mid-point of the project	5.2. Core-project team met during period of 27 th June 2022 to 2 nd July 2 29 th January to 8 th February 2023. Project partner meetings were held on 2022 (Annex 27) and 6 th Feb 2023 (Annex 28) discussing overall implementation status and reviewers' feedback and approaches to add comments as well as monitoring overall project implementing status. 5.3. Wider project team has met annually together with other project partr Annex 27 and Annex 28), where discussions of following year has been held on 2022 (Annex 29).	

	5.5 A second evaluation is undertaken at the end of the project using an external consultant 5.6 Technical and financial reports are provided to Darwin as required 5.7 A 'sustainability plan' is developed by the end of the project to underpin delivery of the post-project restoration plan created under Action 2.6, for example by identifying additional financing mechanisms		
5.1 Hold a project start-up meeting and a	gree a plan for monitoring project	Completed in Y1	
progress in Q1 of Year 1 5.2 Hold quarterly meetings of the core project team to discuss progress made and plan forthcoming work		Quarterly virtual meetings of the core project team were held in Y2. This included physical meetings held during the period of 27 th June 2022 to 2 nd July 2022 and 29 th January to 8 th February 2023 (see Annex 27 & Annex 28).	Target to have quarterly meeting as planned
5.3 Hold annual meetings of the wider project team and managers to share findings among all partners and discuss plans for the following year		Project partner meetings were held on 4 th July 2022 (Annex 27) and 6 th Feb 2023 (Annex 28) discussing overall project implementation status and reviewers' feedback and approaches to addressing comments as well as monitoring overall project implementing status	Carry out at least 1 site visit with the project team in Y3.
5.4 Undertake an internal mid-term evaluation in Year 2		Internal midterm evaluation was carried out in Y2 (see Annex 29)	
5.5 Undertake a final evaluation using an external consultant in Q4 of Year 3		Planned for Y3	
5.6 Submit technical and financial reports	s to Darwin as required	Y2 progress report together with financial report submitted as scheduled	

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

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions	
Impact (max 30 words):				
Cloud forest habitat is restored at a lar tower' hill ranges throughout Kenya.	ndscape scale throughout Taita, bringing	g major benefits to both wildlife and peop	ple and providing a model for 'water	
[30 words]				
Outcome (max 30 words):				
The cloud forest fragments that currently survive in Taita are protected and expanded through a combination of conservation and livelihood interventions, safeguarding their unique biodiversity and enhancing local water security [30 words]	0.1 Land cover assessment shows area of mature cloud forest stabilised over the course of the project at current 500 ha 0.2 Cloud forest habitat is regenerating over an additional 60 haby the end of the project 0.3 Twice-yearly biodiversity surveys over the course of the project show that populations of key species at least remain stable in existing forest fragments and increase measurably in restoration areas 0.4 The livelihoods of c.3,600 people (from c.600 households) are enhanced by the end of the project through the provision of crop trees for agroforestry from Year 1 baseline	O.1 Report on findings from land cover assessment at end of project, including maps and photographs O.2 As above – report on findings from land cover assessment at project end O.3 Reports on findings from biodiversity surveys O.4 Reports on findings from livelihood assessments at the start and end of project (but NB most benefits from agro-forestry will accrue post-project, as the trees' productivity will increase as they grow)	Our Theory of Change proves to be correct, so that achievement of the Outputs described below does indeed yield the expected long-term benefits both for the forests of the Taita Hills and for the poor people who live around them In particular, enhancement of livelihoods is effective in reducing dependence and therefore pressure on the forests Drought and/or fires do not prevent the delivery of our Outputs from leading to our Outcome	
	0.5 The livelihoods of c.1,500 people			

	(from c.250 households) are enhanced by the end of the project from Year 1 baseline through the provision of water tanks and at least two other low-cost, high-impact interventions 0.6 Initial findings obtained during the set-up of a water balance study using real, participatory, local data indicate that forest restoration and crop tree planting will lead in the longer term to improvements in Taita's 'water tower' function	O.5 As above – reports on findings from livelihood assessments at start and end of project O.6 Report on findings from water study set-up	
Outputs: 1 Protection of all surviving fragments of cloud forest and edge habitat in Taita is strengthened	1.1 The Participatory Forest Management Plans (PFMPs) that have been written to guide work in and around the surviving fragments are reviewed and updated as necessary in Year 1, in consultation with the four Community Forest Associations (CFAs) involved in this work, DABICO, the Kenya Forest Service (KFS) and the Taita Taveta County Government	1.1 Reviewed/updated PFMPs	Local communities and the county government remain supportive of forest protection and committed to delivering the PFMPs Covid-19 restrictions do not tighten to the point where they stop the project team promoting and supporting forest protection effectively
Darwin Initiative Main Appual Report Template 2023	1.2 The forest protection capacity of the CFAs is enhanced by the end of the project from Year 1 baseline through the provision of training. 1.3 Additional, practical support is provided to the CFAs to enable them to develop and implement forest conservation action plans by the end of the project	 1.2 Records of training and advisory sessions 1.3 Outputs resulting from this support – e.g. Standard Operating Procedures for the CFAs and Terms 	

			of Reference for Community Scouts to underpin implementation	
2	Restoration of cloud forest habitat is initiated around key existing fragments	2.1 Detailed forest restoration plans for the areas surrounding the lyale and Vuria/Msidunyi fragments are developed by the end of Year 1 2.2 High-priority habitats for Critically Endangered species are identified and mapped by Year 2 for targeted land purchase beyond the project to enable their restoration and/or secure their future	2.1 Restoration plans2.2 Maps of species distribution and land parcels	Local communities and the county government remain supportive of forest restoration Extreme weather events, such as drought, do not significantly impact restoration activities Covid-19 restrictions do not tighten to the point where they stop the project team implementing
		2.3 Two native tree nurseries are established by the end of Year 1, producing a total of 60,000 seedlings by the end of Year 3 2.4 At least 40 people (of whom at least 35% are women) from four different CFAs are trained to manage these nurseries by the end of Year 1, and at least another 40 people (≥35% women) are trained to carry out restoration activities by end of Year 2	 2.3 Nursery records, including photographs and counts of seedlings produced 2.4 Records of training sessions, including lists of trainees specifying their gender and community group 	restoration activities effectively
		2.5 Restoration work is implemented over an area of 20 ha per year (involving, as necessary, clearance of invasive or other non-native vegetation, enrichment planting with native tree seedlings and any other silvicultural measures) 2.6 A Taita hills forest restoration plan to guide post-project activities is	2.5 Reports on restoration work, including maps and photographs	

	developed by the end of the project and integrated into CFA/KFS joint forest management programmes	2.6 Post-project restoration plan	
3 Livelihoods of local communities are enhanced through climate resilience initiatives including agro-forestry, improvement of water storage infrastructure and diversification of income sources	3.1. A detailed livelihood enhancement plan is developed in consultation with communities and landowners by end of Year 1, linking provision of livelihood benefits to support for forest protection and restoration efforts	3.1 Livelihood plan	Extreme weather events, such as drought, do not significantly impact agro-forestry activities or the utility of the water tanks Communities are able to agree on which additional livelihood interventions would be most
	3.2 Two crop tree nurseries (e.g. fruit, nuts, etc) are established in Year 1 to provide seedlings for agro-	3.2 Nursery records, including photographs and counts of seedlings produced	beneficial Covid-19 restrictions do not tighten
	forestry 3.3 At least 15 crop trees of at least	3.3 Report on tree provision, listing	to the point where they stop the project team carrying out livelihood work effectively
	four species are provided to 300 households per year in Years 2 and 3 (giving a total of ≥9,000 trees and c.3,600 people), diversifying production and increasing on-farm tree cover in the project area	households involved and trees supplied to each	
	3.4 Two 50,000-litre water tanks are installed by the end of the project to provide water during the dry season, benefiting 1,200 people (including those using two schools and a dispensary)	3.4 Report on tank installation, including maps/plans and photographs	
Danvin Initiativa Main Appual Danart Tamplata 2003	3.5 Two additional livelihood initiatives are developed and implemented by the end of the project, in line with the livelihood enhancement plan, benefiting between 4-6 women's and youth groups and c.600 people from c.100 households (of whom c.50% will also	3.5 Reports on additional livelihood initiatives (which may include, for example, establishment of beekeeping, provision of high-quality crop seeds, provision of efficient stoves, etc)	

	benefit from the water tanks above)		
	,		
4 The conservation and livelihood impacts of the project are monitored and evaluated	4.1 Twice-yearly surveys are carried out of key endemics (e.g. Taita apalis and thrush) and other species selected for their indicator value, both in surviving forest fragments and in restoration sites	4.1 Records of these surveys (linked to reports of survey findings under 0.3)	Covid-19 restrictions do not tighten to the point where they prevent monitoring work
	4.2 Tree cover (both native and crop) is assessed across the project landscape at the start and end of the project	4.2 Records of land cover survey work (linked to reports of findings under 0.1 and 0.2)	
	4.3 Livelihood assessments are carried out at the start and end of the project	4.3 Records of livelihood assessments (linked to reports of findings under 0.4 and 0.5)	
	4.4 A long-term water balance study is set up to monitor the impacts of forest restoration and agro-forestry	4.4 Reports from set-up work (linked to report of findings under 0.6)	
	on Taita's 'water tower' function 4.5 The impacts revealed by this monitoring work are evaluated and the findings are reported to Darwin	4.5 Reports to Darwin	
5 The project is managed effectively and efficiently	5.1 A start-up meeting involving all key project stakeholders is held within the first three months of the project and a plan is agreed for monitoring project progress	5.1 Minutes of start-up meeting plus progress monitoring plan	Covid-19 restrictions do not tighten to the point where they prevent this project management work (unlikely, as most meetings can be carried out virtually if necessary)
	5.2 The core project team meets every quarter to discuss progress made and plan forthcoming work	5.2 Minutes of quarterly meetings	
	5.3 The wider project team and relevant managers meet annually to	5.3 Minutes of annual meetings	

share findings among all partners and discuss plans for the following year		
5.4 An internal evaluation is undertaken at the mid-point of the project	5.4 Mid-term evaluation report	
5.5 A second evaluation is undertaken at the end of the project using an external consultant	5.5 End-of-project evaluation report	
5.6 Technical and financial reports are provided to Darwin as required 5.7 A 'sustainability plan' is	5.6 Report documents (incorporating M&E findings under 4.6)	
developed by the end of the project to underpin delivery of the post-project restoration plan created under Action 2.6, for example by identifying additional financing mechanisms	5.7 Sustainability plan	

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

Output 1: Protection of all surviving fragments of cloud forest and edge habitat in Taita is strengthened

- 1.1 Facilitate meetings with four CFAs to review and evaluate their PFMPs in Year 1. (PFMPs currently in draft and needing sign-off for forest fragments Vuria/Msidunyi and Chawia; and complete but needing updating for forest fragments lyale-Wesu-Mbili and Susi-Ndiwenyi-Fururu).
- 1.2 Complete organisational capacity assessments of four CFAs in Year 1.
- 1.3 Produce capacity enhancement plans for four CFAs in Year 1.
- 1.4 Update the PFMPs for the lyale-Wesu-Mbil and Susu-Ndiwenyi-Fururu fragments following consultation with community groups and other stakeholders in Year 2.
- 1.5 Develop Terms of Reference for Community Scouts in Year 1 (i.e. community members who will act as 'rangers' to help protect the forest).
- 1.6 Develop and provide training materials and equipment for Community Scouts through the community groups (four CFAs and DABICO) in Year 1.
- 1.7 Develop Standard Operating Procedures to facilitate cooperation between community groups and KFS, including a joint patrol plan, to enable more monitoring support of protected forest fragments by end Year 2.
- 1.8 Run at least 10 training sessions (e.g. on Participatory Forest Management, institutional governance, financial book-keeping, etc) and other meetings with community groups (CFAs & DABICO) over Years1 and 2.
- 1.9 Repeat organisational capacity assessment for four CFAs at the end of the project.

Output 2: Restoration of cloud forest habitat is initiated around key existing fragments

- 2.1 Develop detailed forest restoration plans for lyale-Wesu-Mbili and Vuria/Msidunyi, in consultation with communities, landowners and local government by end Year 1.
- 2.2 Advance progress towards purchase of already identified priority land parcels from existing baseline (10 ha owned/leased by Nature Kenya at Msidunyi) throughout the project [RT co-funding].
- 2.3 Identify and map further priority land parcels for future land purchase in Year 1.
- 2.4 Develop a site management plan for the 10 ha already owned/leased by Nature Kenya in Year 1 and implement management activities in Year 2.
- 2.5 Build two native tree nurseries to provide seedlings for forest restoration work in Year 1, and purchase seeds for these nurseries.
- 2.6 Create a database of species and number of seedlings in Year 1 to monitor nursery outputs over the course of the project.
- 2.7 Provide 8 training events for members of local community groups to manage these nurseries and carry out restoration activities.
- 2.8 Carry out clearance of invasive non-native vegetation and/or planting of native trees as required in sites identified in the restoration plan.
- 2.9 Develop a broader, longer-term restoration plan to guide post-project activities in Year 3.
- 2.10 Convene a county-level meeting to share forest restoration lessons from the project and to promote the forest policy in Year 2.
- 2.11 Complete feedback surveys linked to training events throughout the project to record number of people engaged, disaggregated by gender.

Output 3: Livelihoods of local communities are enhanced through climate resilience initiatives including agro-forestry, improvement of water storage infrastructure and diversification of income sources

- 3.1 Complete a targeted baseline assessment of the livelihoods situation in the project area, taking account of previous initiatives and using existing socioeconomic data and community input, to link provision of additional livelihood benefits under the project to support for forest protection and restoration efforts by end Year 1
- 3.2 Develop a detailed livelihood enhancement plan in consultation with communities and landowners in Year 1, informed by 3.1.
- 3.3 Build two crop tree nurseries to provide seedlings (fruit, nuts, etc) for agro-forestry in Year 1, and purchase seeds for these nurseries.
- 3.4 Create a database of species and number of seedings in Year 1 to monitor nursery outputs over the course of the project.
- 3.5 Establish two agro-forestry demonstration plots in Year 2.
- 3.6 Facilitate meetings with Chief and CFAs in Year 1 to determine beneficiaries of agro-forestry initiative and plan a phased implementation for this initiative.
- 3.7 Provide agro-forestry training and seedlings to CFAs in Years 2 and 3, using existing 'field schools' and the demonstration plots for the training.
- 3.8 Construct or purchase and install two community water tanks in easily accessible locations determined by community groups by the end of the project.
- 3.9 Implement two additional livelihood initiatives in line with the enhancement plan developed under Action 3.2 by the end of the project.
- 3.10 Establish mechanisms for generating income from the agro-forestry and other livelihood enhancement schemes through CFAs in Year 3, to sustain these schemes beyond the end of the project.
- 3.11 Complete evaluation assessment of implementation of the livelihood enhancement plan at the end of the project.

Output 4: The conservation and livelihood impacts of the project are monitored and evaluated

- 4.1 Carry out biannual (twice/year) surveys of key endemics (e.g. Taita apalis and thrush) and other species selected for their indicator value in surviving forest fragments and restoration sites.
- 4.2 Complete assessment of tree cover (both native and crop) across the project landscape at the start and end of the project

- 4.3 Lay foundations for long-term programme to monitor impacts of forest restoration and agro-forestry on Taita's 'water tower' function:
 - (a) Complete a desk assessment of water resources in the project area in Year 1, including a ground water assessment and measurement of surface levels and flows, and analyse existing climate modelling data in Year 3.
 - (b) Determine what basic climate data exists for the Taita Hills and establish basic rainfall data collection by CFAs and local schools in Year 1
 - (c) Carry out community engagement activities to map community water resource knowledge within the restoration area catchments in Year1. Outputs will support (e).
 - (d) Collect monthly data on the amount of water harvested from the water tanks installed in Action 3.8.
 - (e) Set up a baseline water balance for future monitoring of impact of forest restoration by end of Year 3 to continue beyond the project employing easy-to-use equipment such as rain gauges, stream gauge boards and stream flow gauges.
- 4.4 Complete a detailed livelihoods assessment of the communities in the project area at the start and end of the project.
- 4.5 Complete evaluation of project's impact revealed by repeated monitoring work and report findings to Darwin in final project report.

Output 5: The project is managed effectively and efficiently

- 5.1 Hold a project start-up meeting and agree a plan for monitoring project progress in Q1 of Year 1
- 5.2 Hold quarterly meetings of the core project team to discuss progress made and plan forthcoming work
- 5.3 Hold annual meetings of the wider project team and managers to share findings among all partners and discuss plans for the following year
- 5.4 Undertake an internal mid-term evaluation in Year 2
- 5.5 Undertake a final evaluation using an external consultant in Q4 of Year 3
- 5.6 Submit technical and financial reports to Darwin as required
- 5.7 Develop a 'sustainability plan' to underpin delivery of the post-project restoration plan created under Action 2.9, for example by identifying additional financing mechanisms, in Year 3

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-A03	5 The Participatory Forest Management Plans (PFMPs) that have been written to guide work in and around the surviving fragments are reviewed and updated as necessary in Year 1, in consultation with the four Community Forest Associations (CFAs) involved in this work, DABICO, the Kenya Forest Service (KFS) and the Taita Taveta County Government	Number of local/national organisations with improved capability and capacity as a result of project	Number of Organsat ions	Organisation	5	5		5	5
Di-A06	Two 50,000-litre water tanks are installed by the end of the project to provide water during the dry season, benefiting 1,200 people (including those using two schools and a dispensary)	Number of people with improved access to services or infrastructure for improved well-being	People	People	0	1500		1500	1200
DI-D12	Cloud forest habitat is regenerating over an additional 60 ha by the end of the project	Area of degraded or converted ecosystem that are under active restoration	Area	Forest	22	22		44	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	
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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)
2021 Kenya Key Biodiversity Areas Status and Trends Report	Journal	Gacheru, P., Mutunga, J., Mwinami, T., Ngoru, B., Wanjohi, H., Mulwa, R., Mwang'ombe, J., Matiku, P. (2022)	Male	Kenya	Nature Kenya, Nairobi	

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 – without annexes
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.	Will send We Transfer link for annexes
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.	No
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 16)?	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	1