



Darwin Initiative: Final Report

*To be completed with reference to the “Writing a Darwin Report” guidance: (<http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms>). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)*

Darwin Project Information

Project reference	23-019
Project title	Achieving No Net Loss for communities and biodiversity in Uganda
Host country(ies)	Uganda
Lead organisation	University of Oxford
Partner institution(s)	National Environment Management Authority (NEMA), Nature Uganda (NU), International Institute of Environment and Development (IIED), Wild Business Ltd, Wildlife Conservation Society (WCS) Uganda
Darwin grant value	£299,363.00
Start/end dates of project	01/04/2016 – 31/03/2019
Project leader’s name	E.J. Milner-Gulland
Project website/blog/Twitter	http://www.iccs.org.uk/project/achieving-no-net-loss-communities-and-biodiversity-uganda
Report author(s) and date	Victoria Griffiths & E.J. Milner-Gulland, with input from all project team members, June 2019

1 Project Rationale

Governments, businesses and lenders worldwide are adopting the No Net Loss (NNL) objective for biodiversity, and using biodiversity offsetting to achieve this as part of the mitigation hierarchy. Offsets aim to balance residual losses of biodiversity caused by economic development in one location with commensurate gains at another location. Moreover, the Convention on Biological Diversity (CBD) has highlighted how offsets can also help Parties to achieve conservation goals.

Various viewpoints exist about biodiversity offsets and the validity of NNL continues to widely debated, including its technical challenges, governance issues and potential effectiveness. However, seeking NNL outcomes can affect people because society relies on, uses and values biodiversity but these social impacts are often not adequately considered. While international guidance calls for offsets not to make local people worse off, there is a fundamental lack of understanding of how to achieve NNL with regard to people’s use of, and cultural values for, biodiversity, and the social, economic and ecological trade-offs involved. This is a major challenge for countries where poor people depend on natural resources, where poorly planned offsets can exacerbate local poverty, and where impacts vary by gender and livelihood.

Uganda is adopting biodiversity offsetting to balance development with the resultant biodiversity loss and at the time of this project, was developing a national biodiversity offsets strategy. But the national importance of developments can over-shadow their significant costs to poor people, and Uganda and other nations must address issues of human rights, livelihoods and

wellbeing of the individuals, households and communities affected by both developments and offsetting.

The World Bank-funded [Bujagali Hydropower Project](#) (BHP) was completed in 2012, with a Sustainable Management Plan for its offset (Kalagala) to address biodiversity and human impacts. The [Isimba Hydropower Project](#) (IHP) is being constructed downstream of BHP (planned completion was for 2018). The area has high cultural, livelihood and biodiversity value. The rationale for this project was that the National Environment Management Authority (NEMA), the responsible Government agency, and Nature Uganda (NU), a leading conservation NGO, identified an urgent need to understand [how the Isimba project may affect the Kalagala Offset](#), and for general guidance on monitoring and mitigating social and ecological impacts of offsetting in Uganda.

This project, therefore, aimed to support government, NGOs and business to integrate local poverty alleviation, equity and cultural heritage into biodiversity offsets for national economic development. From research on the biggest hydropower project/offset in Uganda, it aimed to produce, and support the implementation of, local and national policy guidance for Uganda, and generate lessons internationally. The [Kalagala Offset Sustainable Management Plan](#) (SMP) considers the sharing of costs and benefits of BHP between districts and communities. Our project aimed to take this further, supporting the Ugandan government to ensure that local people are no worse off because of the Kalagala Offset and hydropower developments. Specifically, we wanted to highlight imbalances between costs and benefits of the development and offset between groups (e.g. women versus men; different livelihood strategies and resource-user groups; poorer versus better off), and between geographical areas. This would enable policy-makers and practitioners to work towards a more socially just balance of development and biodiversity offset impacts.

The project’s case study was located in the Buikwe, Jinja, Kamuli and Kayunga Districts of Uganda, close to the town of Jinja (Figures 1 and 2).

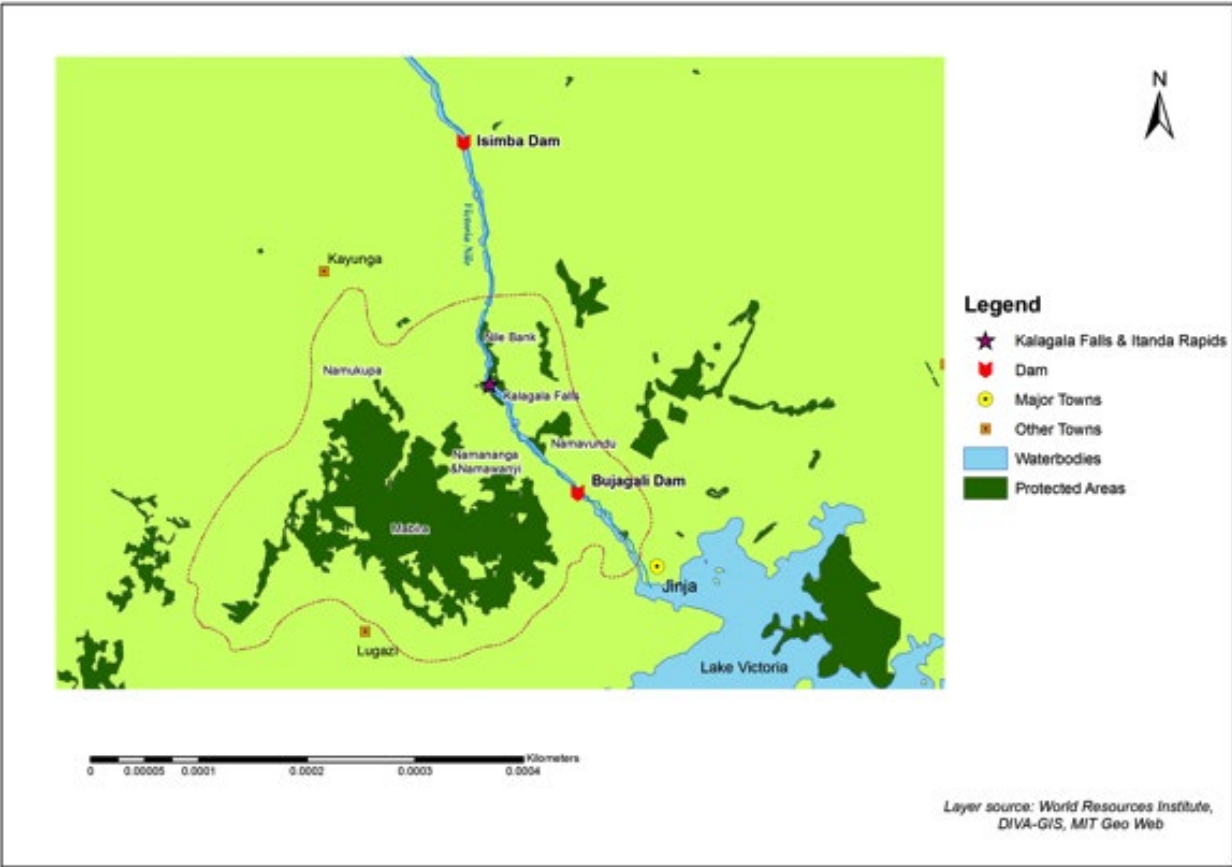


Figure 1: Study site near Jinja, Uganda. The dotted line represents the boundary of the Kalagala offset

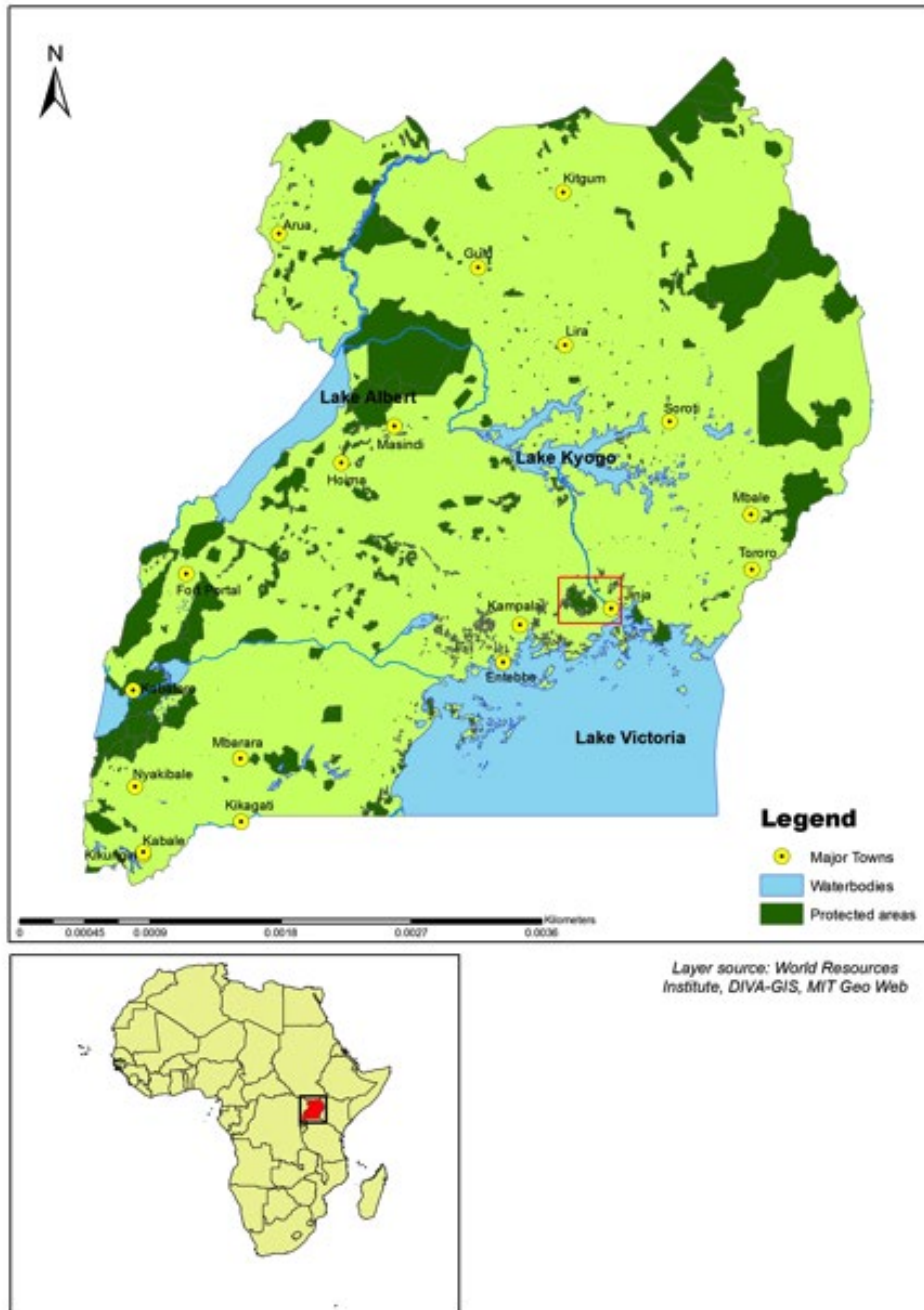


Figure 2: Location of the study area in Uganda

2 Project Partnerships

This was a collaborative project between three UK based institutions: [Oxford University](#), the [International Institute for Environment and Development \(IIED\)](#) and [Wild Business Ltd \(WB\)](#), and three Uganda based institutions: The [National Environment Management Authority \(NEMA\)](#) of the Ugandan government, and the NGOs [Nature Uganda \(NU\)](#) and the [Wildlife Conservation Society-Uganda \(WCS\)](#). Oxford University was the overall project lead, whilst NEMA was the host country lead.



Team members during the project inception workshop (May 2016)



Team members during the Year 1 Annual Project meeting (April 2017)

All project partners were actively involved from the onset, contributing to the planning and designing of the project, the writing of the proposal, and participating in all project workshops and events, from the project inception workshop (held in Kampala on the 23rd and 24th of May 2016) onwards. During the project, there has been continuous engagement between all project partners through more formal project meetings and informal one-on-one discussions. Everyone has been kept up to date with project progress through project meetings: the six-monthly skype calls and annual project meetings held in Kampala. In addition, individual meetings (both via skype and in person in the UK and Uganda) have been held between Oxford University and the project partners to discuss progress and required deliverables. Documents have been uploaded to the project's Basecamp pages (which all partners have access to) and project [website](#). All partners contributed to the drafting and reviewing of this final report.

Over the three years, strong collaborative partnerships were created within the project, not only between all six project partners and our advisory committee members, but also with Ugandan and international external stakeholders (e.g. academics, NGOs and practitioners). The drafting and publication of the international social good practice principles (outcome 0.3) was the result of a huge collaborative effort ([see Darwin newsletter](#)). Although the drafting was led by the Darwin team, we had input and feedback from over 15 organisations and various international stakeholders, who generously gave up their time to attend workshops and provide comments on draft versions. This included representatives from government agencies, NGOs, businesses, consultancies and academia from a range of countries including Australia, the UK, South Africa, Sweden, France and Switzerland. In particular, five external organisations and working groups offered significant support and input: the Business and Biodiversity Offsets Programme (BBOP), IUCN, The Biodiversity Consultancy, SNAPP (Society for Nature and People Partnership) working group and the COMBO project. One of the aims in developing the principles was to encourage closer, collaborative, working between all stakeholders involved with biodiversity NNL/Net Gain (NG) projects. In particular, we focused on involving ecological and social specialists, who often work in silos throughout the lifecycle of a development project. Consensus from all involved was that the principles would be useful in addressing this gap and that they represent a change in thinking.

Project partners and collaborators will continue to keep in touch following the Darwin Project, and will continue working to advocate good practice for implementing biodiversity NNL strategies in Uganda and internationally, as biodiversity NNL/NG and offsetting gain momentum, nationally and internationally. Project partners will also continue to collaborate on several further project outputs, including the publication of another two manuscripts which will be submitted to academic peer-reviewed journals. The UK-based team members are supporting a working group of UK professionals from industry, government, NGOs and academia to develop guidance on how the international social principles developed by this project can apply to the UK. This is particularly relevant as the UK government has stated that Biodiversity Net Gain will become mandatory for new developments in England (HM Treasury Spring Statement 2019). Also, it is an example of how the Darwin Initiative provides invaluable learning for tackling the challenges of economic development, biodiversity conservation and poverty here in the UK. Team members have also submitted joint grant proposals and are planning more, including to the Darwin Initiative, to work on issues arising from the project, in particular on developing Uganda's Natural Capital Forum and testing the Natural Capital approach at the project level.

Description of the partners' roles and activities in the project

Oxford University (OU) led the project overall, prepared materials, organised meetings, and participated in all aspects of the work. Victoria Griffiths (OU) completed the fieldwork for the social elements of the project in Years 1 & 2. She analysed the data and wrote up the results in the form of a PhD thesis, which was completed in October 2018. This work was supervised by E.J. Milner-Gulland (OU), Julia Baker (IIED) and Joe Bull (WB). Together with NU, Victoria prepared engagement materials (posters) and carried out a preliminary dissemination visit to the villages in the study area (March 2018). She also assisted with preparing the posters for the final dissemination undertaken by NU in March 2019. The project lead, E.J. Milner-Gulland, assisted NU with their report on the ecological findings. Two peer reviewed journal articles have been published, led by OU; one conceptual piece published in *Conservation Biology* on why people should be left 'no worse off' from development and offsets, and one published in *Biological Conservation*, presenting local people's preferences for compensatory activities as part of an offset (the choice experiment results). OU (with input from Joe Bull, Julia Baker, Dilys Roe, NU and Advisory Committee member Mark Infield) led a third manuscript exploring how local people's cultural heritage values can be incorporated into NNL strategies, which was submitted to the journal *World Development* in June 2019. OU is currently drafting the fourth manuscript, presenting the impacts of the two hydropower developments on local people's wellbeing. OU (EJMG) also co-supervised the three additional pieces of work (Stakeholder analysis, Natural Capital studies). The results of the social aspects of the project have been presented by OU at a range of academic and conservation events, including 3 international conferences. OU assisted with the drafting and publishing of the social good practice principles,

participating in several workshops held in Cambridge, UK (20th February 2018), Kampala, Uganda (7th March 2018) and Oxford, UK (9th July 2018) to discuss the principles and help solicit feedback. OU organised, coordinated and hosted the business engagement meeting on the 20th of November 2018. OU also contributed to the drafting and reviewing of the U-PCLG policy brief and both the national and international industry briefing notes.

The **National Environment Management Agency (NEMA)**, the principal government agency in Uganda responsible for environmental management, was the project lead in Uganda. They were instrumental in the development of the project; proposing using the Bujagali and Isimba Hydropower Projects and the Kalagala Offset as the case study site, and expressing the need for a better understanding of biodiversity offset implementation and management in Uganda. They supported the implementation of the biological and social research in Years 1 and 2. NEMA provided significant support to the social surveys (providing contacts for the local District Environmental Officers) and participating in a Focus Group Discussion (run by Victoria Griffiths, OU) that informed the development of the choice experiment. They hosted a business engagement workshop at the Serena Hotel in Kampala on the 7th of March 2018. In Year 3, NEMA assisted with coordinating the capacity building and training component of the project. On the 14th of February 2019, a one-day training course was held for NEMA staff from their Headquarters in Kampala, which focused on the social aspects can be applied will to biodiversity NNL/NG development projects in Uganda. A new National Biodiversity and Social Offset Strategy has been published by the Ministry of Water and Environment (MoWE) and new practical guidelines for industry (including Environmental and Social Impact Assessment (ESIA) practitioners) will be published by NEMA to help implement the strategy, which will also include practical guidelines on the social aspects of NNL based on the results of our project. The launch event for the National Strategy is planned for June 2019, following which the Strategy will be posted on the Ministry's website.

Nature Uganda (NU) led the ecological component of the research. In Years 1 and 2, they carried out the biological surveys and in Year 3, finalised and disseminated the report detailing their findings and recommendations. This work is contributing knowledge about the changes in biodiversity which have occurred in the study area over the ten years since the original ESIA for the Bujagali Hydropower Project. During Year 3, NU worked closely with the Project Leader E.J. Milner-Gulland (OU) and Joseph Bull (WB), who provided statistical assistance and support to NU whilst they were writing up their report. NU provided valuable advice and support to Victoria Griffiths (OU) on various aspects of social fieldwork in Uganda and participated in Key Informant Interviews on cultural heritage in Uganda in Year 2. NU also led a preliminary research dissemination visit to local communities of the study area in March 2018, with Victoria Griffiths (OU). During Year 3 (5th March 2019), NU disseminated the final project findings to stakeholders in the study area, including the District Environmental Officers (DEOs), the Local Council Chairmen (LC1) and representatives from the villages visited during the social surveys. Dianah Nalwanga (NU) participated in the business engagement workshop in Oxford on the 20th of November 2018. On the 11th of March 2019, NU hosted and facilitated a meeting for the [Uganda Poverty and Conservation Learning Group](#) (U-PCLG), where they presented the project results to the group and discussed potential advocacy activities with the group. NU contributed to the drafting of the U-PCLG policy brief led by IIED which provided recommendations for NEMA on the improvement of the Kalagala Offset implementation. They also led the compilation of a national briefing note for industries in Uganda, explaining the importance of accounting for social aspects in biodiversity NNL/NG projects. NU will continue to work with NEMA to promote the National Biodiversity and Social Offset Strategy in Uganda.

WCS-Uganda are leading a project called [COMBO](#) (Conservation, Impact Mitigation and Biodiversity Offsets in Africa) which aims to support government policies to improve the mitigation of industry impacts by supporting the uptake of best practice in the application of the mitigation hierarchy. During the three years, our project has worked closely with WCS-Uganda and COMBO, making sure that the objectives of both projects are aligned and that there is no duplication of work. OU, IIED (Julia Baker) and WB (Joseph Bull) drafted and published a set of international social good practice principles for including social aspects into NNL/NG strategies and, through partnering with COMBO, these principles were integrated into Uganda's National Biodiversity and Social Offsetting Guidelines that COMBO produced. Our project's first training event took place in collaboration with training organised and facilitated by WCS-Uganda on behalf of COMBO (25th – 28th June 2018). During Year 3, WCS-Uganda partnered with OU and

IIED to carry out a Natural Capital accounting case study in support of developing a Natural Capital Forum for Uganda. Beatrice Kyasiimire (WCS-Uganda) and Hugo Rainey (COMBO Director, WCS) participated in the business engagement meeting held in Oxford on the 20th of November 2018.

Wild Business (WB) has been providing technical support to the project throughout Years 1-3. Joseph Bull (WB) supported NU with analysing and writing up the results of their ecological report. He contributed to all outputs from the project, and supervised Victoria Griffiths with her social data collection, analyses and write-up. In particular, Joe was instrumental in drafting and finalising the [international social good practice principles](#) published in November 2018. This included integrating feedback and written reviews on the draft principles as well as participating in several workshops held in Cambridge, UK (20th February 2018), Kampala, Uganda (7th March 2018), Oxford, UK (9th July 2018) and London, UK (3rd September) to discuss the principles and solicit feedback. Joe and Julia Baker (IIED) also ran a webinar hosted by the [Business and Biodiversity Offsets Programme](#) (BBOP) on the 20th September 2018, where the draft principles were discussed. Joe launched the principles at the business engagement event in Oxford on the 20th of November as well as during the final BBOP annual conference ([BBOP15](#)) in Paris in November 2018.

The International Institute for Environment and Development (IIED) has been engaged in all aspects of the project throughout the three years. Dilys Roe provided technical support, particularly on the Theory of Change and the policy engagement elements. Julia Baker played a pivotal role in the project, co-supervising the social part of the research and facilitating the dissemination and policy engagement in Uganda and the UK. During the COMBO training (25th – 28th June 2018), she led a module dedicated to the social aspects of biodiversity NNL/NG. In collaboration with NEMA, Julia also led a training course for NEMA staff at their headquarters in Kampala (14th of February 2019), which focused on the social good practice principles, and how they will apply to biodiversity NNL/NG development projects in Uganda. Julia prepared the training material. Julia worked closely with WCS-Uganda (Beatrice Kyasiimire) and the COMBO team, providing technical support on how best our project research could feed into and support the development of a National Biodiversity and Social Offset Strategy being led by COMBO, and especially to embed the social good practice principles. Julia provided significant support to WB during the drafting of the social good practice principles, participating in and facilitating several workshops held in Cambridge, UK (20th February 2018), Kampala, Uganda (7th March 2018), Oxford, UK (9th July 2018) and London, UK (3rd September) to discuss the principles and solicit feedback. Joe (WB) and Julia also ran a webinar hosted by BBOP on the 20th September 2018. Julia facilitated and presented at the business engagement meeting held in Oxford on the 20th November 2018. Julia also contributed to several outputs from OU, including peer reviewed journal articles and supervising Victoria Griffiths with her social data collection, analyses and write-up. Julia Baker and Dilys Roe are contributing to a further two peer reviewed papers being led by OU. Dilys led the drafting and publication of the U-PCLG policy brief and both Julia and Dilys contributed to the briefing note for industries in Uganda (led by NU) and Julia led the compilation of an international industry briefing note. Julia has also been supporting the continued development of a Natural Capital Forum for Uganda and, together with WCS-Uganda and OU, assisted with a Natural Capital Accounting case study in support of developing a Natural Capital Forum for Uganda. Julia has been liaising and engaging with UK-based practitioners to raise awareness around the social principles, which are being integrated into new practical guidelines for biodiversity NG in the UK.

3 Project Achievements

Outputs

Output One: Research on the costs and benefits to local people and biodiversity of the Bujagali/Isimba Hydropower Projects and the Kalagala Offset

Overall Assessment: This output has been achieved, and we had no substantive changes to the indicators or activities from those originally envisaged in our proposal. We did not encounter any problems, and also carried out additional work (specifically, the Stakeholder Analysis),

based on a gap recognised at the Inception Workshop.

1.1 Project inception workshop

A project inception workshop was held at the Makindye Country Club, Kampala on the 23rd and 24th May 2016 (Year 1). It was attended by all project partners and two out of three Advisory Committee members: Oxford University: [E.J. Milner-Gulland](#), [Victoria Griffiths](#) and [Carlyn Samuel](#). NEMA: [Francis Ogwal](#). NU: [Achilles Byaruhanga](#), [Michael Opige](#) and [Judith Mirembe](#). IIED: [Dilys Roe](#) and [Julia Baker](#) (consultant to IIED). WCS-Uganda: [Simon Nampindo](#) and [Beatrice Kyasiimire](#). Wild Business: [Joseph Bull](#). InField Consulting: [Mark Infield](#). Jane Goodall Institute (JGI): [Panta Kasoma](#).



Presentations during the inception workshop

The inception workshop started with a series of presentations by each team, setting out their prior work on the topic and their plans for the project. Presentations were also given on the national and international context. The team went through the logframe clarifying timings, roles and responsibilities. Dilys Roe then led us in an exercise to develop our project's theory of change based on the logframe. We mapped the theory of change onto the logframe and checked for mismatches that needed addressing, as well as synergies (within our project and between our project and other projects) that we could act on. Finally, we mapped the budget onto the activities called for in the theory of change and checked again for mismatches. This was a very useful exercise because it highlighted gaps which needed to be filled in order to ensure that our outcome would be achieved; because this was done early in the project we were able to reallocate time and budget to address these gaps.

An [inception workshop report](#) was compiled and distributed to all partners. A ['Basecamp'](#) site was created to facilitate communications, and all project partners have joined. The workshop report, minutes of the meeting, powerpoint presentations and updated project documents arising from the workshop have all been shared here with project members and uploaded to Basecamp. A [project website](#) was also developed and a [project flyer](#) produced.

1.2 Collate existing datasets

The social data in the Environmental and Social Impact Assessments (ESIAs) and Social Impact Assessments (SIAs) for both the Bujagali and Isimba dams were reviewed by Victoria Griffiths, (OU) in Year 1. Villages for social surveys were selected based on the villages included in the ESIs and in discussion with the local District Environmental Officers (DEOs) in the study area.

In Year 1, NU collated existing biodiversity datasets (for plants and birds) for the study site which informed the selection of sites for ecological surveys under this project. They also reviewed the methodology used to collect the ecological data for the Bujagali ESIA and replicated this methodology (as far as possible) during their field surveys in 2017.

In addition to the activities in the logframe, a stakeholder and institutional analysis was carried out for the Bujagali and Isimba dams and the Kalagala Offset. This was done by WB (Nafeesa Esmail). The need for this analysis was identified when the project team developed the theory of change during the inception workshop. The first objective was to identify and map all stakeholders involved with the Bujagali and Isimba Hydropower Projects and the Kalagala Offset, defining their roles and responsibilities. Then an institutional analysis was carried out for each component of the case study (Bujagali, Kalagala and Isimba). The second objective was to provide recommendations for future business engagement in Uganda by identifying collaborative opportunities, an engagement strategy and approach, practicalities and the target audience. The analysis was completed in September-October 2016. Nafeessa collated all the available literature on the dams and offset and carried out key informant interviews with all relevant stakeholders including all project partners. The resultant [stakeholder and institutional analysis](#) report was published in March 2017 (Year 1) and made publicly available online. Its main message is that the roles and fiscal flows between organisations are complex and unclear, even to the stakeholders concerned. This meant that the funding and responsibilities for the offset were not well designated, resulting in limited implementation and no monitoring. This was important context for our subsequent analysis.

1.3 Social field surveys

Victoria Griffiths (OU) completed two field trips for the social data collection, a scoping trip in April – May 2016 (Year 1), and a data collection trip from September 2016 – February 2017 (Year 1).

Before the scoping trip, a fieldwork plan was developed, as well as protocols for Key Informant Interview (KII) and two focus group discussions (FGDs) (one on livelihoods and basic necessities and the other on wellbeing). A second fieldwork plan was compiled before the data collection field trip, along with protocols for an additional FGD and KII on cultural heritage. The individual questionnaire and choice experiment were also designed based on the information obtained during the scoping trip.

All protocols and procedures used for the social data collection went through a rigorous ethical review by bodies at both OU and the Uganda National Council for Science and Technology. Ethical clearance was received from the Research and Ethics Committee at Oxford University (Ref No: R43209/RE001) as well as from the National HIV/AIDS Research Committee at the Uganda National Council for Science and Technology (ARC 179). In addition, a research permit was received from the Ugandan National Research Council of Science and Technology (NS 558). Victoria Griffiths (OU) compiled a document detailing the ethical considerations and data management procedures, which is available [online](#), and ethical issues were a standing item on the Agenda of every annual project meeting.

The questionnaires and field protocols were made available to all team members on Basecamp. Victoria also held individual meetings with project partners and advisory committee members in Kampala, London and Oxford to discuss her fieldwork plans and solicit feedback, support and advice.

Scoping field trip:

Victoria visited three villages during the scoping trip, one at each site of the dams and offset sites: Bujagali, Kalagala and Isimba. Four wellbeing and four livelihoods and basic necessities FGDs were carried out in each village and FGDs were divided into men and women and according to livelihood strategies. Key informant interviews were carried out in the three villages with elders, members of local government and NGOs as well as with people who have specialised knowledge in the village.

Data collection field trip:

Victoria undertook thirteen key informant interviews were carried out with project partners and specialists in Kampala to find out more about cultural heritage and traditions in Uganda, and more specifically around the study site.

She then, with four research assistants, visited two villages at each of the three dam and offset sites (six villages in total), including the same three villages that were used in the scoping trip. Approximately 240 individuals in the larger villages at Bujagali and Kalagala were sampled and 160 individuals in the smaller villages at Isimba were sampled. The individual questionnaire, including the choice experiment, was piloted in a village near Bujagali and updated according to the findings.



Victoria Griffiths carrying out a women's (left) and men's (right) focus group discussion

The individual questionnaires were complemented by another FGD to explore cultural heritage in more detail. In all six villages, four cultural heritage FGDs were carried out, with separate male and female groups divided according to livelihoods. The same wellbeing and livelihoods FGDs as used in the scoping trip were carried out in the three new villages. The results of the Social Field Surveys are described in various of our project outputs, in particular the three research papers (two published and one in review) listed in the appendix and attached to this report.

1.4 Ecological field surveys

A fieldwork protocol for the ecological field surveys was compiled by NU, and reviewed and approved by the Project Leader E.J. Milner-Gulland (OU). The protocol was made accessible to all team members for comment via Basecamp. Support, advice and additional data were provided by Advisory Committee member Derek Pomeroy.

NU completed their ecological surveys in April-May 2017 (Year 2), where they assessed floristic and bird diversity at 10 sites within the Bujagali Dam and Kalagala Offset area. The assessment followed as far as possible the methods of the 2006 pre-dam ESIA report, in order to enable a comparative overview. The report explored two questions: 1) how has biodiversity in Bujagali and Kalagala changed between 2006 and 2016? And 2) how much of this change is owing to the dam and offset?

The ecological field surveys were slightly delayed, only commencing in the fourth quarter of Year 1 (as opposed to the second quarter). This did not have significant repercussions on our overall project time frame and there were no financial delays. Although there were administrative delays which contributed to this (as outlined in the Year 1 Half-Year Report), a particularly pertinent reason was that, on reviewing the original surveys undertaken for the ESIA prior to the dam being built in 2006, we found that these surveys were conducted in March. For ecological comparability (because of the presence of migratory bird populations at particular times of the year) it was important that the re-surveys under our project were as closely aligned in time as possible to the original surveys. The results of the surveys are described in [NU's Ecological Report](#).

Michael Opige, who was one of the leads on the ecological research, left NU in Year 2, but Judith Mirembe took over as lead on the ecological research. Dr. Dianah Nalwanga joined the project as Nature Uganda's Director of Programmes in Year 2 and became the project lead for NU. These staff changes did not affect the running of the project.



Floral species in the study area

1.5 Analyse datasets and write up

Analysis and writing up of the social data began in March 2017 (end of Year 1). In May 2017 (Year 2), Victoria Griffiths (OU), in collaboration with Julia Baker (IIED), Joe Bull (WB) and E.J. Milner-Gulland (OU), finalised a [conceptual manuscript](#) exploring why people should be left 'no worse off' from development and biodiversity offsets. It was published in *Conservation Biology* in 2018 (Year 3). The paper discussed who experiences the costs and benefits of the biodiversity losses and gains associated with a development and its associated biodiversity offset, and outlines the challenges associated with operationalising this concept of ensuring that people are left no worse off (i.e. social impacts for whom, as a result of what and compared to what?). Victoria Griffiths (OU) finished analysing data from the Choice Experiment aspect of the project's research in Year 2, and the results are presented in a [paper](#) published in *Biological Conservation* in June 2019. This paper explores local people's preferences for compensatory activities as part of an offset and was prepared in collaboration with economists at St Andrews University (Professor Nick Hanley and Dr Oleg Sheremet) as well as team members Julia Baker (IIED), Joe Bull (WB) and E.J. Milner-Gulland (OU).

Analysis of local perceptions on the importance of cultural heritage to wellbeing and the impact that the dams and biodiversity offset have had on their cultural values commenced in November 2017 (Year 2). Victoria Griffiths (OU) has written up the results as a manuscript which was submitted to a journal, *World Development*, in June 2019 (manuscript is appended). The manuscript was drafted in collaboration with Joe Bull (WB), Julia Baker (IIED), Dilys Roe (IIED), Achilles Byaharinga (NU) and Mark Infield (Advisory Committee member). Analysis of the impact of the dams on local people's wellbeing in the study area commenced in May 2018 (Year 3) and the results are currently being written up as a manuscript by Victoria Griffiths (OU), with input from other project partners. It is anticipated that the manuscript will be submitted to a peer reviewed journal by the end of September 2019.

Aside from the four manuscripts, all the results from the social study are presented and discussed in a PhD thesis compiled by Victoria Griffiths (OU): "Win-win? Balancing people's uses of nature with biodiversity No Net Loss". The thesis was submitted for examination at the University of Oxford in October 2018 (Year 3) and was passed subject to corrections (to be submitted in August 2019). The thesis is appended to the report and will be uploaded to the thesis archive at www.iccs.org.uk once the examiners have approved the corrections.

The biological data analysis and write-up began in the first quarter of Year 2. NU produced a draft report on the ecological findings which was reviewed by E.J. Milner-Gulland (OU) and presented at our Research Workshop in March 2018 (Y2 Q4). The report was updated by NU, additional statistical tests carried out by NU (under the guidance of Joe Bull of WB and OU), and the report was finalised and [uploaded to our project website](#) in Year 3.

1.6 Research published and disseminated

Publications:

The stakeholder and institutional analysis (an activity which we added as a result of our Theory of Change work during the Project Inception Workshop) was published in May 2017 ([Esmail 2017](#)) and a [blog](#) published in June 2017 to publicise the report.

NU's report on the ecological findings was finalised in Year 3 and is available [online](#) on the project website. The publication was announced and advertised via social media (personal twitter accounts).

The first conceptual manuscript was published in *Conservation Biology* in August 2018 as an open access paper, meaning that it can be downloaded free of charge. The publication was announced and advertised via social media (personal twitter accounts and *Conservation Biology's* official twitter account), and has been widely shared (tweeted by 87 twitter users).

[Griffiths, V. F., Bull, J. W., Baker, J., & Milner-Gulland, E. J. \(2019\). No net loss for people and biodiversity. *Conservation Biology*, 33\(1\), 76-87.](#)

The second manuscript on the choice experiment results was published in *Biological Conservation* in June 2019 and is currently free to view. The publication was announced and advertised via social media (it has been tweeted by 16 twitter users to date).

[Griffiths, V. F., Sheremet, O., Hanley, N., Baker, J., Bull, J. W., & Milner-Gulland, E. J. \(2019\). Local people's preferences for biodiversity offsets to achieve 'no net loss' for economic developments. *Biological Conservation*, 236, 162-170.](#)

The third manuscript evaluating the importance of nature-based cultural heritage to local people's wellbeing in the study area and how these cultural values can be incorporated into NNL strategies has been submitted to *World Development* in June 2019 (manuscript appended).

Griffiths, V.F., Bull, J.W., Baker, J., Infield, M., Roe, D., Nalwanga, D., Byaruhanga, A., & Milner-Gulland, E.J. (in review) Incorporating local cultural connections to nature into biodiversity No Net Loss strategies. World Development.

A fourth manuscript will be submitted towards the end of September 2019, addressing the wellbeing impacts of the two dams and the Kalagala offset to local people.

The results from the social study are presented and discussed in a PhD thesis compiled by Victoria Griffiths (OU): "*Win-win? Balancing people's uses of nature with biodiversity No Net Loss*" (thesis appended).

A report which reviewed the use of Natural Capital Accounting (NCAs) throughout Africa, and included a hypothetical example of a NCA for a sugar cane factory in Uganda to achieve NNL was finalised in February 2019 (discussed under output 3), and is available on the WB and project website:

[Baker, J. & Oakley, M. \(2019\) Assessing social and economic outcomes from biodiversity 'no net loss' on infrastructure development, using Natural Capital Accounting – a case study from Uganda. London, UK, Wild Business Ltd.](#)

The Natural Capital Accounting case study undertaken on the biodiversity impacts of the planned Katosi water treatment plant near Lake Victoria and carried out in support of

developing a Natural Capital Forum for Uganda (discussed under output 3) was published as an MSc thesis from Imperial College London, and is available online:

[H. Newell. 2018. Natural capital accounting to support assessment of the “no net loss” principle for biodiversity and people for an infrastructure project in Uganda. MSc Thesis.](#)

This is currently being converted into a manuscript for submission to a peer-reviewed journal.

Newell, H., Baker, J., Nampindo, S., Kyasiimire, B. and Milner-Gulland, E.J. Gaps between conceptual and operational implementation of Natural Capital Accounting in a developing country context.

Research on the hydropower projects and Kalagala Offset helped inform the drafting and publication of a set of international social good practice principles for biodiversity NNL (discussed under output 3). These principles were published online in November 2018:

[Bull, J. W., Baker, J., Griffiths, V. F., Jones, J. P., & Milner-Gulland, E. J. \(2018\). Ensuring No Net Loss for people as well as biodiversity: good practice principles.](#)

A manuscript has been prepared (appended) which presents a framework that identifies challenges associated with Biodiversity Net Gain, alongside potential approaches to improving outcomes for people as well as biodiversity. The manuscript also introduces the social good practice principles. The manuscript was submitted to the journal *One Earth* in June 2019.

Julia P. G. Jones, Joe W Bull, Dilys Roe, Julia Baker, Victoria F. Griffiths, Malcolm Starkey, Laura J. Sonter and E.J. Milner-Gulland. Net Gain: Seeking better outcomes for people when mitigating biodiversity losses from development. One Earth. Unpublished.

The good practice principles were presented in a [blog for Inside Ecology](#), an online magazine for ecologists, conservationists and wildlife professionals. The publication was announced and advertised via social media (personal twitter accounts).

A blog has also been published on the IUCN [website](#), presenting the good practice principles. The publication was announced and advertised via social media (personal twitter accounts).

An article describing the huge collaborative effort in producing the good practice principles was published in the [February 2019 Darwin newsletter](#).

IIED in collaboration with OU and NU drafted a policy brief for Uganda, which based on the ecological and social findings from our research, sets out eight recommendations for NEMA to follow in order to improve the Kalagala Offset Sustainable Management Plan (discussed under output 2 below). The policy brief was published by the U-PCLG in March 2019 (Year 3) and is available on the [project website](#) and the [IIED website](#). The publication was announced and advertised via social media (personal twitter accounts and the Darwin twitter account).

A [national](#) industry briefing note was drafted by NU, with input from IIED and OU and published on the project website. The brief is for anyone involved in economic development projects in Uganda that are seeking NNL of biodiversity. It introduces the international good practice principles, why people need to be considered when achieving NNL and presents the business case for accounting for social aspects of NNL.

An [international](#) industry briefing note has been drafted by Julia Baker (IIED) and has also been published on the project website. Information in the brief is similar to that presented in the national briefing note, but it focuses on Biodiversity Net Gain for an international audience.

Dissemination:

Results from the social aspects of the research have been disseminated widely. Dissemination events include: an international conservation conference (International Congress for Conservation Biology, [ICCB](#), Colombia, July 2017), a meeting with [The Biodiversity Consultancy](#) in Cambridge (February 2018), a workshop with NGOs and businesses in

Cambridge (February 2018), at a SNAPP ([Science for Nature and People Partnership](#)) workshop on [Compensatory Conservation](#) (March 2018), the [International Association for Impact Assessment](#) (IAIA 2018) conference in South Africa in May 2018, and the [IAIA 2019](#) conference in Australia in May 2019. Results will also be presented at the upcoming ICCB conference ([ICCB 2019](#)) in Malaysia in July 2019.

A webinar for the [Natural Capital Coalition](#) was done by Julia Baker and Helena Newell (IIED and Balfour Beatty) on the 28th of May 2019 ([presentation](#), [minutes](#) and [attendance list](#) are appended). After the introduction by Eva Paulik from Arcadis, Julia and Helena presented on the gaps between conceptual and operational implementation of Natural Capital Accounting in a developing country context.

Results from both the social and biological data have been presented in Uganda as part of the workshops held in March 2018. The first workshop was held with Government agencies and consultants and the second one with members of the U-PCLG. Final results were also presented by the NU team and discussed at a U-PCLG workshop in March 2019, attended by 35 members. Local consultation and dissemination of the research findings to local government, village leaders, Local Council Chairmen (LC1) and representatives took place on two occasions (in March 2018 and March 2019). This is described further under output 2 below.

1.7 Project meetings

Year 1:

The inception meeting was held in Uganda in May 2016 (discussed above).

The six-monthly project meeting was held via Skype on the 11th November 2016. Details are in our Year 1 report and the minutes are available on Basecamp. Individual meetings with NEMA and NU were held in January and February 2017 with E.J. Milner-Gulland and Victoria Griffiths.

The annual project meeting for Year 1 took place at the NEMA offices in Kampala on the 3rd of April 2017. The aims of the meeting were to reflect on progress to date and to discuss and plan the activities in Year 2. A second meeting was held at the Serena Hotel in Kampala on Tuesday the 4th of April 2017 specifically to discuss and plan for engagement with the private sector. The presentations and [meeting report](#) were shared with all team members via Basecamp. Representatives of all the project partners were present at both meetings, as well as all three of the Uganda-based Advisory Committee members. A representative from the Uganda Chamber of Commerce joined the meeting on Tuesday the 4th of April 2017. Details are in the [Year 1 annual report](#).

E.J. Milner-Gulland was also invited to give a guest lecture at the [Aga Khan Development Network](#) (AKDN) lecture series at the Serena Hotel in Kampala on the 4th of April 2017. The presentation was on how government, business and civil society can work together to revolutionise biodiversity conservation. The slides are available on Basecamp. See the press coverage in the [Daily Monitor](#) and [Saturday Monitor](#).



E.J. Milner-Gulland delivering her guest lecture in the AKDN lecture series

Year 2:

The six-monthly Skype project meeting was held on the 20th of October 2017. The minutes and action points from the meeting were shared with the project members on Basecamp and via email.

A second project meeting was held on the 5th February 2018 to discuss the upcoming research workshop and annual project meeting in Kampala. The meeting minutes (available on Basecamp) were shared on Basecamp and emailed to the entire project team. A separate follow-up skype call was held with Dianah Nalwanga (NU) in February 2018 to discuss the workshops and the plans for the village dissemination meetings.

The annual project meeting for Year 2 took place at the Protea Hotel in Kampala on the 9th March 2018. The aims of the meeting were to reflect on progress to date and to discuss activities for the final year, Year 3. The [meeting report](#) and presentations are available on Basecamp. Representatives of all the project partners were present at the meeting, as well as two of the Uganda-based Advisory Committee members. A teleconference with UK-based Advisory Committee member Kerry ten Kate was held on 17th April 2018 to update her on project progress and gain her feedback on project activities.

Year 3:

A team meeting was held at Oxford University on the 19th of November 2018 (before the business engagement workshop) and attendees included: EJ Milner-Gulland (OU; meeting chair), Dilys Roe (IIED), Julia Baker (IIED), Victoria Griffiths (OU), Dianah Nalwanga (NU) and Beatrice Kyasimiire (WCS-Uganda (informal agenda and minutes are appended). The aim was to discuss the upcoming business engagement meeting and planned project outputs (papers, policy briefs, industry briefs). The informal agenda and meeting minutes are available on Basecamp.

In place of a final project meeting in Year 3, we held a series of dissemination and engagement events within Uganda in March 2019, and in the UK in March-June 2019, involving all members of the project team in various capacities and permutations. More details on these meetings are in the dissemination sections of this report. This approach was chosen in order to maximise the impact of our project for the limited budget, and ensure that as many stakeholders as possible were involved (flying everyone to Kampala for a few days of a final meeting would have been much less impactful).

1.8 Research workshop

Rather than holding one research workshop, we felt it would be more impactful to hold two meetings for different stakeholders, so that the research findings could be presented in a tailored way for the appropriate audiences, and more detailed feedback obtained from smaller groups. Minutes for both meetings are available on Basecamp.

The first meeting was held at the Serena Hotel in Kampala, Uganda, on the 7th of March 2018 (12.30pm – 5.00pm; fourth quarter of Year 2). The workshop was preceded by a lunch for attendees and followed by a drinks reception and networking opportunity. The aim of this meeting was to meet with Government agencies and ecological consultants to gather their feedback on the social data collection and results to date and their advice on how to shape the draft social good practice principles (progress in 3.1 below). During this meeting, presentation topics included Natural Capital approaches, how social aspects can be included into biodiversity NNL/NG strategies for development in Uganda, an example of a Natural Capital Account in Uganda and an overview on a potential Natural Capital Forum for Uganda. This was followed by presenting the social and ecological results from the research carried out a large hydropower project in Uganda and the draft social good practice principles. There was a total of

28 participants (including the Darwin team members). The [meeting report](#) and presentations are available on basecamp and the [project website](#).



Natural Capital workshop, 7th March 2018

A second meeting was held with the Uganda Poverty and Conservation Learning Group (U-PCLG) of Ugandan NGOs on 9th of March 2018 at the Protea Hotel, Kampala. The aim of this meeting was gather their feedback on the social and ecological research carried out to date, the plans for Year 3, and gather any recommendations that they might have on the work. During this meeting, we presented our findings from the biological and social surveys, our progress with developing a Natural Capital Forum in Uganda and our plans for the final year of the project (Year 3). Around 30 U-PCLG members from various conservation and research organisations in Uganda (including the Darwin team) were present. Arising from these two meetings was a firm plan to establish a Natural Capital Forum, plans for dissemination and engagement in Year 3, and a plan for further project proposals and joint work, which informed our current and ongoing work as a partnership. The [meeting report](#) and presentations are available on Basecamp.

1.9 Annual presentations to Advisory Committee & reports to Darwin

In Year 1, the Advisory Committee were present at the annual project meeting held in April 2017, as well as at the Inception Meeting in May 2016. Individual members of the Advisory Committee were also on call to the team for specific advice on their areas of particular expertise (Derek Pomeroy - ecological surveys, Mark Infield - cultural aspects and liaison with government, Panta Kasoma - liaison with Ugandan NGOs and engagement, Kerry ten Kate - international policy and practice in biodiversity offsetting).

The six monthly and Year 1 Darwin reports were compiled by Oxford University, with input from all project partners and submitted in November 2016 and April 2017 respectively.

In Year 2, two members of the Advisory Committee were present at the annual project meeting held in March 2018 (fourth quarter of Year Two). Individual members of the Advisory Committee were also on call to the team for specific advice on their areas of particular expertise. A separate meeting was held with Kerry ten Kate on the 17th of April 2018 (UK-based Advisory Committee member), to update her on project progress and to seek her advice and feedback.

In Year 3, we invited Advisory committee members to our events in their respective countries, and they attended and participated. They were invited to contribute to research outputs (including academic papers) as appropriate, and we remain in close contact with them.

The six monthly and Year 2 Darwin reports was compiled by Oxford University, with input from all project partners, and submitted in November 2017 and April 2018 respectively.

The six monthly Year 3 Darwin report was compiled by Oxford University, with input from all

project partners, and submitted in October 2018.

Table 1: Measurable indicators and achievements for Output 1

Logframe indicator	Achievements
Measurable indicators	
All relevant previous biodiversity and social survey data collated into a spatially explicit database and analysed to assess impacts of projects/offsets, by end Year One.	Biodiversity and social databases have been compiled, analysed and the results written up as part of research outputs.
At least 3 Focus Groups held in each of the 3 sites (of different potentially affected groups), to develop locally appropriate wellbeing measures and explore cultural and social values of biodiversity in the area and effects of projects and offsets (current & potential).	A total of 60 Focus Group Discussions were held. There were 4 FGDs in each of the 3 villages during the scoping trip to develop the Basic Necessities Survey, and 8 per village in all 6 villages to discuss wellbeing and livelihoods (4 groups) and cultural heritage (4 groups). The 4 FGDs groups were because each theme was discussed separately with women and men, and the gendered groups were divided by livelihood strategy (farmers and fishers, business people). Overall 566 people participated in these FGDs, averaging 8-10 people per group.
At least 200 local people, stratified by livelihood and wealth, in each of 3 sites, are surveyed to gain perspectives on costs and benefits of projects and offsets.	6 villages were sampled in the study area. A total of 1305 respondents were interviewed (490 individuals from 317 households at Bujagali, 489 individuals from 289 households at Kalagala and 326 individuals from 178 households at Isimba). Villages at Bujagali and Kalagala were larger than those at Isimba. Thus, to maintain a consistent proportion of individuals sampled per village, more individuals were sampled in the four villages at Bujagali and Kalagala. Where possible, the household head and another family member were interviewed at the respondent's home to capture intra-household variation, particularly by gender and age. Of the total sample (1305 individuals), 39% were male (n = 511) and 61% were female (n = 794). Most were below the age of 45 (65%, n = 848) and the majority had a primary school level of education (54%, n = 701).
At least 50 people in each of the 3 sites participate in choice experiments and scenario interviews, to gain views on potential mitigation for social impacts of current and new projects/offsets.	A total of 1215 individuals participated in the choice experiment (424 individuals from 286 households at Bujagali, 472 individuals from 283 households at Kalagala and 319 individuals from 178 households at Isimba). Of the total sample (1215 individuals), 38% were male (n = 467) and 62% were female (n = 748); 65% were below the age of 45 (n = 784), 54% had a primary school level of education (n = 652) and 87% had lived in their village for more than ten years (n = 1053).
Biodiversity surveys carried out in affected areas to assess ecological mitigation carried out and current biodiversity value, by end of Y2.	Ecological surveys were completed by NU in April-May 2017 (Year 2). They assessed floristic and bird diversity in 10 sites within the Bujagali Dam and Kalagala Offset area. The assessment followed as far as possible the methods of the 2006 pre-dam ESIA report.
Datasets analysed, published and disseminated in appropriate formats and to stakeholders including local leaders, government	Analysis and writing-up of the social and biological components is complete. The outputs have been made available in various formats to a range of audiences (see detail in the main report).

and business, by end Y2.	
Progress indicators	
Annual reports of the project team to Darwin.	The three 6 monthly and two annual reports have been submitted to Darwin.
Minutes of 6-monthly project meetings and powerpoint presentations made.	Minutes and presentations from the six-monthly meetings, annual project meetings and research workshop are available on the team's internal platform in Basecamp. All project partners and the advisory committee have access to Basecamp.
Presentations to Advisory Committee (annual).	Presentations to the advisory committee took place during the project meetings/workshops and via individual consultations.
Biodiversity database developed (end Y1) and enhanced (end Y2).	All the existing biodiversity data for birds and plants from the project area has been collated (1998, 2006, 2017) and is being held at Nature Uganda for future use.
Research Workshop is held in Uganda (end Y2) where the research results are presented by the project team and local people from the case study site to stakeholders (government, NGO and business)	The research workshops were held in Uganda on the 7 th and 9 th of March 2018 (Year 2), where the results of the project and plans for Year 3 were presented to various Ugandan stakeholders involved with NNL, including Government agencies, NGOs and businesses.
Summary of research findings is published in the local language of the case study site (mid Y2). Meetings held with local leaders to present the research findings (end Y1 and Y2).	Village meetings were held with community members and local leaders in March 2018 to present feedback on the preliminary findings of the social and biological studies, by NU and Victoria Griffiths (OU). NU then held a second set of meetings in March 2019, to present the final results from the project. Visual aids in the forms of posters in the local language (Luganda) were used and a set of posters was left with each village Chairman (LC1).
By project end, two research papers are published in peer reviewed journals and one IIED research report is published and available to download on the IIED website.	Two research papers were published in peer reviewed journals in 2019, one in <i>Conservation Biology</i> and a second in <i>Biological Conservation</i> . Both are available online. A third research paper was submitted to the journal <i>World Development</i> in June 2019 and a fourth manuscript is currently being drafted. NU's report on the ecological findings has been completed and is available on the project website.
By project end, the research is presented at a minimum of one international conservation conference and at least one international biodiversity offset policy meeting.	The research has been presented at one international conservation conference (the International Congress for Conservation Biology, ICCB17) in Colombia in July 2017 and will be presented at a second international conservation conference (the International Congress for Conservation Biology, ICCB19) in July 2019. Results have also been presented at another two international conferences (the International Association for Impact Assessment conference, IAIA) in South Africa in May 2018 and in Australia in May 2019. The research was also presented at the annual Business and Biodiversity Offsets Programme (BBOP) meeting (BBOP15) in Paris in November 2018.

Output Two: Review of the Kalagala Offset Sustainability Management Plan and Isimba management plan

Overall Assessment: Achieving two of the four activities under this output was not possible, and an explanation is provided below. Nonetheless, our study has influenced the Ugandan government's future plans for biodiversity offsetting, so that even if we were not able to be as influential as we had hoped at this particular site, our legacy will be felt as a change in policy with respect to future sites.

2.1 Review Kalagala Offset Sustainable Management Plan

2.2 Prepare recommendations on Isimba management plan

We raised concerns regarding these two activities in the Annual Report for Year 2 and the half year report for Year 3. We made the assumption in our proposal that there was still scope to influence the Isimba Management Plan. However the Isimba dam became a highly sensitive yet important project for Uganda, with decisions being made at the highest levels of government. Towards the end of Year 1, we discovered that the management plans for Isimba and the ESIA Addendum evaluating the impact of the Isimba dam on the Kalagala Offset had been completed and approved by the Government. So during Years 2 and 3, we actively sought ways to influence these plans and their outcomes. During our annual Year 2 project meeting, Francis Ogwal (NEMA) described how the World Bank was in the process of refinancing the Bujagali Hydropower Project. The aim of this refinancing was to reduce the cost of electricity and make it more accessible to the rural poor. The refinancing was also an opportunity for the World Bank to address the many concerns that had been raised about the environmental impacts of the project, notably, the implementation of the Kalagala Offset and the impact that the new Isimba dam may have on the offset. Francis mentioned that discussions between the World Bank and the Government of Uganda were underway and that there was a new plan to extend the offset conservation area closer towards Bujagali, with additional funding for offsetting activities being made available. This meant that the Kalagala Offset Sustainable Management Plan, which covered the smaller offset area, was going to be reviewed and updated. However, the refinancing of the Bujagali Hydropower Project proved to be highly contentious. See [here](#) and [here](#) for articles in the international media as examples. So whilst the refinancing was an important opportunity for our project to influence the new Kalagala Offset activities and updated sustainable management plan, as a project team, we had to proceed extremely carefully to ensure that we supported NEMA to influence the implementation of the revised offset to take into account the needs and priorities of local residents.

We prepared a policy brief for NEMA to use in their discussions with the World Bank about the design of the refinanced offset. IIED drafted the policy brief in collaboration with OU and NU. It was based on the biological and social findings from our research, and sets out 8 recommendations for NEMA to follow in order to improve the Kalagala Offset Sustainable Management Plan. The policy brief was published by the U-PCLG and concludes by strongly encouraging NEMA to incorporate these recommendations into an updated version of the Kalagala Offset Sustainable Management Plan. This will ensure that the new Plan not only addresses biodiversity NNL, but also the social impacts that could arise from biodiversity NNL activities. This will go a long way to help Uganda develop NNL policies and biodiversity offsets that are fair, socially acceptable and sustainable. In the brief, the U-PCLG also strongly suggests that NEMA should specify that the Isimba dam compensates for any impacts to the Kalagala Offset. The policy brief was published in March 2019 (Year 3) and is available on the [project website](#) and the [IIED website](#). Our team's understanding is that the brief did help inform discussions between NEMA and the World Bank, however given the sensitivities of the discussions, we were not fully informed of the outcomes. As the whole refinancing is still in progress, it is too early to say whether our project influenced the refinancing and, ultimately, the review of the Offset Plan. Nonetheless, the project and the policy brief certainly raised awareness within NEMA, as during our training for NEMA staff (see below) many of them talked about the biodiversity and social issues surrounding the Isimba dam and its offset and how learning from that development will help them improve NNL for future developments.

The policy brief was discussed during the U-PCLG meeting hosted by NU on 11th March 2019. The group discussed potential follow-on activities, and agreed to develop an Advocacy Action

Plan. Two meeting reports are appended (one from NU and one from the U-PCLG) and are also available on Basecamp.

NU also carried out a meeting to disseminate and popularise the [national industry briefing note](#) so that it influences decisions and practices in Uganda. The meeting was attended by ESIA consultants, development companies, government agencies and line Ministry representatives among others. The meeting was held at the Protea Hotel Kampala, on 29th March 2019 and was attended by a total of 29 participants. The meeting report compiled by NU is appended and available on Basecamp.



Participants at the meeting hosted by NU in March 2019 to discuss the national industry briefing note

At the international level, we have been in contact with colleagues at the International Finance Corporation (IFC; which is working closely with the World Bank on the refinancing), as well as other international stakeholders (e.g. IUCN and the Bank Information Center) who are keen to use our findings. This is likely to be for future investments, however, rather than Isimba. We believe we undertook all possible measures to fulfil outputs 2.1/2.2 given the situation, and that we set the foundations for the Ugandan team members to continue to advocate for better biodiversity and social outcomes from the Isimba dam, and to apply the learning from this project to future NNL developments

2.3 Local consultation and dissemination

OU and NU carried out local dissemination meetings on 12th-16th March 2018, to share feedback on the preliminary results from the biodiversity and social assessments with the 6 communities that participated in the social surveys. These villages are located along the Victoria Nile River, in the Jinja, Buikwe, Kamuli and Kayunga Districts. Meetings were attended by a total of 142 participants, including 84 men and 58 women. Meetings were held in the Luganda or Lusoga languages, depending on the village location. The social results were presented by Victoria Griffiths (OU; with translation to local languages), while the biodiversity results were presented by Dianah Nalwanga (NU). Visual aids in the form of posters in both English and Luganda were used during the meetings and a set of Luganda posters was left with the LC1 in each village. The four District Environmental Officers (DEOs) and four Research Assistants (who carried out the socio-economic surveys) were also invited to the

village meetings. However, they were unable to attend them. The dissemination report and posters are available on Basecamp.



NU and Victoria Griffiths disseminating the research findings in the villages in the study area in March 2018

As only the preliminary results were presented in March 2018, NU carried out a second and final round of dissemination in the study area in Year 3. A meeting was held on the 5th March 2019 in the study area with the LC1s. Representatives from 5 of the 6 villages visited during the social surveys also attended. Unfortunately, the LC1 from one of the villages was unable to attend owing to trouble with his bicycle. On the same day, NU held a meeting with District Environmental Officers from Jinja, Kamuli and Buikwe Districts. The DEO from Kayunga was unable to attend. A representative from the Lands Department in the Busoga Kingdom also attended the meeting. Dianah Nalwanga (NU) and Victoria Griffiths (OU) compiled visual aids for the meetings in the form of posters in both English and Luganda, and a set of Luganda posters were left with the LC1's. A report on the dissemination meetings and the posters (in English), are available on Basecamp and appended to this report.

2.4 Analyse meetings and MoWE reports, site visit by NEMA, and report on implementation of recommendations

As described above, we did not anticipate the World Bank refinancing of the Isimba dam, or its controversy, at the start of the project. This situation prevented us from undertaking this activity as we had originally intended, however we sought other ways to influence the refinancing process to implement our recommendations (see above) and to influence the MoWE and NEMA to apply the learning from this project to future NNL developments.

Influencing the Ministry of Water and Environment (MoWE): towards the end of Y3, the MoWE announced their intention to publish a new National Biodiversity Offset strategy for economic development projects in Uganda. Under this project and with tremendous support from the COMBO team, our team member Julia Baker (IIED) attended a workshop held by the MoWE on 13th February 2019 to discuss the scope and contents of the National Biodiversity and Social Offset Strategy. Julia gave a presentation (slides and agenda appended) on the critical

importance of the social aspects of NNL, illustrated by learning from this project, and facilitated discussions on how the new national strategy can incorporate social aspects alongside biodiversity aspects of NNL. As a direct result, the MoWE changed their strategy to become the National Biodiversity **and Social** Offset Strategy, and invited Julia to provide input on the social aspects. While this work could not directly influence the Isimba dam given the unexpected situation, the social principles for NNL are now integral to Uganda’s national strategy on biodiversity offsetting.

Regarding NEMA, a site visit was carried out on the 27th of June 2018 (Year 3) during COMBO’s training session (report appended), which Julia supported with a session on the social aspects of NNL. Trainees from NEMA, the Uganda National Roads Authority (UNRA), oil companies and ESIA consultants visited the Isimba Hydropower Project where they discussed project impacts (direct, indirect and cumulative), ways that the mitigation hierarchy could be considered in the project design and development, and difficulties with achieving mitigation targets due to the nature of the impacts. This site visit was requested by the Uganda Electricity Generation Company (UEGCL) and helped participants understand the practical difficulties of mitigating impacts after they have taken place. Again while we could not directly influence the Isimba dam, the site visit was invaluable for NEMA staff, along with other trainees, to fully appreciate both the biodiversity and social issues arising from offsets, and how learning from this project can help improve future projects.



Trainees visiting the Isimba Hydropower Project

Table 2: Measurable indicators and achievements for Output 2

Logframe indicator	Achievements
Measurable indicators	
By early Y3, the Kalagala Offset Sustainable Management Plan is reviewed by the Ministry of Water and Environment (MoWE), with a view to revision based on inputs from the project team.	IIED in collaboration with OU and NU compiled a policy brief which sets out 8 recommendations for NEMA to follow in order to improve the Kalagala Offset Sustainable Management Plan. The policy brief was published in March 2019 (Year 3) by the U-PCLG and strongly encourages NEMA to incorporate these recommendations into an updated version of the Kalagala Offset Sustainable Management Plan, which was proposed as part of the Bujagali Hydropower Project refinancing.
By early Y3, recommendations for the Isimba offset management plan are submitted to MoWE, including local feedback on preferred offsetting options (based on output 1.3).	
Project findings are published in local languages and meetings are held with local leaders to present them and NEMA's new	The first dissemination meetings provided feedback on the preliminary social and biological results, whilst the second set of meetings provided feedback on the final

guidelines (end Y2).	<p>results and good practice principles. Meetings were held with local leaders, LC1s and representatives from all six villages sampled during the social surveys. Meetings were held in the local languages, using posters in Luganda as visual aids. A set of posters was left with each LC1 on both occasions.</p> <p>Regarding NEMA's guidelines, these were superseded by the national strategy (as described above and below).</p>
By project end, Ministry of Water and Environment (MoWE) reports and NEMA site visits demonstrate implementation is taking place (end Y3).	A site visit was carried out on the 27th of June 2018 (Year 3) during COMBO's training session and was attended by representatives from NEMA.
Progress indicators	
Document containing approved recommendations for revision of the Sustainability Management Plan for Kalagala, that make explicit the social net positive commitment, and how they will achieve it.	See above.
Document containing approved recommendations for a Sustainability Management Plan for Isimba, that make explicit the social net positive commitment, and how they will achieve it.	
Minutes of local and national-level meetings, publications in local languages.	A report was compiled by NU describing the first set of village dissemination meetings, and includes the minutes from each meeting. posters from these meetings (in English and Luganda) are appended to this report. NU also compiled a report for the second round of local dissemination meetings and our English posters from these meetings are appended to this report. A report (appended) was compiled by NU describing the meeting they hosted in March 2019 to disseminate and popularise the national industry briefing note. Two reports were compiled describing the U-PCLG meeting held on the 11 th of March 2019, one by NU and one by the U-PCLG. Both reports are appended.
Analysis of meetings and reports from NEMA and MoWE in Y3, site visit report from NEMA, minutes of final project meeting.	A site visit report is included in COMBO's training report, appended to this report. Evidence of our various Y3 dissemination meetings is attached.

Output Three: New guidelines on incorporating social costs and benefits into biodiversity offsetting

Overall Assessment: This output has been achieved. We took advantage of additional funding and influencing opportunities to expand both our collaborations and our activities beyond what was originally envisaged in the proposal. We feel that this has been a highly successful element of the project, and one which is still continuing to grow and expand.

3.1 Draft National/International guidelines prepared and discussed

As a team, we spent time in Year 2 discussing the format and content of both the national and international guidelines. At this stage of development of biodiversity NNL policies, both within Uganda and internationally, and the current limited capacity for consideration of the associated social impacts (again in Uganda and internationally), we felt it most appropriate to produce a set of social good practice principles to set the foundations, especially by make explicit what good practice looks like in ways that apply to an international audience. This was reinforced by advice from our technical advisory committee, especially Kerry ten Kate. In addition, we felt we would have more impact and would reach a wider audience if we focused on developing one document for an international audience first, that the Uganda-specific document would be founded on.

These international principles are for those involved with economic development projects who are applying the mitigation hierarchy to achieve NNL/NG of biodiversity. This includes; development commissioners and investors, ESIA consultants, statutory bodies, regulators, competent authorities, auditors, contractors, academics and policy makers, among others. They set out good practice principles for development projects to achieve NNL/NG of biodiversity, while addressing the negative effects on local people and maximising opportunities for NNL/NG to generate positive social outcomes, thereby setting an ambition which industry, investors and industry can strive to achieve. The principles closely align with existing best practice guidance on NNL of biodiversity (e.g. the BBBOP guidelines, IFC Performance Standards), ensuring that people's use and cultural values associated with biodiversity are taken into account when designing and implementing NNL/NG projects.

The first draft of the social principles were compiled in the second half of Year 2 by Joe Bull (WB) and Julia Baker (IIED), with input from E.J. Milner-Gulland (OU) and Victoria Griffiths (OU). The draft principles were presented at a workshop held at UNEP-WCMC in Cambridge on the 20th of February 2018. Participants were from various NGOs (including WCS, Fauna Flora International, UNEP-WCMC), consultancies (The Biodiversity Consultancy) and businesses (BP). The aim of the workshop was to gather feedback and recommendations on the principles, in order to ensure that they reflect good practice and are practical to implement. The principles were then presented and discussed during our meeting with government and ESIA consultants in Kampala, Uganda, held on 7th March 2018. Interestingly, and encouragingly, very similar issues were raised by both sets of stakeholders (including how best to include equity and human rights in the principles). In addition, Kerry ten Kate (BBOP, one of our Advisory Committee) reviewed the draft principles and gave comments, which we discussed in detail with her on 17th April 2018. Two further workshops were held to discuss the principles and solicit feedback, one in Oxford, UK (9th July 2018) and one in London, U.K. (3rd September). A webinar was hosted by BBOP on the 20th of September 2018, where Julia Baker and Joe Bull presented the draft good practice principles. Approximately 65 people attended the webinar, with feedback from BBOP reflecting that this is an extremely high number. At the end of the webinar, several multiple-choice questions were posed to the participants in order to solicit their feedback on various elements of the principles. The slides for the webinar can be downloaded from the [project webpage](#) and the BBOP website also hosts a [recording](#) of the webinar presentation and the results of the voting by participants. In addition, valuable feedback and written reviews on these principles were received from 19 individuals, as well as from various businesses, NGOs, government and consultancies from a range of countries including Australia, the UK, South Africa, Sweden, France and Switzerland. An article (*Built on collaboration: new good practice principles to achieve No Net Loss for people and biodiversity*) in the [February 2019 Darwin newsletter](#) reflected upon this tremendous collaborative effort, especially as we were overwhelmed by the interest and support to develop these principles for the international audience. There was clearly a need that this project addressed, and this far exceeded our hopes on this document when we started the project.

The principles and associated technical notes were published on the 6th of November 2018. The document was published independently by our team, using a professional designer, and made available on our [project website](#) as well as through an [online archiving website](#) which gives it a DOI. To date, the principles have been downloaded 443 times from this website.

The principles were launched at our business engagement workshop, held at Oxford University on the 20th November 2018 (discussed further in section 3.7 below). The workshop included presentations by our Ugandan team members and by COMBO. A slot was also allocated for

Joe (WB) to present the principles at the final BBOP annual conference ([BBOP15](#)) in Paris in November 2018 ([slides are available on the project website](#)). In addition, the principles are currently being translated into French which, when published, will significantly increase the reach of our work.

Over the past four years, [Professor Julia Jones](#) has been researching the social impacts associated with biodiversity offsetting, focusing on a case study in Madagascar. Owing to close synergies between her work and the work that we are carrying out as part of the Darwin Project, and the previous collaborations with Julia and the UK-based team, we invited Julia to be one of the authors on the good practice principles and to take part in our consultations and the business engagement workshop at Oxford. Collaborating with Julia enabled a far greater outreach than we originally anticipated given Julia's networks, and Julia secured a foreword by IUCN which added great credibility to the principles document. In addition, Julia Jones applied for additional funding from the [ESRC Impact Acceleration Account](#) and funding was awarded to Bangor University in June 2018. This additional funding contributed towards finalising the good practice principles (as given the huge interest in our consultations, we had received far greater feedback to process than originally anticipated) and was used to co-finance the business engagement workshop in Oxford, thereby allowing more people to attend the meeting. This funding also supported key BBOP experts to undertake technical reviews of the good practice principles, to support the BBOP webinar, and to assist with launching the principles at the BBOP event in November.

3.2 Research workshop held to solicit feedback on research results and principles from a range of stakeholders

Rather than holding one research workshop, we felt it would be more impactful to hold two meetings for different stakeholders, so that the research findings and the good practice principles could be presented in a tailored way for the appropriate audiences, and more detailed feedback obtained from smaller groups.

The first meeting was held at the Serena Hotel in Kampala, Uganda, on the 7th of March 2018 (fourth quarter of Year Two). There was a total of 28 participants, including government representatives, ESIA consultants and the Darwin team members. A second meeting was held with the U-PCLG on the 9th of March 2018 at the Protea Hotel, Kampala. Around 30 participants from a range of NGOs and including the Darwin team were present.

The research workshop is discussed in more detail under output 1 (section 1.8) and the [report](#) and [minutes](#) are on Basecamp.

The draft principles were presented and feedback solicited at a workshop held at UNEP-WCMC in Cambridge (20th of February 2018), Kampala, Uganda (held 7th March 2018), Oxford, UK (9th July 2018), London, U.K. (3rd September 2018) and during a webinar (20th of September 2018). Participants at the meetings were from various NGOs, consultancies, government agencies and businesses. This is discussed in section 3.1 above.

3.3 Training of NEMA staff on the new guidelines and associated technical needs

Two training events were carried out.

The first training of NEMA staff took place in Kampala on 25th – 28th June 2018, and was done in collaboration with a training event carried out by the COMBO project being led by WCS. By combining our training with that of COMBO, we were able to reach a much wider and larger audience than originally planned in the proposal. In addition to training NEMA staff, the COMBO training enabled us to reach the Uganda National Roads Authority (UNRA), oil companies and ESIA consultants. The overall goal of the three day training course was to strengthen the capacity of institutions in Uganda to implement the mitigation hierarchy, including NNL strategies and biodiversity offsets, as a planning and management tool for biodiversity conservation. The training was organised by The Biodiversity Consultancy (TBC) and WCS. The main objectives were to:

- Improve understanding of the concept of the mitigation hierarchy including biodiversity offsets and the supporting legislative and regulatory framework.

- Improve understanding of the scale at which impacts may occur and the spatial and temporal needs for planning and implementing mitigation and offsets.
- Improve understanding of the international standards that apply to Uganda.
- Improve understanding of the requirements for effective mitigation of impacts by visiting a site where mitigation has been developed.

During COMBO's training event, a module was carried out by Julia Baker (IIED), dedicated to the social aspects of biodiversity NNL, what guidance already exists, what are the gaps and how this fits in with the EIA process. The aim of the day was to:

- Explore potential impacts of NNL on people.
- Explore how to positive and equitable social outcomes from NNL.



Julia Baker presenting a module on the social aspects of NNL during the COMBO training event

Overall 54 people attended the training, 19 females and 35 males. Six individuals were NEMA staff. Training material on the inclusion of social aspects into biodiversity NNL and biodiversity offsets is available on the [project web page](#) and Basecamp. A training report was compiled by WCS-Uganda (appended) but has not been made publicly available.

On 14th February 2019, we held a second training course for NEMA staff, at their Headquarters in Kampala and from their field offices across Uganda. A total of 43 people attended the training, including the facilitators from WCS-Uganda and from NU. The training was carried out by Julia Baker (IIED) and focused on the good practice principles, and how they will apply to biodiversity NNL/NG development projects in Uganda. The training included presentations, practical sessions, and cohort discussions, with in-depth sessions for the two trainers. Delegates were asked to complete a feedback form. While the full feedback is in the [training report](#), in summary most delegates scored the training as good (55%) or very good (45%) saying that the most useful aspects were understanding the difference between ESIA and NNL/NG and the potential impacts on people's wellbeing from NNL/NG. They also requested more training on the social aspects of NNL/NG and for the training to be extended to ESIA practitioners. The [training presentation slides](#) and [training checklist](#) are on the project website and Basecamp.



NEMA training event held on the 14th of February 2019

3.4 Business and Biodiversity Forum/Natural Capital Forum

Our original plan (as stated in the project’s proposal) was to establish a Business and Biodiversity Forum to aid communication and engagement between academics, NGOs, government and the private sector in Uganda on improving biodiversity practices within industry. The aim was for the Forum to eventually become a sustainable entity that would continue to run once the project concluded. Following discussions at the Year 1 workshop, the team decided to change the name to the “Uganda Natural Capital Forum”. This name better reflects terminology that businesses will understand, rather than using the term “biodiversity” which may alienate businesses. Moreover, as Natural Capital approaches are gaining traction within Uganda, a focus on Natural Capital was considered more likely to increase buy-in to the Forum and align the Forum’s activities with thinking about the relationship between business and the environment both nationally and internationally. Finally, with NEMA and WCS both working on Natural Capital initiatives, the team felt that it was particularly important to align the Forum with their ongoing work so that it would be sustainable post-project.

The project team held a roundtable discussion in Uganda with government, industry and NGO representatives on 17th August 2017 (Year 2). The aims were to illustrate how Natural Capital approaches can generate benefits for Uganda’s economy, society and environment, and to gather views on whether and how a Natural Capital Forum could help Uganda’s business community. There was an extremely positive response, with firm agreement about the need for this Forum in Uganda and that the Forum should not be a new entity, but part of an existing government committee, in order to have traction within both government and industry. However, concerns were raised about the abstract nature of the concept and it was suggested that a case study was needed to demonstrate how Natural Capital Accounting (NCA) could improve decision-making for development projects in Uganda.

The project team acted on this recommendation. In consultation with WCMC (a leader in NCA with various Natural Capital projects in Uganda, including the development of national ecosystem accounts, see <https://www.unep-wcmc.org/resources-and-data/experimental-ecosystem-accounts-for-uganda>), in Year 2 IIED and WB (supported by OU) produced a report which reviewed the use of NCA throughout Africa, especially to illustrate the gap whereby NCAs are being produced at national levels but are rarely, if at all, applied to individual development projects in order to improve their environmental outcomes. The report also included a hypothetical example of a NCA for the construction of a sugar cane factory in Uganda. The [report](#) is published on the WB and project website.

The project team presented the findings of the report, including the hypothetical NCA example, to representatives of Uganda’s government, industry and NGO sectors during the workshop in Kampala on 7th March 2018. Julia Baker (IIED) then led a discussion on the Natural Capital Forum including ways to take it forward. Again there was an extremely positive response, with

great interest in a Natural Capital Forum that was far beyond the expectations of the project team. Discussions pointed towards two main avenues to pursue – firstly, to complete a NCA of a real-life flagship development project in Uganda to raise the profile of NCA at the project level (i.e. as opposed to national-level accounting). Secondly, to use the findings to engage government in order to establish Uganda’s Natural Capital Forum as part of an existing government committee.

The project team acted on the first avenue: Simon Nampindo (Director of WCS-Uganda) found a real-life case study, and in Y3, a Master’s student from Imperial College London, with supervision from Julia Baker (IIED) and E.J. Milner-Gulland (OU) and support from Simon Nampindo (WCS-Uganda), completed a NCA for the project and produced a report for in-country stakeholders. [The report is available on the project website](#) and currently is being converted into a manuscript for submission to a peer-reviewed academic journal. The NCA was undertaken on biodiversity impacts of the planned Katosi water treatment plant near Lake Victoria. This water treatment plant is a high-profile development project in Uganda. A webinar for the [Natural Capital Coalition](#) was done by Julia Baker and Helena Newell (IIED and Balfour Beatty) on the 28th of May 2019 ([presentation](#), [minutes](#) and [attendance list](#) are appended). After the introduction by Eva Paulik from Arcadis, Julia and Helena presented on the gaps between conceptual and operational implementation of Natural Capital Accounting in a developing country context.

For the second avenue, the project team continues to support discussions on establishing the Natural Capital Forum, especially to support engagement with government and the business community. The most important thing, from our perspective, is to create something that adds value to existing and planned work, especially as the Forum will not be a self-standing, independent body in the absence of substantial ongoing funding. Both Ugandan and UK partners will provide technical input, especially with practical real-life examples that clearly demonstrate how NCA can improve decision-making given the current surge of infrastructure projects in Uganda. The actual engagement with government and the business community will then be taken forward by the Ugandan partners, in order for the Forum to be sustainable. The project team submitted an unsuccessful proposal for this to the Darwin Initiative (Round 25). Team members are continuing to work on this though, and plan to submit a revised and improved proposal to Round 26.

3.5 Publication of new guidelines by NEMA and launch event

Julia Baker (IIED) worked closely with the WCS-Uganda team leading the COMBO project activities in Uganda during Years 2 and 3. WCS were already working on two initiatives in Uganda: firstly a new National Biodiversity Offset Strategy to be published by the Ministry of Water and the Environment (MoWE; planned to start in March 2019 and to be published in May 2019; strategy appended), and secondly after the strategy, new practical guidelines published by NEMA to help implement the strategy (planned to start in June 2019). Our project team discussed at length how to maximize the benefits given our project and these initiatives by COMBO. We all agreed that the best outcome would be for our project to feed into and support the development of a National Biodiversity Offset Strategy and especially to embed the social good practice principles, which would provide the foundations when NEMA begins work on the practical guidelines. With our input:

- The national strategy became the ‘Biodiversity and Social Offset Strategy’. The Strategy includes a section on social aspects of NNL, based on input from our project team, which would not have been there in the absence of our project.
- A member of our UK project team (Julia Baker, IIED) attended the Strategy Launch Workshop in February 2019 in Kampala and gave a presentation (appended) on the social aspects of NNL to the MoWE and how these can be included into the Strategy.
- Julia also reviewed the first draft of the Strategy, writing in the social good practice principles specifically for the Ugandan context.

The COMBO team continued to develop and finalize the Strategy after March 2019 when this project was completed. At this time, our long-term collaborator, Professor Julia Jones of Bangor

University, was working with Julia Baker on an Impact Award grant by ESRC to maximize the impact and benefits of both the research that went into the social good practice principles and the social principles themselves. With this grant, Julia Baker continued to provide technical input on the social aspects of the Biodiversity and Social Offset Strategy for Uganda, which included embedding the social principles throughout, for example:

“Avoidance of impacts on biodiversity, and on biodiversity that is highly valued by people, is the first and most important stage of the mitigation hierarchy”

“Developments seeking NNL/NG of biodiversity are to ensure that the affected people’s wellbeing is at least as good as before the development”

Combining this matched funding with our Darwin Project greatly extended the outreach of this project, and currently the MoWE is preparing to launch the Strategy. From working with the Ministry and NEMA on the Strategy, they both informed us that several new developments requiring offsets in Uganda will be adhering to the Strategy.

The following quotation is from a blog on the [IUCN website](#):

*“The Ugandan government are preparing a national biodiversity and social offset strategy,” says **Beatrice Kyasiimire of Wildlife Conservation Society (WCS) Uganda**. “The recently produced social principles are very helpful in pointing to a way forward to ensure any potential harmful impacts on people are first avoided and then mitigated, and all potential benefits are realised. This is important as many rural people depend on ecosystem services for their livelihoods.”*

3.6. Drafting of new international guidelines and publication by BBOP

Drafting of the international social good practice principles is discussed in section 3.1 above.

As documented in our Annual report for Year 2, these principles have not been published by BBOP because BBOP drew to close at the end of 2018. Instead, the principles and associated technical notes were published independently by our team, using a professional designer, and made available on our [project website](#) as well as through an [online archiving website](#) which give it a DOI. The principles were published on the 6th of November 2018 (Year 3), and to date, have been downloaded 443 times.

The principles have been endorsed by BBOP, however, and are hosted on the BBOP legacy website, alongside BBOPs good practice guidelines. Unfortunately a technical error has arisen with this website, which means that we cannot include the link, but Kerry ten Kate has informed us that this is being rectified. The principles have also been endorsed by the IUCN and are hosted on their [website](#) with an accompanying blog. They were also discussed in a [feature for Inside Ecology](#), an online magazine for ecologists, conservationists and wildlife professionals. The article has a link to the principles.

3.7. Business engagement workshop in Oxford

The international social good practice principles were launched at the [business engagement workshop](#), held at the Oxford Martin School, Oxford University on the 20th of November 2018 (Year 3). Additional funding for the event came from the [ESRC Impact Acceleration Account](#) awarded to Julia Jones at Bangor University in June 2018 (year 3). This additional funding co-financed the workshop in Oxford, thereby allowing more people to attend the meeting. Invitations were sent out to individuals and organizations involved with biodiversity NNL/NG activities and approximately 65 people attended, including NGOs, academics, ESIA consultants and businesses. Our Ugandan partners from WCS-Uganda (Beatrice Kyasimiire) and NU (Dianah Nalwanga) also attended this event, as well as individuals from Europe and the UK.

The aim of the event was to:

- Increase understanding of the negative and positive impacts on people from biodiversity NNL/NG.

- Share experiences in efforts to ensure people are 'no worse off and preferably better off' from biodiversity NNL/NG.
- Discuss ways forward for biodiversity NNL/NG projects to result in the best possible outcomes for both biodiversity and people.
- Launch the good practice principles for biodiversity NNL/NG projects to generate benefits for both biodiversity and people.

After the welcome address, E.J. Milner-Gulland (OU) introduced why people need to be accounted for in NNL/NG policies. This was followed by presentations and a panel discussion from three individuals working on biodiversity NNL/NG (selected and invited by the Darwin team). They presented their reflections on how social issues affect NNL/NG implementation. This session was chaired by Julia Baker (IIED) and speakers included: Professor Julia Jones ([Bangor University](#)), Anders Enefjörn ([Enefjörn Natur, Sweden](#)) and Mathew Frith ([London Wildlife Trust](#)). After lunch, there were two presentations on sectoral perspectives. This was chaired by Joe Bull (WB) and included a presentation on mainstreaming biodiversity NNL into government, an example from Uganda by Beatrice Kyasimiire (WCS-Uganda), Dianah Nalwanga (NU) and Hugo Rainey (WCS, COMBO Director). Helen Temple ([The Biodiversity Consultancy](#)) then presented their [briefing note](#) on social considerations in the design and implementation of biodiversity offsets: opportunities and risks for business. Joe Bull (WB) launched the social good practice principles and Victoria Griffiths (OU) introduced several critical issues to be discussed during break out-sessions: measuring wellbeing, counterfactuals and examples where the principles might be helpful. A final panel discussion was held, exploring reflections and future avenues. Invited panellists included Katharine Gotto Walton ([Synergy Global Consulting](#)), Sharon Brooks ([UN Environment World Conservation Monitoring Centre](#)), Joe Bull (WB) and Phil Clifton ([Balfour Beatty](#)).



Images from the business engagement meeting in Oxford, November 2018

Details about the symposium are available on the [project website](#) and include the agenda, attendance list, presentations and speaker bio's. These are also available on Basecamp.

3.8. Two international businesses to commit to implementing these new guidelines

[Balfour Beatty](#) is an international infrastructure group who finance, design, build and maintain the infrastructure that underpins our daily lives. A member of our project team, Julia Baker (contracted to IIED), who works for Balfour Beatty, has been integrating the social good practice principles within Biodiversity Net Gain policy and practice in the U.K. Achievements include:

- Raising awareness of the social principles amongst U.K. practitioners by a [blog](#) on the widely read Inside Ecology online magazine.
- The U.K.'s new practical guidelines on Biodiversity Net Gain ([published in February 2019](#)) for development includes specific reference to the social principles, e.g. excerpt from the glossary:

No worse off (in the context of outcome for people from biodiversity net gain)

The Business and Biodiversity Programme (BBOP) requires development projects to achieve biodiversity NNL/gain while ensuring that affected people are “no worse off and preferably better off” (BBOP, 2012a). New international good practice builds on this, by defining this measurable social outcome from biodiversity NNL/net gain: “people perceive the components of their wellbeing affected by biodiversity losses and gains to be at least as good as a result of the development project and associated biodiversity NNL/net gain activities, than if the development had not been implemented” (Bull et al, 2018).

- [Natural England](#) is developing an ‘eco-metric’ tool to assess losses and gains in ecosystem service provision that results from Biodiversity Net Gain activities of a development project. The User Guide and Technical Report of the eco-metric (planned for publication late 2019) contain references to the social principles and outlines their application within a U.K. context.
- Julia Baker hosted a workshop at WSP Consulting on 14th June 2019 with UK government, local planning authorities, NGOs and industry practitioners. The group discussed how the social principles can be applied to Biodiversity Net Gain developments in the UK (workshop invitation and agenda attached). 35 People attended the workshop, following which Defra followed up with a commitment for a member of their Biodiversity Net Gain.
- Balfour Beatty’s Director of Highways, Phil Clifton, attended the launch of the social principles in Oxford, and is now working with Julia Baker on Balfour Beatty’s own Sustainability Blueprint and its internal reporting ‘portal’ is being updated to include targets on Biodiversity Net Gain and its benefits for people’s wellbeing.

Table 3: Measurable indicators and achievements for Output 3

Logframe indicator	Achievements
Measurable indicators	
Draft guidelines for Uganda developed collaboratively by project team and approved at research workshop (end Y2).	The international social good practice principles have been drafted and published.
A minimum of 5 NEMA staff are trained with the necessary knowledge and skills to implement the new guidelines, and a minimum of 2 NEMA staff are trained as ‘trainers’ to continue the training to other / new NEMA staff (by end Y3).	Two training events were carried out. The first training of NEMA staff took place in Kampala from 25 th – 28 th June 2018, and was done in collaboration with a training event carried out by the COMBO project being led by WCS. A module was carried out by Julia Baker (IIED) on the social aspects of biodiversity NNL. Overall 54 people attended the training, 19 females and 35 males. Six individuals were NEMA staff. The second training event for NEMA took place on the 14 th of February 2019. A total of 43 people attended the training, including the facilitators from WCS-Uganda and from NU.
By project end, the new guidelines are published by NEMA, and integrated into the planning for at least two biodiversity offsets in Uganda.	Julia Baker (IIED) worked closely with the WCS-Uganda team leading the COMBO project activities in Uganda during Years 2 and 3. WCS were already working on two initiatives in Uganda: firstly a new National Biodiversity Offset Strategy and secondly after the strategy, new practical guidelines published by NEMA to help implement the strategy.
International guidelines published in collaboration with BBOP, by end Y3.	International social good practice principles were published. Our collaboration with BBOP involved Advisory Committee member Kerry ten Kate

	(BBOP director) giving substantial input and advice, and writing the forward. Because BBOP drew to close at the end of 2018, they could not publish the principles. Instead, the principles and associated technical notes were published independently by our team on the 6th of November 2018 (Year 3) and are available on the project website and an online archiving site, which gives them a DOI. The principles are also hosted on the BBOP legacy website and the IUCN website.
By end Y3, at least 2 international businesses commit to implementing these guidelines within their operations.	Julia Baker (contracted to IIED), who works for Balfour Beatty, has been integrating the social good practice principles into Biodiversity Net Gain policy and practice in the UK. This has led to specific reference to the social principles being referenced in the UK's new practical guidelines on Biodiversity Net Gain for development (published in February 2019 by the Chartered Institute for Ecology and Environmental Management, Construction Industry Research and Information Association and Institute of Environmental Management and Assessment). Balfour Beatty's Director of Highways, Phil Clifton, is working with Julia Baker on updating Balfour Beatty's own Sustainability Blueprint and its internal reporting 'portal' to include targets on Biodiversity Net Gain and its benefits for people's wellbeing. Natural England is developing an 'eco-metric' tool to assess losses and gains in ecosystem service provision that results from Biodiversity Net Gain activities of a development project. The User Guide and Technical Report of the eco-metric (planned for publication late 2019) contain references to the social principles and outlines their application within a UK context. Therefore we have one international business and two governments (UK and Uganda) committed to including the principles into policy, as well as three highly respected UK-based industry bodies.
Progress indicators	
Minutes of research workshop, draft guidelines document posted on project website.	Minutes of the workshops in Uganda are appended to this report and the agenda, attendance list and speaker bio's from the business engagement meeting are available on the project website. The international social good practice principles and associated technical notes were published on the 6th of November 2018 (Year 3) and are available in various locations (see above).
A report of the training for NEMA staff on the new guidelines posted on the project website.	A report of the first training event (25 th – 28 th June 2018) was compiled by WCS-Uganda, but has not been made publicly available. The report is attached and the training slides on the social aspects of>NNL are available on the project

	<p>website. A report for the second training event (14th February 2019) is available on the project website as well as the training checklist and presentation slides.</p>
<p>By project end, the new guidelines are listed on NEMA's website and NEMA hosts an event to formally launch the new guidelines in Kampala.</p>	<p>The new National Biodiversity and Social Offset Strategy, which includes reference to the social good practice principles, will be published by the MoWE. The launch event is planned for June 2019, following which the Strategy will be posted on the Ministry's website.</p>
<p>By project end, Social and Environmental Impact Assessment reports (or equivalent) of a minimum of two biodiversity offsets in Uganda are published that make reference to application of the new guidelines.</p>	<p>Given the slight change in this output (i.e. teaming up with COMBO to feed into the national Strategy), the publication timescales for the national Strategy did not allow for formal reference to the Strategy in ESIA's by the time our project ended. However, Nature Uganda held a meeting to disseminate and popularise the National industry briefing note, which was attended ESIA consultants, development companies, government agencies and line Ministry representatives among others. Uganda's new National Biodiversity and Social Offset Strategy firmly sets out a roadmap for embedding the whole Strategy (including social aspects of NNL) into developments with offsets in Uganda. In addition, NEMA are working on practical guidelines for industry (including ESIA practitioners) on how to implement Uganda's Biodiversity and Social Offset Strategy, which will include practical guidelines on the social aspects of NNL.</p>
<p>Guidelines document on BBOP website and launched at project/BBOP co-hosted international meeting in Oxford.</p>	<p>International social good practice principles and associated technical notes are published on the project website and an online archiving website, which gave them a DOI. Principles are also hosted on the BBOP legacy website and the IUCN website.</p> <p>The business engagement meeting hosted by Oxford University (20th November 2018) served as the launch event for the social principles. Individuals and organizations involved with biodiversity NNL/NG activities were invited and approximately 65 people attended, including NGOs, academics, ESIA consultants and businesses. Our Ugandan partners from WCS-Uganda and NU also attended this event. Details about the launch event are on the project website.</p>
<p>Public documentation of commitments by businesses concerned on website, or reference to guidelines made in specific offset project documents.</p>	<p>See detail above on this point.</p>

Outcome

The anticipated project outcome is: “Government, developers and NGOs work collaboratively on ‘no net loss’ biodiversity offsets that genuinely reflect local people’s needs and values, support poverty alleviation in the long-term and are implemented equitably.”

We believe that the project has achieved the outcome set out in the proposal. We developed a strong Theory of Change in Year 1 (presented in the inception workshop report) and have been monitoring our progress against it throughout the project. As described above, we feel that we have met the three project outputs and the majority of the activities listed under each output. For those activities which we didn't meet, this was because we adapted the project in order to take maximum advantage of synergies with others' work, and to seize opportunities to have impact towards our outcome. These adaptations have been documented in our reporting and change requests. All project partners were instrumental in achieving the project outcome.

Our proposal has four measurable indicators under the outcome.

1. Research on the social and biological impacts of the Bujagali and Isimba Hydropower dams and the Kalagala Offset. This has been fully achieved, according to the original plans in the proposal.
2. Influencing the Isimba dam ESIA. This was the most challenging to achieve, and we only had partial success. This is because of the political and institutional situation at the case study site. Nonetheless we did the best we could, and it is possible that in the longer term our insights and recommendations will be taken into consideration. Passing our findings back to U-PCLG (the original group that asked our team for input into this topic, and the appropriate forum for advocacy in Ugandan conservation) will ensure the issue remains on the agenda.
3. Best practice guidelines. At this international level this has been fully achieved, and at the Ugandan level it is well on the way (slowed only by the timing of the national government's offset policy process).
4. A network of engaged stakeholders. This has been fully achieved; we are working towards founding an ongoing network, but this requires more funding, which the team is pursuing.

Outcome 4 also envisaged the creation of a Business and Biodiversity Forum as part of our legacy and sustainable exit. As explained above, this morphed into a Natural Capital Forum in order to gain traction in Uganda and synergise with other efforts.

Impact: achievement of positive impact on biodiversity and poverty alleviation

Project impact: Local people’s use and cultural values for biodiversity are embodied within ‘no net loss’ development goals, with biodiversity offsetting supporting both conservation and poverty alleviation at local and national levels.

The project has made good progress towards having a positive impact on biodiversity and alleviating poverty in the study area and more broadly. For biodiversity, our study has highlighted the major changes in bird and plant species richness in the region over 20 years, and some of the drivers such as land conversion and planting in riparian zones. This loss of natural habitat is in contravention of the offset's Sustainable Management Plan. The findings are presented in [NU's report](#). The findings on the social side have been published (or are in the process of being published) in peer-reviewed papers. These findings and recommendations on how to improve the biological and social components of the Kalagala Offset have been included in the [U-PCLG policy brief](#), which is publicly available on the IIED and project websites. The project team have also publicized the policy brief through social media in Uganda and UK.

At the local level, the U-PCLG policy brief provides 8 recommendations to NEMA on how to improve and implement the existing Kalagala Offset Sustainable Management Plan, and the updated management plan which is proposed as part of the World Bank's refinancing of the Bujagali dam and Kalagala Offset. Research findings that should be incorporated into an updated Kalagala Offset Sustainable Management Plan, as specified in the U-PCLG policy brief include: to ensure that the Isimba dam accounts for its impacts on biodiversity and local people's uses of natural areas; to set up a dedicated unit to monitor and report on the gains

and losses from implementation of biodiversity offsets (both ecological and social); and to implement biodiversity offsets that also address local people's needs. Following these recommendations will go a long way to help Uganda revise the Kalagala offset and implement the Isimba ESIA in a way that is fair, socially acceptable and sustainable.

At the national level, the new international [social good practice principles](#) have been published and incorporated into the new National Biodiversity and Social Offset Strategy for Uganda. Overall, the Strategy aims to ensure that NNL of biodiversity is achieved, by guiding the design and implementation of development projects and their associated biodiversity offsets. The principles contributed by our team will ensure that local people's use and cultural values of that biodiversity are also taken into account, so that local people affected by future developments in Uganda, and their associated offsets, are 'no worse off in terms of their wellbeing' as a result of the offset and development. In addition, our principles emphasize the importance of taking into account the views and priorities of marginalized and vulnerable groups (including women and natural resource dependent households). The [national industry briefing note](#) published by NU targets anyone involved in economic development projects (small or large) in Uganda, seeking to achieve NNL of biodiversity and introduces the social good practice principles. Therefore, in the longer term (beyond the project) we expect our work to have a positive impact on biodiversity and poverty alleviation in Uganda.

Internationally, our various publications, [international industry briefing note](#), social good practice principles and interactions with the UK government, industry bodies, BBOP and other leading conservation NGOs (e.g. the IUCN), will foster a better understanding of how to account for the social implications of biodiversity losses and gains from development projects and their NNL activities, contributing to more effective biodiversity NNL projects which promote social justice and poverty alleviation. There is a real momentum behind our principles which we feel will continue to have impact beyond the project.

4 Contribution to Darwin Initiative Programme Objectives

Contribution to Global Goals for Sustainable Development (SDGs)

This project contributes to SDGs 1, 9 and 15. When used in conjunction with the mitigation hierarchy, biodiversity NNL activities, including biodiversity offsets, can offer the potential to reconcile economic development with biodiversity conservation thereby allowing for sustainable economic growth. Uganda has enormous hydropower potential along the Victoria Nile River which will contribute significantly to the economic growth of the country (SDG 9) but at the same time, also has a wealth of biodiversity that needs to be protected (SDG 15) as well as local people who rely on this biodiversity (SDG 1). It is also important to note that poorly planned offsets can exacerbate local poverty.

This project has looked at the social and biological impacts of two hydropower developments (Bujagali and Isimba) and the Kalagala Offset along the Victoria Nile River in Uganda. Based on these findings, a [policy brief](#) has been published by the U-PCLG, which sets out eight recommended for NEMA to follow to improve the implementation of the Kalagala Offset Sustainable Management Plan as well as to inform the updating of the Offset Sustainable Management Plan during the Bujagali refinancing process. The international [social good practice principles](#) (*Ensuring No Net Loss for people as well as biodiversity*) have been published (November 2018), setting out 16 principles to ensure that local people are 'left no worse off, or preferably better off' as a result of a development project and its biodiversity NNL/NG activities.

These social principles have also been incorporated into the new National Biodiversity and Social Offset Strategy for Uganda. In addition, new practical guidelines will be published by NEMA to help implement the strategy (planned to start in June 2019).

Project support to the Conventions or Treaties (CBD, CITES, Nagoya Protocol, ITPGRFA)

This project has assisted Uganda with meeting their obligations under the CBD. At the 8th CoP, Parties discussed "[engagement with the private sector](#)" and identified the need for new tools including "mechanisms for biodiversity offsets"; also that "contributions from business and

industry towards the implementation of the Convention could be facilitated by... guidance for potential biodiversity offsets". At the 10th CoP, [Decision X/3](#) "Strategy for resource mobilization" was adopted. It reaffirmed the commitment of Parties to meet obligations in [Article 20 'Financial Resources'](#); highlighted the need for Parties to develop national funding plans to implement the CBD Strategic Plan and its Aichi targets and, when doing so, "explore new and innovative financial mechanisms" including "biodiversity offset mechanisms where relevant and appropriate" ([Objective 4.2](#)).

This project has contributed towards this objective and complements [CBD's existing guidance on offsetting](#). It contributes to Aichi Strategic Goal A [Target 4](#), and its objective on "strengthening partnerships among companies and industry associations, civil society and government agencies, in an accountable and transparent manner, to promote sustainable practices that address biodiversity". In Years 2 and 3, the project developed and published a set of [international good practice principles](#) that take into account local people and poverty alleviation during economic development and its associated NNL strategy. These principles were the result of a huge collaborative effort between the core Darwin team and several NGOs, academic institutions, businesses and government agencies. We reported on this collaboration in the [February 2019 Darwin newsletter](#). During Year Three, the project worked closely with the WCS-Uganda COMBO team, to ensure that these social principles were incorporated Uganda's National Biodiversity and Social Offset Strategy. In addition, two meetings were held in Year Two to discuss the development of a Natural Capital Forum in Uganda which will help facilitate engagement with the private sector and promote the importance of both social considerations for biodiversity NNL initiatives and of biodiversity conservation. There is commitment to continue to fundraise to carry this initiative on.

NEMA is the focal point in Uganda for the CBD and is the lead in-country partner on this project. Francis Ogwal, who leads the NEMA team for this project, is the focal point for the CBD in Uganda. Francis has engaged in project activities throughout the duration of the project.

Project support to poverty alleviation

As mentioned in 3.3 above, the project has assisted government and developers not to exacerbate poverty in the study area and Uganda as a whole. The aim was to raise awareness that NNL strategies and biodiversity offset policies should not only achieve a NNL of biodiversity, but also leave local people 'no worse off, and preferably better off' in terms of their wellbeing.

Our research provided a deep understanding of the impacts that the Bujagali and Isimaba dams and associated Kalagala offset had on the wellbeing of local people living in the study area (including loss of cultural heritage). In addition, as mentioned above, the choice experiment provides insight into what type of compensatory activities local people prefer as part of a biodiversity offset, that promotes both their wellbeing and a NNL of biodiversity. This research has been used in the [U-PCLG policy brief](#) which contains a set of 8 recommendations for national government both on how they could improve wellbeing in the case study site, and how they can ensure that biodiversity offsets in the future are designed to ensure NNL (and ideally net gain) from a social perspective.

Our extensive dissemination and feedback to local leaders and village members in the study site (on two separate visits, see above) means that local leaders are now more engaged with the issues and aware of the experiences and feelings of their communities. They also have the backing of our research to support their positions when arguing for better consideration of local needs in future implementation of the Kalagala offset. This should mean that they are able to contribute more successfully to discussions with national government and developers.

Gender equality

This project specifically sought to understand the gendered nature of the impacts of the Bujagali and Isimba dams and Kalagala offset on local people's wellbeing and cultural values and these results are discussed and presented in project outputs (e.g. research papers). Separate male and female focus group discussions were held during the social data collection

process. Our guidance for improving the wellbeing of local people affected by these developments at the local level, as well as our input to national offset strategy, explicitly focused on ensuring that women are not disproportionately negatively affected by developments and their associated offsets.

The published [social good practice principles](#) and definition of the 'no worse off' principle take into account gender equality issues. Principle 6 specifies that the assessment of wellbeing outcomes from biodiversity NNL should be undertaken for defined groups of people e.g. households or groups by gender or wealth. The more inequality present in a system, the lower the level of aggregation of affected people at which impacts to wellbeing are measured.

The recommendations for NEMA in the [UPCLG policy brief](#) also specifically consider gender equality. For example, there is a recommendation that the refinancing process include stakeholder engagement, targeting local communities across the whole area and must include marginalised and vulnerable people to make sure that the selected compensatory activities are seen as appropriate by different groups of people (e.g. men and women will have different views on appropriate compensatory activities).

Programme indicators

- **Did the project lead to greater representation of local poor people in management structures of biodiversity?**

Indirectly, yes. In general, the social impacts of conservation initiatives and economic development are widely discussed but a gap exists when it comes to evaluating the social impacts of biodiversity NNL/NG. Our project sought to address this gap through our research at the study site and the publication of the social good practice principles which promote biodiversity NNL/NG strategies that aid poverty alleviation and help improve outcomes for local people, especially for the rural poor who rely on biodiversity for their livelihoods.

Our principles suggest that development projects seeking biodiversity NNL/NG should achieve an outcome whereby:

“People perceive the component of their wellbeing affected by biodiversity losses and gains to be at least as good as a result of the development project and associated biodiversity NNL/NG activities, than if the development had not been implemented”.

And

“This applies to people affected by both the development project and its biodiversity NNL/NG activities, including offsets, appropriately aggregated into groups. People’s perceptions of being no worse off should last for the lifespan of the project and the duration of associated mitigation measures”.

By signing up to these principles, governments and businesses are therefore signing up to greater representation of local poor people in management structures of biodiversity.

- **Were any management plans for biodiversity developed and were these formally accepted?**

NU’s key findings and recommendations on how to improve the biological components of the Kalagala Offset were incorporated into a policy brief published by the U-PCLG. This brief has 8 recommendations for NEMA on how to improve and implement the existing Kalagala Offset Sustainable Management Plan as well as the updated sustainable management plan proposed as part of the refinancing. These recommendations were not, however, formally adopted by project end.

- **Were they participatory in nature or were they ‘top-down’? How well represented are the local poor including women, in any proposed management structures?**

Our key findings and recommendations on how to improve the biological and social components of the Kalagala Offset were incorporated into a policy brief published by the U-

PCLG. This brief has 8 recommendations for NEMA on how to improve and implement the existing Kalagala Offset Sustainable Management Plan as well as the updated sustainable management plan proposed as part of the refinancing. These recommendations come out of participatory research, which was specifically aimed at ensuring women's voices were heard. Therefore the proposals should reflect the lived experience of local poor people; this was confirmed by them in our dissemination visits and in their responses to the materials we provided.

- **How did the project positively influence household (HH) income and how many HHs saw an increase?**

Our project's impact was indirect, hence this does not apply.

- **How much did their HH income increase (e.g. x% above baseline, x% above national average)? How was this measured?**

Not applicable.

Transfer of knowledge

As mentioned above, in general the social impacts of conservation initiatives and economic development are widely discussed but a gap exists when it comes to evaluating the social impacts of biodiversity NNL/NG. Our project sought to address this gap through our research at the study site and the publication of the social good practice principles which promote biodiversity NNL/NG strategies that aid poverty alleviation and help improve outcomes for local people, especially for the rural poor who rely on biodiversity for their livelihoods.

Project results and knowledge from this project was shared widely through workshops held in both Uganda and the UK which were attended by the Darwin team, representatives from government, NGOs, businesses, academia, consultancies as well as ESIA practitioners. Two meetings have also been held with the U-PCLG to discuss our findings. A BBOP webinar was also used to present the social principles to wide international audience. In addition, the social findings have been presented at 3 international conferences and the social good practice principles at 1 international conference.

In addition, two training events were carried out. The first training took place in Kampala from 25th – 28th June 2018, and was done in collaboration with a training event carried out by the COMBO project being led by WCS. A module was carried out by Julia Baker (IIED) on the social aspects of biodiversity NNL. Overall 54 people attended the training. The second training event for NEMA took place on the 14th of February 2019. The training was carried out by Julia Baker and focused on the good practice principles, and how they will apply to biodiversity NNL/NG development projects in Uganda. A total of 43 people attended the training, including the facilitators from WCS-Uganda and from NU. Overall, 97 Ugandan's received training, 58 males and 39 females.

One woman from South Africa obtained a PhD degree from the University of Oxford and another two women from the U.K. obtained Master's degrees from Imperial College London.

Capacity Building

On the 1st of May 2019, Francis Ogwal (male), the project lead from NEMA, received a [Presidential award](#) 'for advancing the cause of biodiversity' in Uganda.



Francis Ogwal (NEMA) receiving a Presidential Award

In general, team members, collaborators and stakeholders (including U-PCLG members and NEMA staff) have increased their understanding of biodiversity offsetting and No Net Loss. Team members also have a better understanding of the research methods for operationalising wellbeing in a field context and for understanding the social impact of NNL strategies.

5 Sustainability and Legacy

Our work on the social principles will endure and is likely to grow in influence, both in Uganda and internationally. Team members in both countries continue to work actively to engage with their networks in government and business to get them adopted into policy and practice.

Our other main avenue of legacy in Uganda will come through the Natural Capital Forum. We are engaging with other organisations on this, and put in an unsuccessful proposal for this to Darwin round 25. Team members are continuing to work on this though, and plan to submit a revised and improved proposal to round 26. This is being led by Julia Baker (IIED).

All but one of the project staff were already employed by project partners and will continue in their current roles. Victoria Griffiths, the project social researcher, has completed her contract and has just accepted a new position at the consultancy Synergy Global Ltd, based in Oxford. In this role she will continue to work on social and ecological aspects of industry best practice.

6 Lessons learned

Our detailed Theory of Change (ToC) planning exercise in the Inception Workshop has borne fruit throughout the project. It highlighted areas where we were making assumptions about how our activities would lead through to the outcome, without having activities or budget to support the chain of causation. By recognising this, we were able to think strategically about these weaknesses in the ToC, and plan to address them before it was too late. This led, in Year 1, to the commissioning of a Stakeholder and Institutional Analysis, to understand the roles, responsibilities and financial obligations of all the multifarious actors in the Bujagali, Isimba and Kalagala projects. It also led us to think hard about how best to engage with local government, and how to boost our business engagement.

We strongly recommend that a really rigorous and self-critical Theory of Change exercise is undertaken during the project proposal stage and then re-evaluated as soon as possible in the life of a project to ensure that it has the best chance of reaching its outcome.

During the project, we made great strides in understanding the best approach to take in order to embed biodiversity conservation and poverty alleviation into government and business decision-making about their developments and associated NNL activities. We have taken care to listen to advice from national and international experts, and to adapt our activities accordingly. This led us to move away from our original idea of a Business and Biodiversity Forum towards a Natural Capital-focussed approach. In addition, through discussions with partners and advisors in Uganda, we decided not to develop our own national guidelines for Uganda, but that the best outcome would be for our project to feed into and support the development of the new National Biodiversity and Social Offset Strategy being developed by COMBO and especially to embed the social good practice principles. We have also worked hard to build new collaborations with key national actors (such as the Uganda Chamber of Commerce, Uganda Bureau of Statistics, ecological consultants and embassies), and international actors (WCMC, The Biodiversity Consultancy, IUCN, BBOP) who are working in this space. This ensures that we were able to add value to others' work and that our relatively small and short-term project can contribute in a meaningful way to ongoing policy processes.

We recommend that projects set out to collaborate as fully as possible with other actors working on complementary or synergistic initiatives, to maximise the chances of reaching a sustainable end-point, even if this may reduce the distinctiveness of your own project, because the whole will definitely be greater than the sum of the parts. And listen to advice that may require a shift in emphasis and flexibility about specific activities to achieve the intended outcomes and outputs, but will engage end-users more effectively.

We have seized opportunities to do extra pieces of work that we feel can contribute to the aims of the project. In Year 2 this involved preparing a document which reviewed the implementation of Natural Capital approaches in Uganda and Africa in general, with a hypothetical example, which we presented at our Workshops in March. In Year 3, a Masters student carried out a real-world Natural Capital accounting exercise for the Katosi water treatment plant in Uganda, as a demonstration of the methods involved. Through collaborating with the COMBO Project, we were able to hold two training events for NEMA staff. The first training of NEMA staff took place in the first part of Year 3, and was done in collaboration with a training event carried out by the COMBO project. By combining our training with that of COMBO, we were able to reach a much wider and larger audience than originally planned in the proposal. In addition to training NEMA staff, the COMBO training enabled us to reach the Uganda National Roads Authority (UNRA), oil companies and ESIA consultants. The second training event for NEMA took place in the latter part of Year 3. These opportunities have been realised with minimal budgetary shifts (agreed with LTS).

Often there are cheap, or cost-free, additional activities that can be done to enhance the impact of your work with some reallocation of budget between partners; we recommend that project teams continually seek to identify and act on these opportunities.

The major lesson we have learnt is that we did have a killer assumption in our logframe (that there was still the opportunity to influence the Isimba ESIA and the revision of the Kalagala Sustainable Management Plan). With the main responsible government agency (NEMA) as our lead partner in Uganda, and based on discussions with all project partners during the project proposal stage, we believed that this was possible. Nonetheless, it was a gamble to include this assumption. It is probably unlikely that our project would have been funded otherwise, as it was our hoped-for route to direct local poverty and biodiversity impact.

However we found that our immediate project team was not always well informed about events that NEMA was part of, and opportunities to influence the plans were mistimed with respect to our work. Influencing governmental processes is a long and difficult task and something that external actors (even those within government) cannot always achieve.

Sometimes one has to make assumptions that rest on alignments in timing and ability to influence government processes, when carrying out a policy-focussed project. We should have better understood the windows of opportunity to influence government before writing the proposal, but another lesson is to continue discussions and engagement, especially when situations are fluid, in order to be prepared to step in when windows open. We did this successfully in terms of writing our findings into Uganda's upcoming National Biodiversity and Social Offset Strategy.

We feel that our project has over-achieved in terms of value for money and policy impact on the national and international scales, despite not fully achieving output 2. We also feel that our case study was a really important foundation that built the team's understanding, collaboration and credibility, and provided a concrete focus for our activities. If we had been able to be confident that research (rather than direct site-level poverty alleviation and biodiversity gain) was enough to ensure a project proposal would be well received by Darwin, we would not have needed to take this gamble and would have written the proposal with a more achievable local outcome. We feel that this is an issue that the DEC might like to consider, particularly as so few policy-focussed projects are funded (despite these topics often being listed as priorities in Darwin calls).

Monitoring and evaluation

Monitoring and evaluation was included in the design of this research project. We used the logframe indicators to monitor and check progress of the project as well as used our annual and six month reports. Project progress was also monitored and evaluated during the six monthly project meetings, annual project meetings as well as with phone/ skype calls with individual project partners. Moreover, the project's independent Advisory Committee reviewed progress annually, and gave advice and suggested improvements to the project. All of the protocols and procedures used to collect the social data went through a rigorous ethical review by bodies at Oxford University and the Uganda National Council for Science and Technology. This allowed us to monitor the ethical aspects of our project.

We used a Theory of Change approach to monitor overall progress of the project. We evaluated our progress against the Theory of Change developed at the inception meeting during our Year 2 project meeting and the only change we made (aside from changing the BBF to the Natural Capital Forum) was to move the target 'Offsets as a norm' to a level higher than the other targets and to rename it 'NNL and mitigation hierarchy as the norm'. This is a more correct phrasing than the original. The updated Theory of Change is presented in the [Year 2 project meeting report](#).

The international social good practice principles went through a rigorous review by various international stakeholders. The draft principles were presented at research workshops in Cambridge, Uganda, Oxford, London and via a webinar hosted by BBOP in order to obtain feedback. Valuable feedback and written reviews on these principles were also received from 19 individuals, as well as from various businesses, NGOs, government and consultancies from a range of countries. This helped ensure that the principles are feasible and practical, while clearly setting out good practice. The first two social outputs/papers went through a stringent peer-review process before they were published in *Conservation Biology* and *Biological Conservation*.

Overall, we feel that the monitoring and evaluation on our project worked well, and as intended.

Actions taken in response to annual report reviews

We received one query on our Year 1 Annual Report, which we responded to in the Y2 Annual report (to clarify the number of participants in the focus groups for the social research). No comments or queries were raised in the Annual Review for Year 2 of the project. Reviews on both Annual Reports were shared with all project partners.

7 Darwin identity

We have used the Darwin Initiative logo on all the project promotional material including the project flyer, the website as well as on all written project meeting reports. The logo has also been used on the first major output of the project, the stakeholder and intuitional analysis, published by Wild Business, as well as on subsequent outputs including the U-PCLG policy brief, national and international industry briefing notes and social good practice principles. The Darwin Initiative logo has also been used on all training material and presentations, both at

meetings in Uganda and international conferences. We state on all promotional materials and in talks that the Darwin Initiative is a programme of the UK government. The project is distinct and has a clear identity as it is not part of a larger programme. Both papers published in peer reviewed journals and draft manuscripts acknowledge the Darwin Initiative as the funder for the work.

We did not create a project social media account because it would have been temporary, potentially compromising our legacy. Instead we kept the [project website](#) up to date with project progress and reported on progress via our personal and organisational twitter accounts. We referenced the Darwin Initiative twitter account at each relevant opportunity (example tweets below). We also reported on the good practice principles in the [Darwin February 2019 newsletter](#).





UNEP-WCMC @unepwcmc · 20 Nov 2018

What are the pros and cons for people when we use #NoNetLoss or #NetGain targets? Great to have our own Sharon Brooks at this important symposium today @VicGriffiths1 @ESRC @Darwin_Defra @wildbusiness @UniofOxford @IIED @BangorUni @balfourbeatty iccs.org.uk/event/symposiu...

🗨️ ↻️ 2 ❤️ 15 ✉️



EJ Milner-Gulland @EJMilnerGulland · 20 Nov 2018

Based on extensive consultation, and funded by @ESRC & @Darwin_Defra, our new best practice principles on how to ensure project-level #biodiversity #NNL actions make people better off while restoring nature: osf.io/preprints/soca... @ICCS_updates



Julia Baker @jubak

The moment we've been waiting for, launch of the new social good practice principles for #biodiversity net gain! @wildbusiness

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8 Finance and administration

Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2018 – 31 March 2019)

Project spend (indicative) since last annual report	2018/19 Grant (£)	2018/19 Total actual 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				

Staff employed (Name and position)	Cost (£)

TOTAL	

Capital items – description	Capital items – cost (£)
TOTAL	

Other items – description	Other items – cost (£)
TOTAL	

Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
Royal Geographical Society Slawson Award for fieldwork	
ESRC Impact Acceleration Account awarded to Bangor University	
Matched funding from the WCS COMBO project to assist with the National Biodiversity and Social Offset Strategy and training of NEMA staff	
TOTAL	

Source of funding for additional work after project lifetime	Total (£)
TOTAL	

Value for Money

The project's value for money is evidenced by the substantial achievements compared to the project cost. Because this project was well integrated into the activities of already-employed

team members, much of the work was done at much lower cost than if many people had had to be employed on project-specific contracts. We had one researcher employed in this way, and she worked full-time on the project relatively cheaply (because of her status as a PhD student). This is an example of the successful use of a PhD student as a core member of a Darwin project team. We also successfully engaged two Masters students and a short-term consultant to carry out specific additional pieces of work at very limited cost.

Receiving matched funding from Julia Jones' ESRC Impact award and Victoria Griffiths' Slawson award enabled our project to extend its activities, both internationally (ESRC) and in the research at the study site (Slawson).

Working in collaboration with other projects and initiatives, particularly COMBO, helped us to have both greater impact and value for money, because we were able to share the cost of training events for example.

Annex 1 Project's original (or most recently approved) logframe, including indicators, means of verification and assumptions.

Note: Insert your full logframe. If your logframe was changed since your Stage 2 application and was approved by a Change Request the newest approved version should be inserted here, otherwise insert the Stage 2 logframe.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Impact: Local people's use and cultural values for biodiversity are embodied within 'no net loss' development goals, with biodiversity offsetting supporting both conservation and poverty alleviation at local and national levels.</p>			
<p>Outcome:</p> <p>Government, developers and NGOs work collaboratively on 'no net loss' biodiversity offsets that genuinely reflect local people's needs and values, support poverty alleviation in the long-term and are implemented equitably.</p>	<p>0.1 8,700 people affected by the Bujagali Hydropower Project, 37,000 people affected by the Kalagala Offset, and 2,700 people potentially affected by the Isimba Hydropower project have the actual or potential impacts of these projects on their wellbeing better taken into account in sustainable management plans (by end Y3).</p> <p>0.2 Improved biodiversity conservation outcomes of Kalagala Offset, and reduced biodiversity impacts of Isimba Hydropower Project, with livelihood and cultural values of biodiversity for different groups (particularly of vulnerable groups including women) taken into account, based on an evaluation of impacts to date (by end Y3).</p> <p>0.3 Best practice guidelines for incorporating social impacts into biodiversity offsets are adopted by industry and government in Uganda and internationally, leading to</p>	<p>0.1 Project start-up meeting report (Y1). Report of Research Workshop (end Y2). At least two peer-reviewed papers and IIED report (end Y3).</p> <p>0.2 Policy briefs with recommendations to inform the review of the Kalagala SMP and preparation of IHP's plan. Records of commitments to change management plans by implementing agencies, based on study results, with implementation timetables (end Y3).</p> <p>0.3 Guidelines and accompanying report published through BBOP (end Y3). Meetings in Kampala and Oxford to disseminate findings and engage business leaders - presentations available online (end Y3). NEMA adopts project recommendations (end Y3). Written commitment by at least 2 international developers to incorporate guidelines into their operations in future (end Y3).</p>	<p>Political and economic stability in Uganda enables the project to be completed [there is no reason currently to think this will be an issue]</p> <p>There is still scope to influence the Isimba Hydropower Project's planning [the Environmental and Social Impact Assessment has been referred for revision, they have not yet started their offset].</p> <p>Government implementing agencies are receptive to our recommendations, and are prepared to change their management plans based on our study [we have a Letter of Support from MoWE expressing a strong interest in the project and willingness to engage, and NEMA is an important player in approving and monitoring offsets within the government]</p> <p>There is scope for poverty alleviation</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	<p>commitment to embed guidelines into operations from at least 2 Ugandan and international businesses and developers (by end Y3)</p> <p>0.4. A network of engaged people, with the capacity and will to improve the biodiversity and local social outcomes of national-level economic developments; belonging to at least 10 organisations within Uganda (government, NGOs, business), by end Y3.</p>	<p>0.4 Minutes of NEMA training workshops; evidence of attendance at, and engagement with Research Workshop and Launch Event by relevant organisations; minutes and attendance records for Business and Biodiversity Forums (Y2 & 3); minutes of U-PCLG meetings (annual); evidence of implementation of project findings in organisations' policies and practice (end Y3).</p>	<p>in the project site, through improvements in the Sustainable Management Plans [preliminary discussions with project partners and other stakeholders in Uganda suggest that this is likely]</p> <p>Businesses and NGOs are keen to engage, nationally and internationally [initial meetings with relevant stakeholders at both national and international scales have been very positive]</p>
<p>Output 1:</p> <p>Study completed on the costs and benefits to local people and biodiversity of the Bujagali/Isimba Hydropower Projects and Kalagala Offset captures differentiated local impacts of these projects (end Y2)</p>	<p>1.1. All relevant previous biodiversity and social survey data collated into a spatially explicit database and analyzed to assess impacts of projects/offsets, by end Y1.</p> <p>1.2. At least 3 Focus Groups held in each of the 3 sites (of different potentially affected groups), to develop locally appropriate wellbeing measures and explore cultural and social values of biodiversity in the area and effects of projects and offsets (current & potential), by end Y1.</p> <p>1.3 At least 200 local people, stratified by livelihood and wealth, in each of 3 sites, are surveyed to gain perspectives on costs and benefits of projects and offsets, by end Y1.</p> <p>1.4 At least 50 people in each of the</p>	<p>1.1-1.5. Annual reports of the project team to Darwin. Minutes of 6-monthly project meetings and powerpoint presentations made. Presentations to Advisory Committee (annual).</p> <p>1.1, 1.5. Biodiversity database developed (end Y1) and enhanced (end Y2).</p> <p>1.1-1.5: Research Workshop is held in Uganda (end Y2) where the research results are presented by the project team and local people from the case study site to stakeholders (government, NGO and business)</p> <p>1.6. Summary of research findings is published in the local language of the case study site (mid Y2). Meetings held with local leaders to</p>	<p>Local people at the case study site are willing to participate in the research [involvement of NU, Makerere University and NEMA and their existing positive relationships with local leaders will support this]</p> <p>Existing biodiversity and social datasets are of a high enough quality for a before-after analysis to be feasible [If not, then inferences on biodiversity and social impacts will be weaker; data on perceived social impact, and biodiversity surveys in control and impact sites, will still give an indication of impact. NEMA has the datasets generated for the ESIA, which will be made available to the team.]</p> <p>Research team is able to build trust in order to gain reliable and truthful</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	<p>3 sites participate in choice experiments and scenario interviews, to gain views on potential mitigation for social impacts of current and new projects/offsets, by end Y1.</p> <p>1.5. Biodiversity surveys carried out in affected areas to assess ecological mitigation carried out and current biodiversity value, by end of Y2.</p> <p>1.6. Datasets analysed, published and disseminated in appropriate formats and to stakeholders including local leaders, government and business, by end Y2.</p>	<p>present the research findings (end Y1 and Y2).</p> <p>1.6. By project end, two research papers are published in peer reviewed journals and one IIED research report is published and available to download on the IIED website.</p> <p>1.6. By project end, the research is presented at a minimum of one international conservation conference and at least one international biodiversity offset policy meeting.</p>	<p>information on social impacts. [Our long experience of social research, including 2 previous Darwin/IWT projects in Uganda will help us here]</p>
<p>Output 2:</p> <p>The Kalagala Offset Sustainability Management Plan is reviewed, and recommendations made for the Isimba management plan, with a focus on how to ensure NNL of biodiversity and net positive social impacts, based on the findings from Output 1, by end of Y3.</p>	<p>2.1. By early Y3, the Kalagala Offset Sustainability Management Plan is reviewed by the Ministry of Water and Environment (MoWE), with a view to revision based on inputs from the project team.</p> <p>2.2. By early Y3, recommendations for the Isimba offset management plan are submitted to MoWE, including local feedback on preferred offsetting options (based on output 1.3).</p> <p>2.3. Project findings are published in local languages and meetings are held with local leaders to present them and NEMA's new guidelines (end Y2).</p>	<p>2.1 Document containing approved recommendations for revision of the Sustainability Management Plan for Kalagala, that make explicit the social net positive commitment, and how they will achieve it.</p> <p>2.2. Document containing approved recommendations for a Sustainability Management Plan for Isimba, that make explicit the social net positive commitment, and how they will achieve it.</p> <p>2.3. Minutes of local and national-level meetings, publications in local languages.</p> <p>2.4. Analysis of meetings and reports from NEMA and MoWE in Y3, site</p>	<p>The Ministry of Water and Environment is receptive to implementing changes to the Kalagala offset management plans based on the research findings [See letter of support]</p> <p>The Isimba offset can be influenced and commitments made will be carried through to implementation [Given the short timespan of the project, there will be limited time in which to see actual outcomes at Isimba based on our findings. However, the onward engagement of NEMA and the Ministry for Water and Environment with local perspectives and biodiversity impacts can be gauged by project</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	<p>2.4. By project end, MoWE reports and NEMA site visits demonstrate implementation is taking place (end Y3).</p>	<p>visit report from NEMA, minutes of final project meeting.</p>	<p>end. We are also not in control of the timetable for the Isimba offset (which will be agreed between the World Bank and various Ministries, including NEMA and MoWE), although currently it appears that it will be congruent with the project.]</p>
<p>Output 3:</p> <p>New guidelines on incorporating social costs and benefits into biodiversity offsetting within Uganda and internationally are published and being implemented, by end of Y3</p>	<p>3.1. Draft guidelines for Uganda developed collaboratively by project team and approved at research workshop (end Y2).</p> <p>3.2. A minimum of 5 NEMA staff are trained with the necessary knowledge and skills to implement the new guidelines, and a minimum of 2 NEMA staff are trained as 'trainers' to continue the training to other / new NEMA staff (by end Y3).</p> <p>3.3 By project end, the new guidelines are published by NEMA, and integrated into the planning for at least two biodiversity offsets in Uganda.</p> <p>3.4. International guidelines published in collaboration with BBOP, by end Y3.</p> <p>3.5. By end Y3, at least 2 international businesses commit to implementing these guidelines within their operations.</p>	<p>3.1. Minutes of research workshop, draft guidelines document posted on project website.</p> <p>3.2. A report of the training for NEMA staff on the new guidelines posted on the project website.</p> <p>3.3. By project end, the new guidelines are listed on NEMA's website and NEMA hosts an event to formally launch the new guidelines in Kampala.</p> <p>3.3. By project end, Social and Environmental Impact Assessment reports (or equivalent) of a minimum of two biodiversity offsets in Uganda are published that make reference to application of the new guidelines.</p> <p>3.4. Guidelines document on BBOP website and launched at project/BBOP co-hosted international meeting in Oxford.</p> <p>3.5. Public documentation of commitments by businesses concerned on website, or reference</p>	<p>NEMA retain their autonomy within Government to publish new guidelines [there is no reason to suppose this will change - NEMA are well respected and consulted within the Ugandan government planning system]</p> <p>NEMA continues its commitment for local people's use and values associated with biodiversity to be fully incorporated into offset decision-making in order to integrate social fairness into the offset process [their full involvement as partners in this project will support this]</p> <p>Biodiversity offset projects in Uganda continue to occur at a level to enable application of the new guidelines within the timeframe of this project, and clients/funders/developers are receptive to applying these guidelines [offsetting at the moment is growing fast as an approach in Uganda, hence the need for the project, and engagement with clients/funders/developers by the project team throughout will help to</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
		to guidelines made in specific offset project documents.	<p>ensure that they are keen to be involved. We have relationships with Lafarge, Tullow and Total, who are all planning or implementing developments and offsets in Uganda. They will attend our Business and Biodiversity forums and other engagement activities in Uganda, and our UK meeting.]</p> <p>Businesses internationally are interested to engage with issues of social fairness in a proactive way [BBOP involvement will help to build trust, Oxford's team have an ongoing relationship with several thought-leading international businesses on supporting improvement in their biodiversity performance (through a NERC Knowledge Exchange project), who will be targeted for project engagement. Project team members Julia Baker (IIED) and Joe Bull (Wild Business) work in the corporate sector, and have strong links to relevant businesses]</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)

1. Research on the costs and benefits to local people and biodiversity of the Bujagali/Isimba Hydropower Projects and Kalagala Offset

1.1 Prepare for and run Project Inception Workshop. Complete and disseminate workshop report.

1.2 Existing biodiversity and social survey data collated into a spatially explicit database and analysed to assess baseline conditions and planned mitigation.

1.3 Social field surveys: a) Focus groups held at the 3 sites, wellbeing measures developed, cultural and social values of biodiversity in the area explored;. b) Individual surveys to gain perspectives of costs and benefits of developments and offset. c) Choice experiments and scenario interviews for Isimba offset.

1.4 Biodiversity field surveys: a) Site visits to assess status of planned ecological mitigation activities at Bujagali and Kalagala; b) Transect surveys of tree

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>planting sites, Central Forest Reserve and agricultural land at Kalagala to assess biodiversity (trees, culturally valuable plants and birds) and signs of human use (tree cutting, snares).</p> <p>1.5. Analysis of datasets for impact evaluation of offset.</p> <p>1.6 Data sets published and disseminated, including conference abstracts and summaries of research findings in local languages.</p> <p>1.7 Six monthly project meetings (alternating in-country and by skype), including preparation and dissemination of minutes.</p> <p>1.8 Research Meeting to present results to stakeholders and gain feedback</p> <p>1.9 Annual reports to the project team at Darwin and annual presentations to the Advisory Committee.</p> <p>2. Review of the Kalagala Offset Sustainability Management Plan and Isimba management plan</p> <p>2.1 Review the existing Kalagala Offset Sustainable Management Plan and provide recommendations to inform the updating of the plan.</p> <p>2.2 Provide recommendations for the Isimba management plan, including local feedback on preferred offsetting options.</p> <p>2.3 Publish study results in local languages, hold meetings with local leaders to present them with new guidelines.</p> <p>2.4 Analyse meetings and MoWE reports, site visit by NEMA, and report on implementation of recommendations.</p> <p>3. New guidelines on incorporating social costs and benefits into biodiversity offsetting</p> <p>3.1 Draft guidelines prepared and discussed at project workshop.</p> <p>3.2. Research workshop held to solicit feedback on research results and guidelines from a range of stakeholders.</p> <p>3.3. Training of NEMA staff on the new guidelines and associated technical needs.</p> <p>3.4. Business and Biodiversity Forums held in Kampala.</p> <p>3.5. Publication of new guidelines by NEMA and launch event.</p> <p>3.6. Drafting of new international guidelines and publication by BBOP.</p> <p>3.7. Business engagement workshop in Oxford.</p> <p>3.8. Two international businesses to commit to implementing these new guidelines.</p>			

Annex 2 Report of progress and achievements against final project logframe for the life of the project

Project summary	Measurable Indicators	Progress and Achievements
<p>Impact:</p> <p>Local people's use and cultural values for biodiversity are embodied within 'no net loss' development goals, with biodiversity offsetting supporting both conservation and poverty alleviation at local and national levels.</p>		<p>Research and data collection on social and biological impacts of the Bujagali and Isimba dams and Kalagala offset was undertaken, data analysed, and results compiled in the form of a research report, PhD thesis and three academic manuscripts. Results have been included in a policy brief published by the U-PCLG with the aim of informing the refinancing of the Bujagali Hydropower Project, and the updated Kalagala Offset Sustainable Management Plan, ensuring better outcomes for both biodiversity and people in the study area. International social good practice principles have been published describing how to include the social aspects (including cultural heritage) into biodiversity NNL strategies, including biodiversity offsetting. These principles have been incorporated in the new National Biodiversity and Social Offset Strategy for Uganda, published by the Ministry of Water and Environment.</p>
<p>Outcome</p> <p>Government, developers and NGOs work collaboratively on 'no net loss' biodiversity offsets that genuinely reflect local people's needs and values, support poverty alleviation in the long-term and are implemented equitably.</p>	<p>0.1 8,700 people affected by the Bujagali Hydropower Project, 37,000 people affected by the Kalagala Offset, and 2,700 people potentially affected by the Isimba Hydropower project have the actual or potential impacts of these projects on their wellbeing better taken into account in sustainable management plans (by end Y3).</p> <p>0.2 Improved biodiversity conservation outcomes of Kalagala Offset, and reduced biodiversity impacts of Isimba Hydropower Project, with livelihood and cultural values of biodiversity for different groups (particularly of vulnerable groups including women) taken into account, based on an evaluation of impacts to date (by end Y3).</p>	<p>0.1 Completed. Analysis of both social and biological data sets is complete and results published online in the form of: a research report on the biological findings, a stakeholder and institutional analysis, 2 papers on the social findings published in peer reviewed journals, two draft manuscripts for submission to peer reviewed journals and a PhD thesis on the social findings. Reporting back to local government and engagement of national government with the results has taken place, as well as dissemination of the results to local communities surveyed during the social study. Project findings have also been disseminated at 4 international conferences as well as during workshops in both Uganda and the U.K.</p> <p>0.2 Completed. A policy brief has been compiled and published by the U-PCLG, which sets out 8 recommendations for NEMA to follow in order to improve the updated Kalagala Offset Sustainable Management Plan which is proposed as part of the Bujagali Hydropower Project refinancing. Recommendations in the brief aim to improve biodiversity conservation outcomes in the study area but also aim to minimise negative impacts on local people's wellbeing and cultural heritage or enhance any gains, so that people in the study are left 'no worse off, or preferably better off' as a result of the combined development and offset.</p>

Project summary	Measurable Indicators	Progress and Achievements
	<p>0.3 Best practice guidelines for incorporating social impacts into biodiversity offsets are adopted by industry and government in Uganda and internationally, leading to commitment to embed guidelines into operations from at least 2 Ugandan and international businesses and developers (by end Y3)</p> <p>0.4. A network of engaged people, with the capacity and will to improve the biodiversity and local social outcomes of national-level economic developments; belonging to at least 10 organisations within Uganda (government, NGOs, business), by end Y3.</p>	<p>0.3 Completed. International social good practice guidelines for incorporating social considerations into biodiversity NNL/NG activities, including biodiversity offsets have been drafted and published online. The principles were launched at the business engagement meeting in Oxford and at the BBOP conference in November. Through collaborating closely with WCS-Uganda, the COMBO project, NEMA and the MoWE, our social principles have been incorporated into the new National Biodiversity and Social Offset Strategy for Uganda, published by the MoWE. This will form the foundations for the new practical guidelines that NEMA will produce to help implement the strategy. MoWE and NEMA informed the team that several new developments requiring offsets in Uganda will be adhering to the Strategy. An international and national industry briefing note for Uganda have been published, targeting anyone involved in development projects aiming at achieving biodiversity NNL/NG. A large number of organisations in the UK and Uganda have engaged with these principles.</p> <p>0.4 Completed. Two meetings were held in Year Two to discuss the development of a Natural Capital Forum in Uganda which will help facilitate engagement with the private sector and promote the importance of both social considerations for biodiversity NNL initiatives and of biodiversity conservation. It was decided during Year 2 that the Forum needs to be integrated into other existing initiatives if it is to gain any traction in Uganda and be sustainable for the long-term. Fund-raising is now ongoing for the continuation of the forum.</p>
<p>Output 1. Study completed on the costs and benefits to local people and biodiversity of the Bujagali/Isimba Hydropower Projects and Kalagala Offset captures differentiated local impacts of these projects (end Y2)</p>	<p>1.1. All relevant previous biodiversity and social survey data collated into a spatially explicit database and analysed to assess impacts of projects/offsets, by end Y1.</p> <p>1.2. At least 3 Focus Groups held in each of the 3 sites (of different potentially affected groups), to develop locally appropriate wellbeing</p>	<p>1.1 Database is completed. Social and biological diversity data have been accessed and collated. Data has been analysed and written up.</p> <p>1.2 Completed. A total of 60 Focus Group Discussions were held across 6 villages (2 villages at each site: Bujagali, Kalagala and Isimba). Topics of focus groups included cultural heritage, wellbeing and livelihoods (where the Basic Necessities Survey was developed). Overall 566 people participated in</p>

Project summary	Measurable Indicators	Progress and Achievements
	<p>measures and explore cultural and social values of biodiversity in the area and effects of projects and offsets (current & potential), by end Y1.</p> <p>1.3 At least 200 local people, stratified by livelihood and wealth, in each of 3 sites, are surveyed to gain perspectives on costs and benefits of projects and offsets, by end Y1.</p> <p>1.4 At least 50 people in each of the 3 sites participate in choice experiments and scenario interviews, to gain views on potential mitigation for social impacts of current and new projects/offsets, by end Y1.</p> <p>1.5. Biodiversity surveys carried out in affected areas to assess ecological mitigation carried out and current biodiversity value, by end of Y2.</p> <p>1.6. Datasets analysed, published and disseminated in appropriate formats and to stakeholders including local leaders, government and business, by end Y2.</p>	<p>these FGDs, averaging 8-10 people per group.</p> <p>1.3 Completed. 6 villages were sampled in the study area. A total of 1305 respondents were interviewed (490 individuals from 317 households at Bujagali, 489 individuals from 289 households at Kalagala and 326 individuals from 178 households at Isimba). Of the total sample (1305 individuals), 39% were male (n = 511) and 61% were female (n = 794). Most were below the age of 45 (65%, n = 848) and the majority had a primary school level of education (54%, n = 701).</p> <p>1.4 Completed. 6 villages were sampled in the study area. A total of 1215 individuals participated in the choice experiments (424 individuals from 286 households at Bujagali, 472 individuals from 283 households at Kalagala and 319 individuals from 178 households at Isimba). Of the total sample (1215 individuals), 38% were male (n = 467) and 62% were female (n = 748); 65% were below the age of 45 (n = 784), 54% had a primary school level of education (n = 652) and 87% had lived in their village for more than ten years (n = 1053).</p> <p>1.5 Completed. Biodiversity surveys were completed by NU in April-May 2017 (Year 2). They assessed floristic and bird diversity in 10 sites within the Bujagali Dam and Kalagala Offset area. The assessment followed as far as possible the methods of the 2006 pre-dam ESIA report.</p> <p>1.6 Completed. Biological findings are presented in a report published on the project website. The social results have been published in two peer reviewed journals: <i>Conservation Biology</i> and <i>Biological Conservation</i>. A third manuscript on the social findings is currently under review with the journal <i>World Development</i>. Presentations (in the form of workshops both in Uganda and the U.K.) have been used to disseminate the findings to governments, businesses, academics and NGOs. Findings were also presented to LC1's</p>

Project summary	Measurable Indicators	Progress and Achievements
		and village representatives on two occasions (meetings and local-language posters). Results from the social analyses have been presented at three international conferences.
<p>Activity 1.1</p> <p>Prepare for and run Project Inception Workshop. Complete and disseminate workshop report.</p>		A project inception workshop was held at the Makindye Country Club, Kampala on the 23rd and 24th May 2016. Report was disseminated to all project partners and Advisory Committee members.
<p>Activity 1.2</p> <p>Existing biodiversity and social survey data collated into a spatially explicit database and analysed to assess baseline conditions and planned mitigation.</p>		<p>The social data in the Environmental and Social Impact Assessments (ESIAs) and Social Impact Assessments (SIAs) for both the Bujagali and Isimaba dams was reviewed by Victoria Griffiths (OU). Villages for social surveys were selected based on the villages included in these ESIAs and in discussion with the local District Environmental Officers.</p> <p>NU collated existing biodiversity datasets (for plants and birds) for the study site, which informed selection of sites for repeat surveys. They reviewed the methodology used to collect the biological data in the Bujagali ESIA and replicated this methodology during their field surveys in 2017.</p> <p>In addition, a stakeholder and institutional analysis was carried out for the Bujagali and Isimba dams and the Kalagala offset. This was done by Wild Business on behalf of Oxford University and was published in March 2017.</p>
<p>Activity 1.3</p> <p>Social field surveys: a) Focus groups held at the 3 sites, wellbeing measures developed, cultural and social values of biodiversity in the area explored;. b) Individual surveys to gain perspectives of costs and benefits of developments and offset. c) Choice experiments and scenario interviews for Isimba offset.</p>		Socio-economic data collection by OU (which included focus groups, a questionnaire, choice experiment and key informant interviews) was completed in Year 1. Data was collected from 6 villages, 2 at each study site (Bujagali, Kalagala and Isimba).
<p>Activity 1.4</p> <p>Biodiversity field surveys: a) Site visits to assess status of planned ecological mitigation activities at Bujagali and Kalagala; b) Transect surveys of tree planting sites, Central Forest Reserve and agricultural land at Kalagala to assess biodiversity (trees, culturally valuable plants and birds) and signs of human use (tree cutting, snares).</p>		Biological data collection by NU was completed in Year 2. NU assessed floristic and bird diversity in 10 sites within the Bujagali Dam and Kalagala Offset area.
<p>Activity 1.5</p> <p>Analysis of datasets for impact evaluation of offset.</p>		Analysis and write-up of the biological and social data is complete.

Project summary	Measurable Indicators	Progress and Achievements
<p>Activity 1.6</p> <p>Data sets published and disseminated, including conference abstracts and summaries of research findings in local languages.</p>		<p>A conceptual manuscript exploring why people should be left 'no worse off' from development and offsets was published in <i>Conservation Biology</i> in 2018. A second manuscript on the choice experiment results was published in <i>Biological Conservation</i> in June 2019. Three more papers are either submitted or close to submission. Two Natural Capital Accounting case studies have been published on the project website. A U-PCLG policy brief as well as national and international industry briefing notes have also been published on the project website.</p> <p>Research has been presented at three international conferences: the International Congress for Conservation Biology ICCB17 (Colombia, July 2017), the International Association for Impact Assessment IAIA18 (South Africa, May 2018) and IAIA19 (Australia, May 2019).</p> <p>On two separate occasions, posters presenting research findings have been presented in all 6 villages that were sampled during the social surveys. In addition, posters in the local language (Luganda) were left with each LC1.</p>
<p>Activity 1.7</p> <p>Six monthly project meetings (alternating in-country and by skype), including preparation and dissemination of minutes.</p>		<p>Year 1: six monthly project meeting was held via skype on the 11th of November 2016 and the annual project meeting was held in Kampala on the 3rd of April 2017.</p> <p>Year 2: six monthly project meeting was held via skype on the 20th of October 2017 and the annual project meeting was held in Kampala on the 9th of March 2018. An additional project meeting was held via skype on the 5th of February 2018. A meeting with UK-based Advisory Committee member Kerry ten Kate was undertaken in April 2018.</p> <p>Year 3: six monthly project meeting was held in Oxford on the 19th of November 2018. Several dissemination meetings held.</p> <p>Minutes of all the meetings are appended to this document.</p>
<p>Activity 1.8</p> <p>Research Meeting to present results to stakeholders and gain feedback</p>		<p>The main stakeholder meeting to present our research and get feedback was held at the Serena Hotel in Kampala, Uganda on the 7th of March 2018.</p> <p>A second meeting was held with the U-PCLG on the 9th of March 2018 at the Protea Hotel in Kampala, Uganda.</p> <p>Minutes from these meetings are appended to this report.</p>
<p>Activity 1.9</p>		<p>In Years 1 and 2, the Advisory Committee's Ugandan members were present at the annual project meeting held in April 2017 and March 2018</p>

Project summary	Measurable Indicators	Progress and Achievements
Annual reports to the project team at Darwin and annual presentations to the Advisory Committee.		<p>respectively. A meeting with UK-based Advisory Committee member Kerry ten Kate was undertaken in April 2018. In Year 3 the team collaborated to hold a range of dissemination meetings instead.</p> <p>The six monthly and Year 1 Darwin reports were submitted in November 2016 and April 2017 respectively. The six monthly and Year 2 Darwin reports were submitted in November 2017 and April 2018 respectively. The six monthly Year 3 Darwin report was submitted in October 2018. All reports were compiled by Oxford University, with input from all project partners,.</p>
<p>Output 2.</p> <p>The Kalagala Offset Sustainability Management Plan is reviewed, and recommendations made for the Isimba management plan, with a focus on how to ensure NNL of biodiversity and net positive social impacts, based on the findings from Output 1, by end of Y3.</p>	<p>2.1. By early Y3, the Kalagala Offset Sustainability Management Plan is reviewed by the Ministry of Water and Environment (MoWE), with a view to revision based on inputs from the project team.</p> <p>2.2. By early Y3, recommendations for the Isimba offset management plan are submitted to MoWE, including local feedback on preferred offsetting options (based on output 1.3).</p> <p>2.3. Project findings are published in local languages and meetings are held with local leaders to present them and NEMA's new guidelines (end Y2).</p> <p>2.4. By project end, MoWE reports and NEMA site visits demonstrate implementation is taking place (end</p>	<p>2.1 Instead of this activity, we compiled a policy brief which sets out 8 recommendations for NEMA to follow in order to improve the Kalagala Offset Sustainable Management Plan. The policy brief was published by the U-PCLG and strongly encourages NEMA to incorporate these recommendations into an updated version of the Kalagala Offset Sustainable Management Plan, which was proposed as part of the Bujagali Hydropower Project refinancing.</p> <p>2.2 The ESIA and ESIA Addendum for the Isimba Hydropower Project have already been finalised and signed off by NEMA. Our work will therefore only be able to influence future projects in Uganda, including potentially, the offset revision linked to the Bujagali refinancing.</p> <p>2.3 Completed. Two dissemination events took place in the study area. The first meetings (in March 2018) provided feedback on the preliminary social and biological results, whilst the second set of meetings (in March 2019) provided feedback on the final results and good practice principles. Meetings were held with local leaders, LC1's and representatives from all six villages sampled during the social surveys. Meetings were held in the local languages, using posters in English and the local language (Luganda) as visual aids. A set of Luganda posters was left with each LC1 on both occasions.</p> <p>2.4. Partly completed. This depended on our success in influencing NEMA, MoWE and World Bank decisions, which we were unable to do before project</p>

Project summary	Measurable Indicators	Progress and Achievements
	Y3).	end. A site visit was carried out on the 27th of June 2018 during COMBO's training session and was attended by representatives from NEMA.
<p>Activity 2.1.</p> <p>Review the existing Kalagala Offset Sustainable Management Plan and provide recommendations to inform the updating of the plan.</p>		<p>We reviewed the Kalagala Offset Sustainable Management Plan and also conducted a Stakeholder Analysis to improve understanding of financial and administrative roles and responsibilities.</p> <p>The attributes of the choice experiment which we used to gain local preferences for compensatory activities as part of offsetting activities were based on the actions which were supposed to have been part of the Sustainable Management Plan (although these were, in fact, not implemented). Therefore the preferences expressed are for activities in line with the Sustainable Management Plan. Our results from the choice experiment as well as other findings from both the biodiversity and social studies have been incorporated into a policy brief published by the U-PCLG. The brief which sets out 8 recommendations for NEMA to follow in order to improve the Kalagala Offset Sustainable Management Plan strongly encourages NEMA to incorporate these recommendations into an updated version of the Kalagala Offset Sustainable Management Plan, proposed as part of the World Bank's refinancing of the Bujagali Hydropower Project.</p>
<p>Activity 2.2.</p> <p>Provide recommendations for the Isimba management plan, including local feedback on preferred offsetting options.</p>		<p>We unfortunately had no power to require the MoWE or the developers of the Isimba dam to implement our findings. We are hoping to influence the implementation of future offset projects in Uganda and the refinanced offset through the U-PCLG brief, but were unable to do so before project end.</p>
<p>Activity 2.3.</p> <p>Publish study results in local languages, hold meetings with local leaders to present them with new guidelines.</p>		<p>Two dissemination events were held. The first set of meetings (March 2018) provided feedback on the preliminary social and biological results, whilst the second set of meetings (March 2019) provided feedback on the final results and good practice principles. Meetings were held with local leaders, LC1's and representatives from all six villages sampled during the social surveys. Meetings were held in the local languages, using posters in English and the local language (Luganda) as visual aids. A set of posters was left with each LC1 on both occasions.</p> <p>See dissemination report and posters attached.</p>
<p>Activity 2.4.</p> <p>Analyse meetings and MoWE reports, site visit by NEMA, and report on</p>		<p>Part of this activity was not achieved as it depended on our success in influencing NEMA, the MoWE and World Bank decisions, which we were unable to do before project end. A site visit was carried out on the 27th of</p>

Project summary	Measurable Indicators	Progress and Achievements
implementation of recommendations.		<p>June 2018 during COMBO's training session. Trainees from NEMA, the Uganda National Roads Authority (UNRA), oil companies and ESIA consultants visited the Isimba Hydropower Project.</p> <p>See COMBO training report attached.</p>
<p>Output 3.</p> <p>New guidelines on incorporating social costs and benefits into biodiversity offsetting within Uganda and internationally are published and being implemented, by end of Y3.</p>	<p>3.1. Draft guidelines for Uganda developed collaboratively by project team and approved at research workshop (end Y2).</p> <p>3.2. A minimum of 5 NEMA staff are trained with the necessary knowledge and skills to implement the new guidelines, and a minimum of 2 NEMA staff are trained as 'trainers' to continue the training to other / new NEMA staff (by end Y3).</p> <p>3.3 By project end, the new guidelines are published by NEMA, and integrated into the planning for at least two biodiversity offsets in Uganda.</p>	<p>3.1 Completed. The team felt it most appropriate to produce a set of international social good practice principles rather than detailed guidelines. The principles were developed collaboratively by the project team and published in November 2018. The draft principles were presented at research workshops in Cambridge, Uganda, Oxford, London and via a webinar hosted by BBOP in order to obtain feedback. Valuable feedback and written reviews on these principles were also received from 19 individuals, as well as from various businesses, NGOs, government and consultancies from a range of countries.</p> <p>3.2 Completed. Two training events were carried out. The first training of NEMA staff took place in Kampala on the 25th – 28th June 2018 and was done in collaboration with a training event carried out by the COMBO project. A module was carried out by Julia Baker (IIED) on the social aspects of biodiversity NNL, what guidance already exists, what are the gaps and how this fits in with the ESIA process. Overall 54 people attended the training, 19 females and 35 males. Six individuals were NEMA staff. The second training event for NEMA took place in Kampala on the 14th of February 2019. The training carried out by Julia Baker focused on the social good practice principles, and how they will apply to biodiversity NNL/NG development projects in Uganda. A total of 43 people attended the training, including the facilitators from WCS-Uganda and from NU.</p> <p>3.3 Completed. Members of the project team worked closely with the WCS-Uganda team leading the COMBO project activities in Uganda. Our team discussed at length how to maximize the benefits given our project and these initiatives by COMBO and agreed that the best outcome would be for our project to feed into and support the development of a National Biodiversity and Offset Strategy being compiled by COMBO, and especially to embed the social principles, which would provide the foundations when NEMA begins work on the practical guidelines. The Strategy was renamed the National Biodiversity and <u>Social</u> Offset Strategy. As the Strategy was finalised after our Darwin Project ended, it was not included into the planning of two</p>

Project summary	Measurable Indicators	Progress and Achievements
	<p>3.4. International guidelines published in collaboration with BBOP, by end Y3.</p> <p>3.5. By end Y3, at least 2 international businesses commit to implementing these guidelines within their operations.</p>	<p>biodiversity offsets in Uganda by the end of the project. However, from working with the MoWE and NEMA on the Strategy, they both informed us that several new developments requiring offsets in Uganda will be adhering to the Strategy.</p> <p>3.4. Completed. International social good practice principles no longer to be published by BBOP owing to the project's timescale. BBOP also drew to close at the end of 2018. Instead, the principles and associated technical notes were published independently by our team on the 6th of November 2018 (Year 3) and are available on the project website and an online archiving site, which gave them a DOI. Principles are also hosted on the BBOP legacy website and the IUCN website.</p> <p>3.5. Almost complete. Julia Baker (contracted to IIED) has been integrating the social good practice principles into Biodiversity Net Gain policy and practice in the U.K. The U.K.'s new practical guidelines on Biodiversity Net Gain (published in February 2019) for development includes specific reference to the social principles. Balfour Beatty is working on their own Sustainability Blueprint and its internal reporting 'portal' is being updated to include targets on Biodiversity Net Gain and its benefits for people's wellbeing. Natural England is developing an 'eco-metric' tool to assess losses and gains in ecosystem service provision that results from Biodiversity Net Gain activities of a development project. The User Guide and Technical Report of the eco-metric (planned for publication late 2019) contain references to the social principles and outlines their application within a U.K. context. A workshop is planned for 14th June 2019 with government, local planning authorities, NGOs and industry practitioners to discuss how the social principles can be applied to Biodiversity Net Gain developments in the UK.</p>
<p>Activity 3.1.</p> <p>Draft guidelines prepared and discussed at project workshop.</p>		<p>The international social good practice principles were developed collaboratively by the project team and published in November 2018. Drafting of the principles was led by Joe (WB) and Julia Baker (IIED). The draft principles were presented and feedback solicited at a workshop held at UNEP-WCMC in Cambridge, UK (20th of February 2018), Kampala, Uganda (held 7th March 2018), Oxford, UK (9th July 2018), London, UK (3rd September) and during a webinar hosted by BBOP (20th of September 2018). Participants at the meetings were from various NGOs, consultancies, government agencies and businesses. Valuable feedback and written</p>

Project summary	Measurable Indicators	Progress and Achievements
		reviews on these principles were also received from 19 individuals, as well as from various businesses, NGOs, government and consultancies from a range of countries.
<p>Activity 3.2.</p> <p>Research workshop held to solicit feedback on research results and guidelines from a range of stakeholders.</p>		<p>Rather than holding one research workshop, we felt it would be more impactful to hold two meetings for different stakeholders in Uganda to present our research findings and the social principles. The first meeting was held at the Serena Hotel in Kampala, Uganda, on the 7th of March 2018. There was a total of 28 participants, including government representatives, ESIA consultants and the Darwin team members. A second meeting was held with the U-PCLG on the 9th of March 2018 at the Protea Hotel, Kampala. Around 30 participants from a range of NGOs and including the Darwin team were present. The draft principles were also presented and feedback solicited at a workshop held at UNEP-WCMC in Cambridge, UK (20th of February 2018), Kampala, Uganda (held 7th March 2018), Oxford, UK (9th July 2018), London, UK (3rd September) and during a webinar (20th of September 2018). Participants at the meetings were from various NGOs, consultancies, government agencies and businesses.</p>
<p>Activity 3.3.</p> <p>Training of NEMA staff on the new guidelines and associated technical needs.</p>		<p>Two training events were carried out. The first training of NEMA staff took place in Kampala on the 25th – 28th June 2018 and was done in collaboration with a training event carried out by the COMBO project. A module was carried out by Julia Baker (IIED) on the social aspects of biodiversity NNL, what guidance already exists, what are the gaps and how this fits in with the ESIA process. Overall 54 people attended the training, 19 females and 35 males. Six individuals were NEMA staff. The second training event for NEMA took place in Kampala on the 14th of February 2019. The training carried out by Julia Baker focused on the social good practice principles, and how they will apply to biodiversity NNL/NG development projects in Uganda. A total of 43 people attended the training, including the facilitators from WCS-Uganda and from NU.</p>
<p>Activity 3.4.</p> <p>Business and Biodiversity Forums held in Kampala.</p>		<p>A meeting was held in August 2017 to discuss the need and purpose of a Natural Capital Forum (previously called the Business and Biodiversity Forum). This was followed up with a second Natural Capital workshop held in Kampala, Uganda in March 2018. Two reports have been produced: the first one is a hypothetical example of a Natural Capital Account for the construction of a sugar cane factory in Uganda. The second one is an example of a Natural Capital Account carried out for the Katosi water</p>

Project summary	Measurable Indicators	Progress and Achievements
		treatment plant in Uganda. The second report is currently be written up as a manuscript for submission to a peer-reviewed journal.
Activity 3.5. Publication of new guidelines by NEMA and launch event.		The COMBO team led the drafting of the new National Biodiversity and Social Offset Strategy for Uganda. In collaboration with WCS-Uganda, the project team incorporated the findings from our project into the Strategy and worked to embed the social principles into the Strategy, which would provide the foundations when NEMA begins work on the practical guidelines to aid the implementation of the Strategy. The MoWE is preparing the launch the Strategy in June 2019.
Activity 3.6. Drafting of new international guidelines and publication by BBOP.		Drafting described under Activity 3.1. The team decided that the social principles would no longer be published by BBOP owing to the project's timescale and the fact that BBOP drew to close at the end of 2018. Instead, the principles and associated technical notes were published on the 6 th of November 2018, independently by our team, using a professional designer, and made available on our project website as well as through an online archiving website, which gave them a DOI. The principles have also been published on the IUCN and BBOP legacy websites.
Activity 3.7. Business engagement workshop in Oxford.		The business engagement workshop was held on the 20 th of November at the Oxford Martin School, Oxford University. About 65 individuals from organizations involved with biodiversity NNL/NG activities attended, including NGOs, academics, ESIA consultants and businesses. Our Ugandan partners from WCS-Uganda and NU also attended. The aim of the workshop was to increase understanding of the negative and positive impacts on people from biodiversity NNL/NG, share experiences in efforts to ensure people are 'no worse off and preferably better off' from biodiversity NNL/NG, discuss ways forward for biodiversity NNL/NG projects to result in the best possible outcomes for both biodiversity and people, and to launch the good practice principles. Details of the workshop are available on the project website (including agenda, attendance list and speaker's biographies).
Activity 3.8. Two international businesses to commit to implementing these new guidelines.		Julia Baker (contracted to IIED) has been integrating the social good practice principles into Biodiversity Net Gain policy and practice in the UK. The U.K.'s new practical guidelines on Biodiversity Net Gain (published in February 2019) for development includes specific reference to the social principles.

Project summary	Measurable Indicators	Progress and Achievements
		<p>Balfour Beatty is working on their own Sustainability Blueprint and its internal reporting 'portal' is being updated to include targets on Biodiversity Net Gain and its benefits for people's wellbeing. Natural England is developing an 'eco-metric' tool to assess losses and gains in ecosystem service provision that results from Biodiversity Net Gain activities of a development project. The User Guide and Technical Report of the eco-metric (planned for publication late 2019) contain references to the social principles and outlines their application within a UK. context. A workshop is planned for 14th June 2019 with government, local planning authorities, NGOs and industry practitioners to discuss how the social principles can be applied to Biodiversity Net Gain developments in the UK.</p>

Annex 3 Standard Measures

Code	Description	Total	Nationality	Gender	Title or Focus	Language	Comments
Training Measures							
1a	Number of people to submit PhD thesis	1	British/South African	Female	Win-win? Balancing people's uses of nature with biodiversity No Net Loss	English	
1b	Number of PhD qualifications obtained	1	British/South African	Female			
2	Number of Masters qualifications obtained	2	British	Female	Assessing social and economic outcomes from biodiversity 'no net loss' on infrastructure development, using Natural Capital Accounting – a case study from Uganda Natural capital accounting to support assessment of the "no net	English	

					loss" principle for biodiversity and people for an infrastructure project in Uganda		
3	Number of other qualifications obtained						
4a	Number of undergraduate students receiving training						
4b	Number of training weeks provided to undergraduate students						
4c	Number of postgraduate students receiving training (not 1-3 above)						
4d	Number of training weeks for postgraduate students						
5	Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification (e.g., not categories 1-4 above)						
6a	Number of people receiving other forms of short-term education/training (e.g., not categories 1-5 above)	97	Ugandan	58 males, 39 females	Two training sessions on including social considerations into biodiversity NNL and the social good practice principles	English	
6b	Number of training weeks not leading to formal qualification						

7	Number of types of training materials produced for use by host country(s) (describe training materials)	2			Social considerations into biodiversity NNL and the social good practice principles	English	Powerpoint presentations, check list for NEMA staff reviewing ESIA's
Research Measures		Total	Nationality	Gender	Title	Language	Comments/ Weblink if available
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (ies)	2	Lead authors = British, Ugandan	Female authors	Industrial brief: achieving no net loss for people and biodiversity in Uganda; Policy brief: achieving no net loss for people and biodiversity in Uganda	English	U-PCLG policy brief Industry briefing note
10	Number of formal documents produced to assist work related to species identification, classification and recording.						
11a	Number of papers published or accepted for publication in peer reviewed journals	2	Lead author = British/South African	3 male authors, 3 female authors	No net loss for people and biodiversity; Local people's preferences for biodiversity offsets to achieve 'no	English	Paper 1 Paper 2

					net loss' for economic developments		
11b	Number of papers published or accepted for publication elsewhere	5	Lead authors = British, Ugandan, Kenyan/Canadian	1 male author; 4 female authors	Ensuring no net loss for people as well as biodiversity: good practice principles. Stakeholder and institutional analysis, Re-assessment of the terrestrial biodiversity, Assessing social and economic outcomes from biodiversity 'no net loss' on infrastructure development, using Natural Capital Accounting – a case study from Uganda Natural capital	English	Project website

					accounting to support assessment of the "no net loss" principle for biodiversity and people for an infrastructure project in Uganda		
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country						
12b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country	1	Ugandan	Female	Biological database	English	The biological database will be kept by Nature Uganda
13a	Number of species reference collections established and handed over to host country(s)						
13b	Number of species reference collections enhanced and handed over to host country(s)						

Dissemination Measures		Total	Nationality	Gender	Theme	Language	Comments
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	13	Ugandan/ British	Both males and females	Presentations of the biological and social findings, presentations on the social good practice	English (Luganda for the village dissemination meetings)	Workshops/meetings arranged in Uganda: Year 1 annual meeting, natural capital workshop, two U-PCLG meeting's, two local dissemination

Dissemination Measures		Total	Nationality	Gender	Theme	Language	Comments
					principles		meetings and one meeting held by NU with ESIA consultants, government agencies and NGOs. Workshops arranged in the UK: Business engagement meeting, workshops held in Cambridge, Oxford and London. 1 BBOP webinar and 1 Natural Capital Coalition webinar.
14b	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.	6	British and South African	Both male and female	Presentations on the social findings and the social good practice principles		3 international conferences and 2 workshops (TBC and SNAPP) where social findings were presented by Victoria Griffiths (OU), 1 international conference where Joe Bull (WB) presented the social principles

Physical Measures		Total	Comments
20	Estimated value (£s) of physical assets handed over to host country(s)		

Physical Measures		Total	Comments
21	Number of permanent educational, training, research facilities or organisation established		
22	Number of permanent field plots established		

Financial Measures		Total	Nationality	Gender	Theme	Language	Comments
23	Value of additional resources raised from other sources (e.g., in addition to Darwin funding) for project work	£ 26 999.00	British	Female	Field work funding and funding for the social good practice principles	English	ESRC Impact Acceleration Account awarded to Bangor University; and Royal Geographical Society Slawson Award for fieldwork awarded to Victoria Griffiths (OU)
23	Matched funding obtained from the WCS COMBO project		Ugandan	Male	Funding to assist with the National Biodiversity and Social Offset Strategy and the training of NEMA staff.		

Annex 4 Aichi Targets

	Aichi Target	Tick if applicable to your project
1	People are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	x
2	Biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	x
3	Incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.	
4	Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.	x
5	The rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	x
6	All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.	
7	Areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	
8	Pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.	
9	Invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.	
10	The multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.	
11	At least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	
12	The extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	
13	The genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.	

14	Ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.	x
15	Ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.	x
16	The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.	
17	Each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.	x
18	The traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.	x
19	Knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.	x
20	The mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	

Annex 5 Publications

Type * (e.g. journals, manual, CDs)	Detail (title, author, year)	Nationality of lead author	Nationality of institution of lead author	Gender of lead author	Publishers (name, city)	Available from (e.g. web link, contact address etc)
Research report	Stakeholder and institutional analysis. Nafeesa Esmail, 2017	Kenyan/ Canadian	British	Female	Wild Business Ltd, Canterbury	Project website
Research report	Re-assessment of the terrestrial biodiversity (flora and avi-fauna) in Bujagali, Isimba and Kalagala hydropower dams and offsets, Uganda. Dianah Nalwanga, 2017	Ugandan	Ugandan	Female	Nature Uganda, Kampala	Project website
Journal	No net loss for people and biodiversity. Victoria Griffiths, Joseph Bull, Julia Baker and E.J. Milner-Gulland, 2019	British/South African	British	Female	Wiley-Blackwell	Wiley Online Library
Journal	Local people's preferences for biodiversity offsets to achieve 'no net loss' for economic development.	British/South African	British	Female	Elsevier	ScienceDirect

	Victoria Griffiths, Oleg Sheremet, Nick Hanley, Julia Baker, Joseph Bull and E.J. Milner-Gulland, 2019					
Research report	Assessing social and economic outcomes from biodiversity 'no net loss' on infrastructure development, using Natural Capital Accounting – a case study from Uganda. Julia Baker and Millie Oakley, 2019	British	British	Female	Wild Business Ltd, Canterbury	Project website
MSc thesis	Natural capital accounting to support assessment of the "no net loss" principle for biodiversity and people for an infrastructure project in Uganda. Helena Newell, 2018	British	British	Female	Imperial College London	Project website
Policy document	Ensuring no net loss for people as well as biodiversity: good practice principles. Joseph Bull, Julia Baker, Victoria Griffiths, Julia Jones and E.J. Milner-	British	British	Male	SocArXiv Papers, New York	SocArXiv Papers

	Gulland, 2018					
Blog	Ensuring biodiversity net gain delivers for people. Julia Baker, 2019	British	British	Female	Inside Ecology, Kent	Inside Ecology website
Blog	No net loss: ensuring the best possible outcomes for people and biodiversity. Julia Jones, 2019	British	British	Female	IUCN, Gland	IUCN website
Darwin newsletter article	Built on collaboration: new good practice principles to achieve no net loss for people and biodiversity. Victoria Griffiths and Julia Baker, 2019	British/South African	British	Female	Darwin Initiative, London	Darwin newsletter
Policy document	Policy brief: achieving no net loss for people and biodiversity in Uganda. Dilys Roe, Victoria Griffiths, Dianah Nalwanga, Julia Baker and E.J. Milner-Gulland, 2019	British	British	Female	IIED, London	IIED website
Policy document	Industrial brief: achieving no net loss for people and biodiversity in	Ugandan	Ugandan	Female	Nature Uganda, Kampala	Project website

	Uganda. Dianah Nalwanga, Julia Baker, Victoria Griffiths and E.J. Milner-Gulland, 2019					
Policy document	Industrial brief: achieving net gain for people and biodiversity. Project team, 2019	British	British	Female	ICCS, Oxford	Project website

Annex 6 Darwin Contacts

Ref No	23-019
Project Title	Achieving No Net Loss for communities and biodiversity in Uganda
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Role within Darwin Project	Host Country Lead
Address	
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Email	
Partner 2	
Name	Achilles Byaruhanga
Organisation	Nature Uganda
Role within Darwin Project	Lead on biodiversity study
Address	
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Email	
Partner 3	
Name	Dilys Roe
Organisation	International Institute for Environment and Development (IIED)
Role within Darwin Project	Technical Input
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Fax/Skype	
Email	
Partner 4	
Name	Joseph Bull
Organisation	Wild Business Ltd.
Role within Darwin Project	Technical input

Address	
Fax/Skype	
Email	
Partner 5	
Name	Simon Nampindo
Organisation	Wildlife Conservation Uganda
Role within Darwin Project	Technical input, and training
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