

Darwin Initiative Main Project Annual Report

Important note: To be completed with reference to the Reporting Guidance Notes for Project Leaders:

it is expected that this report will be about 10 pages in length, excluding annexes

Submission Deadline: 30 April

Darwin Project Information

Project Reference	21-014
Project Title	Reconnecting poverty-alleviation to biodiversity conservation in Kenya's Eastern Arc Mountains
Host Country	KENYA
Contract Holder Institution	Durrell Institute of Conservation & Ecology (DICE), University of Kent
Partner institutions	Kenya Forest Service, Government of Kenya. Taita Taveta Wildlife Forum (TTWF). Nature Kenya. Zoological Society of London (ZSL). International Institute for Environment and Development.
Darwin Grant Value	£352,913
Funder (DFID/Defra)	DFID
Start/end dates of project	1 st July 2014 – 30 th June 2017
Reporting period (e.g., Apr 2015 – Mar 2016) and number (e.g., Annual Report 1, 2, 3)	July 2014 – March 2015 Annual Report 1
Project Leader name	JIM GROOMBRIDGE
Project website/blog/Twitter	https://www.kent.ac.uk/sac/research/projects/jg_kenya.html http://ttwforum.org/
Report author(s) and date	Jim Groombridge (DICE), James Mwang'ombe (KFS), Dawson Mwanyumba (TTWF), Joan Gichuki (NK), Dilys Roe (IIED)

1. Project Rationale

BACKGROUND & PROBLEM: Sustainably enhancing local livelihoods whilst conserving biodiversity and ecosystem services is a major challenge in the face of poverty. Most poverty-alleviation projects fail due to a lack of experience and leadership in *local* conservation training and no tangible long-term livelihood benefits.

LOCATION: Kenya's Taita Hills (Biodiversity Hotspot, Birdlife IBA) contain many endemic, threatened forest species, but suffer high unemployment (>66% of community-members live below the poverty-line). Near-total loss of indigenous forest has degraded environments for both farming and biodiversity, and compromising Taita ecosystem function as a crucial water-catchment for lowland areas (including Tsavo National Parks). Regularly-poor harvests make subsistence-farming alone unfeasible. Survival of poor harvests requires a raft of livelihood initiatives to increase amount, stability and accessibility of alternative income year-round.



SOLUTION: Our project in the Taita Hills (including Sagalla Hill) builds local-capacity and strengthens TTWF's focus on livelihood diversification and sustainable environmental management to improve food and water security. Six alternative livelihoods (thoroughly ground-tested by TTWF) will increase income and income stability; offering opportunities for both men/women across ages/physical abilities that are profitable across seasons. Habitat re-connectivity and soil restoration will benefit three Critically-Endangered Taita endemics (Taita thrush, apalis; Sagalla caecilian), at least three other threatened, amphibian/reptile forest-specialists.

2. Project Partnerships

The project is led by DICE (University of Kent); the host-country partners are Taita Taveta Wildlife Forum (TTWF), Kenya Forestry Service (KFS), Nature Kenya (NK) and International Institute for Environment and Development (IIED). Representatives from all partners have formed a Project Steering Group (PSG) as a conduit for internal reporting and approval of decisions during the running of the project. The PSG communicate via Skype (see Annex 4; eg of PSG Skype meeting minutes). A UK visit by TTWF representatives in November 2014 consolidated the partner relationships (see Annex 4; Meeting minutes from UK visit). TTWF/KFS/NK work closely together across all aspects of the project, although TTWF/KFS lead mainly on the livelihoods component and NK lead mainly on the species conservation component. ZSLs In-country Field Officer provides *in situ* support across the project activities. IIED, based in UK, provides a supporting role on the livelihood components of the project.

3. Project Progress

General tasks achieved

- A 1-week visit by 3 representatives of TTWF (Carolyn Talu, Dawson Mwanjumba, and James Mwang'ombe) to UK to meet DICE, ZSL and IIED partners was undertaken during 22-29th November 2014, to discuss project activities, planning and management, as well as financial and administrative management (see Annex 4).
- A Toyota Hilux Double-Cabin 4WD and a motorbike Yamaha 175DT were purchased and delivered to the Project in Kenya on 16th October 2014, using project funds allocated for this purpose. Project Officers mainly use motorbike transport whilst the vehicle is used when there are equipment or materials to be transported or when more than one officer visit the same place. These vehicles have really enhanced mobility of the officers for undertaking project activities (Annex 5 shows photographs of vehicle use).

Progress against Logframe Indicators for Year 1:

Indicator 1	Progress in 2014/15 (9 months since 1/7/14)
Average annual income of participating households increased by at least 30% from a baseline of KSh 72,000 per annum (2014)	1 support visits made to farmers with fishponds. 22 community members trained in handicrafts and leatherwork (Annex 6 shows participant list, and report

and diversified through inclusion of up to 6 additional sustainable alternative livelihood options by Year 3.	on training). Preliminary socio-economic surveys conducted in Taita and Sagalla regions (Annex 7).
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Training/support: In Sagalla, technical support visits have been made to farmers/groups with fishponds with appropriate advice provided. Contact was made with one handicraft group and a trainer was identified. The group consisted of 16 people (12 women and 4 men). Initially, 16 people were to be trained but more community members requested to join in and subsequently an extra 6 people were trained. Training in handicrafts and leather work was undertaken (Annex 5 shows photos of some of the products made by the participants during the training).

Socio-economic surveys: A preliminary socio-economic survey for the collection of baseline socio-economic information was undertaken and draft reports for each of the project areas (Taita and Sagalla) were compiled (Annex 7). The preliminary survey included an inventory of the community groups involved in various environmentally-related activities was undertaken; very few active groups were found in Sagalla; in Taita 16 active community groups were found (bee-keeping groups - 4, fish farming – 5, handicrafts – 2, and tree nurseries 5).

Indicator 2	Progress in 2014/15 (9 months since 1/7/14)
Management of forest and catchment area improved through preparation of strategic plans (finalised by end of Yr-2) in partnership with community associations.	<p>2 Draft PFM plans completed; undergoing review by local KFS officers before presentation to local stakeholders for adoption and submission to KFS for review and approval.</p> <p>3 additional PFMPs reviewed by Project staff.</p> <p>3 CFAs produced, reviewed and finalized; ready for application for registration in April 2015 (Annex 7 provides examples of the draft documents).</p> <p>Articles of association have been initiated for 2 WRUAs.</p> <p>Letter sent by TTWF/KFS to the Athi regional office informing them about the preparations/reviews of SCMPs (copy of letter included at end of Annex 7; see section below).</p>

PFMPs: The formulation of the Participatory Forest Management Plans is ongoing. The Project Officers have been involved in collecting socio-economic data that had been identified as gaps in a review meeting held in the previous quarter. These activities by the project raised the interest of the Taita Taveta County Government who requested technical assistance of the PM/POs in reviewing five PFM Plans of forest areas beyond the focus of the project, in doing so galvanizing wider impact. The County Government assisted the review of PFM Plans of Ngangao forest, Mbololo/Mwambirwa, Kasigau and Kitobo forests, and the reviews were completed and a stakeholder meeting for their presentation and adoption was held from 1st – 3rd April 2015 involving experts from KFS, the Head of Forest Management Plans and Head of Biodiversity Management. These PFM plans were supported by the County Government of Taita Taveta where the Project Manager (Mr Dawson Mwanyumba) and Project Officer (Mr Gilbay Obunga) were involved on invitation to provide expertise by the County Government. The plan is to have the revised plans approved at the same time as the ones supported by TTWF and to hold a prominent launching ceremony to be graced by the Director of KFS and the Governor of Taita Taveta County.

CFAs: The interim officials of IYAWEMBI (Iyale/Wesu/Mbili) CFA and SUNDIFU (Susu/Ndiwenyi/Fururu) CFA prepared their articles of association and they were reviewed by

Project Officers and KFS Officers; these two CFAs have been finalised and application will be made for registration to the Registrar of Societies in April 2015. The application could have been submitted in March 2015, but it became necessary to delay this slightly so as to assist NGACOF A CFA (for Ngangao forest) to finalise their articles of association for application. Therefore, as a consequence of assistance by TTWF, three CFAs will be submitting their applications for registration in April 2015.

WRUAs: Meetings have been held with Kishenyi WRUA and Kinyeshamvua WRUA. The meeting with Kishenyi WRUA indicated the need for resolution of some conflict among the officials. This information has been shared with the Water Resources Management Authority that is charged with their management. Kinyeshamvua WRUA requires a lot of capacity building. The process of preparing the articles of association to enable application for registration by the Registrar of Societies has been initiated.

Forest Management Agreements: FMAs will be drafted once the PFMPs have been agreed.

SCMPs: A delay has been experienced with the Water Resources Management Authority (WRMA); no response has been received from the Athi regional office to the letter (copy of letter included at end of Annex 7) sent informing about the preparations/reviews of SCMPs. However, this has not stopped activities but may delay approval once the plans are completed. The project hopes to take advantage of the fact that TTWF is one of the Civil Society Organisations that received approval from the WRMA to be Support Organisations that can offer Technical Support to WRUAs including SCMP preparation. Indeed, TTWF was awarded three contracts (James Mwang’ombe being the lead person) to assist 3 WRUAs in Makueni and Machakos Counties to prepare SCMPs that went through technical scrutiny successfully. The Project is hopeful of a positive outcome soon for approval of SCMPs.

Indicator 3	<u>Progress in 2014/15 (9 months since 1/7/14)</u>
<p>Generation of knowledge and improved technical expertise in biodiversity conservation among local communities and TTWF (at least 4 people with increased qualifications and experience)</p>	<p>PM Dawson Mwanyumba has been accepted on the ZSL EDGE Fellowship programme, and attended the 4-week EDGE Conservation Tools course in Costa Rica (Annex 8 shows the certificate of attendance). <i>Course was originally intended to be located in Kenya (enabling further TTWF staff to attend) but location changed due to security/FCO guidelines.</i></p> <p>PO Basil Lewela attended two-part training course on Advocacy organized by PELUM (Participatory Ecological Land-Use Management), a network to which TTWF is a member (Annex 9 shows the report). <i>The course has enhanced the POs advocacy skills for community engagement activities.</i></p> <p>PO Basil Lewela took part in the preparation of the Climate Change Adaptation plan for Taita hills facilitated by CHIESA (Climate Change Impacts on Ecosystem Services and Food Security in Eastern Africa). <i>It is anticipated that this plan will contribute towards informing implementation of activities related to livelihood generation.</i></p> <p>KFS partner Mr James Mwang’ombe has been nominated /approved by PSG to undertake DICE MSc programme in Conservation Biology (approved on 19th March 2015; see Annex 10), starting Sept 2015. Application to University admissions underway. <i>This MSc programme will provide formal training in conservation to complement his background in forestry.</i></p>

	<p>PM/EDGE Fellow Dawson Mwanyumba received training from ZSL Reptile experts on methodology for surveying caecilians (one of the Projects three focal EDGE species, and his EDGE research project) (Annex 11 shows 1st 4 pages of the draft Caecilian field manual/ survey protocol).</p> <p>A draft CEPA strategy is currently being prepared by the EDGE Fellow Dawson Mwanyumba with support from ZSL/EDGE team.</p>
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Indicator 4	<u>Progress in 2014/15 (9 months since 1/7/14)</u>
<p>Development and implementation of conservation strategies for three Critically- Endangered species through improved knowledge, and implementation of Species Action Plans (SAPs) for Critically- Endangered Taita thrush, Taita apalis and Sagalla caecilian, and contributions to SAPs for other threatened Taita endemics.</p>	<p>SAPs: 1 SAP stakeholder workshop conducted to initiate SAPs for the Taita apalis, Taita Thrush and Sagalla caecilian. <i>It is anticipated the SAPs will be finalised and published by end of June 2015.</i></p> <p>3 SAPs produced in draft form (Annex 12 shows shortened versions of those documents).</p>

Bird survey activities: Common bird monitoring was carried out in Chawia forest during October 2014. It involved counting of birds seen/heard within the counting transect. Counting was done after every 200m within a stretch of 2km transect. Birds heard/seen were identified into species and their numbers recorded. A total of 12 species and 33 individual birds were recorded. Also joined National Museum of Kenya (NMK) scientist (Lawrence Wagura) for Taita Apalis monitoring in Iyale forest where only one Taita apalis was located. Common bird monitoring was carried out in Ngangao and Fururu forests during the months of February and March 2015. It involved counting of birds seen/heard within the counting transect. Counting was done after every 200m within a stretch of 2km transect. A total of 7 species and 72 individual birds were sighted in Ngangao forest and 6 species and 11 individual birds recorded in Fururu forest. Among these were 1 Taita apalis and some Taita thrush.

SAP activities: Development of Species Action Plans (SAPs) for the three Taita endemics (Taita Thrush, Taita Apalis and Sagalla Caecilian) are underway under the leadership of Nature Kenya (Annex 12 provides details on current draft SAPs). Preliminary work involving Internet searches for publications on the three species was carried out. Data on the number, distribution, life history & threats to Taita thrush and Taita Apalis was summarized, together with a report from NMK and a paper by Mwangi Githiru on Taita apalis. These publications gave the insight into the number, distribution, threats and intervention efforts to restore the Taita endemics.

The SAP stakeholder workshop was conducted during 24/25th March 2015 involving local community and representatives from County Government of Taita Taveta, Taita Environmental Research & Resource Arc, and experts on birds and amphibians from Kenya Wildlife Service, National Museums of Kenya, Nature Kenya, Kenya Forest Service.

Advocacy activities: Nature Kenya Communication Officer John Mwacharo visited the project site to collect information to publicise Taita as a bird destination tourist site and to promote local communities products in Nature Kenya publications. One story has been published in *Nature net* (included in Annex 12) which is circulated to more than 1200 Nature Kenya members, and another article will be published in Kenya Birding and the annual magazine that is distributed in the UK bird fair that is held in August every year. One stand-up banner is being developed to promote Taita attraction sites; four copies will be produced and distributed as follows; Mombasa

Butterfly House, TTWF office Voi, Taita Eco Resource Centre and Nature Kenya membership office (included in Annex 12).

Indicator 5	Progress in 2014/15 (9 months since 1/7/14)
Native tree cover and forest connectivity in Dawida Massif and Sagalla Hill enhanced by end of Year 3; measured by appropriate spatial analysis.	<p>6 tree nurseries are being maintained in Taita and technical support provided by TTWF (Annex 5 shows photos of nurseries).</p> <p>53,300 seedlings have been raised in Taita (36,300 by TTWF nurseries; 17,000 by community member-owned nurseries).</p> <p>53,000 seedlings raised in Sagalla.</p> <p>A 5-day site visit by ZSL In-country Officer (Chris Gordon) in March 2014 (see Annex 13) identified training needs of TTWF staff, including training in GIS. GIS training will take place in May/June 2015 to facilitate collation of spatial data and spatial analysis/planning.</p>

Taita: The tree nurseries, both those under community groups and individuals and also under TTWF, have seedlings being raised. Six tree nurseries, Chawia (Chawia Environment Committee), Iyale (Angamiza, Msidunyi, Sere community groups), Wesu (Changamoto) and Fururu (Dogholonyi). In total >50,000 tree seedlings are being raised. 36,300 indigenous tree seedlings have been raised between Jan/Mar within the TTWF tree nursery in Wundanyi, and 17,000 in the nurseries owned by community members, totalling 53,300 seedlings in Taita. The tree seedlings being raised are mainly indigenous and mostly comprising the following tree species– *Prunus africana*, *Milletia oblata sp. teitensis*, *Albizia gummifera*. Preparations for planting are underway although by the end of March 2015, no rains had been received and the weather forecast indicated lower rainfall than usual. This may affect tree planting activities to some extent in the foreseeable future.

Sagalla: The partnership with Shauri Moyo Community Group in a nursery located in Kishamba/Ngolia area together with a private farmer has raised >50,000 tree seedlings. This achieves the project target for tree seedlings in Sagalla although production of more tree seedlings will continue albeit at a lower rate. An extra >3,000 tree seedlings of *Albizia gummifera* have been raised using seeds collected from Ngangao forest.

3.1 Monitoring of assumptions

Indicator 1: *The new government remains committed to community empowerment and participation in natural resource management.*

The project has no reason to doubt that this assumption does not continue to hold true. However, see under Section 6 regarding PFMPs/SCMPs).

Indicator 2: *Target communities will continue to be open and positive in working with the project.*

The project has no reason to doubt that this assumption does not continue to hold true.

Indicator 3: *Minimal staff changes within the life of the project. Availability of suitably qualified local community members willing to undertake studies on biodiversity conservation.*

The project has no reason to doubt that this assumption does not continue to hold true.

Indicator 4: *Accessibility of up-to-date data from existing/previous Species Action Plans between all partners.*

The project has no reason to doubt that this assumption does not continue to hold true. NK has supplied draft SPA documents (Annex 12) and participated in collaborative workshop for SAP development.

Indicator 5: Weather conditions permit effective restoration of indigenous forest following tree planting.

The project has no reason to doubt that this assumption, although the project is fully aware of the recent poor rains (flagged by the 3-monthly internal report to the Project Steering Group which forms part of the Project's M&E) and the implications that this may have on planting progress. Notably, this year the rains that were expected are proving to be unusually late and possibly short-lived (Annex 14 shows the regional weather report by WFP).

4. Project support to the Conventions (CBD, CMS and/or CITES)

The project is on course to support the CBD through production of updated SAPs for three critically-endangered species, training (e.g. via supporting a Kenyan on the ZSL EDGE Fellowship programme) and capacity-building (e.g. via provision of a MSc scholarship to a Kenyan forestry employee).

5. Project support to poverty alleviation

The project has so far trained 22 local community members in handicrafts, raised >53,000 seedlings for re-planting, finalised 3 CFAs, and supported 6 seedling nurseries; as more of these activities get underway we hope that livelihoods will become diversified and generate alternative sources of income.

6. Monitoring and evaluation

Following the UK visit by TTWF and KFS representatives, the Project leader receives 3-monthly reports produced by Mr Mwang'ombe (KFS) in consultation with the Project Manager, POs and TTWF/NK representatives; these 3-monthly reports are circulated to the Project Steering Group consisting of representatives from KFS, TTWF, NK, ZSL, IIED, DICE. A 5-day site visit by ZSL In-country Officer Chris Gordon was also circulated to the PSG (Annex 13).

Challenges encountered which have/may have impact on progress:

Delay in TTWF-UK trip: Our project started on 1st July 2014, and we had scheduled a trip to the UK for representatives from Taita Taveta Wildlife Forum (the main partner) to visit DICE and ZSL during a week-long trip. The purpose of the trip has been to get to know the partners, discuss the project and ensure they are familiar with Darwin's financial and administrative requirements and those expected of them by the financial administrators here at the University of Kent. This trip was originally scheduled for 8-12th September 2014, but with a few days before their flight the Kenyans had to cancel the trip due to visa issues in Kenya. Thankfully, with great effort coordination of calendars the trip was rescheduled for 24-28th November 2014. However, the delay caused was noticeable and meant that the TTWF staff were not able to familiarise themselves with University of Kent administrative procedures or to meet other key partners and the Project Leader until a time when various project activities were already underway.

Price of seedlings: One problem encountered is the increase in the prices of seedlings, from the previous price of ksh 10-12.50 per seedling to Ksh 20 per (after negotiation from Ksh 25). This will likely have a bearing on the total number of tree seedlings the project will be able to plant by the end of the project.

Delay in socio-economic survey activities: The progress on the collection of baseline information during this period was delayed a little due to The Project Officer (Dawson) experiencing bereavement of a close relative. Project activities on this have since continued.

Poor rainfall: The weather advisory paints a worrying picture of the rainfall season ahead, which happens to be the long rains. The forecast indicated the rains will be near normal tending

towards below normal (Annex 14 shows 2014/15 WFP rainfall report). Unlike before where the rains began in the 3rd or 4th week of March, the rains have not even begun after end of March 2015. This will affect the tree planting activity; we hope that April will receive adequate rainfall. The weather advisory also indicates the rains will end in the first week of May, thus leaving a very short period for planting to be undertaken.

PFM Plans Preparation There has been a slower-than-expected response from the KFS officers in Taita Taveta County in playing their role in PFM plans preparation. This has affected progress in finalisation of all the plans. This matter is being taken up with the officer in-charge of Forest Management Plans in the Head Office in order to quicken the progress. Some of the forests that are not gazetted as Forest Reserves are under the management of the County Government and therefore this requires substantial consideration between KFS and the County Government.

SCMPs (Sub-Catchment Management Plans) A slower-than-expected response has been experienced with the Water Resources Management Authority (WRMA). No response has been received from the Athi regional office to the letter (copy of letter included at end of Annex 7) sent informing about the preparations/reviews of SCMPs. However, this has not stopped activities but may delay approval once the plans are completed. The project hopes to take advantage of the fact that TTWF is one of the Civil Society Organisations that received approval from the WRMA to be Support Organisations that can offer Technical Support to WRUAs including SCMP preparation. Indeed, TTWF was awarded three contracts (James Mwang'ombe being the lead person) to assist 3 WRUAs in Makueni and Machakos Counties to prepare SCMPs that went through technical scrutiny successfully. The Project is hopeful of a positive outcome soon for approval of SCMPs.

Monkey predation: It was observed in March 2014 that the nursery in Wundanyi has had some seedlings being damaged by monkeys (eating the succulent leaves) which is a new observation.

7. Darwin Identity

8. Project Expenditure

Please expand and complete Table 1.

Table 1 Project expenditure during the reporting period (1 April 2014 – 31 March 2015)

Project spend (indicative) since last annual report	2014/15 Grant (£)	2014/15 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)				
Others (see below)				
TOTAL				

Highlight any agreed changes to the budget and **fully** explain any variation in expenditure where this is +/- 10% of the budget. Have these changes been discussed with and approved by Darwin?

Annex 1: Report of progress and achievements against Logical Framework

Project summary	Measurable Indicators	Progress and Achievements April 2014 - March 2015	Actions required/planned for next period
<p>Impact</p> <p>Diversified livelihoods linked to sustainable natural resource management, achieved by marrying poverty-alleviation and biodiversity conservation. Enhanced land-management practices, which lead to improved ecosystem services, and which provide a model for use beyond project area.</p>		<p>The early phase of the project (months 1- 9 reported here) is providing baseline data on poverty and livelihoods. Project impact against these baselines is expected to be felt in Year-2 and 3. Engagement by the Project team with local communities is progressing well; plans for training and capacity-building of project staff are proceeding as planned.</p>	
<p>Outcome</p> <p>Capacity-building and diversified livelihoods in Kenya will result in a transition from unsustainable subsistence agriculture to sustainable livelihoods. This will yield empowered communities managing their natural resources effectively and improved biodiversity conservation.</p>	<ol style="list-style-type: none"> 1. Average annual income of participating households increased by at least 30% from a baseline of KSh 72,000 per annum (2014) and diversified through inclusion of up to 6 additional sustainable alternative livelihood options by Year 3. 2. Management of forest and catchment area improved through preparation of strategic plans (finalised by end of Year 2 of project) in partnership with community associations. 3. Generation of knowledge and improved technical expertise in biodiversity conservation among local communities and TTWF (at least 4 people with increased qualifications and experience). 	<ol style="list-style-type: none"> 1. Handicraft training is underway, as are support visits by Project staff to community groups, together with collation of socio-economic data to provide baseline data on income and livelihoods. 2. Community management plans are being produced/agreed (3 CFAs produced & finalised, 2 PFMPs drafted, 2 WRUAs initiated). Issues between regional authorities need to be resolved which have hampered progress on development of SCMPs and WRUAs. Strong project links with KFS should help to resolve these delays. 3. 1x Kenyan currently training as ZSL/EDGE Fellow; 1x Kenyan approved by PSG to register for DICE/Kent MSc in Conservation Biology (starting Sept 2015). 1x Kenyan trained in caecilian surveys/field techniques. 	<ol style="list-style-type: none"> 1. Complete collation and analysis of socio-economic information to inform baseline data. 2. Focus on progressing community agreements/plans (CFAs, PFMPs, SCMPs, WRUAs) 3. Complete collation of pre-CEPA strategy data, and implement CEPA strategy. <p>2x Kenyans to complete EDGE programme and MSc programme.</p> <p>Encourage/facilitate applications to project's Kenyan Student Research</p>

	<p>4. Development and implementation of conservation strategies for three Critically-Endangered species through improved knowledge, and implementation of Species Action Plans (SAPs) for Critically-Endangered Taita thrush, Taita apalis and Sagalla caecilian, and contributions to SAPs for other threatened Taita endemics.</p> <p>5. Native tree cover and forest connectivity in Dawida Massif and Sagalla Hill enhanced by end of Year 3; measured by appropriate spatial analysis.</p>	<p>4. Draft SAPs being produced for the target species; 1x Kenyan currently carrying out caecilian surveys/research.</p> <p>5. 106,300 seedlings raised (53,300 in Taita; 53,000 in Sagalla). Tree nursery maintenance ongoing. Fluctuation in value of Kenya Shilling (Ksh) may impact on final # seedlings able to be purchased by project. Recent poor weather is being noted within project M&E.</p>	<p>Fund</p> <p>4. Produce and review SAPs.</p> <p>5. Continue raising seedlings. Enhance and facilitate planting activities.</p>
<p>Output 1.</p> <p>Existing resource-based livelihoods diversified, to potentially include forest restoration, carbon-credits, fish-farming, handicrafts, bee-keeping, butterfly-farming, to benefit at least 300 households by end of Year 3.</p> <p><u>Forest restoration:</u> Train 250-300 farmers in tree nursery devel.^t.</p> <p><u>Sustainable agriculture:</u> Train 250-300 farmers in suitable tech.^s.</p> <p><u>Fish-farming:</u> Establish and maintain 20-25 ponds.</p> <p><u>Handicrafts:</u> Train 4-5 women's/mixed groups in manufacture.</p> <p><u>Bee-keeping:</u> Establish 4-5 additional bee-keeping groups.</p> <p><u>Butterfly-farming:</u></p>	<p><u>Measure-1:</u> <u>Farming techniques:</u> # TTWF employees trained in sustainable livelihood initiatives. # farmers trained in and implementing appropriate farming techniques. # farmers attending sustainable farming workshops.</p> <p><u>Fish-farming:</u> # ponds established and maintained (measured via periodic assessment). <u>Handicrafts:</u> # women's/mixed-gender groups trained, producing & selling handicrafts. # women attending handicraft groups. # additional women's groups. # handicrafts produced and sold.</p> <p><u>Bee-keeping:</u> # newly-formed bee-keeping groups. # hives & training sessions provided. Kgs honey produced.</p> <p><u>Butterfly-farming:</u> # farmers trained in butterfly pupae-production/harvesting. # successfully harvesting and selling pupae.</p> <p><u>Carbon-credits scheme (TIST):</u> # farmers recruited/supported in the TIST scheme. # seedlings produced and sold.</p>	<p><u>General progress:</u> see Section 3 above under 'Project progress'.</p> <p><u>Appropriateness of Indicators:</u> This project involves activities relating to up to six different alternative livelihoods. All/each of them has the potential to deliver against Output 1, producing a large number of measurable indicators. We decided to include indicators for all six alternative livelihoods into our logframe following UK project staff attendance at a Darwin workshop in March 2014 at IIED/London focusing on M&E; Leslie King at LTS International kindly reviewed and 'sanity-checked' our final logframe. However, at that workshop a suggestion was made by workshop leader Paddy Abbot to perhaps consider choosing just <u>one</u> of the six livelihoods as a proxy Indicator for the other livelihoods under Output 1 in order to simplify M&E/reporting. The Project Leader will discuss this suggestion will be Project Steering Group and ask for feedback on this idea.</p>	

<p>Train 10-15 farmers in pupae-prodⁿ/harvesting. <u>Carbon credits:</u> Provide tech/TIST support to 250-300 farmers. <u>Cascade-training:</u> Train 3+ TTWF staff in sustainable livelihoods.</p>	<p><u>Measure-2:</u> Change in knowledge/attitude as measured by socio-economic surveys. # trained trainers delivering cascade training.</p>	
<p>Activity 1.1 Training of farmers and cascade training</p>	<p>Project Manager and both POs have visited farmers and attended training workshops (see Annex 9).</p>	
<p>Activity 1.2 Establishment of support network and training in sustainable livelihood techniques</p>	<p>Project Manager and both POs have visited farmers. Site visit by ZSL in-country Officer Chris Gordon with project staff (Annex 13) has identified staff training needs. Future work will include a main focus on support/training in sustainable livelihood techniques.</p>	
<p>Activity 1.3 Training/support of women's groups in handicrafts and marketing, and introduction of other livelihood options</p>	<p>22 community members trained in handicrafts and leatherwork (Annex 6 shows participant list, and report on training).</p>	
<p>Activity 1.4 Socio-economic survey of household income, uptake of sustainable farming practices and livelihoods</p>	<p>Preliminary socio-economic surveys conducted in Taita and Sagalla regions (Annex 7). Future work will include additional surveys/ analysis of baseline data.</p>	
<p>Output 2. Participatory Forest Management Plans developed (2 in Dawida Massif; 1 in Sagalla Hill) and approved and implemented. Forest Management Agreements produced and signed by KFS. Respective Community Forest Associations formed and registered. Sub-Catchment Management Plans developed (2 in Dawida Massif; 1 in Sagalla Hill). Respective Water Resource Users Associations formed and registered.</p>	<p><u>Measure-1:</u> # Participatory Forest Management Plans approved and implemented. <u>Measure-2:</u> # Forest Management Agreements registered. # Community Forest Associations; approval by KFS. <u>Measure-3:</u> # Sub-Catchment Management Plans prepared, registered and approved by Water Resources Management Authority (WRMA). # Water Resource Users Associations formed.</p>	<p><u>General progress:</u> see Section 3 above under '<i>Project progress</i>'. <u>Appropriateness of Indicators:</u> The Indicators appear to be satisfactory.</p>
<p>Activity 2.1. Participatory Forest Management Plans (PFMPs), Forest</p>	<p>2 draft PFM plans completed (Annex 7).</p>	

Management agreements, and Sub-Catchment Management Plans (SCMPs)		
Activity 2.2. Implementation of PFMPs and SCMPs		Plans undergoing review by local KFS officers before presentation to local stakeholders for adoption and submission to KFS for review and approval. Future work will involve their implementation by the project.
Activity 2.3 Formation of Community Forest Associations and Water Resource Users Associations		3 CFAs produced, reviewed and finalized; ready for application for registration in April 2015 (Annex 7).
Activity 2.4 Training of CFAs and WRUAs in governance and natural resource management		Due to some delays in developing some community agreements, the training of resulting members will occur in Years 2 and 3.
<p>Output 3. 1x MSc completed by Year 3. 1x 2-year EDGE Fellowship completed by Year 3. Up to 4x Kenyan Student Research Fund projects completed by end Yr 3. 2+ TTWF staff trained on ZSL Conservation Tools course. CEPA strategy developed and implemented by end Year 2.</p>	<p><u>Measure-1:</u> Attendance records of 2+ TTWF staff on ZSL Cons Tools course. Attendance records of 1+ TTWF staff on ZSL Cons Leadership course. EDGE Fellow reports and blogs. # local community members trained/involved in biodiversity conservation and monitoring activities (via CEPA strategy reports). <u>Measure-2:</u> MSc attendance records and MSc dissertation by 1 TTWF staff. <u>Measure-3:</u> # applications received for funding via Kenyan Student Research Fund.</p>	<p><u>General progress:</u> see Section 3 above under '<i>Project progress</i>'. <u>Appropriateness of Indicators:</u> The Indicators appear to be satisfactory.</p>
Activity 3.1 Training on DICE MSc programme		KFS partner Mr James Mwang'ombe has been nominated /approved by PSG to undertake DICE MSc programme in Conservation Biology (approved on 19 th March 2015; see Annex 10), starting Sept 2015.
Activity 3.2 Training on ZSL Cons ⁿ Tools course (Kenya)		PM Dawson Mwanyumba has been accepted on the ZSL EDGE Fellowship programme, and attended the 4-week EDGE Conservation Tools course in Costa Rica (Annex 8 shows the certificate of attendance).
Activity 3.4 Admin/activities of Kenya Student Research Fund		Year 1 funds have been utilised to purchase a number of GPS units in preparation to facilitate local BSc/MSc student research projects.
Activity 3.5 Training of 1 TTWF employee on ZSL EDGE Fellowship		PM Dawson Mwanyumba has been accepted on the ZSL EDGE Fellowship programme (Annex 8 shows the certificate of attendance).
Activity 3.6 Training and involvement of community in biodiversity conservation		PO Basil Lewela attended two-part training course on Advocacy organized by PELUM (Participatory Ecological Land-Use Management) (Annex 9 shows the

		report). Mr Lewela also took part in the preparation of the Climate Change Adaptation plan for Taita hills facilitated by CHIESA (Climate Change Impacts on Ecosystem Services and Food Security in Eastern Africa).
Activity 3.7 Implementation of CEPA strategy		The CEPA strategy is being developed; it will be implemented once the pre-CEPA surveys are completed, and will be a focus of Year 2 activities by project staff.
Activity 3.8 Survey to gauge impact of CEPA strategy		Questions relating to Biodiversity were included within the preliminary socio-economic survey carried out during year 1. However, further data will be produced via additional survey/questionnaires by the Project Manager/EDGE Fellow.
<p>Output 4. Conservation strategies for Taita thrush, Taita apalis, Sagalla caecilian developed and initiated by Year 3 of project.</p> <p>Research projects by Kenyan students on key endemic species incorporated into existing SAPs (by Year 3 of project).</p>	<p><u>Measure-1:</u> # locally-led, multi-authored publications to peer-reviewed journals by end of the project.</p> <p><u>Measure-2:</u> Conservation strategies and biodiversity monitoring and evaluation protocols developed for Thrush, apalis and caecilian.</p> <p><u>Measure-3:</u> Species Action Plans developed or updated for Taita thrush, Taita apalis and Sagalla caecilian</p>	<p><u>General progress:</u> see Section 3 above under '<i>Project progress</i>'.</p> <p><u>Appropriateness of Indicators:</u> The Indicators appear to be satisfactory.</p>
Activity 4.1 Analysis of project data and writing of publications		It is too early for writing of publications from project activities, but the SAPs are under development, and the EDGE Fellows research project on the Sagalla caecilian shows promise for producing a wealth of much-needed scientific data which it is hoped will form a valuable multi-authored publication.
Activity 4.2 Development and updating of Species Action Plans		SAPs: 1 SAP stakeholder workshop conducted to initiate SAPs for the Taita apalis, Taita Thrush and Sagalla caecilian. <i>It is anticipated the SAPs will be finalised and published by end of June 2015.</i> 3 SAPs produced in draft form (Annex 12 shows shortened versions of those documents).
<p>Output 5. Indigenous forest habitat restored through planting and maintenance of 500,000 native seedlings and tree saplings (450,000 in Dawida Massif; 50,000 on Sagalla Hill).</p>	<p><u>Measure-1:</u> # native tree seedlings and saplings planted and maintained in Dawida Massif and Sagalla Hill.</p> <p><u>Measure-2:</u> # existing and new community members involved in planting activities (to be measured biannually).</p>	<p><u>General progress:</u> see Section 3 above under '<i>Project progress</i>'.</p> <p><u>Appropriateness of Indicators:</u> The Indicators appear to be satisfactory.</p>

	<u>Measure-3:</u> Measures of forest cover/connectivity through appropriate spatial analysis.	
Activity 5.1 Development of seedling nursery(ies) involving locally-led community groups		6 tree nurseries are being maintained in Taita and technical support provided by TTWF (Annex 5 shows photos of nurseries).
Activity 5.2 Maintenance of seedlings		53,300 seedlings have been raised in Taita (36,300 by TTWF nurseries; 17,000 by community member-owned nurseries). 53,000 seedlings raised in Sagalla.
Activity 5.3 Identification of planting sites enhancing forest connectivity		See Activity 5.6, below.
Activity 5.4 Planting of seedlings		See Section 3 above. Preparations for planting are underway although by the end of March 2015, no rains had been received and the weather forecast indicated lower rainfall than usual (see Annex 14). This may affect tree planting activities to some extent in the foreseeable future.
Activity 5.5 Maintenance of planted trees and monitoring of survival and growth		
Activity 5.6 GIS mapping of tree planting areas		A 5-day site visit by ZSL In-country Officer (Chris Gordon) in March 2014 (see Annex 13) identified training needs of TTWF staff, including training in GIS. GIS training will take place in May/June 2015 to facilitate collation of spatial data and spatial analysis and identification of sites for enhancing forest connectivity.

Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal: Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.</p>			
<p>Outcome: Capacity-building and diversified livelihoods in Kenya will result in a transition from unsustainable subsistence agriculture to sustainable livelihoods. This will yield empowered communities managing their natural resources effectively and improved biodiversity conservation.</p>			
<p>Outputs:</p> <p>Output 1: Existing resource-based livelihoods diversified, to potentially include forest restoration, carbon-credits, fish-farming, handicrafts, bee-keeping, butterfly-farming, to benefit at least 300 households by end of Year 3.</p>	<p><u>Farming techniques:</u> # TTWF employees trained. # farmers trained in appropriate farming techniques. # farmers attending workshops.</p> <p><u>Fish-farming:</u> # ponds established and maintained</p> <p><u>Handicrafts:</u> # women's/mixed-gender groups trained, producing & selling handicrafts. # women attending handicraft groups. # additional women's groups. # handicrafts produced and sold.</p> <p><u>Bee-keeping:</u> # newly-formed bee-keeping groups. # hives & training sessions provided. Kgs honey produced.</p> <p><u>Butterfly-farming:</u> # farmers trained in butterfly pupae-production/harvesting. # successfully harvesting and selling pupae.</p> <p><u>Carbon-credits scheme (TIST):</u> # farmers recruited/supported in the TIST scheme. # seedlings produced and sold.</p> <p>Change in knowledge/attitude as measured by socio-economic surveys. # trained trainers delivering cascade training.</p>	<p>1a. Section in Annual Project Report showing; <i># farmers trained in appropriate farming techniques;</i> <i># women's/mixed gender groups;</i> <i># new bee-keeping groups/hives established;</i> <i># farmers trained in butterfly pupae-production;</i> <i># recruited in TIST scheme;</i> <i># TTWF staff trained in delivering sustainable livelihood training.</i></p> <p>Socio-economic survey reports.</p> <p>IIED case study report on this projects' use and impact of sustainable livelihoods.</p> <p>1b. Attendance records at women's community groups. Number of attendance sheets (1 per group).</p> <p>Reports on handicraft production/sales.</p> <p>1c. Attendance records of farmers at sustainable farming workshops. Socio-economic survey results in Annual Reports showing change in knowledge/attitude. Audit by TTWF and NK of sustainable farming techniques being adopted.</p> <p>Record in Annual Report of # new community members involved in planting activities.</p>	<p>Local farmers are willing and able to attend training in sustainable farming techniques and to adopt these techniques on a long-term basis. Women community members are sufficiently motivated to sign up to and attend activities and training in sustainable livelihoods and subsequently implement them (and are able to profit from them). Support and market links for development of livelihoods are available via local and international partner links.</p>
<p>Output 2: Participatory Forest Management Plans developed (2 in Dawida</p>	<p># Participatory Forest Management Plans approved and implemented.</p>	<p>Signed copies of Plans, Agreements, Association docs (& KFS approval where relevant) included as</p>	<p>Local community members and resource management agencies motivated to</p>

<p>Massif; 1 in Sagalla Hill) and approved and implemented. Forest Management Agreements produced and signed by KFS. Respective Community Forest Associations formed and registered. Sub-Catchment Management Plans developed (2 in Dawida Massif; 1 in Sagalla Hill). Respective Water Resource Users Associations formed and registered.</p>	<p># Forest Management Agreements registered. # respective Community Forest Associations; approval by KFS. # Sub-Catchment Management Plans prepared, registered and approved by Water Resources Management Authority (WRMA). # respective Water Resource Users Associations formed.</p>	<p>Appendices in Annual Project Reports. Water Resources Management Authority letter confirming approval of 3 Sub-catchment Management Plans.</p>	<p>establish and sign up to Plans, Agreements and Associations.</p>
<p>Output 3: 1x MSc completed by Year 3. 1x 2-year EDGE Fellowship completed by Year 3. Up to 4x Kenyan Student Research Fund projects completed by end Yr 3. 2+ TTWF staff trained on ZSL Conservation Tools course. CEPA strategy developed and implemented by end Year 2.</p>	<p>Attendance records of 2+ TTWF staff on ZSL Cons Tools course. Attendance records of 1+ TTWF staff on ZSL Cons Leadership course. EDGE Fellow reports and blogs. # local community members trained/involved in biodiversity conservation and monitoring activities (via CEPA strategy reports). MSc attendance records and MSc dissertation by 1 TTWF staff. # applications received for funding via Kenyan Student Research Fund.</p>	<p>ZSL Course Certificates to TTWF staff. EDGE Fellowship Certificate. ZSL pre/post-course knowledge assessments. CEPA strategy progress reports (e.g. detailing biodiversity monitoring groups and forest restoration actions). MSc degree certificate (or confirmation of marks from Kent). Award letters to successful Kenyan Student Research Fund candidates. Post-project reports by successful candidates.</p>	<p>Appropriate people will be identified to fill the Project Manager/Officer positions and that they will be retained for the project duration. Sufficient number of TTWF staff can be identified and have an appropriate background to undergo training on ZSL courses and DICE MSc programme. Local communities will be able to engage in activities associated with the CEPA strategy.</p>
<p>Output 4: Conservation strategies for Taita thrush, Taita apalis, Sagalla caecilian developed and initiated by Year 3 of project. Research projects by Kenyan students on key endemic species incorporated into existing</p>	<p># locally-led, multi-authored publications to peer-reviewed journals by end of the project. Conservation strategies and biodiversity monitoring and evaluation protocols developed for Thrush, apalis and caecilian. Species Action Plans developed or updated for Taita thrush, Taita apalis and Sagalla caecilian.</p>	<p>Publication submission documents confirming submission of three multi-authored manuscripts/articles. Draft conservation strategies, biodiversity monitoring protocols, habitat survey reports and developed/updated SAPs on thrush, apalis and caecilian submitted with annual reports.</p>	<p>Timely submission and peer-review of manuscripts submitted to journals for publication. Availability of SAPs to the project team.</p>

SAPs (by Year 3 of project).			
Output 5: Indigenous forest habitat restored through planting and maintenance of 500,000 native seedlings and tree saplings (450,000 in Dawida Massif; 50,000 on Sagalla Hill).	<p># native tree seedlings and saplings planted and maintained in Dawida Massif and Sagalla Hill.</p> <p># existing and new community members involved in planting activities (to be measured biannually).</p> <p>Measures of forest cover/connectivity through appropriate spatial analysis.</p>	<p>Section in annual report detailing # native tree seedlings & # saplings planted (in Dawida and Sagalla), area covered.</p> <p>Section in annual report detailing # new community members involved in planting activities (both adult and school children).</p> <p>Maps showing new areas of planting activity and how they are connecting previously isolated forest fragments (guided by existing reforestation plans for Sagalla, and the “<i>Least-cost forest connectivity model</i>” for Dawida).</p>	<p>Provision of sufficient supply of seedlings (and sufficient survival of them) and that the supply at any one time keeps pace with the planting activities during the course of the project, to meet the target of 500,000 planted tree seedlings. Sufficient availability/willingness of community members for planting work.</p>
<p>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)</p> <p>Activity 1.1 Training (and cascade-training) of farmers in sustainable farming practices and forest restoration methods.</p> <p>Activity 1.2 Establishing support networks/training in sustainable livelihoods (fish-farming; handicrafts; bee-keeping; butterfly-farming; carbon-credits).</p> <p>Activity 1.3 Training and support of women’s groups in handicraft manufacture (and other livelihood options where appropriate) and marketing.</p> <p>Activity 1.4 Socio-economic survey of (i) uptake of sustainable farming practices, (ii) livelihoods, (iii) household income.</p> <p>Activity 2.1 Develop/implement of Part.y Forest Plans & Forest Manag.t agreements.</p> <p>Activity 2.2 Develop/approval/implement of Sub-Catchment Management Plans.</p> <p>Activity 2.3 Develop/approval/implement of Community Forest Associations (CFAs) and Water Resource Users Associations (WRUAs).</p> <p>Activity 2.4 Training of CFAs and WRUAs in governance and resource management.</p> <p>Activity 3.1 Training of 1 TTWF staff on DICE MSc programme.</p> <p>Activity 3.2 Training of 2+ TTWF staff on ZSL Cons Tools course (Kenya).</p> <p>Activity 3.3 Training of 1+ TTWF staff on ZSL Cons Leadership training course (London).</p> <p>Activity 3.4 Administration of Kenyan Student Research Fund, facilitation of projects.</p> <p>Activity 3.5 Training of 1 TTWF staff on a 2-year ZSL EDGE Fellowship.</p> <p>Activity 3.6 Training and involvement of community in biodiversity conservation.</p> <p>Activity 3.7 Implementation of CEPA strategy.</p> <p>Activity 3.8 Survey to gauge impact of CEPA strategy.</p> <p>Activity 4.1 Analysis of project-generated data and writing of publications.</p> <p>Activity 4.2 Development and updating of SAPs for the thrush, apalis and caecilian.</p> <p>Activity 5.1 Development of seedling nursery(ies) involving locally-led community groups</p> <p>Activity 5.2 Maintenance of seedlings and their preparation for planting</p> <p>Activity 5.3 Surveys (for baseline data) to identify planting sites to enhance connectivity.</p>			

- | | |
|--------------|---|
| Activity 5.4 | Planting of seedlings by community groups and members. |
| Activity 5.5 | Maintenance of planted trees and monitoring of survival and growth. |
| Activity 5.6 | GIS mapping of tree planting areas. |

Annex 3 Standard Measures

Please expand and complete Table 1: new projects should complete the Y1 column and also indicate the number planned during the project lifetime. Continuing project should cut and paste the information from previous years and add in data for the most recent reporting period. Quantify project standard measures over the last year using the coding and format from the Darwin Initiative Standard Measures (see website for details: <http://darwin.defra.gov.uk/resources/>) and give a brief description. Please list and report on relevant Code No's. only. The level of detail required is specified in the Standard Measures Guidance notes under 'definitions and reporting requirements' column. Please devise and add any measures that are not captured in the current list. Please note that these measures may not be a substitute for output level objectively verifiable indicators in the project logframe.

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
Established codes								
4C	EDGE Conservation Tools course	Male	Kenyan	1				1
4D	EDGE Conservation Tools course (4 weeks)	Male	Kenyan	4				4
6A	Training in handicrafts	60% female	Kenyan	22				Output 1: <i>Train 4-5 women's/ mixed groups</i>
7	Nature Kenya poster/banner	N/A	Kenyan	1				N/A
9	Draft SAPs	N/A	Kenyan	3				3
14B	SAP workshop	50/50	Kenyan	1				N/A
20	1 (£34,000 total)	4x4 vehicle, and motorbike	Kenyan	1				1

In Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Mark (*) all publications and other material that you have included with this report.

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. website link or publisher)
N/A						

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	No
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	13.2MB Yes
Have you included means of verification? You need 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 want 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.	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?	No (permission granted to send it shortly)
Do not include claim forms or other communications with this report.	