Darwin Initiative/Darwin Plus Projects
Half Year Report
(due 31st October 2020)

Project reference	25-031
Project title	Partnering with Business for Restoration of Mt Kenya ecosystem services
Country(ies)/territory(ies)	Kenya
Lead organisation	Nature Kenya
Partner(s)	Kenya Forest Service, Ministry of Environment and Forestry, National Museums of Kenya, Mt. Kenya Biodiversity Group-SSG, The Nature Conservancy
Project leader	Paul Matiku
Report date and number (e.g. HYR3)	HYR3
Project website/blog/social media	*www.naturekenya.org*

1. Outline progress over the last 6 months (April – Sept) against the agreed project implementation timetable (if your project has started less than 6 months ago, please report on the period since start up to end September).

In the project implementation period between 1st April 2020 and 30th September 2020, we Nature Kenya and National Museums Scientists carried out end of project biodiversity assessment between 31st August and 5th September 2020 (**Annex 1**). The populations of bird species remained stable in natural forest habitats. The mean species richness in natural forest showed slight increase from 10 recorded during baseline to 11 species recorded at this end of project biodiversity assessment. The mean abundance (bird population) was 28 birds compared to the baseline record of 26 birds. In restoration areas, it seems to be too early for restoration to have an impact on species richness as the data shows stable species richness between baseline (8 species) and end of project (7 species). However, preliminary data analysis shows that indigenous restoration forest generalist species reduced from **10 species** during baseline to **8 species** in 2020 survey. This shows improving forest quality where forest generalist abundance decline while forest specialists are known to increase with forest quality. Overall bird population remained stable in different land use type compared across the three years. Indigenous natural forest had the highest mean species diversity index of **H' = 1.9422** followed by indigenous forest restoration areas **H' =1.6851** with the plantation forest restoration areas (PELIS) recording the lowest diversity index of **H' = 0.8174** (*in line with* ***Output 1- Activity 1.4***). Further analysis of the data will be presented in the next report. **(Output 1)**

The National Museums of Kenya scientists assessed the water quality and quantity of rivers flowing from Mt. Kenya by carrying out stream sampling (close to forests and dam entry) in line with ***Output 1- Activity 1.4***.). Between baseline collected in 2018 and year 2020 samples, the data shows notable reduction of sedimentation load of sampling point close to the forest from **4.42ton/yr** during the baseline to **2.94ton/yr** in 2020. Mid-stream, sedimentation load reduced from a baseline of **7.47ton/yr** to **5.89ton/yr** in the 2020 survey (**Annex 2**). While the restoration efforts made a contribution to reduced degradation, awareness created at 5 counties that embraced the restoration agenda, may have played a major role in reducing soil erosion in areas around the forest where community forest associations operate. At the dam entry, there was an increase from a baseline **3.65ton/yr** to **6.41 ton/yr** in 2020. The increase of sedimentation load at the dam entry may be attributed to the convergence of many other rivers and streams within the Tana River basin which includes tributaries from the Aberdare Forest, influenced by poor land use practices with continuing land degradation and soil erosion. To complement

these surveys, trained Community Forest Associations representatives carried out participatory randomised forest disturbance assessment. The results show reduced forest threats especially of livestock grazing leading to increased regeneration of indigenous tree seedlings; **75.13** seedlings in 2020 compared to **44.97** seedlings baseline in 2018 per sampling area (**Annex 3**) (**Output 1).**

Nature Kenya and local enumerators, trained by the ecosystem service consultant during year 1, carried out end of project socioeconomic assessment including household income, energy saving cook stoves and other livelihoods options (eco-tourism, bee keeping and tree growing). The same survey protocol as the baseline was used. A total of 357 households were surveyed. Results indicate an increase of 13% adoption of household energy-saving cooking stoves; reduction of 6% in the household use of Kerosene as a source of energy, and a 16% increase on the perception that Mt. Kenya forest condition was improving (**Annex 4**). Three schools directly supported to install energy saving cook stoves benefiting 800 children, reduced their own fuel wood consumption by 60%. The technology was learned and applied by other 19 schools with benefiting total children population of 8000 from 5000 parents (*see* **Annex 4** ***pg 6-7***). Total carbon saving from the energy saving technology in schools is 45T/year/school and 952T/C/yr for the 21 schools that have adopted the energy saving cookstoves (**Output 1).**

Income at household level increased as a result enhancing nature based enterprises. According to the socio-economic survey **87%** of respondent had a monthly income that ranged from 0 – KSh.15,000 in 2020 compared to **79%** in 2018 (*see* **Annex 4** *pg. 4*). Additional to the 300 beehives supported by the project, 1473 beehives were locally mobilised by the Community Forest Associations who supported by Nature Kenya to develop and submit proposals to the National Water Sector Trust Fund. The community harvested 1224kg of honey in 2018 earning the community £, 2355kg in 2019 earning the community £, and 3033kg of honey by 30th September 2020 earning the community £ (*see* **Annex 4** *pg 9*). This was as result of capacity through skills training and provision of equipment for beekeeping husbandry provided by the project. This may be collaborated with the reduction in forest threats, increase of forest species in restored areas and reduction in sediment load from streams around the forest. (**Output 4)**

Community Forest Associations managed tree nurseries increased tree seedlings production from 1.5million seedlings in 2018 to 2.5million seedlings by June 2020. The community has earned a total of £ by 30th September 2020 from sale of tree seedlings planted inside and outside Mt Kenya forest ecosystem (*see* **Annex 4** *pg 8*). A total of 2.6 million trees (equivalent to 2600ha) have been planted during the planting seasons of 2018 (300,000 trees), 2019 (2.1million tree seedlings) and April 2020 (200,000 tree seedlings). The survival rate of the trees planted has been assessed to be 85%. This survival is made possible by the unique approach applied by Nature Kenya where trees are grown but not just planted. All trees are protected, weeded and dead ones replaced to boost survival rates. **(Output 3)**

Payment for water services awareness and restoration partnerships were developed and strengthened at Mt. Kenya forest ecosystem level and at national level. 14 Community Forest Associations (CFAs) were supported to create awareness through local radio stations. Between 25th August 2020 and 30th September 2020, ten CFAs representatives took part in 8 radio talk shows hosted on local media houses in the region. This enabled the CFAs to reach more area based water buyers and small businesses making them understand why they need to be engaged in the financing for the restoration of Mt Kenya water services (***in line with Output 2-Activity 2.4.).*** Also, the CFAs applied the skills imparted by Nature Kenya and through letters reached out to individual businesses seeking appointments to present their forest restoration proposals (***see a sample letter*** **Annex 5**) (***in line with Output 2-Activity 2.5***).

Five County Governments (Meru, Embu, Tharaka Nithi, Kirinyaga and Nyeri) have embraced the Payment for Water Services business case approach. County level partnership meetings with leadership from the County Governments were held. Nyeri County convened a meeting on 8th September 2020 (**Annex 6**) and Meru County convened a meeting on 23rd and 25th September 2020 (**Annex 7)**. All these meetings brought together county based business owners to create awareness on the adoption of the Kenya restoration business case. As a result, Meru County business owners agreed to become partners to support the county Government to achieve its forest restoration target of increasing county tree cover from 18% to 22% by 2022 (equivalent to restoration of 6000ha/year) (**Annex 8**). This includes areas inside and outside the Mt Kenya forest. In Nyeri County, business owners agreed to be partners to restore 1000ha by April 2021 (**Annex 9**). A total of 28 Community Forest Associations that are based in Mt.Kenya forest are site based partners in forest restoration. Theese CFAs participated actively in the county based consultation meetings where they presented their businesses cases as opportunities and

avenues to support the county governments to achieve the set forest restoration targets through tree seedlings production and provision of labour (***in line with Output 2-Activity 2.8***). Therefore local community-county governments' partnerships now exist to facilitate delivery of restoration targets. The businesses now have an avenue for them to achieve their restoration targets as CFAs are ready to provide seedlings and labour in tree planting. **(Output 2)**

At the national level, a partnership meeting for Mt. Kenya forest restoration was convened virtually on 7th September 2020 (**Annex 10**) in line with ***Output 2-Activity 2.6 & 2.9***. This meeting chaired by Kenya Breweries Ltd, brought together national partners-Kenya Water Towers Agency, Water Sector Trust Fund, KENGEN, Kenya Forest Service, Kenya Wildlife Service and The Nature Conservancy. The meeting discussed commitments and targets for Mt Kenya forest restoration (**Annex 11**). The Water Sector Trust Fund committed to support the Mt.Kenya Community Forest Associations within their next cycle of funding to build on their past support of **£** provided to 15 CFAs around Mt Kenya. The Water Sector Trust Fund, is a Government Water fund that benefits from water levies made part of the electricity bill issued by the Kenya Power and Lighting Company. The Kenya Electricity Generating Company (KENGEN) adopted two county forests in Meru County to restore. The Kenya Breweries Ltd committed to restore another 100ha (**£**) of Mt. Kenya forest in 2020-2021 period adding to the previously restored 200ha for a total of **£**; Kenya Water Towers Agency commitment to support partners in forest restoration by setting up a national policy framework to guide Payment for Ecosystem Services schemes; and The Nature Conservancy agreed to ensure that Upper Tana and Nairobi Water Fund when operational from 2022, communities would access much needed funds for forest restoration. The Kenya Breweries has mainstreamed forest restoration as part of their business sustainability policy and they are encouraging their suppliers and value chains as their partners to board into the initiative. So far they have developed an engagement model to engage 170 companies nationally. The Safaricom ltd, has joined the partnership is planting trees across Kenya including Mt Kenya. The CoCaCola has pledged to support Mt Kenya restoration and discussions have been held with Nature Kenya (**Annex12**). **(Output 2)**

Lessons learned from the project were collated and shared with partners nationally. We printed 2000 copies of the Mt. Kenya Forest Ecosystem Services Report. We also printed 2000 copies of the Mt. Kenya Forest Restoration Business Case. These documents were shared widely during the county governments meetings held in Nyeri and Meru in September 2020. Aa total of 600 copies of these documents have been distributed. The aim is to raise awareness on the importance of restoring Mt. Kenya forest (***in line with Output 5-Activity 5.2***). In addition we have produced the 2019 Kenya KBA Status and Trends Report including Mt Kenya (**Annex 13**) and data collation has been initiated for the 2020 KBAs status and trends reports. {***in line with Output 3 –Activity 3.6***}

The Mt Kenya restoration approach has impacted national policy. The Kenya Forest Service is finalising National Forest Landscape Restoration Action Plan 2020-2025 informed by the lessons learned in Mt Kenya. (see draft-**Annex 14**). This action plan targets to restore 5.1million hectares of Kenya's degraded landscapes. This is part of Kenya's commitment under the global Bonn Challenge to restore 5.1 m ha by 2022. The restoration results catalysed by this project will be reported having contributed and supported the Kenyan government towards achieving this target.

Nature Kenya has fully mainstreamed the Payment for Water Services Mt Kenya forest restoration as part of the institutional activities and approaches for marketing to business at all levels. ***(in line with Output 5-Activity 5.1).*** Nature Kenya has functional partnership with the World Land Trust (WLT) that provided **£** to complement the Darwin Initiative funding allowing the expansion of CFAs from 14 to 34 including 4 in the Aberdare's forest. The WLT is considering to provide support for planting 150,000 trees (**£0**) in year 2021/22. Nature Kenya membership has engaged 4 national companies- Peptang Foods (**Annex 15**), Total Kenya (**Annex 16**), Stanchart Bank and CocaCola (**Annex 17**). The BirdLife International has recognised the approach used by Nature Kenya in restoration of Mt Kenya. The business case approach is considered innovative and ground breaking. As a result, Nature Kenya is part of the global Trillion Trees initiative where BirdLife, WWF and the WCS are partners to grow one-trillion trees globally. Also, Nature Kenya is part of the Forest Landscapes Sustainability Accelerator program (Link) managed by BirdLife International. Through the Forest Landscapes Sustainability Accelerator program, Nature Kenya staff are gaining new skills through training and mentorship on innovative restoration financing models and help in increasing visibility of Mt. Kenya forest restoration through global platforms to mobilize resources for Community Forest Associations restoration programs. Nature Kenya has included Mt Kenya among the scaling up sites for the GEF/UNEP Forest Landscape Restoration Initiative where Nature Kenya is one among 11 projects in 10 countries that are restoring

forest landscapes under the name The Restoration Initiative.

2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months (for Covid-19 specific delays/problems, please use 2b). Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

We did not encounter any notable unexpected problem in project delivery.

2b. Please outline any specific issues which your project has encountered as a result of Covid-19. Where you have adapted your project activities in response to the pandemic, please briefly outline how you have done so here. Explain what residual impact there may be on your project and whether the changes will affect the budget and timetable of project activities.

The first case of CoVid-19 in Kenya was reported in mid-March 2020. Immediately life changed; social distancing, wearing of facial masks, ban on community gathering, and imposed lockdowns. Nature Kenya offices were closed end of March and have remained closed to date. Fortunately Q1 of Y3 was not seriously affected. Field activities slowed down but direct forest restoration and maintenance of restoration sites went on unabated working within CoVid-19 limitation: social distancing while planting seeding, transporting etc. Activities that required gathering e.g. workshops, meetings, seminars etc. did not proceed until CoVid-19 partial lockdown was lifted towards Q2 of Y3. However with 2 staff in the field, work continues. Significant loss of impact of project is not expected. We have adopted program delivery to include use of virtual platforms. This has resulted to increase time demand on staff time and saving funds for physical workshops. In addition we have continued to consolidated lessons learned by engaging community groups in forest restoration for up scaling.

2c. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS:	No
Formal change request submitted:	No
Received confirmation of change acceptance	No

3a. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this year?

Yes ☐ **No** ☒ Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project, please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary. Please DO NOT send these in the same email as your report.

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

No.

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but should also be raised with LTS International through a Change Request. Please DO NOT send these in the same email.

Please send your **completed report by email** to Darwin-Projects@ltsi.co.uk. The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g. Subject: 25-001 Darwin Half Year Report**