Biodiversity Challenge Funds Projects
Darwin Initiative, Illegal Wildlife Trade Challenge Fund, and Darwin Plus

Half Year Report

Project reference	DAREX006
Project title	Increasing Ecological and Socio-Economic Resilience in the Upper Ewaso Ngiro North Ecosystem
Country(ies)	Kenya
Lead Organisation	Fauna & Flora
Partner(s)	Mount Kenya Trust (MKT), Mount Kenya Ewaso Water Partnership (MKEWP), Ol Pejeta Conservancy (OPC), Laikipia Conservancies Association (LCA), Northern Rangelands Trust (NRT), National Museums of Kenya (NMK)
Project Leader	Serah Munguti
Report date and number	31st October 2025. Half Year Report 3 (HYR3)

1. **Outline progress over the last 6 months (April – September) against the agreed project implementation timetable.**

Output 1: Habitat restoration, reduced fuelwood use, equitable water-demand regulation and sharing, and climate-resilient cropland management, increases quantity and quality of dry-season river flows, and improves soil, rangeland, and forest habitat health

OPC conducted pasture assessments across 50 plots recording a 24% biomass increase, with the Eastern sector of the conservancy leading. However, overall yields remained 78% lower than 2024 due to poor rainfall. (**Annex 01**). 23,500 *Vachellia xanthophloea* seedlings were planted in OPC to restore 100 acres of land heavily browsed by black rhinos. Of these, 15,000 were planted within exclusion zones, staff compounds, and tourism facilities across the conservancy, while 8,500 were distributed to surrounding community members. An additional 5,000 seedlings are ready for planting in October–November rainy season (**Annex 02**). A pilot invasive species survey conducted in June 2025 within OPC confirmed *Solanum incanum* as the most dominant invader constituting 93.4% of all hits. Consequently, 7.36 acres were cleared reducing infestations. (**Annex 03**).

The Ecological Outcome Verification (EOV) work within OPC progressed with adoption of the Land Degradation Surveillance Framework (LDSF) over the Digital Soil Mapping (DSM) and training of 10 Ecological Monitoring Unit staff. Using a spatial predictive model, 11 random cluster centres and 4 additional strategic sites were selected, with each cluster generating 15 sampling points within 1 km² area which will be used for ecological monitoring going forward (**Annex 04**).

To understand the impact of active forest regeneration program through Tree Establishment & Livelihood Improvement Scheme (TELIS) program on livelihoods and general household wellbeing, MKT conducted a livelihood survey within Mt. Kenya Forest restoration areas. The survey showed an improvement in household wellbeing among 92.5% of the respondents. 78.24% of the households previously involved in tree nursery establishment and management training reported improvements in household income with seedling sales being the main source of income. The incomes were used primarily for food, school fees and reinvestments in purchasing tree nursery inputs. 74.54% reported improvement in food security and 40.74% of the respondents reporting that additional family members have since joined active tree nursery activities **(Annex 05).** A focused group discussion with Community Forest Associations (CFA) showed a 58% reduction in fire extinguishment time and significant improvement in inter-agency collaboration (**Annex 06)**. This is attributed to the trainings on fire management and the subsequent distribution of PPE equipment in Y2 that have engineered a transformative shift in local firefighting capacity, moving communities from informal to professionalised response protocols.

On the reduction of fuelwood use, OPC trained 9 enumerators (4M, 5F) and conducted a survey on the impact of the energy saving stoves installed in Y2. The findings indicate that the adoption of energy saving jikos has reduced fuelwood use by 50% and charcoal by 30-35% with corresponding cost reductions of between 30-40% on fuelwood and 20-30% on charcoal (**Annex 07**).

MKT conducted monitoring of 507,478 trees planted in Year 2 across 370 hectares in Marania and Karuri. The results show a strong vegetation growth, with Normalized Difference Vegetation Index (NDVI) peaking 1–2 months after April rainfall, reflecting rainfall-driven growth patterns. Tree survival assessments across 87 plots indicated high seedling health (92%) and correct species identification (93%), though survival rates varied, from 85% to 56% in some areas due to localised mortality and farmer mismanagement. The Kenya Forest service (KFS) and MKT are working closely to address these localized mortalities resulting from farmer mismanagement. Ranger patrols and monitoring in the forest contributed to a decrease in illegal logging and snares. In addition, wildlife monitoring recorded shifts in species distribution, with over 19 species increasingly concentrated in the north-eastern sector, reflecting changes in habitat use and human pressures **(Annex 08).**

NRT undertook refresher training in wildlife monitoring data collection, reporting and troubleshooting for 69 conservancy rangers (67M, 2F) from five member conservancies **(Annex 09)**. During the reporting period, community conservancy rangers covered 12,070 kms in routine patrols for wildlife security and to enhance peaceful co-existence between people and wildlife. 49,459 wildlife observations across 23 different species, including elephant, wild dogs, and Grevy's zebras among others were made (**Annex 10**). NRT mechanically removed 55 hectares of *Opuntia stricta* in Naibunga North Conservancy and have plans underway for reseeding the cleared areas during October-December rains (**Annex 11**). LCA also dug and reseeded 4,000 semi-circular bunds in Ilmamusi and Il Ngwesi conservancies after a restoration planning meeting with local communities (**Annex 12**). Similar restoration planning meeting held in Naibunga **(Annex 13).**

A survey conducted by MKEWP to monitor the impact of environmental conservation activities, including tree planting, nursery development, clean-up campaigns, infrastructure projects, and regulatory compliance campaigns showed general improvement around participation and support of the conservation work, with Water Resource Users Associations (WRUAs) expanding their activities **(Annex 14).** Over the reporting period, the Water Resource Authority (WRA) conducted water quality assessments with the reports showing that the water quality within the basin has remained stable **(Annex 15).** Concerns with some of the automatic gauging stations were addressed and data transmission restored **(Annex 16).**

The National Museums of Kenya also conducted Biodiversity Assessments for the wet season. The survey showed that rivers draining into Ewaso Ewaso Ngiro harbor macro invertebrates which are suitable bio-indicators for short and long-term monitoring of the outcomes of restoration and rehabilitation ecosystems within the project area. The survey also indicated a seasonal fluctuation of the three indicator frog species (age groups, tadpoles, metamophs, sub-adults and adults) due to change in river water level. Fish surveys found some indicator species such as the Rainbow trout in the upper courses, the Dembea stone lapper in the mid courses and Redeye labeo, Pangani barb and Dembea stone lapper in the lower courses is an indication of good water quality **(Annex 17).**

The development of a water sharing plan is underway. A development road map was collaboratively developed to guide the process (**Annex 18**). Subsequently, community consultations were held, including Focused Group Discussions, to incorporate local community input **(Annex 19a)**. A joint inception workshop was then held with participation of communities, government agencies and civil society organizations to kick off the plan development process **(Annex 19b). T**he plan development status report has been shared **(Annex 20).**

Output 2: Climate-resilient, nature-based solutions, sustainable land, pasture and water management practices, and improved market linkages, increase wellbeing for 2,906 farming, agropastoral and pastoral households / c.14,530 people (at least 40% women).

MKEWP trained 50 people (34F,16M) in agribusiness, savings, vertical gardening, nutritional crop adoption, and market linkages within its established demonstration sites. This training emphasized nutritional awareness, market intelligence, and efficient land use through vertical gardening, equipping participants with both technical and economic skills to enhance household food security and income generation. 18 ToTs (11M, 7F) received refresher trainings on climate-smart agriculture (CSA), covering farm layout, soil fertility, resilient crops, Integrated Pest Management (IPM), water use, erosion control, nature-positive solutions, and enterprise development. Capacity gaps included group mobilization, training delivery, and record keeping **(Annex 21).** A total of 71 ToTs and model farmers (52M, 19F) were trained at Wambugu Agricultural and Exhibition

Centre on high value crops including apples **(Annex 22).** Subsequently, 1 field day was held with 85 (41M 44F) ToTs and model farmers reached **(Annex 23).** OPC trained 1,095 farmers on soil testing and fertility management **(Annex 24)** and supported the interpretation of soil test results for 311 (166 M, 145F) farmers **(Annex 25).**

1,026 farmers/pastoralists were trained on disease control through practical demonstrations. Consequently, 7 producer groups were formed to support access to critical services such as AI program, access to acaricides & mineral supplements. 133 cattle from the community were synchronized & inseminated (**Annex 26**). The livestock to market scheme saw 315 cattle being purchased from 34 pastoralists.

NRT undertook an evaluation and assessment of the 6 water pans to ascertain completion status and governance structure for sustainability. The concerns identified have since been addressed by the contractors and handing over finalized (**Annexes 27**). The water plans that have filled with water are providing dry season water access for livestock, wildlife and people.

Output 3: Conservation CBOs (6 WRUAs and 5 CFAs) and local civic organisations (MKEWP, OPC, LCA, NRT, MKT) have the capacity and capability to jointly, equitably, and sustainably manage natural resources.

Fauna & Flora worked with WRA to train three WRUAs towards better governance and compliance (Annex 29-31). Consequently, 3 Sub Catchment Management Plans (SCMPs) were developed and adopted (**Annexes 28-30**).

The EMUSACCO board convened to assess the status of the revolving fund, reporting total loan disbursements of KES 5,856,062 (GBP 34,447). Delayed repayments were raised as a major concern and in response, staff were directed to follow up with defaulters and inform guarantors**.** 34 (11M,23F) SACCO members accessed water tanks through a revolving fund with a 6-month loan repayment structure. This initiative supported a shift from rain-fed agriculture, with demonstration farms accelerating the adoption of climate-smart practices and investments in water security. As a result, production stabilized, and SACCO membership grew significantly from 282 to 640 **(Annex 31).**

Output 4: The value of project outcomes, (biodiversity conservation, human-wildlife co-existence, economic productivity, water security, climate resilience), is evidenced and ready to be scaled up, through local stakeholder commitment and larger-scale investment.

The market analysis report was finalized towards establishing possible options for conservation financing within the Upper Ewaso Ngiro North Ecosystem **(Annex 32).** Consequently, prioritization was done to identify priority initiatives for advancing Upper Ewaso Ngiro North Ecosystem (**Annex 33).** Payment for Ecosystem Services was identified as a priority and the process of development of a business plan is underway, with an initial draft received from the consultant **(Annex 34).**
LCA conducted a two-day situational Analysis Workshop and validation of its zero-draft Strategic Plan. The process produced a shared vision, mission, and Theory of Change, and identified strategic priorities on conservation, livelihoods, advocacy, and institutional sustainability (**Annex 35**). The Strategic Plan is now in its final design phase, pending official launch.

2. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

The major challenges included:

i) A fall in tree seedling survival, especially at Karuri, where rates dropped from 92% to 56% due to farmer mismanagement and localised environmental stress.
ii) Poor seed germination, destruction of bunds by livestock, wildlife, and water runoff, and weak post-restoration management across conservancies, slowing rangeland restoration initiatives.
iii) Slow repayment of the microfinance loans advanced to groups/individuals, hence slowing down the ability to advance the credit facility to additional beneficiaries.

3. Have any of these issues been discussed with NIRAS and if so, have changes been made to the original agreement?

Discussed with NIRAS:	No
Formal Change Request submitted:	No

Received confirmation of change acceptance:	No
Change Request reference if known: *N/A*	

Guidance for Section 4:

4a. Please confirm your actual spend in this financial year to date (i.e. from 1 April 2025 – 30 September 2025)

Actual spend: £[redacted]

4b. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this financial year (ending 31 March 2026)? No

4c. If you expect an underspend, then you should 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.

5. Are there any other issues you wish to raise relating to the project or to BCFs management, monitoring, or financial procedures? No

6. Project risk management

6a. If your project has an Overseas Security and Justice assessment, please provide an update on any related risks, and any special conditions in your award paperwork if relevant for your project.

[redacted]

7. Please use this section to respond to any feedback provided when your project was confirmed, or from your most recent Annual Report. As a reminder, all projects that were scored as 'Not Yet Sensitive' in the Gender Equality and Social Inclusion (GESI) assessment of their latest Annual Report should demonstrate how they are meeting the minimum GESI-Sensitive standard.

1. [redacted]

3. Please provide an update in future reporting on the lessons learned and upcoming actions that OPC plan to take after the training with F&F safeguarding team is complete.
   The online safeguarding training (ran by Fauna & Flora's Safeguarding Manager, Health Safety & Security) did not go well for partners due to internet issues. Fauna & Flora is working on a partner project to add safeguarding resources and templates to a Partner Online Hub where they can access and upskill on safeguarding.

Checklist for submission

Have you responded to **feedback from your latest Annual Report Review?** You should respond in section 6, and annexe other requested materials as appropriate.	✓
Have you reported against the most **up to date information for your project?**	✓
Have you **clearly highlighted any confidential information** within the report that you do not wish to be shared on our website?	N/A
Include your **project reference** in the subject line of submission email.	✓
Submit to **BCF-Reports@niras.com**	
Please ensure claim forms and other communications for your project are not included with this report.	