

Applicant: **Beale, Colin**
Organisation: **University of York**
Funding Sought: **£379,432.00**
Funding Awarded: **£379,432.00**

DIR26S2\1052

27-008 Rangeland Guardians: Women Entrepreneurs for Rangeland Restoration

Rangeland degradation in northern Tanzania, driven by climate and societal change, reduces threatened wildlife populations and threatens food security for pastoralist communities. Here, women are the biggest victims of climate change and land degradation but are also key agents of change. This project pilots an innovative, pastoralist-driven, rangeland restoration process, empowering 60 women to become catalysts of sustainable management in a wildlife-rich, but degrading, corridor within the Tarangire-Manyara ecosystem, restoring grazing opportunities for >10,000 adults and their families.

Section 1 - Contact Details

PRIMARY APPLICANT DETAILS

Title Dr
Name Colin
Surname Beale
Organisation University of York
Tel (Work) [REDACTED]
Email (Work) [REDACTED]
Address [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

GMS ORGANISATION

Type	Organisation
Name	University of York
Phone (Work)	[REDACTED]
Email (Work)	[REDACTED]
Website (Work)	[REDACTED]
Address	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

Section 2 - Title, Dates & Budget Summary

Q3. Project title:

27-008 Rangeland Guardians: Women Entrepreneurs for Rangeland Restoration

What was your Stage 1 reference number? e.g. DIR26S1\100123

DIR26S1\1548

Q4. Country(ies)

Which eligible country(ies) will your project be working in? Where there are more than 4 countries that your project will be working in, please add more boxes using the selection option below.

Country 1

Tanzania

Country 2

No Response

Country 3

No Response

Country 4

No Response

Do you require more fields?

No

Q5. Project dates

Start date:

01 April 2020

End date:

31 March 2023

Duration (e.g. 2 years, 3 months):

3 years

Q6. Budget summary

Year:	2020/21	2021/22	2022/23	Total request
Amount:	£136,706.00	£131,437.00	£111,289.00	£ 379,432.00

Q6a. Do you have matched funding arrangements?

Yes

What matched funding arrangements are proposed?

Q6a. What matched funding arrangements are proposed? If none, please explain why.

University of York commits to fund contributions towards full economic costs and will also contribute towards travel for Dr Critchlow to a value of £[REDACTED]. This reflects a match of 48% of UoY requested funds.

Oikos East Africa will fund consultant's fees plus a vehicle and field costs up to £[REDACTED] reflecting a match of 8% of the total budget.

Istituto Oikos will fund residency permits for the project staff, totalling £[REDACTED]

Q6b. Proposed (confirmed and unconfirmed) matched funding as % of total project cost (total cost is the Darwin request plus other funding required to run the project). 28

Section 3 - Project Summary

Q7. Summary of project

Please provide a brief summary of your project, its aims, and the key activities you plan on undertaking. Please note that if you are successful, this wording may be used by Defra in

communications e.g. as a short description of the project on [GOV.UK](https://www.gov.uk).

Please write this summary for a non-technical audience.

Rangeland degradation in northern Tanzania, driven by climate and societal change, reduces threatened wildlife populations and threatens food security for pastoralist communities. Here, women are the biggest victims of climate change and land degradation but are also key agents of change. This project pilots an innovative, pastoralist-driven, rangeland restoration process, empowering 60 women to become catalysts of sustainable management in a wildlife-rich, but degrading, corridor within the Tarangire-Manyara ecosystem, restoring grazing opportunities for >10,000 adults and their families.

Section 4 - Lead Organisation Summary

Q8. Lead organisation summary

Has your organisation been awarded a Darwin Initiative or IWT Challenge Fund award before (for the purposes of this question, being a partner does not count)?

Yes





If yes, please provide details of the most recent awards (up to 6 examples).





Reference No	Project Leader	Title
17027	Dave Rafaelli/Jon Lovett	Market Based Scheme for Conservation in La Primavera
17003	Jane Hill	Developing tools for reducing biodiversity losses in tropical agricultural landscapes
14022	Jane Hill	Predictive Tools for Targeting Conservation Effort in Bornean Forest Reserves,
EIDPS12	Jane Hill	Noel Tawatao Fellowship
9005	Callum Roberts	Conservation of whale sharks and fish spawning aggregations in Belize
5164	Callum Roberts	Do Marine Reserves Promote Biodiversity Conservation and Fishery Sustainability?

Have you provided the requested signed audited/independently examined accounts? If you select "yes" you will be able to upload these. Note that this is not required from Government Agencies.

Yes

Please attach the requested signed audited/independently examined accounts.

 [Annual Report and Financial Statements 2018 \(1\)](#)
 05/12/2019
 21:52:34
 pdf 4.72 MB

 [annual-report-2019](#)
 05/12/2019
 21:51:20
 pdf 2.67 MB

Section 5 - Project Partners

Q9. Project partners

Please list all the partners involved (including the Lead Organisation) and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development.

This section should illustrate the capacity of partners to be involved in the project. Please provide Letters of Support for the Lead Organisation and each partner or explain why this has not been included.

N.B: There is a file upload button at the bottom of this page for the upload of a cover letter (if applicable) and all letters of support.

Lead Organisation name: University of York

Website address: <https://www.york.ac.uk/>

Details (including roles and responsibilities and capacity to engage with the project):

The University of York (UoY) will administer the project, provide scientific oversight and technical expertise in rangeland restoration. UoY (and in particular, Dr Colin Beale) has 15 years experience working in Tanzania's savanna ecosystems, including running a large USAID project focussed on experimental rangeland restoration, and long-term research into the processes shaping natural savannas. The Biology Department at the UoY was rated first in the UK for impact in the last Research Excellence Framework process and has considerable expertise generating practical benefits from research outputs.

In this project, UoY, led by Dr Colin Beale will be responsible for overall project management, collaboration and communication among partners, financial and technical reporting, and monitoring and evaluation. Additionally, UoY will work on the following specific project components: developing a restoration toolkit that Rangeland Guardians (RGs) will use to restore degraded grasslands and training rangeland guardians and village grazing committee members. UoY will also lead on monitoring the ecological of the impacts of the project using methodologies defined and refined over 15 years of savanna research.

Have you included a Letter of Support from this organisation? Yes

Have you provided a cover letter to address your Stage 1 feedback? Yes

Do you have partners involved in the Project?

Yes

1. Partner Name: OIKOS EAST AFRICA

Website address: <http://oikosea.org/>

Details (including roles and responsibilities and capacity to engage with the project):

Oikos East Africa (OEA) is a Tanzanian NGO working with communities in northern Tanzania rangelands since 1996. The principle behind OEA's work is that sound environmental conservation strategies can guarantee health and wellness to current and future generations, increase the economic independence of vulnerable communities and tackle climate change. Since it was funded, OEA has implemented more than 100 conservation and sustainable resource management projects and has liaised with more than 30 institutional and private donors and it has ongoing MoU with several districts, the Arusha Regional Administrative Secretariat, the Nelson Mandela African Institute Science and Technology. In the past 3 years OEA has trained more than 7000 women in the region in Marketplace Literacy, has set up community-led ecological rangeland monitoring in 8 villages, has trained more than 50 district officers in climate change adaptation strategies and risk management, and is working in joint resource management planning with the National Land Use Commission.

OEA will provide experienced community development officers who have already worked in the target villages and are familiar with both the local government and the traditional leader groups, experienced Marketplace Literacy trainers and logistical support making one vehicle available for the project.

Have you included a Letter of Support from this organisation? Yes

2. Partner Name: ISTITUTO OIKOS

Website address: <https://www.istituto-oikos.org/>

Details (including roles and responsibilities and capacity to engage with the project):

Istituto Oikos (IO) is a conservation organisation founded in 1996. Since foundation, IO has developed over 300 projects in Italy and in seventeen countries across Asia, Africa and South America and counts on a staff of 165 members. Oikos partners with scientists, technicians and experts and has a continuous dialogue with academics and research centres in order to fuel competencies and ensure that interventions are based on sound scientific knowledge and rigorous analysis of environmental data. IO has been working with OEA to build capacity in Tanzania for 22 years. IO will support OEA in ensuring rigorous financial reporting and will provide a senior specialist in sustainable rural development with 20 years of experience in conservation work and project coordination in Tanzania. Dr Silvia Ceppi will act as a liaison between the scientists at the University of York, the local partners and research institutions in Tanzania, facilitating in particular the information sharing ('e.g. through the 'Healthy and connected rangelands' workgroup in Arusha and Manyara Regions) and finding opportunities for the scaling up of the Rangeland Guardians method. Dr Ceppi will support OEA and UCRT in data collection for monitoring purposes.

Have you included a Letter of Support from this organisation?

Yes

3. Partner Name:

UCRT

Website address:

<http://www.ujamaa-crt.org/>

Details (including roles and responsibilities and capacity to engage with the project):

The Ujamaa Community Resource Team (UCRT) is a grassroots Tanzanian non-profit working with minority groups in Northern Tanzania since 1997. Its mission is to promote and enhance communities' capacity to improve their livelihoods and to sustainably manage their natural resources. It runs an award-winning portfolio of projects focussed on strengthening indigenous land rights, improving governance structures, increasing sustainable use of natural resources and empowering marginalised groups. In this project UCRT will enable all interactions and communications with village governance structures and community groups, and will have responsibility for facilitating land use planning within villages, delivering rangeland management training for RGs and grazing committees and will ensure production of resources with language and culturally suitable visual content. UCRT will also ensure the full integration of the RG teams with the Women's Leadership Forums (WLF), groups developed as a means of including women in the decision-making of Maasai communities. The forums mobilize women and the wider community to collectively address existing threats to their lands; demand accountable governance and participatory decision making; ensure all community members' views are taken into account in land management decisions. Linking the RG initiatives to the WLF will be key to secure the sustainability of the project.

Have you included a Letter of Support from this organisation?

Yes

4. Partner Name:

No Response

Website address:

No Response

Details (including roles and responsibilities and capacity to engage with the project):

No Response

Have you included a Letter of Support from this organisation?

Yes
 No

5. Partner Name:

No Response

Website address:

No Response

Details (including roles and responsibilities and capacity to engage with the project): *No Response*

Have you included a Letter of Support from this organisation? Yes
 No

6. Partner Name: *No Response*

Website address: *No Response*

Details (including roles and responsibilities and capacity to engage with the project): *No Response*


Have you included a Letter of Support from this organisation? Yes
 No


If you require more space to enter details regarding Partners involved in the project, please use the text field below.


These partners are all part of the "Northern Tanzanian Rangelands Initiative", (NTRI) alongside a wide range of other partners. This project falls within the remit of NTRI and will benefit from being able to share practice among the partners.


Key to the success of this project will be interactions with the local village and district officials. To demonstrate their support for the project we have further supplied support letters from the three village councils and the district government (though please note they have conflated Darwin with GCRF in their letters).

Please provide a cover letter responding to feedback received at Stage 1 if applicable and a combined PDF of all letters of support.


 [AllSupportLetters](#)


 05/12/2019

 22:02:06

 pdf 3.79 MB

 [ResponseLetterDec19 \(1\)](#)

 05/12/2019

 22:01:49

 pdf 323.11 KB

Section 6 - Project Staff

Q10. Key project staff

Please identify the key project personnel on this project, their role and what % of their time they will be working on the project.

Please provide 1 page CVs for these staff, or a 1 page job description or Terms of Reference for roles yet to be filled. These should match the names and roles in the budget spreadsheet.

If your team is larger than 12 people please review if they are core staff, or whether you can merge roles (e.g. 'admin and finance support') below, but provide a full table based on this template in the pdf of CVs you provide.

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Colin Beale	Project Leader	10	Checked
Rob Critchlow	Project manager and technical advisor	67	Checked
Silvia Ceppi (IO)	Conservation biologist	10	Checked
Plakizia Msaliwa (OEA)	Rangeland Conservation officer & Community mobiliser	60	Checked





Do you require more fields?

Yes

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Emanuel Tarangei (OEA)	Marketplace Literacy Trainer	10	Checked
TBA	Pastoralist liaison officer	100	Checked
Mary Birdi (OEA)	Gender specialist	5	Checked
Paine Eulalia Mako (UCRT)	Specialist in Traditional Women Leadership Forum	5	Checked
Fred Loure (UCRT)	Land use and rights lawyer	5	Checked
Liza Tanganelli	Accounting, expenditure revision and procurement	5	Checked
<i>No Response</i>	<i>No Response</i>	0	Unchecked
<i>No Response</i>	<i>No Response</i>	0	Unchecked

Please provide 1 page CVs (or job description if yet to be recruited) for the project staff listed above as a combined PDF.

Ensure the file is named clearly, consistent with the named individual and role above.

 [All CVs](#)
 05/12/2019
 21:15:23
 pdf 1.47 MB

Have you attached all project staff CVs?

Yes

Section 7 - Problem Statement & Conventions

Q11. Problem the project is trying to address

Please describe the problem your project is trying to address in terms of biodiversity and its relationship with poverty. For example, what are the drivers of loss of biodiversity that the project will attempt to address? Why are they relevant, for whom? How did you identify these problems?

The savannas of Northern Tanzania are not only home to iconic biodiversity, but to 800,000 pastoralists. Unfortunately, both wildlife and pastoralist livelihoods are at risk from societal and environmental change: increasing human population requires more livestock; modern society demands sedentary lifestyles, land-use change severs corridors, and climate change alters rainfall. Together these reduce rangeland biodiversity and compound rural poverty, with >15% of remaining rangelands in northern Tanzania degraded. When grazing is no longer possible, degraded land may be converted to agriculture, further exacerbating the problem. As a consequence, pastoralists are among the poorest (monthly income among Maasai of 13,500 Tsh/adult/month compared to World Bank's national food poverty at 26,085 Tsh/adult /month), women are particularly marginalised and wildlife including Beisa Oryx (Endangered), Zebra (Vulnerable) and Giraffe (Vulnerable) populations in northern Tanzanian rangelands have fallen >80% over 20 years. Importantly, local initiatives to improve grazing management in calving areas have halted declines in Zebra and Wildebeest, suggesting restoration could reverse them. Although we cannot halt external drivers like climate change, our theory of change suggests we can reverse degradation and loss of rangelands by working with communities to adapt governance structures to new conditions. Working together through the Northern Tanzania Rangeland Initiative, all partners have helped identify the problems: UoY studying ecological degradation and restoration, IO and OEA working in community-based conservation and rangeland management and UCRT in sustainable land use planning. We have all seen increasing demand for assistance in restoration from villagers and decreases in wildlife. Although technical solutions to degradation are developed, tackling rangeland degradation at scale is difficult and landscape-scale restoration often fails. Our project pilots a novel, culturally acceptable and research-informed eco-entrepreneurial solution to rangeland restoration that we anticipate will scale well. Rangeland restoration will halt wildlife declines and reduce poverty among pastoralists, particularly marginalised women.

Q12. Biodiversity Conventions, Treaties and Agreements

Q12a. Your project must support the objectives of one or more of the agreements listed below.

Please indicate which agreement(s) will be supported and describe which objectives your project

will address and how.

- Convention on Biological Diversity (CBD)
- Global Goals for Sustainable Development (SDGs)

Q12b. Biodiversity Conventions

Please detail how your project will contribute to the objectives of the agreement(s) your project is targeting. You should refer to Articles or Programmes of work here.

This project directly addresses 3 Aichi targets of the Convention on Biological Diversity (CBD): Target 4, sustainable consumption being key to sustainable use of grasslands; Target 5, reduction of habitat loss by preventing further loss of functional savannas; and Target 15, restoration and resilience of ecosystems, the key objective of this project.

Degraded rangelands are evidence that current consumption is unsustainable (contra Target 4). Consumption in pastoralist rangelands is primarily associated with domestic livestock eating grass and other vegetation until the grass component of the rangeland is unable to recover within the annual growing season and ultimately grassy components are lost from the ecosystem. In degraded rangelands three primary processes are driving unsustainable grass consumption: (i) an increasing 'squeeze' on open rangelands available to pastoralists as a consequences of land conversion for agriculture, development or other purposes concentrates pastoralists on smaller areas of grassland and limits their nomadic movements, preventing natural recovery of grasslands; (ii) socio-economic changes within pastoral communities resulting in increasing sedentarization, again limiting seasonal and nomadic movements and (iii) changes in climate altering the productivity of grasslands. To improve sustainable consumption of grass resource under these changed conditions, traditional management practices need to adapt. This project will transfer scientific knowledge of grassland management under changed conditions to pastoralist communities to co-produce updated management practice and restore sustainable use.

Degraded rangelands represent a loss of habitat (contra Target 5) for both pastoralists and wildlife. In essence, pastoralist communities and savanna wildlife require the same landscapes to thrive: large, connected areas of savanna grasslands incorporating sufficient environmental variation to provide grazing opportunities throughout the range of climatic variation. As rangelands degrade they are both more susceptible to conversion for other uses and functionally lost from the landscape, limiting the movements of animals and adding to the rangeland 'squeeze'. Habitat loss has been identified as the primary cause of the loss of connectivity between protected areas and closure of movement corridors, itself a key threat to the biodiversity of savanna ecosystems. Restoring degraded grasslands will both reverse habitat loss directly, and restore landscape-level connectivity for pastoralists and wildlife alike.

Rangelands degrade primarily through loss of resilience: restoring lost resilience (Target 15) is the primary focus of this project. We will improve the status of degraded rangelands to the benefit biodiversity and human livelihoods with direct benefits to ecosystem resilience.

Q12c. Is any liaison proposed with the CBS / ABS / ITPGRFA / CITES / CMS / Ramsar / CCC focal point in the host country?

Yes

If yes, please give details.

We have attempted to make contact with Mrs. Esther Makwaia in the Vice President's office and the National Contact point for CBD, but have not received feedback.

Q12d. Global Goals for Sustainable Development (SDGs)

Please detail how your project will contribute to the Global Goals for Sustainable Development (SDGs)

The project will benefit 5 of the Sustainable Development Goals (SDG): (1) No poverty, (5) Gender equality, (8) Decent work and economic growth, (13) Climate action and (15) Life on land.

Providing a sustainable income for women is an effective way of reducing poverty (SDG1). This project will improve women's access to finance, employment and education. By improving rangeland condition, the project will improve the resilience of the pastoralist lifestyle to climate-related events, another component of SDG1. The same focus on women's groups directly tackles SDG 5 with the project explicitly improving the rights for women to economic resources including access to land and natural resources. Similarly, SDG 8 refers to the creation of micro-sized enterprises, more sustainable use of resources to reduce environmental degradation and improving employment for women, exactly as we envisage. SDG 13 states improving the resilience and adaptive capacity to a changing climate, specifically for women in developing countries as key targets. Our proposal will benefit women in Northern Tanzania by providing a mechanism to utilise degraded rangelands more effectively through improvement of the status of grazing resources. Finally, restoration, conservation, sustainable use of degraded land, particularly drylands, and reducing the impact of invasive species are targets of SDG 15. Adopting sustainable livestock management will improve the status of degraded rangelands and improve resilience to climate change and benefit human livelihoods.

Section 8 - Method, Change Expected, Gender & Exit Strategy

Q13. Methodology

Describe the methods and approach you will use to achieve your intended Outcome and Impact.

Provide information on:

- How you have analysed historical and existing initiatives and are building on or taking work already done into account in project design. Please cite evidence where appropriate.
- The rationale for carrying out this work and a justification of your proposed methodology.
- How you will undertake the work (materials and methods).
- How you will manage the work (roles and responsibilities, project management tools, etc.).

The project targets non-protected village-land in a threatened wildlife corridor enabling Wildebeest, Zebra, Oryx, Elephants and other threatened species to travel from dry season refugia in Tarangire to calving grounds on village-land. We believe conservation strategies outside protected areas work if communities (1) drive the process and (2) are direct beneficiaries of tangible economic benefits. Furthermore, the long-term sustainability of conservation strategies increases dramatically when they are culturally acceptable, low-cost and scalable.

The concept is simple: women's groups, formed and selected by traditional Grazing Management Committees (GMC) and UCRT will take temporary management of unproductive and highly degraded rangelands within important wildlife corridors as Rangeland Guardians (RG). With training, they will restore the land, receiving financial compensation by selling fodder grown as an integral part of the recovery process, and after 2-5 years will return the restored land to the GMC. The RGs will then restore the next degraded patches while the GMC receive training in rangeland management to prevent re-degradation of restored sites and improve grazing for pastoralists and wildlife alike.

UCRT will facilitate identification of women groups and allocation of land. RGs will implement rangeland restoration with technical support of UoY, OEA and IO. Project funds will resource this process, leaving RGs trained in restoration techniques and 3 demonstration sites to inspire neighbouring villages to undertake similar projects. We will work with local communities to identify and train GMC members and pastoralists in

best practice management of restored grassland to ensure long-term recovery.

RG groups will be formed under the coordination of existing grazing committees. The RGs will be trained in Livestock Marketplace Literacy by OEA and negotiations with the village by UCRT. The ideas were presented to local government leaders in July 2018, and support secured with village leaders in Naitolia, Lolkisale and Mswakini villages.

The techniques required to restore degraded grassland depend on local context: degradation can take the form of invasive weed infestations, excessive soil loss or bush encroachment, etc. We will develop a resource toolkit that helps RGs identify the problems they face and appropriate restoration techniques based on the results of ongoing experiments (manual clearance, rill blocking, bush packing, reseeding, grass cutting to promote horizontal growth, etc.). Training will be provided by OEA with UCRTs support. Simultaneously, we will work with GMCs to develop sustainable grazing management protocols. UoY and Oikos will build capacity in target communities for ongoing ecological monitoring to inform grazing strategies and improve livestock mobility. An ecological monitoring plan led by UoY will provide evidence of successful restoration models. Monitoring will focus on (1) how healthy rangelands function and how well the restoration methods applied encourage transition towards this, and (2) monitoring wider compliance and best practice in grazing. Biodiversity surveys using established rangeland monitoring methods at fixed points and transects form the core method, with additional monitoring of cattle movements by GPS tags. Socioeconomic monitoring (standardised surveys using OEA protocols) will assess the characteristics of the women who engage with the programme, and the financial benefits provided.

Q14. Raising awareness of the potential worth of biodiversity

If your project contains an element of communications, knowledge sharing and/or dissemination please provide a description of your intended audience, how you intend to engage them, what the expected products/materials will be and what you expect to achieve as a result.

For example, are you expecting to directly influence policy in your host country or is your project a community advocacy project to support better management of biodiversity?

Our project is a community advocacy project supporting better management of biodiversity by communities most closely connected to rangelands. For these communities, the value of healthy ecosystems is self-evident and a detailed knowledge of the most valuable components of a healthy ecosystem is often well known by community elders - e.g. the identity and grazing value of a wide range of grass species are often intimately known. The value of rangelands to wildlife is also widely appreciated, and in the areas we are working the potential ecotourism value of birds and particularly of larger animals is widely appreciated. In our target communities there are strong cultural values attached to healthy rangelands and the wildlife that occurs alongside pastoralist communities. To increase the potential worth of biodiversity the project will conduct an awareness campaign in primary and secondary schools targeting at least 2000 students and advocating the importance of rangeland conservation and the opportunities deriving from rangeland restoration (designed by IO and lead by OEA). Environmental and conservation education are widely used to improve attitudes towards wildlife. Such programs are aimed at children with the assumption that this can also impact adults through intergenerational transfer of environmental knowledge from child to parent. There is good evidence that children in villages who receive environmental education have higher knowledge and more positive attitudes towards wildlife than children not exposed to environmental education. The implementing partners will engage with students at 3 primary schools in interactive activities aimed at developing understanding the importance of healthy rangelands in pastoralist areas, and at showing opportunities arising from wildlife protection and habitat restoration.

Q15. Capacity building

If your project will support capacity building at institutional or individual levels, please provide details of what form this will take and how this capacity will be secured for the future.

Capacity building is an important component. We will grow capacity in 3 groups:

Rangeland Guardians
Village grazing committees
Local partners

For the RGs we will provide training in micro-business management and rangeland restoration techniques. This will be delivered through workshops followed by one-to-one mentoring. For 6-9 RGs (identified during the project) we will provide teaching skills training to enable them to share their experience and skills to neighbouring villages. The size and cooperative nature of the RG group ensures that knowledge and skills can be passed directly from established to new members once running. The trainers we will equip are sufficient in number to ensure core skills required are not dependent on individuals.

For the village grazing committees we will provide training in best practice grazing management to ensure restored areas do not enter a cycle of restoration and degradation. Training will consist of an introductory workshop, followed by mentoring at grazing committee meetings from the pastoralist advisor. By the project end the grazing committee will have improved understanding of grassland management laws, be able to monitor grass quality and apply the principles of adaptive management to determine grazing plans independently of the project team. Working with the established structures of the village grazing committee ensures lasting legacy.

Within OEA and UCRT the teams of resource assessors will be trained in the field on rangeland restoration methods and data collection by UoY, this will ensure technical knowledge is transferred to local partners.

We will work with the District Grazing and District Livestock Officers. They will join training for grazing committees and OEA/UCRT field team and will be the liaison between district and village government. At District level we are training individual staff, but they are neither essential to project success, nor are we planning tailored training.

Q16. Gender equality

All applicants must consider whether and how their project will contribute to reducing inequality between persons of different gender. Explain how your project will collect sex disaggregated data and what impact your project will have in promoting gender equality.

Women are broadly recognised as the most vulnerable and marginalised sector of pastoralist societies, yet, they are also the most effective catalysts of behavioural change. Interventions specifically targeted at women in these communities can have larger impacts on household poverty rates than other targets, and empowers women to take a greater role in community leadership. Our project focuses explicitly on identifying, training and developing women's groups to increase their financial independence and leadership skills. We expect these actions to significantly reduce gender inequality within the target communities. The core business of both local partners Oikos East Africa and UCRT is women empowerment in pastoral communities. Both organisations have worked with thousands of women in Northern Tanzania and understand very well the mechanisms for both inclusion and empowerment. The project specifically targets women but to allow this men and traditional leaders will be included in the implementation and in the conversation of the project development. UCRT will facilitate women's participation through the established Women's Rights and Leadership Forum (WRLF). By facilitating more opportunities for women's

meetings and discussions the project will strengthen the WRLF role in the villages and guarantee equitable control of the RG's finances.

To ensure gender disaggregated monitoring data are collected, all surveys of participation (and learning) will include explicit questions about gender and results will be summarised separately. Monitoring surveys are listed in section 25.

Gender of senior project staff is also important - co-management between Silvia and Colin provide a balanced gender example for the project team. Field staff of local partners tend to be male dominated, but we have identified female project members where possible.

Q17. Change expected

Detail the expected changes this work will deliver. You should identify what will change and who will benefit a) in the short-term (i.e. during the life of the project) and b) in the long-term (after the project has ended).

Please describe the changes for biodiversity and for people in developing countries, and how they are linked. When talking about people, please remember to give details of who will benefit and the number of beneficiaries expected. The number of communities is insufficient detail - number of households should be the largest unit used. If possible, indicate the number of women who will be impacted.

The survival of pastoralists in Northern Tanzania depends on healthy rangelands. Equally, pastoralists are key to conserving rangelands: FAO reports 'Pastoralists should be recognized as key stakeholders and decision makers to achieve sustainable production in rangelands and landscapes that simultaneously allow for the unimpaird movement of thriving and healthy populations of migratory animals travelling through corridors of public, private and community lands and protected areas'. In rangelands, the requirements of biodiversity and humans are uniquely aligned, both requiring large, connected rangelands: when savannas degrade both pastoralists and wildlife suffer.

Our vision is for restored rangelands to generate increased wildlife populations within the Tarangire-Mara ecosystem, sustaining valuable ecotourism (currently 183,000 visitors pa) and providing pastoralist communities sustainable futures.

The project has three phases: (1) establishing and training Rangeland Guardians (RG), (2) scaling their work to restore larger areas and improving the management of non-degraded rangelands within the villages, (3) preparing for wider implementation in northern Tanzania.

Phase one will directly benefit >60 pastoralist women, giving skills enabling transformation of degraded land. Income generated by 60 RG will benefit >300 family dependants. £10/month will double RG personal income (currently <5/month). RGs, with technical (UoY, IO, OEA) and legal (UCRT) support, will become community role models playing key roles in biodiversity conservation and rangeland management. Although the cash income is small by Western standards, securing/managing land and growing legal/business knowledge are key elements within the empowerment cycle of women that will outlast the project, even if all rangelands are successfully recovered and the RGs need to find new business models. Recognition at community level and the voice that pastoralist women will acquire are critical to positive change. This phase will have immediate benefits for plant and invertebrate communities on heavily degraded (often barren) land.

By focussing on degraded lands with no value for pastoralism or agriculture, we ensure non-competitive

land allocation. In phase two, the area managed by RGs extends to 500Ha and we establish science-based, adaptive-management protocols within traditional grazing committees. 500Ha of restored grassland will provide forage for >50 cows, sustaining an additional 8 households (or reducing food insecurity for more). Improved grazing management will reduce degradation rates (currently ~1% pa), reversing increasing vulnerability within pastoralist communities. Perhaps more important than financial benefits, reversing fragmentation of rangelands reduces 'poverty of opportunity': for our communities the cultural value of livestock ownership and grazing cannot be understated, but increasing fragmentation and degradation threatens this entire lifestyle. Ungulates that share the landscape will similarly benefit (though populations respond on slower timescales).

In our experience, communities adopt new technologies if these are simple, culturally acceptable and provide tangible benefits. Ensuring these results are visible is key to scaling-up. Phase three will introduce District technical teams to our projects and bring other women's groups to meet the RG teams. Combined with national and international dissemination at conferences (raising awareness) this will prime scaling-up activities after the project end. We believe the novel eco-entrepreneurial approach we take will facilitate scaling-up where traditional approaches have stalled.

Q18. Pathway to change

Please outline your project's expected pathway to change. This should be an overview of the overall project logic and outline how you expect your Outputs to contribute towards your overall Outcome and, longer term, your expected Impact.

Wildlife declines and poverty among pastoralist communities are caused by rangeland loss and degradation, themselves consequences of societal and environmental change.

To break the spiral of degradation requires four changes: (1) ongoing biodiversity loss must be reversed to restore basic function of savannahs and their provision of grazing opportunities; (2) women involved in rangeland restoration need to see financial benefits from their efforts, or they will not be motivated to undertake the work required, (3) the wider community needs to benefit from good rangeland management, or they will not support the restoration initiatives, (4) rangeland management committees need governance and management tools that will enable sustainable pastoralism despite social and environmental changes or restored rangelands will rapidly degrade again.

Having established these necessary conditions through a mixture of activities focused on training, practical fieldwork and awareness generation, we will achieve our outcome of restored rangeland and improved management over three villages in a key wildlife corridor, benefitting biodiversity and local communities. With these demonstration sites in place (and individuals ready to train others in the mechanics of the programme), neighbouring villages will seek to develop in their own Rangeland Guardian programmes, leading to landscape-level improvements in biodiversity and pastoralist livelihoods.

Q19. Exit Strategy


State whether or not the project will reach a stable and sustainable end point. If the project is not discrete, but is part of a progressive approach, give details of the exit strategy and show how relevant activities will be continued to secure the benefits from the project. Where individuals receive advanced training, for example, what will happen should that individual leave?


At the project end the Rangeland Guardian's programme will be established within our target communities. These groups should be self-sustaining (until degradation is no longer a problem) and represent the primary outcomes. To achieve our ultimate impact requires that the programme expands to new locations


after the project end. To facilitate this, we will train 6-9 RGs as trainers (2-3 in each village), and will facilitate visits by district rangeland technical teams. This will prime programme expansion: we anticipate that if successful, RGs will have established a new income source and grazing quality on village lands will improve.

Such tangible benefits ensure neighbouring villages will want to get involved: with official district support (levered through NTRI's leadership role within the regional government's new 'Healthy and connected rangelands working group'), such roll-out can be self-fulfilling. While this may seem optimistic, successful interventions in pastoralist communities managed by the project partners have seen spectacular organic growth. For example, UCRT have seen growth following establishment of Women's Rights and Leadership Fora in 2011, with 35 village fora now established and over 900 women establishing legal land ownership rights. If a solution is simple, beneficial and culturally acceptable, uptake is strong.

If necessary, please provide supporting documentation e.g. maps, diagrams, references etc., as a PDF using the File Upload below:

 [TheoryOfChangeAndMap \(2\)](#)

 05/12/2019

 19:13:44

 pdf 963.9 KB

Section 9 - Existing works, Ethics & Safeguarding

Q20a. Harmonisation

Is this a new initiative or a development of existing work (funded through any source)?

Please give details.

This project is a new initiative, but it draws on the experience the partners and others have gained through years of work in Tanzanian rangelands and specifically through the partnership that is the Northern Tanzania Rangelands Initiative (NTRI: www.ntri.co.tz). NTRI is a partnership of businesses and NGOs, coordinating work by partners to create and maintain rangeland landscapes where people and wildlife coexist. Currently, NTRI partners (and UoY) hold a USAID funded project focussed on rangelands in northern Tanzania. Joint work by the partners on the USAID project identified the link between degradation, poverty and biodiversity loss as well as possible solutions, but the Rangeland Guardian's concept is entirely new: this will be the first implementation. The partners' experience of and long-term commitment to working in northern Tanzanian rangelands ensures we are aware of and involved in most development work in these communities. We will work to integrate new projects alongside the Rangeland Guardian's programme should other initiatives develop during the project implementation. The NTRI partnership ensures this project is complementary to ongoing projects tackling governance and strategic development plans: together these projects support our ultimate impact goals.

Q20b. Are you aware of any other individuals/organisations/projects carrying out or applying for funding for similar work?

No

Q21. Ethics

Outline your approach to meeting the Darwin Initiative's key principles for research ethics as outlined in the [Guidance](#).

UoY management systems ensure adherence to labour, finance, banking, and registration regulations in both UK and overseas countries where we work, alongside UK government regulations and donor compliance requirements. UoY operates to a Code of practice and principles for good ethical governance (<https://goo.gl/HE1Qwh>) and considers this to encompass the welfare and interests of human participants, animals, cultural heritage, the natural environment and the welfare and interests of the wider community. The Code applies to all activities in the UK and overseas and includes collaborative work even where the University is not the lead collaborator. It applies to all staff, contractors and consultants and will be followed by all partners. Our Internal Review Board ensures that work carried out by our programs protects the rights of human subjects and conforms to the Code.

In Tanzania, this project has strong leadership and participation from our partners OEA and UCRT including local legal counsel to ensure we meet the country's specific legal obligations. UCRT is a community-led, grassroots organisation with a mission to promote and enhance communities' capacity to improve their livelihoods and to sustainably manage their natural resources. Their partnership ensures all partners work closely and in a culturally appropriate context with pastoralist communities, benefiting from traditional knowledge of grazing management and co-producing solutions to pressing environmental problems. UCRT will also have primary responsibility for ensuring communities involved in the work give Prior Informed Consent to activities and will act as a liaison between communities, project partners and government as required.

Q22. Corruption

Explain how you have considered any risk of corruption that may affect the success of this project, and how you plan to manage this.

Corruption in Tanzania could affect development projects in a number of ways: lower-level corrupt officials may expect payments to facilitate or enable work under their jurisdiction; corruption may distort the individuals who communities chose to benefit from new opportunities, and higher level corruption can create significant challenges for capital investments. All partners involved in this work have strict policies that prohibit corruption of all kinds. Further, all partners have long-term experience of working in Tanzania and how to avoid situations where corruption may occur. In this project we already have required support from the officials who need to facilitate our work (as the letters of support show), and we will be selecting participants from an existing programme that leaves little room for corruption. Similarly, this project does not involve large economic activities of capital spends, meaning it is unlikely to be a target of higher-level corruption. Together this mitigates the risk associated with corruption.

Q23. Safeguarding

Projects funded through the Darwin Initiative must fully protect vulnerable people all of the time, wherever they work. In order to provide assurance of this, projects are required to have appropriate safeguarding policies in place. Please confirm the lead organisation has the following policies in place and that these can be available on request:

We have a safeguarding policy, which includes a statement of your commitment to safeguarding and a zero tolerance statement on bullying, harassment and sexual exploitation and abuse Checked

We keep a detailed register of safeguarding issues raised and how they were dealt with	Checked
We have clear investigation and disciplinary procedures to use when allegations and complaints are made, and have clear processes in place for when a disclosure is made	Checked
We have shared our safeguarding policy with downstream partners	Checked
We have a whistle-blowing policy which protects whistle blowers from reprisals and includes clear processes for dealing with concerns raised	Checked
We have a Code of Conduct in place for staff and volunteers that sets out clear expectations of behaviours - inside and outside the work place - and make clear what will happen in the event of non-compliance or breach of these standards	Checked

Section 10 - Funding and Budget

Q24. Funding and budget

Please complete the appropriate Excel spreadsheet, which provides the Budget for this application. Some of the questions earlier and below refer to the information in this spreadsheet. Note that there are different templates for projects requesting over and under £100,000 from the Darwin budget.





- [Budget form for projects under £100,000](#)
- [Budget form for projects over £100,000](#)

-

Please refer to the [Finance for Darwin/IWT Guidance](#) for more information.

N.B: Please state all costs by financial year (1 April to 31 March) and in GBP. The Darwin Initiative cannot agree any increase in grants once awarded.

Please upload your completed Darwin Budget Form Excel spreadsheet using the field below.

-  [R26 Darwin Budget over £100K FINAL](#)
-  05/12/2019
-  20:11:23
-  xlsx 65.49 KB

Q25. Value for Money

Please explain how you worked out your budget and how you will provide value for money through managing a cost effective and efficient project. You should also discuss any significant assumptions you have made when working out your budget.

Budgets are planned within the University of York's Finance and project planning system, Worktribe, providing structure and overview to the planning process. Tendering and purchasing rules are established by UoY to ensure value for money. Value for money is further ensured because:

1. All partners are committed to the conservation of Tanzania's wildlife and development of pastoralist communities. They have an established presence and are well respected in Tanzania. This enables us to implement such projects more efficiently and effectively than someone from outside the country. We are also committed to follow up after the project is completed ensuring that long-term impact is achieved.
2. The project is part of a close partnership within NTRI, all partners of which are committed to halting rangeland degradation. The combined power of the NTRI partnership adds considerably to the individual members involved in this project, ensuring both a rapid conduit for scaling up and easy access to the combined wisdom of a wide support network with considerable experience in the field.
3. Sizeable matched funding is brought to this project by the partners, though the project remains identifiable as a Darwin Initiative project. This financial commitment by the partners demonstrates the commitment each have to generating the overall impact.
4. All partners have a long history of managing medium to large institutional grants and have auditing systems in place, it is expected that all expenditures will be justified according to the donor's procedures.
5. Although relatively few women will be the direct beneficiaries of the project, the effects of this work will be greatly amplified by their benefits to their dependents, to the entire villages that benefit from improved rangelands (c.10000 people) and all those who depend on the sustainability of ecotourism within the Tarangire-Mara ecosystem (currently with 183,000 visitors per year).

Q26. Capital items

If you plan to purchase capital items with Darwin funding, please indicate what you anticipate will happen to the items following project end.

The only significant capital outlay is the planned purchase of smart ear tags for cattle to monitor movements and compliance. These have an expected life-time of c. 5 years and at the end of the project will remain in place, with the data gathered and shared through the partnership and open access agreements.

Q27. Match funding (co-financing)

Are you proposing co-financing?

Yes

Q27a. Secured

Provide details of all funding successfully levered (and identified in the Budget) towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity, as well as any your own organisation(s) will be committing.

Donor Organisation	Amount	Currency code	Comments
--------------------	--------	---------------	----------

University of York

████████

GBP

This funding is the UoY contribution. It includes a £████████ contribution to indirect and overhead costs that are based on computation of the Full Economic Costs of the grant, and further contributions to international travel and permit costs that otherwise would need to be funded by Darwin can be paid for using existing funds allocated to UoY: remit of research permits can be extended at no additional cost, trips to Tanzania can be combined to avoid duplication of flight costs, etc,

OEA

████████

GBP

This includes a £████████ in-kind contribution for the time of Alais Morindat, a senior pastoralist specialist who provides advice to OEA and £████████ towards real costs of vehicles and field equipment that will be allocated to the work by OEA

OI

████████

GBP

This is a contribution to the costs of residence and work permits for Dr Ceppi

No Response

0

No Response

No Response

Q27b. Unsecured

Provide details of any matched funding where an application has been submitted, or that you intend applying for during the course of the project. This could include matched funding from the private sector, charitable organisations or other public sector schemes. This should also include any additional funds required where a donor has not yet been identified.

Date applied for	Donor Organisation	Amount	Currency code	Comments
No Response	No Response	0	No Response	No Response
No Response	No Response	0	No Response	No Response
No Response	No Response	0	No Response	No Response
No Response	No Response	0	No Response	No Response

Do you require more fields?

No

Section 11 - Open Access and Financial Risk Management

Q28. Outputs of the project and Open Access

Please describe the project's Open Access plan and detail any specific funds you are seeking from Darwin to fund this.

Any scientific publications that result from this work will be published in Open Access journals, with all supporting data published similarly. Materials generated for the training sessions will be hosted on UoY websites and made freely available to all and will particularly be promoted among other NTRI partners.

Q29. Financial Risk Management

Explain how you have considered the risks and threats that may be relevant to the success of this project, including the risks of fraud or bribery.

UoY has a bribery policy (<https://www.york.ac.uk/media/abouttheuniversity/planningoffice/usefullegaldocuments/Bribery%20Act%202012.pdf>), identifying the risks of paying and receiving bribes and has a sound and ethical organizational culture. Our implementing partners have strong policies around bribery and continually work to increase awareness and reduce opportunity, ensuring a comprehensive and robust internal control process. UoY has a fraud response plan (<https://www.york.ac.uk/media/staffhome/finance/documents/University%20of%20York%20Fraud%20Response%20Plan%20Sept%202018.pdf>), covering three recognised areas of fraud: theft, false accounting and abuse of position. All are covered by the policy and we share our values with implementing partners, as exhibited by similar IO policies.

All partners recognise that fraud and bribery is intolerable, identifying that accountability is the key to reducing both. Consequently, the resources allocated to this project will be accounted for and audited to the highest level, with payments made only with appropriate documentation and on demonstration of work completed. All partners have accounting systems that are frequently used for international grant funds such as those provided by Darwin.

Exchange rate volatility has been identified as a risk, mitigated by costing Tz work in USD with an exchange

rate of \$1.2/£1.

Section 12 - Logical Framework

Q30. Logical Framework

Darwin projects will be required to report against their progress towards their expected Outputs and Outcome if funded. This section sets out the expected Outputs and Outcome of your project, how you expect to measure progress against these and how we can verify this.

Impact:

Healthier rangelands in Northern Tanzania will reduce the vulnerability of pastoralist communities by increasing resource availability, reduce conflict and will preserve endangered wildlife corridors and connectivity.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
------------------------	------------------------------	------------------------------	------------------------------

Outcome:

A scalable and sustainable, community led and culturally acceptable model of rangeland restoration and management is implemented over three villages, with tangible benefits for biodiversity and local communities.

0.1 500 Ha of degraded rangeland under restoration in Monduli district (Tanzania) by project end (0 Ha in 2019, 100 Ha in year 1, 300 Ha in year 2).

0.2 By-laws passed in three villages ensuring commitment toward rangeland restoration and rights of Rangeland Guardians (year one)

0.3 60 households record income generated by the rangeland restoration programme of £10 per month during the dry season (year three).

0.4 Grassland productivity, plant invertebrate and bird diversity is increased in restoration plots by at least 50% annually from baseline (to be established in within three months of start)

0.5 Rangeland quality (measured by grass cover) over entire village grazing areas is increased by 10% relative to neighbouring villages not participating in pilot (year 3).

0.1 Village government declarations and project maps.

0.2 Village by-laws approval documents.

0.3 Grass sales ledgers

0.4 Wet-season monitoring using fixed quadrats transects and point counts within restoration sites.

0.5 Annual remote sensing analysis monitoring bare ground and invasive encroachment.

District Governance remains supportive of the implementing partners work and of NGOs work more in general.

The target villages remain committed to support the Rangeland Guardians programme throughout and beyond the life of the project.

National policies will not further marginalise pastoralism in favour of land conversion for farming purposes.

Prolonged droughts will not exacerbate conflict between communities and land invasions targeting available grass in the restored rangelands and simultaneously compromise recovery rates.

Output 1:

1. Biodiversity improvements: Degraded rangeland within key wildlife corridors in Northern Tanzania have restored function and increased biodiversity.

1.1 Grazing potential increased from baseline by 100% per year in restoration plots.

1.2 Plant species richness increases from baseline by 50% per year in target degraded rangeland (many sites have only 1-2 species in largely barren ground ensuring rapid progress is possible).

1.3 Nutrient cycling rates increased by 30% start to end in restoration plots.

1.4 Use of restored sites by threatened wildlife (notably Zebra) has increased by 10% relative to baseline by end.

1.5 Invertebrate and bird diversity has increased by 50% relative to baseline (many sites have only 1-2 species in largely barren ground ensuring rapid progress is possible) by project end.

1.1 Wet-season assessment of % of bare ground and invasive species coverage through Rangeland Health methodology.

1.2 Baseline and endline ecological monitoring reports.

1.3 Decomposition rates of grass and wood from standardized litterbags in year one and year three.

1.4 Baseline and endline ecological monitoring reports (signs of mammalian use, particularly dung counts, will be key for this indicator. We base our indicator on Zebra as the most abundant of the threatened species present, but will also monitor all signs of ungulate use).

1.5 Baseline and endline ecological monitoring reports.

Identified communities remain stable and committed to respect the agreements in terms of allocation of land to Rangeland Guardians (compliance will be monitored).

No prolonged drought: rangeland restoration is achieved by restoring recovery potential under normal conditions, continuous drought may render activity ineffective.

That our measures of biodiversity (vegetation, zebra, invertebrate and bird) reflect wider impacts on ungulate populations that change at slower rates than the project timeline.

Output 2:

2. Direct benefit to Rangeland Guardians: Three Rangeland Guardians groups composed of women and youth from vulnerable pastoralist communities are established and trained and at least 60 members receive sustainable income from sale of grass from restored rangelands.

2.1 Sixty informally educated pastoral women lease an average of 8 Ha of recovering rangelands (securing grazing for circa 30 small stock worth at least £1000) by end.

2.2 Sixty informally educated pastoral women are empowered through new skills: rangeland restoration techniques and marketplace literacy knowledge by end.

2.3 3 cooperatives, microenterprises are registered with District government (year 2).

2.1 Project socio economic baseline and endline report.

2.2 Training course attendance certificates; surveys before and after training demonstrating a change in understanding of rangeland restoration and entrepreneurship.

2.3 Official incorporation documents

Compliance with by-laws established by local governments in the target villages.

There will be no dramatic change in land tenure or land grabbing episodes targeting or involving the restored areas.

Output 3:

3. Community benefits from restoration: Availability of dry-season fodder increases, improving livestock value.

3.1 >300 Kg / Ha.yr of grass biomass available to livestock across the restored rangelands (currently <100 Kg /Ha.yr) by end.

3.2 Purchases of grass at village level contribute to increased value of livestock by end. (Due to lack of dry season grass, members of our communities have recently resorted to purchasing maize husks to feed their cows during the dry season with negative consequences for cattle health. Cut grass is much better, but none is currently available in the villages).

3.3 2000 school students receive awareness raising and training in sustainable rangeland management (500 in year 1, 1000 in year 2, 500 in year 3).

3.1 Rangeland Guardian's commercial records and grass sale log books.

3.2 Numbers of bales of grass purchased by village members.

3.3 School logs and entry and exit tests on a sample of students (at least 200).

Northern Tanzania will not be affected by severe drought which will reduce recovery potential.

OEA will continue to be welcomed in local schools.

Output 4:

Governance improvements underpinning lasting impact: Village grazing committees have established adaptive principles of sustainable grazing management across non-degraded rangelands, with best practice shared with neighbour villages.

4.1 Three village grazing committees have increased knowledge of adaptive grazing management strategies compared with baseline and understand the concepts of joint resource management (continuous increase in average understanding scores from baseline, 18 months and year surveys).

4.2 Adaptive grazing management plans will have been developed and are in use for all communal grazing lands by end (none currently).

4.3 By-laws will have been passed defining and allocating restoration areas and implementing communal grazing management plans in all villages by year 2 (none currently).

4.4 Resource Assessors will be able to monitor rangeland conditions in the target communities and feedback to grazing committees enabling adaptive management by end (none currently).

4.1 Before and after surveys of knowledge and understanding of best practice within grazing committee membership.

4.2 Village grazing plan documents archived with village executive.

4.3 Copy of the by-laws signed by local government.

4.4 Village government meetings minutes showing official recognition of resource assessors role.

Tanzania will not implement zero livestock mobility policies that will increase dramatically rangeland degradation.

Villages maintain strong working relationships with UCRT and OEA.

Output 5:

No Response

No Response

No Response

No Response

Do you require more Output fields?

It is advised to have less than 6 Outputs since this level of detail can be provided at the Activity level.

No

Activities

Each activity is numbered according to the Output that it will contribute towards, for example, 1.1, 1.2, 1.3 are contributing to Output 1.

1.1. Identification, mapping and baseline monitoring of the first 100 Ha of degraded rangelands across 3 villages in Monduli District (Lead by UoY). The project team has conducted preliminary surveys identifying critical portions of wildlife corridors falling into village lands which are seriously threatened by degradation, soil erosion and invasion by unpalatable weeds. The exact areas hosting the pilot phase will be selected to combine ease of access (including considerations of safety for women) with high levels of degradation. In practice, the most degraded areas are often those closest to villages where safety is simpler to ensure.

1.2. Creation of a simple manual (the 'restoration toolkit') for the rangeland restoration. The manual will be largely visual, enabling RGs to compare pictures of degraded land with the situation they see on the ground, and leading through appropriate cartoons and simple text to appropriate restoration methods. An important part of all restoration activities is regular cutting of the grass - this stimulates horizontal growth by grass plants, speeding the restoration process and simultaneously providing the raw material by which RGs will fund their work (Lead by UoY).

1.3. Training of the RG members in rangeland restoration techniques (Lead by UoY and Oikos East Africa): Oikos East Africa has trained a team of 15 resource assessors in Arumeru District and has trained District Game Officers in the past, so established workshop methods are available.

1.4. Practical restoration activities by RGs (following training and manual, including field mentoring by OEA and UoY).

1.5. Identification of 400 Ha of degraded rangelands and scale up of the restoration process [SC3]. This activity builds on outputs and lessons from activities in group 1. Scaling up will involve a strong role of the first and most successful RG teams to pass on their knowledge through horizontal transfer of knowledge. Scaling up of activities will also involve a strong participation of traditional leaders and local government representatives in the identification of priority areas for restoration, which will be chosen in a participatory way.

1.6. Selection and tagging of >100 heads of livestock with GPS tags (Lead by UoY): we will use commercially available 'smart' cattle tags that monitor and record location and activity levels at 10-minute intervals. In each village, we will tag at least two animals per herd enabling both the monitoring of compliance and the quantification of grazing pressure on rangeland outside the intervention areas, enabling identification of 'at risk' areas on the landscape level.

1.7. Biodiversity baseline surveys for invertebrates and birds, ongoing surveys of vegetation composition and structure (repeated at end). Surveys will follow standard methods employed by the project team over several years. Key methods include vegetation transects, identifying key species cover and bare ground, and vegetation density at different heights, with biomass production measured using disk pasture meters and a local calibration. Birds will be surveyed using repeated point counts, invertebrates using standard sweep samples and pitfall traps.

2.1. Socio-economic baseline and end-point surveys. UCRT has a standard pastoralist questionnaire-based survey that will provide a baseline and will be repeated at the end.

2.2. Selection and formation of 3 Rangeland Guardians groups composed by women and youth (and at

least 60 members) (Lead by UCRT). Selection will be informed by the baseline socio-economic survey to target those most likely to benefit from the intervention.

2.3. Training of the RG members (60 people) in Marketplace Literacy and basic saving group management (Lead by Oikos East Africa). This will be a workshop style activity, supported by mentoring, using methods and training materials already established and tested by OEA.

3.1. Presentation of the activities and work plan to the Local Government (District and Village) with project launch (Led by OEA and UCRT). This activity will work as a project kick start meeting, the project team is very familiar with the local government key authorities and with protocols to follow to increase participation and acceptance.

3.2. RGs will run a workshop with the village grazing committee to raise awareness of the project, focussing on marketing the fodder they will cut during restoration. Fodder is a very precious resources especially for the most vulnerable animals such as young calves shoats and lactating females which are usually tendered by women. RGs will benefit directly from the commodity for their own animals and will sell the excess. The price will be established based on market prices for grass for the specific season and discussed with the traditional grazing committees.

3.3. Awareness campaign in primary and secondary schools targeting at least 2000 students on the importance of rangeland conservation and the opportunities deriving from rangeland restoration (designed by Istituto Oikos and Lead by Oikos East Africa). Environmental and conservation education are widely used to improve attitudes towards wildlife. Such programs are aimed at children with the assumption that this can also impact adults through intergenerational transfer of environmental knowledge from child to parent. There is scientific evidence that children in villages who receive environmental education have higher knowledge and more positive attitudes towards wildlife than children not exposed to the environmental education. The implementing partners will engage with 3 primary schools students in interactive activities aimed at understanding the importance of healthy rangelands in pastoralist areas, and at showing opportunities arising from wildlife protection and habitat restoration.

4.1. Training of at least 4 resource assessors in each target village on ecological monitoring, simultaneously undertaking baseline monitoring of biodiversity, and providing bi-monthly reports on conditions and grazing activities to the Grazing Committee, underpinning adaptive management. (Lead by Oikos East Africa and UoY): Oikos has trained a team of 15 RA for the purpose of ecological monitoring and has outlined a simple manual in English and Kiswahili which shall be used as a syllabus for the training.

4.2. Training of 3 grazing committees on sustainable grazing management (led by UoY with OEA and UCRT). Pastoralists have traditionally managed pastures, transhumant routes were decided on the basis of empirical observation of weather patterns and grass composition. Due to unpredictable rains, loss of rangelands and overpopulation, pastoralists today cannot rely on their ability to read the environment as effectively as they used to for centuries. Traditional grazing committees remain the most important decision making group in pastoral societies in the landscape, and will be the target of specific trainings on natural resource management. Grazing committees are traditionally male dominated and the new knowledge of the RG women groups will be incorporated into the grazing committees through the facilitation of UCRT and the Traditional Women Leadership Forum which we intend to link to the RG programme. This will therefore build on the peer to peer knowledge exchange and feel less of an external force driving the training. Moreover, the project team includes some highly experienced sustainable grazing experts, of Maasai ethnicity, both in the OEA team and in the UCRT team, who will lead this delicate activity

in the most culturally sensitive approach.

4.3. Learning events and exchange visits between local governments and district representatives targeting restored rangelands. The project implementing partners are members of the Healthy and connected rangelands workgroup which includes two regional administrative secretariats (Arusha and Manyara) and 9 districts. The workgroup, among other goals, intends to disseminate knowledge and lessons from initiatives aimed at rangeland conservation for wildlife and people. This project intends to link the Rangeland Guardian initiative among the pool of pilot initiatives which have potential for scaling up at landscape level to be endorsed by all relevant government institutions.

4.4. Presentation of the project results to at least 2 international scientific conferences and one national (TAWIRI). The discussion on rangeland restoration in key wildlife corridors is of great interest for both conservationist and rural developers. We are confident that this project, for its innovative form, participatory and women oriented set up, and strong research component, will gather a lot of interest and we will be able to disseminate the results in several scientific and development platforms. It is noticeable that all applicants are part of the Northern Tanzania Rangelands Initiative consortiums which in the region is the most active and frontline initiative for wildlife conservation in Northern Tanzania and provides an ideal primary dissemination route.





Section 13 - Implementation Timetable

Q31. Provide a project implementation timetable that shows the key milestones in project activities

Provide a project implementation timetable that shows the key milestones in project activities. Complete the Excel spreadsheet template as appropriate to describe the intended workplan for your project.

Implementation Timetable Template

Please add/remove columns to reflect the length of your project. For each activity (add/remove rows as appropriate) indicate the number of months it will last, and fill/shade only the quarters in which an activity will be carried out. The workplan can span multiple pages if necessary.

 [Darwin R26 - Stage 2 - Implementation Time table FINAL](#)
 05/12/2019
 20:44:14
 xlsx 16.39 KB

Section 14 - Monitoring and Evaluation

Q32. Monitoring and evaluation (M&E) plan

Describe, referring to the Indicators above, how the progress of the project will be monitored and

evaluated, making reference to who is responsible for the project's M&E.

Darwin Initiative projects are expected to be adaptive and you should detail how the monitoring and evaluation will feed into the delivery of the project including its management. M&E is expected to be built into the project and not an 'add' on. It is as important to measure for negative impacts as it is for positive impact. Additionally, please indicate an approximate budget and level of effort (person days) to be spent on M&E (see [Finance Guidance for Darwin/IWT](#)).

Monitoring and evaluation is a core element of this project: success of restoration projects relies heavily on adaptive management processes. The routine monitoring includes regular monitoring of vegetation structure and composition in restoration plots (using established Rangeland Health methodology) and compliance with grazing restrictions on recovering sites. Vegetation monitoring is therefore embedded within the normal work plan and cannot be separated from core operating costs.

Additional monitoring for project evaluation includes separate, dedicated activities that investigate the wider impact of the work on biodiversity and communities. These focus on three areas: (1) biodiversity monitoring, (2) Socio-economic monitoring (including compliance monitoring) and (3) monitoring of training effectiveness.

Monitoring includes:

(1.1) Ecological monitoring surveys for invertebrates and birds within the 100 Ha of most degraded rangelands in the three project villages. This monitoring combines core vegetation monitoring with annual wet-season (March) survey of birds and invertebrates using point counts, sweep transects and pitfalls.

(1.2) Monitoring of decomposition rates of grass and wood from standardized litterbags in year one (baseline) and year three in restoration sites. These litterbags provide selective access to litter by microbes and/or invertebrates, allowing important nutrient cycling rates to be monitored.

(1.3) Annual remote sensing analysis monitoring bare ground and invasive encroachment. This will use Sentinel 1 and 2 data combined with ground truthing data from core vegetation monitoring to give an annual picture of rangeland condition across the rangelands of northern Tanzania. We can analyse changes in restored areas separately from those not being restored, within target communities and outside them to evaluate success of the overall intervention. We use established methods and Google Earth Engine to run analyses.

(2.1) A baseline socio-economic survey (month 3) of 60 households in each village will use UCRT's standard pastoralist questionnaire-based survey to provide a baseline and support a proven pro-poor beneficiary selection. Repeated surveys at the project end will enable direct evaluation of the impact on individuals involved or not in the intervention. We have undertaken similar profiling for previous interventions supporting women-led enterprises and have a good understanding of the proxies indicators to identify project impact.

(2.2) On an annual basis we will make copies of village meeting minutes, grass sales ledgers and official incorporation documents.

(2.3) Selection and tagging of >100 heads of livestock with GPS tags (3 per herd), to monitor compliance with land use plans as established by the village grazing committees. We will use commercially available cattle tags and will map movements and behaviour near restoration patches as well as in the wider landscape. Using hierarchical movement models we will analyse the results in relation to remotely sensed data to quantify how grassland responds to grazing pressure more fully.

(3.1) We will undertake before and after surveys of knowledge and understanding of best practice within grazing committee membership and at local schools, using simple questionnaire style surveys.

In the figures below we have included only costs dedicated to monitoring that would not otherwise be required by the adaptive management process, though complete separation is difficult.

Total project budget for M&E in GBP (this may include Staff, Travel and Subsistence costs) £ [REDACTED]

Number of days planned for M&E 112

Percentage of total project budget set aside for M&E (%) 10

Section 15 - FCO Notifications

Q33. FCO Notifications

Please state whether there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise the project's success in the Darwin competition in the host country.

No

Please indicate whether you have contacted your Foreign Ministry or the local embassy or High Commission (or equivalent) directly to discuss security issues (see [Guidance Notes](#)) and attach details of any advice you have received from them.

Yes (no written advice)

Section 16 - Certification

Q34. Certification

On behalf of the

Trustees

of

University of York

I apply for a grant of





£379,432.00

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)

- I have enclosed CVs for key project personnel, letters of support, budget and project implementation timetable (uploaded at appropriate points in application).
- Our last two sets of signed audited/independently verified accounts and annual report are also enclosed.

Checked

Name	Colin Beale
Position in the organisation	Reader in ecology
Signature (please upload e-signature)	 Signature  05/12/2019  20:49:02  png 15.1 KB
Date	05 December 2019

Section 17 - Submission Checklist

Checklist for submission

	Check
I have read the Guidance, including "Guidance Notes for Applicants" and "Finance Guidance".	Checked
I have read, and can meet, the current Terms and Conditions for this fund.	Checked
I have provided actual start and end dates for the project.	Checked
I have provided my budget based on UK government financial years i.e. 1 April - 31 March and in GBP.	Checked
I have checked that our budget is complete, correctly adds up and I have included the correct final total at the start of the application.	Checked
The application been signed by a suitably authorised individual (clear electronic or scanned signatures are acceptable).	Checked
I have included a 1 page CV or job description for all the key project personnel identified at Question 10, including the Project Leader, or provided an explanation of why not.	Checked
I have included a letter of support from the the Lead Organisation and main partner organisation(s) identified at Question 9, or an explanation of why not.	Checked
I have included a cover letter from the Lead Organisation, outlining how any feedback received at Stage 1 has been addressed where relevant.	Checked
I have been in contact with the FCO in the project country/ies and have included any evidence of this. If not, I have provided an explanation of why not.	Checked

I have included a signed copy of the last 2 annual report and accounts for the Lead Organisation, or provided an explanation if not. Checked

I have checked the Darwin website immediately prior to submission to ensure there are no late updates. Checked

I have read and understood the Privacy Notice on GOV.UK. Checked

We would like to keep in touch!

Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under the Darwin Initiative and our sister grant scheme, the IWT Challenge Fund. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share our quarterly project newsletter. You are free to unsubscribe at any time.

Unchecked

Data protection and use of personal data

Information supplied in this application form, including personal data, will be used by Defra as set out in the latest copy of the Privacy Notice for Darwin, Darwin Plus and the Illegal Wildlife Trade Challenge Fund available [here](#). This Privacy Notice must be provided to all individuals whose personal data is supplied in the application form. Some information, but not personal data, may be used when publicising the Darwin Initiative including project details (usually title, lead organisation, location, and total grant value) on the GOV.UK and other websites.

Information relating to the project or its results may also be released on request, including under the 2004 Environmental Information Regulations and the Freedom of Information Act 2000. However, Defra will not permit any unwarranted breach of confidentiality nor will we act in contravention of our obligations under the General Data Protection Regulation (Regulation (EU) 2016/679).