



Illegal Wildlife Trade (IWT) Challenge Fund Final Report

IWT Challenge Fund Project Information

Project reference	IWT001
Project title	Building Capacity for Pro-Poor Responses to Wildlife Crime
Country(ies)	Uganda
Contract holder institution	IIED
Partner institution(s)	Oxford University , Wildlife Conservation Society, Uganda Wildlife Authority
Total IWT grant value	£384,441
Start/end dates of project	April 2014 – March 2017
Project leader's name	Dilys Roe
Project Website/Blog/Social Media	http://www.iied.org/building-capacity-for-pro-poor-responses-wildlife-crime-uganda
Report author(s) and date	Dilys Roe, Henry Travers, Julia Baker, EJ Milner-Gulland, Andy Plumtre, Simon Nampindo, Geoffrey Mwedde; Aggrey Rwetsiba. June 2017

1. Project Summary

This project aimed to generate evidence to improve understanding of the interactions between wildlife crime and poverty (in Uganda specifically but with wider lessons internationally), support the Uganda Wildlife Authority (UWA) to implement measures that tackle the drivers of wildlife crime while improving the livelihoods of poor people, and generate lessons that can be rolled out from this pilot case to elsewhere.

Specifically it sought to answer three key questions:

- 1) What are the drivers and impacts of wildlife crime at the local and national level?
- 2) What are the socio-economic profiles and motivations of individuals who participate in wildlife crime?
- 3) In the eyes of local people, government and conservation managers, which interventions are most effective in reducing wildlife crime and contributing towards poverty alleviation?

Our theory of change was that improvements in the evidence base, coupled with improvement in UWA capacity to respond would result in improved anti-IWT policy and practice (by which we meant a shift in UWA policy and practice away from a predominantly law-enforcement based approach to tackling IWT to one also seeks to improve local livelihoods).

Uganda was chosen as a case study country because the partners had previous experience of working there on relevant issues - implementing policy to address wildlife crime (UWA, WCS) and researching the impacts of conservation on poor people's livelihoods (IIED, Oxford). The project built directly on that experience and the relationships between the international and in-country partners that had developed as a result. The project was not targeted at any particular species but rather explored different types of wildlife crime that occur in specific sites and the effectiveness of different types of response to those crimes. Within Uganda the project focused on Queen Elizabeth and Murchison Falls National Parks. These case study sites were chosen because they experience a wide variety of wildlife crimes ranging from elephant poaching to domestic bushmeat hunting. Figure 1 below shows the location of the case study sites.

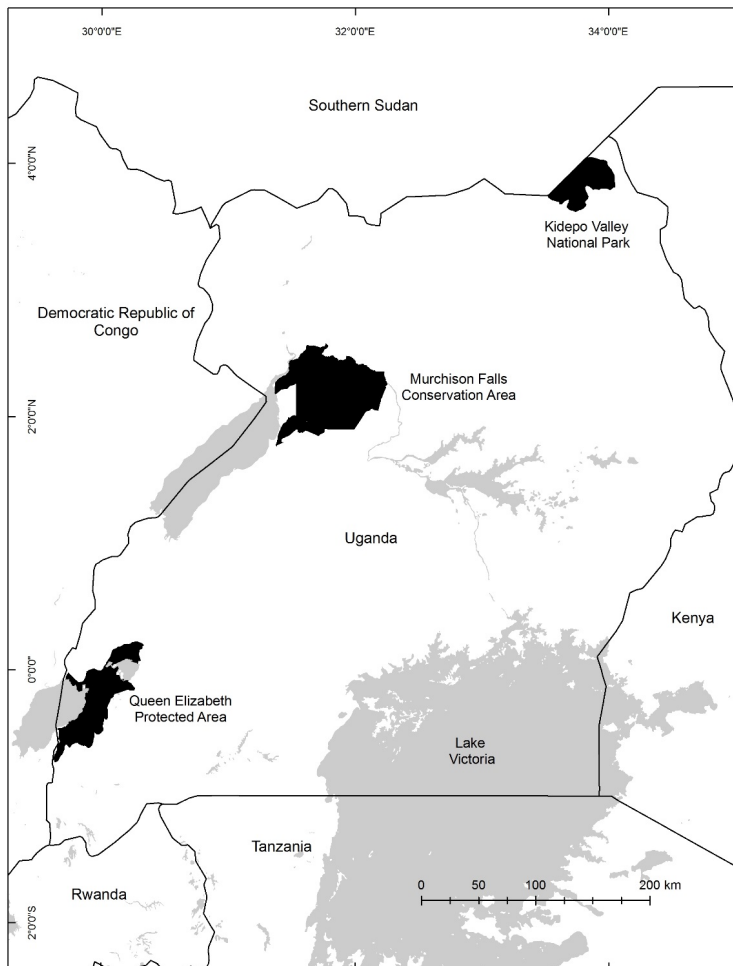


Figure 1: Map of Uganda showing location of Queen Elizabeth and Murchison Falls National Parks

2. Project Partnerships

As noted in the previous section, this project evolved from an existing relationship between the main project partners in the UK and Uganda. The project partners were all actively involved in the design of the project and in its implementation over the three years. One of the UK partners was Imperial College but Prof EJ Milner Gulland who headed the Interdisciplinary Centre for Conservation Science (ICCS) at Imperial was appointed to a professorship at Oxford University halfway through the project. ICCS, along with the project's post-doc researcher moved to Oxford with Prof Milner-Gulland so the partnership with Imperial College ceased at this point and a new partnership with Oxford University started – although there was no change to the actual individuals working on the project or their roles within it. Each partner had a specific role in the project: Imperial/Oxford led on research design and implementation; WCS-Uganda led on in-country coordination and technical support; and UWA led on research dissemination within UWA and dissemination of Uganda experience to other countries (via its status as a Party to CBD and CITES); and IIED led on overall contract management, project coordination, communications and international policy links. As project manager, IIED has led on writing this report with all partners contributing details for their components and reviewing and commenting on the draft report.

Additional partnerships were developed over the course of the project including with:

- Uganda Poverty and Conservation Learning Group: Throughout the course of the project, updates were disseminated to Ugandan conservation organisations through U-PCLG meetings. In addition, U-PCLG members were invited to participate in all the project events – including workshops and publication launches. And UPCLG published a briefing paper based on the project and participated actively in the end of project workshop.
- Joanne Hill: Jo is a PhD student at University College London who is producing an agent-based model of bushmeat poaching at Murchison Falls National Park to help better understand poacher

behaviour in order to target law enforcement efforts more effectively. Our two projects have both benefitted from the informal interaction through attendance at workshops, occasional skype etc.

- Andrew Lemieux: The project, through WCS, coordinated with Andrew Lemieux who was working with Uganda Conservation Foundation to support prosecutions in Queen Elizabeth National Park and Murchison Falls National Park. We were able to share data that contributed to our analysis of law enforcement effectiveness.
- Colin Beale and Rob Critchlow, University of York: The project, via WCS and Oxford, collaborated with Colin Beale and Rob Critchlow at University of York to test their analysis method that was used to predict where illegal activities were taking place in the Queen Elizabeth National Park¹. We were also able to use this data to undertake a comparative analysis of the prevalence of illegal activities related to wildlife crime derived from the analysis of MIST data with the data collected at the household level under Activity 3.2.
- Uganda Conservation Foundation: UCF were awarded an IWT Fund project starting in April 2016 thus coinciding with the last year of our project and with a focus on the same two national parks. We worked collaboratively with UCF on their IWT Fund proposal, ensuring the early results of our research fed into their planned activities. When UCF began their project, we were careful to ensure coordination with this project, inviting UCF staff to our workshops (UCF gave a presentation at our final workshop), sharing information where appropriate and involving them in the development of our final output – park-level action plans for tackling IWT – especially to benefit from their lessons learnt to date.
- The British High Commission in Uganda was also kept up to speed with the project including visits by IIED staff to provide an update at the end of Year 1 and attendance by a BHC staff member at our final workshop.

Evidence of all these interactions is provided in the annual reports to the IWT Fund, and more specifically in workshop reports and project outputs all of which are available on the project web pages: <https://www.iied.org/building-capacity-for-pro-poor-responses-wildlife-crime-uganda>

¹ Critchlow, R., **Plumptre, A.J.**, Driciru, M., Rwetsiba, A., Stokes, E.J., Tumwesigye, C., Wanyama, F. and Beale, C.M. (2015) Spatiotemporal trends of illegal activities from ranger-collected data in a Ugandan national park. *Conservation Biology*, 29, 1458-1470. DOI: 10.1111/cobi.12538

3. Project Achievements

3.1 Outputs

The project had five planned Outputs (see agreed logframe in Annex 1):

1. An evidence review of the drivers and impacts of wildlife crime in Uganda, with a focus on the interactions between poverty and wildlife crime.
2. A written analysis of the interactions between development indicators, conservation interventions, wildlife crime incidences (for different commodities) and the status of natural resources, at the national level.
3. A spatial analysis of the relationship between wildlife crime indicators, social and economic profiles and conservation interventions of different types, for the two protected areas.
4. A written analysis of local perceptions of the drivers and consequences of wildlife crime, and local perspectives on potential conservation interventions, with a poverty focus, using novel and appropriate techniques to understand sensitive behaviours.
5. Improved and/or new (additional) wildlife crime monitoring databases owned and routinely used by UWA.

The project achieved, or largely achieved, all its planned Outputs including:

Output 1 - Evidence review: The indicators used measured progress in delivering this output at different stages across the project period, from compiling literature, to posting the evidence review online, presenting it at a research workshop, and then including it in the final research report (see logframe in Annex 1). The report was compiled during the first year of the project and published by IIED in July 2015. It is available to freely download at: <http://pubs.iied.org/17576IIED>. The report was officially launched by the Executive Director of Uganda Wildlife Authority at an event in Kampala in July 2015 (see <https://www.iied.org/what-drives-wildlife-crime-uganda>) which received good press coverage within Uganda; presented at the project Research Workshop in May 2016 (see <http://pubs.iied.org/17590IIED/>) and incorporated into the final research report which was published in March 2017 (available at <http://pubs.iied.org/17604IIED/>)

Output 2 – Written analysis of interactions between conservation, development and wildlife crime incidences: This output was completed to the extent possible, and while all the indicators were met, actual achievement of the output was limited by a lack of data and did not result in a stand-alone written output as anticipated. We compiled a database to identify whether or not relevant data existed for each park in a particular year from 2004 (the earliest date possible given the availability of data) to 2014. We described trends evident in the data which included number of tourists; arrests by park rangers; snares collected by park rangers; revenue sharing funds; park operational budgets; ranger patrols; and, authorised resource users. But the limited amount, type, and quality of data available meant it was impossible to determine any clear correlations. We used the broad trends, however, to inform both the evidence review and the fieldwork design, and we presented the data at the Research Workshop. We also wrote an internal report on the analysis, which was distributed to project partners and will be made available to any interested parties on demand. Furthermore the dataset remains useful as a baseline for others, and as a clear indicator of knowledge gaps. We have discussed with both Uganda Wildlife Authority and with the Uganda Poverty and Conservation Learning Group how best to make this data available to others, but not yet come to any clear conclusions (largely due to a lack of resources for either group to maintain the dataset on their websites). We will, however, continue to explore this with U-PCLG in phase 2 of this project.

Output 3 - Spatial analysis: This output was achieved and is a key element of the final research report. As with Output 1, the indicators were selected to show progress in delivering this Output across project period – from planning the research at the inception workshop, to conducting fieldwork, analysing data, presenting results and writing up and disseminating the findings. All of the indicators were met with the exception of submitting a journal article – the article is currently in preparation but not yet finalised.

Fieldwork at the two case study sites, led by Henry Travers (Oxford), entailed a large scale household survey comprising 1948 interviews, which included components on household poverty, perceptions of conservation and an indirect questioning approach for estimating the prevalence of household participation in wildlife crime. Analysis of MIST datasets for the two case study sites was completed through our partnership with Dr. Colin Beale at the University of York (see above) and combined with our

prevalence estimates of household involvement in wildlife crime in order to improve the efficiency of patrols and other law enforcement activities. WCS also continues to work with Colin Beale and Rob Critchlow at University of York to analyse the spatial distribution of threats based on the MIST/SMART data for Murchison Falls National Park, showing that the main threats are snaring and bushmeat hunting across the park. Their analyses also show a recent increasing trend in snaring in the park.

Evidence of the progress in achieving this output, against the indicators set can be found in the form of: the inception meeting report (available at <http://pubs.iied.org/G03810.html>); the Research Workshop report (available at <http://pubs.iied.org/17590IIED/> with individual presentations available on the project web pages); a journal article published in Conservation Letters based on the analysis of SMART/MIST data by WCS and University of York (<http://onlinelibrary.wiley.com/doi/10.1111/conl.12288/full>); a summary briefing paper (<http://pubs.iied.org/17354IIED/>) and the final research report (<http://pubs.iied.org/17604IIED/>). The final indicator for this Output was a presentation at CITES CoP and evidence of the event, as well as a summary presentation and response from the Permanent Secretary of the Ugandan Ministry of Tourism, Wildlife and Antiquities (<https://www.iied.org/sites/default/files/Wildlife%20crime%20Uganda%20CITES%20closing%20remarks.pdf>) is also available on the project web page.

Output 4 - Analysis of local perspectives: Although framed as a separate output, this Output along with Output 3 are the key components of the research undertaken in this project and both, combined; have formed the basis of the research findings and the reports, briefing papers etc that have been produced. Because of this, the indicators used for this Output were the same as for Output 3. For this component of the research, the fieldwork at the two sites was led by Geoffrey Mwedde (WCS and Imperial College) and Lucy Archer (Imperial College). The research entailed a choice experiment conducted with 394 households and semi structured scenario interviews with 119 households. Data analysis was completed in September 2015 and the results written up as two MSc theses, which are available here: <http://www.iccs.org.uk/publications/thesis-archive-msc-con-sci/>. In addition, Henry Travers conducted 54 key-informant interviews with current or convicted poachers (including prisoners incarcerated for wildlife related crimes), providing an important perspective for understanding the local drivers of wildlife crime and perceptions of possible policy or intervention responses.

We hadn't included in our indicators the need to start building awareness amongst UWA staff – particularly those based at the case study sites – of the emerging research findings, however adaptive management of the project made it clear that this was vital in order to have a long-term impact on conservation practice. Therefore we invested substantial time and resources into engaging with local-level and national UWA staff. We organised a 2-day workshop in Kampala in April 2015 for this purpose and used this opportunity to explore the views of UWA headquarters and Park Wardens on the types of interventions that would be likely to tackle IWT while contributing to local livelihoods. We were then able to compare this with the perspectives of local people obtained under Output 4 and include this in the final research findings. Evidence of progress in achieving this output is the same as for Output 3 (with the exception of the journal article) given that the two Outputs both contribute to the overall research findings.

Output 5 – Wildlife crime database:

One of the issues face by the Uganda Wildlife Authority at the start of the project was the problem that they would successfully arrest poachers in the park but were failing to successfully prosecute some because they could not prove they had been in the park, or alternatively when they went to court they were tried as first time offenders and given lenient sentences as a result. UWA would lobby for stiffer sentences but this negatively penalised true first time offenders. WCS had been developing a database to try and tackle this problem and this project helped provide the training and update it following initial piloting with UWA prosecutors. The indicators, all of which were met, document progress in delivering this training and updating.

The wildlife crime database (or offenders database as UWA call it) maintains records of all suspects arrested in protected areas managed by UWA, details about the arrests and the results of any court actions taken following the arrest. With support from this project it now has a finger print matching capability which ensures that when re-offenders are arrested they can be identified accurately even if the give false names (Figure 2).

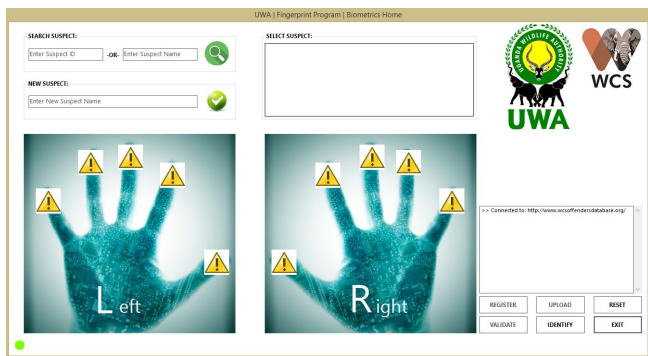


Figure 2: Screen shot of the fingerprint reader that was developed for the Offenders database

In April 2016 WCS ran a basic training programme for 20 UWA staff and a further training on the fingerprint module in June 2016. Demonstrations were also provided to staff from protected area authorities from four other countries: Malawi, Ethiopia, Republic of Congo and Gabon.

The database has also been updated to include a facility to store images taken of the arrest in the field so that it can be fully documented and presented in court. As a result success of prosecutions is now at about 95% across the protected areas and there is a clear difference in penalties given to re-offenders, ensuring that first time offenders are treated as such (Figure 3).

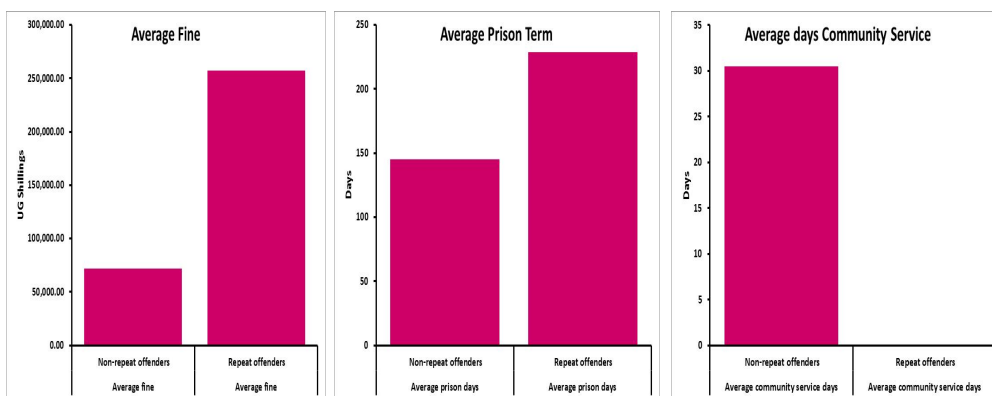


Figure 3: Comparison of average penalties for first time and repeat offenders from the Offenders database showing the increase when an offender repeats.

The offenders fine database was initially developed as a web based system because at the time internet connectivity in the parks was good. This had deteriorated by June 2016 however which was leading to a

drop in data entry into the database. Under the project a module to allow offline data entry that can be uploaded was developed so that data can be easily uploaded when connectivity is good.

The data base has also been rolled out to Malawi's National Park Authority following the demonstration in April 2016. The same system has been set up there so they have their own database and a training programme was run by WCS staff Geoffrey Mwedde in Malawi in March 2017. We will also make people aware of it on the WILDLABS.NET website for conservation technology.

A final training programme for UWA staff was given at the end of the project to train UWA staff in the use of the offline data entry module. This training included staff from the recently established intelligence unit who will now be able to export names and contact details from the offenders database and migrate them to their I2 intelligence database so that they can match telephone numbers and other details with other suspects they are tracking. At this training UWA identified two people who will now act as internal UWA trainers for ongoing UWA staff training. These trainers include one person who had attended training courses in 2016 and 2017 from the intelligence unit and one person from UWA's IT unit to manage the database.

3.2 Outcome

The planned Outcome of this project was "Conservation policy makers have the tools and capacity to understand interactions between wildlife crime, biodiversity and poverty and thus target interventions effectively for the long-term benefit of rural communities". The Outcome was achieved, particularly in the context of the availability of tools available to understand and tackle the interactions between wildlife crime and local livelihoods. The project resulted in a practical action plan (published and endorsed by Uganda Wildlife Authority) for each of the two case study parks – Murchison Falls (<http://pubs.iied.org/G04161/>) and Queen Elizabeth (<http://pubs.iied.org/G04162/>) setting out a series of interventions to tackle key drivers of wildlife crime (human wildlife conflict and lack of livelihood opportunities). It also resulted in a Wildlife Crime Database (<http://wcsoffendersdatabase.org/login/>) which enables UWA to better track suspects and offenders, monitor its effectiveness in prosecuting cases, assess the effectiveness of deterrents in the courts on re-offending and ensures that first time offenders are treated differently from repeat offenders. (see <https://www.slideshare.net/IIEDslides/building-capacity-for-propoor-responses-to-wildlife-crime-in-uganda-online-offenders-database> for a summary).

As far as the wildlife crime database is concerned, capacity has also been built amongst UWA staff with evidence of the improved capacity provided by the large number of documented suspects in the database (over 1,700) and the evidence of suspects being successfully prosecuted as repeat offenders (see Figure 3).

The next stage in developing capacity is actual implementation of improved interventions that tackle IWT while benefitting local communities. Our Theory of Change was that an increase in knowledge about the drivers of wildlife crime and the types of intervention that could tackle wildlife crime while supporting local livelihoods would be sufficient to bring about a change in policy and practice. We partnered with UWA in the project and engaged UWA staff throughout the project to share research findings and highlight the potential implications of the research findings. In addition, we held a planning day with UWA staff on the second day of the Research Workshop, and workshops at each park to develop the park action plans. However, UWA has set timeframes for allocating park operational budgets which were out of sync with the preparation of the action plans. Also while UWA staff were really interested in the research findings and keen to improve their interventions, they highlighted a significant capacity gap that we had not anticipated needing to fill as part of this project. Because we had assumed that, as a core partner in the project, UWA would have capacity to respond to the research findings (see outcome assumptions 4, 5, and 6 in our logframe) we did not build capacity development into our activity plan nor into our outcome indicators. It would also have taken a much larger, better resourced, and longer project to do this. In fact, one major achievement of this project has been to act as a springboard for a successful application to the IWT Challenge Fund to support UWA to implement the findings of this project at Murchison Falls NP. Our recommendations are also already influencing other NGOs active in the area to develop projects in line with our recommendations.

If we measure the success of the project purely against the outcome indicators in the logframe we can see that all have been largely met:

- Indicator 1: drivers of wildlife crime assessed and findings disseminated - ACHIEVED

Evidence: National-level evidence review (<http://pubs.iied.org/17576IIED/>) exploring drivers and impacts of wildlife crime published in June 2015; launched by UWA to a Ugandan audience in July 2015 (<https://www.iied.org/what-drives-wildlife-crime-uganda>) and international presentation made in August 2015 at the International Congress for Conservation Biology (page 589 in https://conbio.org/images/content_conferences/2015_ICCB_Abstract_Book_021816_FINAL_NODOI_web.pdf).

- Indicator 2: At least one new or improved intervention to tackle wildlife crime based on local perspectives – NOT ACHIEVED (but in progress - see below)

- Indicator 3: Wildlife crime mitigation policy re-designed to ensure fairness - ACHIEVED

Evidence: UWA have endorsed and published new Wildlife Crime Action Plans for both case study parks (<http://pubs.iied.org/G04162/> and <http://pubs.iied.org/G04161/>), based directly on the research findings. The plans were formally launched by the UWA Executive Director in April 2017 during our final project workshop.

- Indicator 4: Functioning wildlife crime database in routine use by UWA - ACHIEVED

Evidence: Wildlife crime database was made available online to UWA staff in May 2014 and is being used by UWA staff in each conservation area. The database is not for public access of use but evidence of its existence is provided by the login page here: <http://wcoffendersdatabase.org/login/>. The database has continued to evolve over time and showcased to other countries, with its adoption already in Malawi as a result.

- Indicator 5: Project outputs widely disseminated – ACHIEVED

Evidence: Written outputs of the project include the evidence review; a research report (<http://pubs.iied.org/17604IIED/>); an international briefing paper (<http://pubs.iied.org/17354IIED/>); and a national briefing paper (<http://pubs.iied.org/G04133/>) as well as the park action plans, workshop reports and presentations. All the outputs have been distributed in Uganda in hard copy and are freely available via the project website <https://www.iied.org/building-capacity-for-pro-poor-responses-wildlife-crime-uganda>). A side event was held at CITES CoP in 2016, hosted by UWA, at which the research findings were presented and draft action plans introduced.

We recognised that our assumptions about UWA willingness and capacity to engage might be over-optimistic after the first year of the project, based on our preliminary research findings. Hence we organised an additional workshop with UWA staff from the two case study parks and from across different departments within HQ, to start to increase awareness about the research findings and their likely implications. Subsequently we scheduled a full day discussion with UWA staff at the start of year 3 as part of the research results workshop.

The idea for developing park-level action plans emerged from this discussion of the research findings at the end of Year 2 workshop, but were realised due to the research team's commitment to supporting UWA to bridge this capacity and resource gap. Throughout the project UWA staff have expressed strong commitment to the project (evidenced by the official endorsement and public launch of written outputs by the Executive Director, and by the side event at CITES including public commitments from the Permanent Secretary of UWA's parent ministry). However translating verbal commitment into real change in practice has been challenging.

We flagged these concerns in our previous annual report and in our last half year report noting: "This is partly because the ideas we are proposing are new to them and it will take some time to internalise them in their operations and partly because of a lack of capacity – UWA have requested extra guidance on how to implement the various activities identified in the plans. It is also because their budgets are restricted and were planned for this year (2016) and they therefore couldn't implement our suggestions. They have expressed a willingness to include greater funding in the FY2017 budget for what we are proposing and at least test them at QENP and MFPA." At our end of project workshop

<http://pubs.iied.org/G04170/> Charles Tumwesigye, UWA's Deputy Director for Conservation noted "At UWA, the park-level action plans are welcome and UWA is committed to spearheading their implementation with support from our partners."

Our follow up project (which started in April 2017) is specifically focussed on implementing the plans and building capacity amongst UWA staff, in response to these identified constraints.

3.3 Impact: achievement of positive impact on illegal wildlife trade and poverty alleviation

The anticipated impact that our project was designed to contribute to was that "Wildlife crime is effectively managed resulting in more sustainable use of biodiversity and more secure local livelihoods, thus supporting poverty alleviation at both local and national levels".

The project has contributed to that impact by supporting UWA to improve the effectiveness and fairness of policies aimed at reducing wildlife crime. As discussed in previous sections this was achieved in a number of ways. Firstly through providing technical and capacity support to develop an effective database for UWA to record and monitor wildlife crime including generating better information on the socio-economic profiles of offenders. Secondly by shedding light on the motivations of offenders and the likely effectiveness of different interventions to address wildlife crime. Thirdly, the Action Plans we have produced will help UWA and PA managers, and their NGO partners, to tailor their approach to better respond to different types of wildlife crime and avoid unnecessarily penalising poor people in cases where they are not the major culprits. Beyond Uganda, the wide dissemination of our findings will help other agencies who are seeking to tackle IWT to better understand the multiple drivers of wildlife crime and hence the need for a range of interventions that respond to those drivers. Our wider dissemination is already bearing fruit, with substantial interest in our evidence review (Harrison et al 2015), and in our presentations on the project at international workshops and symposia. The lessons learnt were incorporated into a widely cited paper on the theory of change for illegal wildlife trade interventions (Biggs et al. 2016). The Offenders data base is being used across the protected area estate in Uganda and is now established in Malawi managed by the Malawi National Parks Authority there and is also being rolled out elsewhere by the NGO Stop Ivory.

4. Monitoring of assumptions

The assumptions were reviewed periodically throughout the project as a routine element of skype catch up calls between the project team (these calls were not formally minuted so documented evidence is not available). They were also reviewed in depth at our annual project meetings, and reported on in the annual reports.

As noted in Section 3.2, we became concerned about some of our outcome indicators (those related to UWA's capacity to engage) after the first year of the project. We didn't change the assumptions but we took some remedial actions to address these issues, specifically: proactively increasing our direct outreach to, and engagement with, UWA park staff (ie going beyond our focal point for the project based in the monitoring and research division of UWA HQ to engage with park-level staff); allocating researcher time to drive the drafting of the Park Action Plans rather than assuming this would be undertaken by UWA; documenting public commitments to implementing the research findings by UWA senior management and reminding UWA of these commitments when opportunities arose; producing a briefing paper published by Uganda Poverty and Conservation Learning Group, spelling out key policy actions for UWA (see <http://pubs.iied.org/G04133/>)

5. Project support to the IWT Challenge Fund Objectives and commitments under the London Declaration and Kasane Statement

It should be noted that this project was designed prior to the establishment of the IWT Challenge Fund (it was originally submitted as a Darwin proposal but agreed for funding under the IWT fund) and was thus not specifically aimed at meeting the IWT Challenge Fund objectives. Nevertheless, the project has made a strong contribution to objectives 1 (sustainable livelihoods) and 2 (law enforcement). The contributions are as described in the section above on outcome and impact. In terms of sustainable livelihoods, the project has contributed by strengthening the evidence base in support of improved wildlife crime mitigation policies with the aim of reducing both wildlife crime and the resultant impact on

local livelihoods and security, by acting as the foundation for a follow-on IWT project directly addressing local livelihoods, and by influencing NGOs working in the study area to change their approach to engagement with local people.

It is also identifying policies that can directly contribute towards improving local livelihoods, and improving the fairness of wildlife crime mitigation policies. For example the project has listened to local voices (including householders in areas around National Parks, and also convicted poachers) so as to better understand motivations for wildlife crime, and how to improve conservation and development interventions so as to reduce these motivations. The project has resulted in two park-level action plans that are intended to pilot a series of activities that directly respond to these perspectives. If piloting of the action plans is successful then there is potential for roll out of this approach to other PAs in Uganda.

In terms of law enforcement the project has helped the Ugandan government to better record and monitor wildlife crime – including monitoring conviction rates and levels of penalties imposed. This will strengthen their capacity to tackle wildlife crime strategically based on robust information.

In combination, these different project outputs will enable an evidence-based approach to wildlife crime by the Ugandan government, which changes incentives through both improved law enforcement targeting and more effective conservation and development interventions that work synergistically rather than in isolation.

6. Impact on species in focus

As noted above this project was designed as a Darwin Initiative project and the proposal did not specify a particular species of focus, therefore the logframe does not reflect this either. However the research at the case study sites has identified a number of species impacted by wildlife crime, including African elephants, pangolins, buffalos, Uganda kobs, Jackson's hartebeests, Nile crocodiles, waterbucks, hippopotamuses, African lions, leopards and hyenas. Evidence from our research shows that the main form of wildlife crime in the case study parks is bushmeat hunting – of species that are of lesser concern to the IWT Fund. However, it has also shown that elephants and pangolins – while not widely targeted by local people around the parks – are often a “bycatch” of bushmeat hunting. Key informant interviews with known hunters suggest that a significant proportion of elephant deaths from hunting (estimated to be 20 - 40%) are opportunistic killings. This suggests that a significant proportion of deaths will continue unless snaring and other hunting methods for bushmeat can also be reduced. Similarly, hunters report that pangolins are difficult to find and so are not deliberately targeted, but are caught if the opportunity arises. The action plans developed by the project are intended to respond to the problem of opportunistic poaching of high value species in three ways: by developing small enterprise schemes as an alternative to bushmeat hunting; using eco-guards to increase intelligence on poaching from outside of the local area that is deliberately targeting high value species; and by tackling human wildlife conflict in order to reduce revenge killings of crop-raiding elephants.

7. Project support to poverty alleviation

The expected beneficiaries of the project are the poor people who live in and around the case study protected areas. The project was not designed to generate immediate, direct poverty impacts such as increases in household income and we did not include indicators of this type in our logframe. However indirect benefits to poor people have included the following::

- 1) The research has increased the understanding of the socio-economic profiles and the motivations of those engaged with wildlife crime and the different types of crime that are occurring (from subsistence-based resource extraction to organised poaching). The action plans developed as a result of the research identify more nuanced approaches to tackling wildlife crime that do not unintentionally penalise the poor in cases where they are not the perpetrators of serious crime, but instead actively seek to increase the availability of income earning opportunities and decrease the cost of living close to wildlife.
- 2) The research has directly engaged with poor people to understand their perspectives on which interventions to reduce wildlife crime are likely to be most effective (including comparing between law enforcement approaches and different types of livelihood support interventions). The research team actively set out to ensure that a full range of perspectives was sought, including marginalised groups who may otherwise not be included in surveys or consultations. This

includes convicted poachers in prison, women, people living close to and within the parks rather than in the main village centres. These perspectives were included in our recommendations to UWA and the strategies set out in the action plans are based directly on these. Local council chairmen representing the study sites at the two case study parks were also included amongst the participants of the end of year 2 workshop at which the research results – and their implications for conservation practice – were presented to UWA. The participants from local communities were given space within the discussion sessions to further voice their perspectives (see workshop report at <http://pubs.iied.org/17590IIED/>), and did indeed actively engage in the workshops. Local perspectives were also actively included in the park-level workshops and in the final project workshop.

The project has culminated with the development of the park-level action plans, but not with their implementation. As such it is not possible to determine what the actual poverty impacts of the plans will be and whether they will meet expectations. The next phase of the project – where the plans are implemented – includes measurement of changes in household income and consumption and so will be a test of whether the park-level action plans provide the necessary pre-conditions for a longer term direct poverty impact. It will also assess whether UWA continues to allocate more money towards law enforcement, or whether it shifts its budgets (as we recommended) towards activities that support local livelihoods and built community support for conservation.

8. Consideration of gender equality issues

This project was designed prior to the Gender Equity Act and does not have a specific focus on gender. Nevertheless the research actively sought the perspectives of women as well as men, and the Action Plans that have been developed recognise the gendered division of roles in some of the livelihood support opportunities that we have advocated. For example, wildlife scouts or eco-guardians are widely perceived by both men and women to be men's jobs, while women are more likely to be able to take up opportunities associated with small enterprise development. The Action Plans have thus sought to include a combination of strategies that benefit both men and women.

The project has also directly engaged with UWA's Community Conservation Unit, which is one of the most poorly resourced units within UWA and also the one that is most dominated by women. Participation of these women in our project workshops and the opportunity that this has provided them to interact with UWA senior management (all male) has helped raise their profile and the level of respect afforded to them (anecdotal evidence, no documentation of this impact).

9. Lessons learnt

Key elements of the project that worked well include

- Collaboration between UK-based and Uganda-based organisations. It was critical having the on the ground support from WCS for the research fieldwork, while the UK-based organisations provided added value in terms of access to academic resources and strong links to other initiatives and international policy processes.
- Involving Masters students enabled us to employ high calibre research assistants at a low cost and represented excellent value for money. In addition, including members of a partner organisation (in this case WCS) as masters students enabled us to enhance the legacy and sustainability of the project. It enabled us to include a significant capacity development component (the student, Geoffrey Mwedde is playing a lead research role in our follow up project). and build strong connections between international and Ugandan researchers. It also enabled the project to access substantial matched funding (the DFID commonwealth shared scholarship scheme in which DfID and Imperial college shared the costs of his scholarship, as well as STOP Ivory funding for the database and UWA funding from GEF).
- Engaging directly with park-level UWA was rewarding. They were clearly appreciative of the project, very engaged during workshop discussions, and we had the feeling of genuine feedback rather than placatory words which we felt might sometimes be the case from higher level officials. The park-level staff were also able to use the project to build their profile within UWA and had our backing to argue for the importance of community-based approaches, therefore they were given a platform.

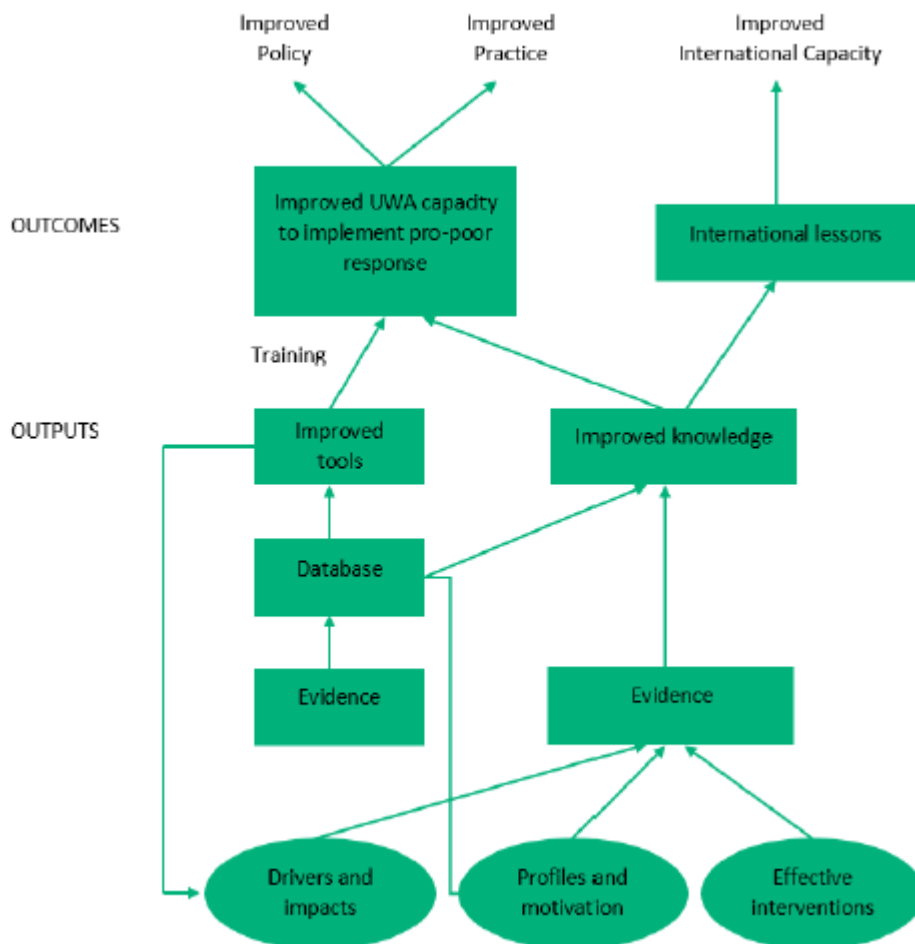
- Engaging UWA's Executive Director for the formal launch of project's outputs – while implementation was challenging, the formal endorsement by ED raised the profile of the project both within UWA and within Uganda through the associated press coverage
- Researcher time allocated to the project was reasonably flexible, allowing us to respond adaptively to the UWA capacity challenge and the opportunity to engage with park-level staff - and put a lot of time and effort into the park-level action plans.
- Using Uganda Poverty and Conservation Learning Group as a mechanism for disseminating project progress and outputs within Uganda enabled us to engage with a range of Ugandan NGOs and identify opportunities to support them on issues that were important to them (and to learn between projects). For example we ran a workshop on how to apply to Darwin Initiative during the course of one visit as this was identified as something PCLG members were interested in.

Aspects of the project which didn't work so well included:

- The cost of involving UWA staff in workshops – we hadn't anticipated high, fixed-cost (non-negotiable) allowances for travel and accommodation. The transaction cost of managing these expenses was also high – acquiring and sorting foreign exchange, verifying attendance at meetings; recording and receipting expenses provided etc. With respect to working with UWA, a challenge was the difficulty of moving from words of support to actual change. Our assumption that the research findings and associated recommendations would lead directly to change without further support, funds and capacity was misplaced. We also underestimated the length of time needed for change. UWA develop annual operational plans with associated budgets and influencing the plan for one year needs to start at least a year earlier. Given that our efforts to influence UWA plans were largely scheduled for the last year of the project once the research findings were available this was too short a timeframe. A related issue is the pressure to overpromise on project impacts, particularly with regard to policy projects, where experience worldwide repeatedly shows that policy change takes a long time. However if we had suggested our project would only lay the foundations for policy change this would have probably meant it wouldn't have been funded, and yet laying this groundwork slowly means hopefully in the longer term trust is built, mindsets are changed and more impact is achieved in the end.

10. Monitoring and evaluation

We didn't have any major changes to the project design. Our M and E system was based on regular review of the logframe indicators – usually as part of project team “catch up” calls via skype and often associated with delivery of half year and annual reports to IWT Fund. As noted above, however, the indicators that we used in the logframe were more focussed on indicators of progress in delivering physical outputs (some of the project written reports for example) rather than on changing conditions on the ground. This reflects the research-driven nature of this project. The logframe indicators were not sufficient to monitor UWA engagement, capacity and commitment which – as discussed above – were critical to delivering a response to our research findings. In addition to the logframe we developed a theory of change for the project at the project inception workshop (see Figure 5 below). This rested heavily on the assumption that UWA would have the capacity and resources available to bring about the desired changes in policy and practice at the protected area level. While UWA engagement in all of the project events, and its verbal support for the project both in public and private meetings was very strong, as noted above engagement was not sufficient to generate capacity and commitment for change without associated additional resources.



There was no formal evaluation of the project, however we ensured that the project workshops involved external stakeholders working on complementary projects who could critically assess our findings and approach. We don't have formal feedback on the project from these stakeholders other than reports of their participation in, and interventions made during, the project workshops, but the feedback has been positive throughout.

11. Actions taken in response to annual report reviews

The reviews from both of our annual reports were circulated to the project team members. The only outstanding action is "Future reports should try to capture some of the key issues that are discussed between partners and the nature of these discussions.". This is quite a hard recommendation to implement in that our interactions have tended to be either informal skype-based catch up calls which have been often somewhat technical in nature and produced lists of action points, in-person or email correspondence, or our regular project workshops (which have provided the main opportunity for interacting with UWA). We could include some of the informal meeting notes in this report but not sure that items such as:

"Meeting with UWA: UWA suggested should change the project title - didn't like pro-poor, but very keen to understand why people are poaching. Less keen on understanding effectiveness of different types of interventions. Keen to hear some early findings at the planning workshop"

would mean much outside of the immediate project group. We were a close-knit team in which partners interacted on a very regular basis to exchange progress reports and trouble-shoot as soon as concerns arose, and this is not a recipe for easy capture of these types of discussions. A potential recommendation might be to use a system such as Basecamp to capture these informal discussions, but experience with attempting this on a linked project with some overlap in partners (Darwin project "No net loss for biodiversity and communities in Uganda") is that the platform is not well-used; the most effective interactions with Ugandan partners are in person.

Each of our project workshop includes substantive discussion sessions and these workshops largely consist of project partners and relevant external stakeholders. The discussion sessions were minuted in detail. These therefore provide clear documentation of issues raised and discussed, and are all available on the project web page.

12. Other comments on achievements not covered elsewhere

The project benefitted from the support of two Masters students, Geoffrey Mwedde and Lucy Archer, as they greatly added to the depth of the research undertaken. While not specific achievements in terms of the project, both students benefitted from being involved in the project thus enhancing their skills and knowledge for future conservation work. In particular, for Geoffrey, the project enabled him to directly relate his Masters research to his work with WCS. Geoffrey is now the WCS Uganda point person for the Offenders database and was the person who ran the training of the Malawi National Parks Authority. We also supported the team leader of the Murchison Falls research team, Ernest Oniba, who was responsible for the household survey data collection and worked with Lucy Archer on the scenario interviews assessment of conservation interventions. Ernest is now responsible for the day to day implementation of the wildlife scout component of an IWT Fund project led by UCF at Murchison Falls.

13. Sustainability and legacy

The project has a high profile within Uganda given our partnership with UWA and our involvement of other key stakeholders at each project workshop. The workshops and publication launch events have attracted press attention and the project has been featured in radio interviews and newspaper articles. Presentations about the project have been made in Uganda and elsewhere whenever suitable opportunities arise. An update on the project is provided at each meeting of the Uganda Poverty and Conservation Learning Group - a network of conservation and development organisations - whenever UK team members have been in Uganda. A presentation was also made about the project at an IWT symposium in South Africa in February 2015, at the International Congress on Conservation Biology in August 2015 (and forthcoming in July 2017), and at the CITES CoP in October 2016 in order to reach a wider audience. There has been substantial interest in the project and its aims and findings from the national and international conservation communities. Ideas and results from the project have fed into presentations made by group members at a number of recent international symposia and conferences (for example the British Ecological Society-Cambridge Conservation Initiative Science-Policy conference in April 2016), and into publications with other people working on IWT (e.g. [Biggs et al. 2016](#)).

A project website has been established at <http://www.iied.org/building-capacity-for-pro-poor-responses-wildlife-crime-uganda> and all of the project outputs have been posted on this site and are freely available. This web page will continue to be maintained by IIED beyond the life of the project and will link to a follow up project for which funding from IWT Fund has recently been confirmed. Project outputs are also promoted via the newsletter of the Poverty and Conservation Learning Group – both within Uganda and internationally. Dissemination of these outputs is done by twitter and other social media in order to maximise uptake.

A key aspect of the project's legacy has been the publication and formal endorsement by UWA of park-level action plans (one for Murchison Falls and one for Queen Elizabeth National Parks) for tackling wildlife crime through community engagement. This included the plans undergoing review by UWA's senior management team and then being launched by the UWA Executive Director. We have secured follow up funding from IWT Fund to pilot the implementation of the Murchison Falls Action Plan – work which will be led by UWA's community conservation unit at the park. If successful this could lead to the roll out of this approach to other protected areas in Uganda.

Beyond this specific project, three new projects have just been funded by the Darwin Initiative (Round 22), in Uganda involving various combinations of the Ugandan and UK project teams. These are 23-019 (Achieving no net loss for communities and biodiversity in Uganda; University of Oxford), 23-023 (Can health investments benefit conservation and sustainable development; Conservation Through Public Health) and 23-032 (Local economic development through "pro-poor" gorilla tourism in Uganda; IIED). Although these are not direct follow-ons from this project, they are important legacies, in that they

benefited from the strong relationships between UK and Uganda built up in this project, delivering improved conservation and development outcomes, and building capacity and networks. In addition, our close work with UCF throughout ensured that their IWT project benefitted from our learning and experiences, as well as the research findings.

Our exit strategy remains largely unchanged from our proposal – UWA staff trained and equipped with tools to implement and monitor improved approaches to IWT. As discussed throughout this report we have delivered on this strategy and have secured follow up funds to test implementation and further build capacity of the community conservation unit at UWA for long term impact.

14. IWT Challenge Fund Identity

We have acknowledged the IWT Challenge Fund and the UK Government in all the project outputs and in the national and international presentations that have been described above. The funding was recognised as a stand-alone project. When the project first started – as the first IWT Fund project – there was little awareness of the fund in Uganda but subsequently a number of other IWT Fund projects have been developed including new initiatives led by core partners in this project.

11 OPTIONAL: Outstanding achievements of your project during the (300-400 words maximum). This section may be used for publicity purposes

I agree for the IWT Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here)

The park-level action plans being signed off and endorsed by the UWA executive director within the timeframe of the project was a major achievement! Beyond the actual plans though, a major achievement has been the change in understanding of how poaching is happening around the two parks - that poverty is not the main driver. The interventions in the plans reflect this change in understanding and awareness that tackling IWT requires more sophisticated understanding of social dynamics, of the costs of living with wildlife, and of local perceptions of what is and what isn't "fair" conservation.

12 Finance and administration

- a. Project expenditure**
- b. Value for Money**

IIED has established methodologies and processes applied on all its projects – those it leads and participates in - to ensure they are delivered to the highest standard at best possible value cost. Project activities were successfully completed within the IWTCF agreed budget. Additional funds or in-kind contributions secured at the start of the project were increased from £ at the start of the project to £ by the project end.

The key cost driver of the project was the salaries of project personnel and related overheads, reflecting the personnel intensive nature of a project based on field research, and on-site technical support and capacity development. These were costed at proposal stage using salary day rates for all project staff and estimating carefully the number of days that would be required by each person for each activity. A standard set of measures and processes are applied to ensure that our staff rates are fair, competitive and benchmarked against both the market and similar contracts conducted previously. Overheads are levied in order to cover the actual organisational costs of facilitating the running of projects and allocated according to organisational policies. The change in IIED's overheads during the course of the project reflects a change that happened after one of its regular reviews that ensure the proportion of overheads attributed to projects are "reasonable" (i.e. necessary for supporting its activities), "allowable" (legally permissible and compliant with donor requirements), and "allocable" (providing benefit to projects in a way that can be demonstrated)."

In addition, considerable amount of project personnel and related overhead costs were covered by co-funding or in-kind contributions worth over £ over the course of the project.

Throughout the project, activities capitalised on established networks and resources of all partner organisations where possible. For example, WCS had already invested resources in developing the first iteration of the wildlife crime database and project resources were then able to be utilised to add improvements rather than being invested in development from scratch. Dissemination and advocacy activities benefited from IIED's links to the Uganda Poverty and Conservation Learning Group which it helped to initiate and has been working closely with since 2011. IIED also widely disseminated project outputs via its well-established website and publications database.

International travel was booked through a charity travel agency, whose remit is to find us transportation and accommodation at the lowest possible cost and where possible event times are fixed to reduce cost. Venues for events were chosen to balance convenience, necessary facilitates, and (where relevant) the ability to attract a target audience, with cost. In addition, we kept international travel costs and meeting costs to a minimum by timing events to enable cost-sharing across projects in the region.

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 application and was approved by a Change Request the newest approved version should be inserted here, otherwise insert application logframe.

Impact

The Impact is not intended to be achieved solely by the project. This is a higher-level situation that the project will contribute towards achieving. All Darwin projects are expected to contribute to poverty alleviation and sustainable use of biodiversity and its products.

(Max 30 words)

Wildlife crime is effectively managed resulting in more sustainable use of biodiversity and more secure local livelihoods, thus supporting poverty alleviation at both local and national levels.

Outcome

There can only be one Outcome for the project. The Outcome should identify what will change, and who will benefit. The Outcome should refer to how the project will contribute to reducing poverty and contribute to the sustainable use/conservation of biodiversity and its products. This should be a summary statement derived from the answer given to question 14.

(Max 30 words)

Conservation policy makers have the tools and capacity to understand interactions between wildlife crime, biodiversity and poverty and thus target interventions effectively for the long-term benefit of rural communities

Measuring outcomes - indicators

Provide detail of what you will measure to assess your progress towards achieving this outcome. You should also be able to state what the change you expect to achieve as a result of this project i.e. the difference between the existing state and the expected end state. You may require multiple indicators to measure the outcome – if you have more than 3 indicators please just insert a row(s).

Indicator 1	The national-level drivers and impacts of wildlife crime and its relationship to poverty and conservation interventions, for different locations and commodities, have been assessed and the resultant analysis is publicly disseminated nationally and internationally.
Indicator 2	By the end of the project, at least one improved or new intervention to tackle wildlife crime is implemented at each study location, based on local people's perceptions of the drivers and poverty impacts of wildlife crime, and their views on the potential for improved interventions to tackle both biodiversity conservation and wildlife crime,

Indicator 3	By the end of the project, the wildlife crime mitigation policies in at least one of the two National Parks have been re-designed to ensure fairness (for example refocusing law enforcement efforts away from local subsistence users towards external expropriators), and are being implemented.
Indicator 4	By the end of the project a functioning database is in routine use by UWA together with improved reporting processes for monitoring wildlife crime (all known incidences of wildlife crime being recorded in this database within 3 months of occurrence) and improved processes in place for adaptive management and better targeting of wildlife crime interventions in response to profiles of offenders recorded.
Indicator 5	Project outcomes are widely disseminated to appropriate users and taken up into policy; briefings, CITES side events and individual discussions at the NP, national and international levels leading to a change in understanding of, and more sophisticated discourse about, poverty-wildlife crime interactions at all levels.

Verifying outcomes

Identify the source material the Darwin Initiative (and you) can use to verify the indicators provided. These are generally recorded details such as publications, surveys, project notes, reports, tapes, videos etc.

Indicator 1	One research paper, one briefing paper for Ugandan government, one international briefing paper, at least one oral presentation of results within Uganda (at UWA head office), and at least one presentation at CITES and to interested governments (including the UK government).
Indicator 2	Two research workshops are held and reports issued: a Project Inception Workshop where the detailed research method is jointly planned by IIED, Imperial College, WCS and UWA; a Research Workshop where UWA with the project team jointly present the research results and recommendations. Feedback from UWA, PA managers and local communities during the research process. At least one research paper detailing the analysis and results.
Indicator 3	Individual PA management plans or wildlife crime prevention/mitigation policies redesigned in the light of research results, detailing new approaches to integrating poverty alleviation and conservation interventions. UWA reports on PA community projects demonstrate the integration of the results into UWA's new community monitoring initiatives for revenue sharing schemes, and demonstrate the engagement of local people in decisions on conservation and development interventions. Reports on patrol effort and effectiveness using the MIST system demonstrate change in law enforcement targeting and improved outcomes through reductions in overall incidences of poaching per area patrolled. MIST and wildlife crime data on illegal wildlife trade incidents, the socio-economic profiles of individuals arrested for wildlife crime and the number of individuals arrested who are re-offenders show reduced reoffending and reduced engagement in wildlife crime by local people.
Indicator 4	The database on wildlife crime is fully functional and in use by UWA, with a complete dataset on illegal incidents (law enforcement, arrests, prosecutions) and the socio-economic profiles of individuals arrested for the target PAs. By year three at least 20 UWA staff trained in data entry and basic query analysis and 5 UWA staff fully trained in database management, analysis and interpretation of the data, and a minimum of two UWA staff trained as 'trainers' to ensure new staff are able to continue working on the database after project completion.

	Two database training workshops, a series of one-to-one practical sessions, a 'train the trainer' learning session and production of the UWA wildlife crime database guidance manual. Annual reports issued by UWA on wildlife crime are based on data analysis from the national wildlife crime database and reflect application of the database to address wildlife crime.
Indicator 5	UWA side event at CITES CoP17 registered and results – including attendance – documented. National-level policy documents within Uganda revised to take project findings into account. Open access research papers, briefings and presentations to a range of international audiences.

Outcome risks and important assumptions

You will need to define the important assumptions, which are critical to the realisation of the *outcome and impact* of the project. It is important at this stage to ensure that these assumptions can be monitored since if these assumptions change, it may prevent you from achieving your expected outcome. If there are more than 3 assumptions please insert a row(s).

Assumption 1	Political and economic stability in Uganda enables the project to be completed.
Assumption 2	UWA continues its commitment to strengthen its support for local livelihoods and make a contribution towards poverty eradication while tackling wildlife crime.
Assumption 3	Park staff, local communities and individuals involved with wildlife crime are willing to participate in the project.
Assumption 4	UWA have the ability to apply the project recommendations in an improving management capacity, and host the side event at CITES CoP17 in 2016.
Assumption 5	The Ugandan government is receptive to policy change in light of the research findings
Assumption 6	Protected Area managers are willing to implement the research recommendations and remain committed to engaging with local communities on wildlife crime prevention measures

Outputs

Outputs are the specific, direct deliverables of the project. These will provide the conditions necessary to achieve the Outcome. The logic of the chain from Output to Outcome therefore needs to be clear. If you have more than 3 outputs insert a row(s). It is advised to have less than 6 outputs since this level of detail can be provided at the activity level.

Output 1	An evidence review of the drivers and impacts of wildlife crime in Uganda, with a focus on the interactions between poverty and wildlife crime.
Output 2	A written analysis of the interactions between development indicators, conservation interventions, wildlife crime incidences (for different commodities) and the status of natural resources, at the national level.

Output 3	A spatial analysis of the relationship between wildlife crime indicators, social and economic profiles and conservation interventions of different types, for the two protected areas.
Output 4	A written analysis of local perceptions of the drivers and consequences of wildlife crime, and local perspectives on potential conservation interventions, with a poverty focus, using novel and appropriate techniques to understand sensitive behaviours.
Output 5	Improved and/or new (additional) wildlife crime monitoring databases owned and routinely used by UWA.

Measuring outputs

Provide detail of what you will measure to assess your progress towards achieving these outputs. You should also be able to state what the change you expect to achieve as a result of this project i.e. the difference between the existing state and the expected end state. You may require multiple indicators to measure each output – if you have more than 3 indicators please just insert a row(s).

Output 1	
Indicator 1	By December 2014, all literature compiled for the evidence review.
Indicator 2	By March 2015, evidence review report posted on the project website.
Indicator 3	By March 2016, evidence review findings presented at the Research Workshop.
Indicator 4	By March 2017, evidence review findings included in the final project report.

Output 2	
Indicator 1	By March 2015, national-level data collected on law enforcement effort, arrests, natural resources and conservation and development interventions.
Indicator 2	By March 2016, analysis findings presented at the Research Workshop.
Indicator 3	By March 2017, analysis findings included in the final project report.

Output 3	
Indicator 1	By July 2014, Project Inception Workshop held where the detailed research method is jointly planned by IIED, UWA, WCS-Uganda and Imperial College.
Indicator 2	By September 2015, fieldwork and data collation completed.
Indicator 3	By March 2016, data analysis completed.

Indicator 4	By March 2016, UWA and the project team jointly present the research findings and recommendations at the Research Workshop.
Indicator 5	By end of project, research report posted on the project website, journal article submitted and briefings and presentations to a range of international audiences.
Indicator 6	UWA presents the research results at a UWA side event at CITES CoP17.

Output 4	
Indicator 1	By July 2014, Project Inception Workshop held where the detailed research method is jointly planned by IIED, UWA, WCS-Uganda and Imperial College.
Indicator 2	By September 2015, fieldwork completed.
Indicator 3	By December 2015, data analysis completed.
Indicator 4	By March 2016, UWA and the project team jointly present the research findings and recommendations at the Research Workshop.
Indicator 5	By end of project, research report posted on the project website, journal article submitted and briefings and presentations to a range of international audiences.
Indicator 6	UWA presents the research results at a UWA side event at CITES CoP17.

Output 5	
Indicator 1	By March 2016, digitisation of hard copy law enforcement data (law enforcement effort, arrests, prosecutions) into the UWA Wildlife Crime Database and at least 20 UWA staff trained in data entry and basic query analysis
Indicator 2	By March 2017, at least five UWA staff fully trained in database management and analysis and interpretation of the data from a series of one-to-one support sessions and from a database guidance manual produced in collaboration with the UWA staff who will be using the database.
Indicator 3	By March 2017, a minimum of two UWA staff trained as 'trainers' to rollout the training to other UWA staff including new staff after project completion.
Indicator 4	By March 2017, UWA using data from the Wildlife Crime Database to inform the design of wildlife crime prevention measures in collaboration with protected area managers, to monitor impacts of these measures and to report on wildlife crime incidents.

Verifying outputs

Identify the source material the Darwin Initiative (and you) can use to verify the indicators provided. These are generally recorded details such as publications, surveys, project notes, reports, tapes, videos etc.

Indicator 1	Project reports including the evidence review, workshop reports, research report, biannual progress reports and final project report.
Indicator 2	UWA Wildlife Crime Database populated with law enforcement data and production of a database guidance manual.
Indicator 3	Guidance manual for the analysis and interpretation of MIST law enforcement data
Indicator 4	Publications and presentations of the project including journal paper, briefing papers and documentation of the UWA side event at CITES CoP17.

Output risks and important assumptions

You will need to define the important assumptions, which are critical to the realisation of the achievement of your outputs. It is important at this stage to ensure that these assumptions can be monitored since if these assumptions change, it may prevent you from achieving your expected outcome. If there are more than 3 assumptions please insert a row(s).

Assumption 1	The project team is able to gather or access data that are accurate and suitable for analysis
Assumption 2	UWA maintains capacity to adopt routine use of new database and collection of appropriate data
Assumption 3	Local community perspectives reveal differential impacts and effectiveness of different types of intervention

Activities

Define the tasks to be undertaken by the research team to produce the outputs. Activities should be designed in a way that their completion should be sufficient and indicators should not be necessary. Risks and assumptions should also be taken into account during project design.

Output 1	
Activity 1.1	Parameters for the evidence review discussed and agreed by the project teams, and information sources identified, at the Project Inception workshop.
Activity 1.2	Desk research to collate published and grey literature on the drivers and impacts of wildlife crime in Uganda.
Activity 1.3	Review of the evidence.

Activity 1.4	Evidence review report compiled with input and review by the project team.
Activity 1.5	Presentation on the evidence review findings at the Research Workshop.
Activity 1.6	Incorporation of the evidence review findings into project reports and outputs.

Output 2	
Activity 2.1	Parameters for the national level analysis discussed and agreed by the project teams, and data sources identified, at the Project Inception workshop.
Activity 2.2	National level data collection on law enforcement effort, arrests, natural resources and conservation and development interventions.
Activity 2.3	Data analysis to identify broad correlations based on different commodities of wildlife crime and potential feedbacks between poverty and wildlife crime.
Activity 2.4	Write-up on interactions between development indicators, conservation interventions, wildlife crime incidences (for different commodities) and the status of natural resources compiled with input and review by the project team.
Activity 2.5	Presentation of the national level analysis at the Research Workshop.
Activity 2.6	Incorporation of the national level analysis into project reports and outputs.

Output 3	
Activity 3.1	Detailed research methods discussed and agreed by the project teams at the Project Inception workshop.
Activity 3.2	Fieldwork at two protected areas.
Activity 3.3	Data analysis of the MIST datasets for the two case study PAs
Activity 3.4	Research report compiled with input and review by the project team.
Activity 3.5	Presentation of the research findings and recommendations at the Research Workshop.
Activity 3.6	UWA presents research findings and recommendations at UWA side event at CITES CoP17.
Activity 3.7	Incorporation of the research findings and recommendations into project reports and outputs.

Output 4	
Activity 4.1	Detailed research methods discussed and agreed by the project teams at the Project Inception workshop.

Activity 4.2	Fieldwork at two protected areas.
Activity 4.3	Data analysis.
Activity 4.4	Research report compiled with input and review by the project team.
Activity 4.5	Presentation of the research findings and recommendations at the Research Workshop.
Activity 4.6	UWA presents research findings and recommendations at UWA side event at CITES CoP17.
Activity 4.7	Incorporation of the research findings and recommendations into project reports and outputs.

Output 5

Output 5	
Activity 5.1	Digitisation of hard copy law enforcement data into the Wildlife Crime Database.
Activity 5.2	Enhancement of the Wildlife Crime Database.
Activity 5.3	One-to-one support sessions for UWA staff.
Activity 5.4	Production of a Wildlife Crime Database manual and MIST/SMART analysis manual.
Activity 5.5	Train the Trainer sessions for UWA staff.
Activity 5.6	Final Project Workshop including a demonstration of the Wildlife Crime Database by UWA.

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><i>Impact</i></p> <p>Wildlife crime is effectively managed resulting in more sustainable use of biodiversity and more secure local livelihoods, thus supporting poverty alleviation at both local and national levels.</p>		<p>Wildlife Crime Action Plans which include strategies for tackling wildlife crime while improving local livelihoods have been developed for two of Uganda's biggest protected areas, and endorsed by the Executive Director of Uganda Wildlife Authority.</p> <p>Technical and capacity support has been provided to UWA to develop an effective "offenders database" to record and monitor wildlife crime.</p>
<p><i>Outcome</i></p> <p>Conservation policy makers have the tools and capacity to understand interactions between wildlife crime, biodiversity and poverty and thus target interventions effectively for the long-term benefit of rural communities</p>	<ol style="list-style-type: none"> 1. The national-level drivers and impacts of wildlife crime and its relationship to poverty and conservation interventions, for different locations and commodities, have been assessed and the resultant analysis is publicly disseminated nationally and internationally 2. By the end of the project, at least one improved or new intervention to tackle wildlife crime is implemented at each study location, based on local people's perceptions of the drivers and poverty impacts of wildlife crime, and their views on the potential for improved interventions to tackle both biodiversity conservation and wildlife crime 3. By the end of the project, the wildlife crime mitigation policies in at least one of the two National Parks have been re- 	<ol style="list-style-type: none"> 1. National-level evidence review (http://pubs.iied.org/17576IIED/) exploring drivers and impacts of wildlife crime published in June 2015; launched by UWA to a Ugandan audience in July 2015 (https://www.iied.org/what-drives-wildlife-crime-uganda) and international presentation made in August 2015 at the International Congress for Conservation Biology (page 589 in https://conbio.org/images/content_conferences/2015_ICCB_Abstract_Book_021816_FINAL_NODOI_web.pdf). The report has been downloaded 1800 times from the IIED website and a further 120 times from Researchgate. 2. This outcome indicator proved too ambitious for us to achieve within the project timeframe despite partnering with UWA HQ and continuously engaging with them through the project, and involving UWA park staff in the project workshops. The Park Action Plans (indicator 3) identify the types of new or improved interventions that could be implemented but actual implementation will require additional support to UWA. 3. UWA have endorsed and published new Wildlife Crime Action Plans for both case study parks, based directly on the research findings (http://pubs.iied.org/G04162/ and http://pubs.iied.org/G04161/). The plans were formally launched by the UWA Exec Director in April 2017.. 4. Wildlife crime database was made available online to UWA staff in May 2014 and is being used by UWA staff in each conservation area. The database is not for public access of use but evidence of its

	<p>designed to ensure fairness (for example refocusing law enforcement efforts away from local subsistence users towards external expropriators), and are being implemented.</p> <p>4. By the end of the project a functioning database is in routine use by UWA together with improved reporting processes for monitoring wildlife crime (all known incidences of wildlife crime being recorded in this database within 3 months of occurrence) and improved processes in place for adaptive management and better targeting of wildlife crime interventions in response to profiles of offenders recorded.</p> <p>5. Project outcomes are widely disseminated to appropriate users and taken up into policy; briefings, CITES side events and individual discussions at the NP, national and international levels leading to a change in understanding of, and more sophisticated discourse about, poverty-wildlife crime interactions at all levels.</p>	<p>existence is provided by the login page here: http://wcoffendersdatabase.org/login/.</p> <p>5. Written outputs of the project include the evidence review; a research report (http://pubs.iied.org/17604IIED/); an international briefing paper (http://pubs.iied.org/17354IIED/); and a national briefing paper (http://pubs.iied.org/G04133/) as well as the park action plans, workshop reports and presentations. All the outputs have been distributed in Uganda in hard copy and are freely available via the project website https://www.iied.org/building-capacity-for-pro-poor-responses-wildlife-crime-uganda). A side event was held at CITES CoP in 2016, hosted by UWA, at which the research findings were presented and draft action plans introduced.</p>
<p>Output 1. An evidence review of the drivers and impacts of wildlife crime in Uganda, with a focus on the interactions between poverty and wildlife crime.</p>	<p>1. By December 2014, all literature compiled for the evidence review.</p> <p>2. By March 2015, evidence review report posted on the project website.</p>	<p>1. Completed</p> <p>2. Completed – available at http://pubs.iied.org/17576IIED.</p> <p>3. Workshop held 24-25 May 2016 – report available at: http://pubs.iied.org/17590IIED/</p> <p>4. Final research report published March 2017. Available at:</p>

	<ol style="list-style-type: none"> 3. By March 2016, evidence review findings presented at the Research Workshop. 4. By March 2017, evidence review findings included in the final project report. 	http://pubs.iied.org/17604IIED/ .
Activity 1.1 Parameters for the evidence review discussed and agreed by the project teams, and information sources identified, at the Project Inception workshop.		Completed
Activity 1.2 Desk research to collate published and grey literature on the drivers and impacts of wildlife crime in Uganda.		Completed
Activity 1.3 Review of the evidence.		Completed
Activity 1.4 Evidence review report compiled with input and review by the project team.		Completed
Activity 1.5 Presentation on the evidence review findings at the Research Workshop.		Completed
Activity 1.6 Incorporation of the evidence review findings into project reports and outputs.		Completed
Output 2. A written analysis of the interactions between development indicators, conservation interventions, wildlife crime incidences (for different commodities) and the status of natural resources, at the national level.	<ol style="list-style-type: none"> 1. By March 2015, national-level data collected on law enforcement effort, arrests, natural resources and conservation and development interventions. 2. By March 2016, analysis findings presented at the Research Workshop 3. By March 2017, analysis findings included in the final project report. 	<ol style="list-style-type: none"> 1. Completed. Available on request as internal project report 2. As per output 1 3. As per output 1
Activity 2.1 Parameters for the national level analysis discussed and agreed by the project teams, and data sources identified, at the Project		Completed

Inception workshop.		
Activity 2.2 National level data collection on law enforcement effort, arrests, natural resources and conservation and development interventions.		Completed
Activity 2.3 Data analysis to identify broad correlations based on different commodities of wildlife crime and potential feedbacks between poverty and wildlife crime.		Completed
Activity 2.4 Write-up on interactions between development indicators, conservation interventions, wildlife crime incidences (for different commodities) and the status of natural resources compiled with input and review by the project team.		Completed – available on request as internal project report
Activity 2.5 Presentation of the national level analysis at the Research Workshop.		Completed
Activity 2.6 Incorporation of the national level analysis into project reports and outputs.		Completed.
Output 3. A spatial analysis of the relationship between wildlife crime indicators, social and economic profiles and conservation interventions of different types, for the two protected areas.	<ol style="list-style-type: none"> 1. By July 2014, Project Inception Workshop held where the detailed research method is jointly planned by IIED, UWA, WCS-Uganda and Imperial College. 2. By September 2015, fieldwork and data collation completed. 3. By March 2016, data analysis completed. 4. By March 2016, UWA and the project team jointly present the research findings and recommendations at the Research Workshop. 5. By end of project, research report posted on the project website, journal article submitted and briefings and presentations to a range of 	<ol style="list-style-type: none"> 1. Completed – report available at http://pubs.iied.org/G03810.html) 2. Completed 3. Completed 4. Completed – workshop report available at 5. Largely completed: all outputs and presentations available on project web page. Journal article in prep, not yet submitted. 6. Completed – side event held at CITES CoP in Johannesburg, October 2016. Presentations available on project web page.

	international audiences. 6. UWA presents the research results at a UWA side event at CITES CoP17.	
Activity 3.1 Detailed research methods discussed and agreed by the project teams at the Project Inception workshop.		Completed
Activity 3.2 Fieldwork at two protected areas.		Completed
Activity 3.3 Data analysis of the MIST datasets for the two case study PAs		Completed - this has been done by the team at the University of York in collaboration with WCS, and the paper for QENP is published in Conservation Biology Dataset incorporated into rest of project data, analysed and summary findings written up.
Activity 3.4 Research report compiled with input and review by the project team.		Completed, including two MSc theses completed in September 2015, summary briefing published March 2016, full report published March 2017.
Activity 3.5 Presentation of the research findings and recommendations at the Research Workshop.		Completed – workshop report available on project web page
Activity 3.6 UWA presents research findings and recommendations at UWA side event at CITES CoP17.		Completed – presentations available on project web page
Activity 3.7 Incorporation of the research findings and recommendations into project reports and outputs.		Completed – final research report and park action plans all available on project web page and formally launched at end of project workshop in April 2017.
Output 4. A written analysis of local perceptions of the drivers and consequences of wildlife crime, and local perspectives on potential conservation interventions, with a poverty focus, using novel and appropriate techniques to understand sensitive behaviours.	<ol style="list-style-type: none"> 1. By July 2014, Project Inception Workshop held where the detailed research method is jointly planned by IIED, UWA, WCS-Uganda and Imperial College. 2. By September 2015, fieldwork and data collation completed. 3. By March 2016, data analysis completed. 4. By March 2016, UWA and the project team jointly present the 	<ol style="list-style-type: none"> 1. Completed – report available at http://pubs.iied.org/G03810.html) 2. Completed 3. Completed 4. Completed – workshop report available at 5. Largely completed: all outputs and presentations available on project web page. Journal article in prep, not yet submitted. 6. Completed – side event held at CITES CoP in Johannesburg, October 2016. Presentations available on project web page.

	<p>research findings and recommendations at the Research Workshop.</p> <p>5. By end of project, research report posted on the project website, journal article submitted and briefings and presentations to a range of international audiences.</p> <p>6. UWA presents the research results at a UWA side event at CITES CoP17.</p>	
Activity 4.1 Detailed research methods discussed and agreed by the project teams at the Project Inception workshop.		Completed
Activity 4.2 Fieldwork at two protected areas.		Completed
Activity 4.3 Data analysis.		Completed
Activity 4.4 Research report compiled with input and review by the project team.		Completed
Activity 4.5 Presentation of the research findings and recommendations at the Research Workshop.		Completed
Activity 4.6 UWA presents research findings and recommendations at UWA side event at CITES CoP17.		Completed
Activity 4.7 Incorporation of the research findings and recommendations into project reports and outputs.		Completed
Output 5. Improved and/or new (additional) wildlife crime monitoring databases owned and routinely used by UWA.	<p>1. By March 2016, digitisation of hard copy law enforcement data (law enforcement effort, arrests, prosecutions) into the UWA Wildlife Crime Database and at least 20 UWA staff trained in data entry and basic query analysis</p>	<p>1. Completed - previous data from other databases migrated, training delivered in April 2016.</p> <p>2. Completed - a manual has been finalised for the database, the fingerprint module and the offline data entry module and these are available on the database site for download. 17 UWA staff were trained on April 22nd 2015 in the use of the database. A further 8 were trained at in April 27-28th 2016 and 27 trained in June 2016 on the finger print module.</p>

	<ol style="list-style-type: none"> 2. By March 2017, at least five UWA staff fully trained in database management and analysis and interpretation of the data from a series of one-to-one support sessions and from a database guidance manual produced in collaboration with the UWA staff who will be using the database. 3. By March 2017, a minimum of two UWA staff trained as 'trainers' to rollout the training to other UWA staff including new staff after project completion. 4. By March 2017, UWA using data from the Wildlife Crime Database to inform the design of wildlife crime prevention measures in collaboration with protected area managers, to monitor impacts of these measures and to report on wildlife crime incidents. 	<ol style="list-style-type: none"> 3. Completed. A further follow up training was made at the end of the project of 25 UWA staff in April 2017 on the offline data entry module. At this final training two UWA staff were nominated by UWA headquarters as the trainers for the institution because they had attended all of the training sessions 4. Completed - UWA is now using the data from the Database to enhance prosecutions of suspects in the courts through their ability to document prior offences as well as track the history of suspects. Successful prosecutions are around 95% as a result.
Activity 5.1 Digitisation of hard copy law enforcement data into the Wildlife Crime Database.	Completed as far as is possible	
Activity 5.2 Enhancement of the Wildlife Crime Database.	Completed	
Activity 5.3 One-to-one support sessions for UWA staff.	Completed	
Activity 5.4 Production of a Wildlife Crime Database manual and MIST/SMART analysis manual.	Completed.	
Activity 5.5 Train the Trainer sessions for UWA staff.	Completed.	
Activity 5.6 Final Project Workshop including a demonstration of the Wildlife Crime Database by UWA.	Completed	

Annex 3 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

Please include here a list of all annexes you are including alongside your final report, which can be submitted as separate document/s.

This may include the Means of Verification material you listed in your project logframe. For example, the abstract of a conference, the summary of a thesis etc. If we feel that reviewing the full document would be useful, we will contact you again to ask for it to be submitted.

It is important, however, that you include enough evidence of project achievement to allow reassurance that the project is continuing to work towards its objectives. Evidence can be provided in many formats (photos, copies of presentations/press releases/press cuttings, publications, minutes of meetings, reports, questionnaires, reports etc.) and you should ensure you include some of these materials to support the final report text.

All the evidence generated by the project has been referenced multiple times throughout this report.

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to IWT-Fund@itsi.co.uk putting the project number in the subject line.	X
Is your report more than 10MB? If so, please discuss with IWT-Fund@itsi.co.uk about the best way to deliver the report, putting the project number in the subject line.	
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	X
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	
Have you involved your partners in preparation of the report and named the main contributors	X
Have you completed the Project Expenditure table fully?	X
Do not include claim forms or other communications with this report.	