Department for Environment Food & Rural Affairs

# Illegal Wildlife Trade (IWT) Challenge Fund Annual Report

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**Important note:** *To be completed with reference to the Reporting Guidance Notes for Project Leaders: it is expected that this report will be about 10 pages in length, excluding annexes*

**Submission Deadline: 30th April 2017**

**IWT Challenge Fund Project Information**

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| Project reference | **IWT029** |
| Project title | An integrated, multi-scale approach to combating wildlife trafficking in Uganda |
| Country/ies | Uganda |
| Contract holder Institution | Wildlife Conservation Society |
| Partner institution(s) | Uganda Wildlife Authority (UWA), Natural Resources Conservation Network (NRCN), Maisha Consulting Ltd, Department of Biology, University of York (UoY) |
| IWT grant value | £ 449,171 |
| Start/end dates of project | 1st April 2016 – 31st March 2018 |
| Reporting period (e.g. April 2016-Mar 2017) and number (e.g. Annual Report 1,2,3) | April 2016 to March 2017; Annual Report 1 |
| Project leader name | Simon Nampindo |
| Project website | None |
| Report author(s) and date | Geoffrey Mwedde, Simon Nampindo, Andrew Plumptre; 29th April 2017 |

## 1. Project rationale

Over the past two decades, UWA's effective park PA management has led to increases in most large mammal populations within parks and wildlife reserves. However, since 2011, there has been an upsurge in poaching, particularly of elephants for ivory (increasing 3-4 fold in the past 4 years), pangolins for scales and hippo for teeth, concerning given the limited populations in the region. Uganda is a major trafficking route for illegal wildlife trade from neighbouring countries: Democratic Republic of Congo, South Sudan, Tanzania and Kenya through to Asia, particularly Malaysia, Thailand and China. One major impediment to solving this problem is lack of capacity within UWA to gather intelligence and target middlemen involved in the trade. While UWA has strong law enforcement within its parks, it has insufficient trained staff, intelligence networks, and links with police and military to tackle wildlife trafficking through to its border posts. Without good intelligence, it is difficult to arrest and effectively prosecute criminals involved in wildlife trafficking.

In addition, bribery and corruption in Uganda often lead to ineffective enforcement of wildlife crimes. Well-connected suspects can talk or buy their way out of being prosecuted. As a result, penalties become insignificant and offenders are released to continue trafficking wildlife. Unfortunately, at the start of this project, UWA did not have the manpower to track these cases.

Recognizing the need to involve and share benefits from conservation with the communities living around the protected areas, UWA shares 20% of all gate receipts with local communities around its protected areas. During the past decade, this has resulted in the sharing of at least with communities, but this revenue doesn't target people who bear the main costs of conservation, particularly those who experience having crops or livestock destroyed by wildlife.

This project proposed to address three major challenges, namely 1) the lack of effective intelligence capacity at UWA to stop wildlife trafficking, 2) ineffective prosecution, and 3) lack of accountability and increases in poaching of wildlife, which threatens Uganda's tourism industry, deprives communities of rural livelihoods and robs the country of its natural heritage. In order to address the critical issues outlined above, we set out to a) tackle trafficking routes to the border posts; b) ensure that bribery and corruption do not allow convicted offenders to escape the rule of law; and c) improve anti-poaching patrolling in key protected areas.

## 2. Project partnerships

**Uganda Wildlife Authority:**

Having supported conservation in Uganda for over 60 years now, WCS has been working with Uganda Wildlife Authority since its establishment in 1996. UWA is responsible for the management of national parks and wildlife reserves in Uganda as well as wildlife outside protected areas. WCS has supported UWA to initiate and implement several conservation projects as well as ecological research monitoring activities. These include conducting aerial and ground surveys of large mammals, carrying out biodiversity surveys in the parks, training and rolling out of MIST across the protected areas, and more recently training and rolling out SMART (Spatial Monitoring and Reporting Tool) in all UWA PAs, among others. Some of the work relevant to this project that WCS has supported UWA with include:

1. Leading a programme to initiate training of the recently-formed Wildlife Crime Unit (WCU) under the Uganda Wildlife Authority (UWA). The goal of this project was to build capacity and increase knowledge of intelligence analysis methods among WCU members in order to help reduce ivory trafficking through Uganda. Two key objectives were achieved: (1) Provide training to selected UWA staff at Headquarters and in the field, and (2) Improve capacity and methods for more efficient monitoring and management of information.

2. Working with Maisha Consulting Ltd to train the WCU and field staff in (1) planning out an intelligence gathering operation, (2) collecting intelligence information, and (3) Web intelligence. UWA have been effectively managing wildlife numbers in these parks for the past 15 years, achieving increases in most of the large mammal populations. With so many protected areas under its jurisdiction, UWA also has a substantial role in managing Uganda's tourism industry and attracting visitors.

Through the above projects and programmes, WCS has been able to contribute significant amounts of data to inform management plans and strategies for wildlife management in the country. Under this project, UWA staff have been at the core of receiving trainings and application of all tools provided. The headquarter staff have been responsible for ensuring that the right staff receive training and equipment, and ensuring that data is entered and reports are produced and used to improve prosecution of wildlife crime offenders and combat poaching, IWT, and trafficking. The park rangers are responsible for conducting patrols using SMART technology and analysing patrol data to plan activities for law enforcement.

**Maisha Consulting Ltd:**

Maisha Consulting Ltd (Maisha) has been working with WCS in Uganda and other countries in Africa to provide training in intelligence gathering and analysis of intelligence data. Maisha has a strength of technical capabilities that conservation NGOs such as WCS do not have, as well as contacts with other law enforcement agencies. Maisha has been training the Uganda police force in the use of sniffer dogs

to tackle trade in drugs and weapons and is working with WCS and UWA to establish a Canine Unit at Entebbe Airport to detect ivory and other wildlife products.

Maisha, with support from WCS has already provided training to UWA's Enforcement Unit (SLEU) (formerly known as Wildlife Crime Unit) staff in data analysis and the targeting of middlemen in the trafficking routes using network analysis. Maisha is now providing more detailed follow-up training to UWA and the SLEU under this project with the aim of improving UWA's and WCU's recruitment, handling and management of a network of informers; strengthening their ability to organize intelligence networks; and maximizing their process of transferring information from the field to the SLEU at UWA's headquarters.

**Natural Resource Conservation Network:**

A national NGO, NRCN is a network of professionals whose aim is to ensure timely investigation, prosecution and reporting of wildlife crime in Uganda. NRCN is part of the larger Eagle Network (http://www.eagle-enforcement.org/) of NGO's working across Africa to ensure that wildlife crimes are prosecuted effectively. NRCN prosecution has already changed the trend in wildlife crime law enforcement in Uganda by following all cases to their logical conclusion, noting and fighting incidences of bribery attempts, and lodging appeals when cases are decided outside the law.

NRCN is supporting UWA to prosecute offenders and ensure that they cannot bribe their way out of paying fines or serving a prison term. NRCN's activities are led by Vincent Opyene, former UWA legal counsel and a trained wildlife crime investigator and prosecutor who also coordinated a WCS-led project titled Bushmeat free East Africa Network (BEAN). He works with project partners to build capacity among NRCN members (wildlife officers, prosecutors, journalists) and effectively report wildlife crime cases.

NRCN is involved in this project to support the newly-established prosecution unit, which is currently prosecuting wildlife crime in a record turnaround of less than two months for cases where suspects plead not guilty.

**Department of Biology, University of York:**

Dr Colin Beale, Department of Biology at the University of York (UoY), UK, has been collaborating with WCS and UWA to analyse law enforcement monitoring data collected over the past 15 years in Uganda's PAs using MIST and now SMART (Spatial Monitoring and Reporting Tool). Colin has developed a method to analyse these data rigorously and predict where illegal activities are most likely to be encountered. Tests of these predictions are proving to significantly increase ranger detections of snares in Queen Elizabeth National Park (QENP) and Murchison Falls National Park (MFNP). In order to more effectively and efficiently deploy rangers and focus overall conservation efforts within Uganda's PAs, WCS is working closely with UoY and UWA to develop a user-friendly SMART plug-in that enables SMART software users to easily run these analyses and use results to inform patrol planning and improve law enforcement at the park level.

## 3. Project progress

### 3.1 Progress in carrying out project Activities

**Output 1: An effective and functioning Wildlife Crime Unit (WCU) collects and analyses intelligence information to increase arrests of middlemen.**

**Activity 1.1** Train UWA staff quarterly for two years in intelligence gathering and data analysis, with continual mentoring between training courses.

With matching funds from Elephant Crisis Fund (ECF) and United States Fisheries and Wildlife Services (USFWS), WCS together with Maisha Consulting Ltd recruited and embedded an intelligence expert and mentor in UWA for one year to provide continuous training and technical backstopping and to establish systems and better intelligence protocols for UWA. So far, the mentor has been able to help UWA establish a database containing all information associated with intelligence at UWA headquarters. All data has been uploaded into I2, a software used for intelligence data management and analysis.

Throughout this process, three core staff in the intelligence unit have received hands-on training in various aspects of intelligence data collection and storage.

With funds from this grant, we procured a Cellebrite UFED mobile forensic unit and associated accessories to facilitate collection of intelligence data from mobile phones confiscated from offenders. The four core intelligence staff at UWA headquarters were trained to use Cellebrite and are continually being mentored by the Maisha expert embedded in UWA. They are now able to extract useful information from phones. Other equipment acquired under the Maisha subgrant and donated to the UWA intelligence unit include five customised covert cameras and 5 GPS trackers. The Human Intelligence (HUMINT) training provided practical use of these equipment.

**Activity 1.2** Train UWA Law Enforcement Wardens and Intelligence Officers at PA level in the recruitment, management and handling of informers as well as in packaging and transmitting intelligence information for WCU at UWA HQ.

Following preliminary training in web intelligence, network analysis with Sentinel software and basics of developing intelligence operations conducted in January 2015, WCS with technical support from Maisha Consulting Ltd conducted a two-week Human Intelligence training for UWA staff. The training involved seventeen (17) (two female and 15 male) UWA rangers and intelligence officers and was instructed by a team of intelligence experts from Maisha Consulting Ltd which included one former Federal Bureau of Intelligence (FBI) special agent. The training was structured around three general topics, namely: Human Intelligence (HUMINT), Investigative Techniques, and Operational Security. Trainees were instructed on the safety and successful use of human sources as a vital component of information gathering of illegal activities in and around the parks, the importance of employing proper investigative techniques that adhere to Ugandan law, and the importance of good investigative case management practices in pursuing prosecutions of those committing wildlife crimes. An introduction to the best methods for personal security, safety and source protection, and execution of thorough investigations was given. The course placed emphasis on how individual rangers/officers can adapt all material to their own work situations and utilize their personal strengths (i.e. personality traits, communication skills, intuition, sight) and cognitive abilities.

Other trainings in the HUMINT for more intelligence officers are planned for the first quarter of the second year. WCS will collaborate with UWA and other partners involved building UWA's capacity to curb wildlife crime (particularly Uganda Conservation Foundation) to ensure that there is no duplication of efforts and that all efforts contribute to a common goal.

From the trainers' perspective and based on the end of course evaluation, the trainees were well equipped to begin the informants/agents recruitment process. However, it was noted that due to differences in personality, the rate at which individuals become proficient at the art of recruiting agents will vary from one person to another. Thus, individual personality and drive is critical in maintaining and improving the skills gained.

In addition to HUMINT training, a group of ten (10) (two women and 8 men) UWA intelligence officers and rangers was trained in web intelligence (WEBINT). The 5-day training conducted in two sessions, included both theoretical and practical presentations about WEBINT as well as practical exercises at the end of each presentation, giving the trainees an opportunity to practice and test their ability to apply the skills and knowledge acquired. The last day of each group's training was dedicated to a final exercise in which the trainees were required to practice all the material that was covered during the training and apply the concepts they had learned.

Topics covered included WEBINT introduction and structure of the internet, managing investigations, search engines, Twitter, Facebook and WEBINT methodology. WEBINT methodology exposed the trainees to advanced methods for finding further information on the internet and emphasized how phone numbers and email addresses may provide crucial leads for investigations.

**Activity 1.3** Establish intelligence networks at park level to feed information to the SLEU.

UWA's intelligence officers (IOs) based at different national parks attended the HUMINT and WEBINT training in which they were instructed on how to recruit, manage and reward informants. The mentor from Maisha, together with intelligence unit staff from UWA headquarters, conducted field trips to the national parks following the HUMINT training to assess intelligence systems at the protected areas for

purposes of improving and ensuring smooth and secure management and sharing of information between the parks and headquarters. Development of a protocol for sharing information between protected areas and the SLEU is now completed, only waiting to be approved by the top management for implementation.

Though still early to see real change, the feedback from the field indicates a great improvement in the way intelligence is managed at the national parks.

**Output 2: Through the work of NRCN Uganda, prosecuted offenders are held accountable for wildlife crimes committed**

**Activity 2.1** Train NRCN in publicity campaigns, supported with website development and materials development to advertise their activities.

Cases involving highly connected people can be challenging for state agencies to handle due to the threats and pressure from highly placed on government officials. Publicising such high profile cases helps to put pressure on law enforcement agencies to prioritize them, when cases might have otherwise been dropped quietly. In this project, NRCN is running a publicity campaign involving journalists from the press and television stations to create awareness about the huge threat from wildlife crime and also ensure that the offenders receive high sentences and serve them to the completion.

To improve effectiveness of the media campaign, in March 2017, NRCN recruited a media specialist (Joshua Poro) who previously worked for one of the leading newspaper companies (the Daily Monitor) and urban TV in Uganda and engaged another media expert (Mutaizibwa Emmanuel) currently working with NTV Uganda and reporting for Aljazeera to mentor the media staff for a period of four months.

In four months alone, beginning October 2016, NRCN has succeeded in getting approximately 27, 22, 8 and 15 wildlife crime stories published via the internet, print media, radio and television respectively. As an example, one of the big stories was run by the National Geographic[1].

In the same spirit of improving visibility of efforts to combat wildlife crime in Uganda, NRCN through this grant redesigned its website and acquired a new domain name. As an added advantage, NRCN now have e-mail accounts with the nrcn.org domain name and also opened a Paypal account registered with the email for donations.

**Activity 2.2** Train NRCN in proposal development, budget management and reporting.

Prior to disbursement of funds, WCS trained three NRCN staff in proposal development, financial management, budget management and reporting. The training covered a) identification of grants and learning more about the donor interests, requirements, budget limitations and application cycles; b) main components of the proposal; c) application of the logical framework, conceptual models and theory of change principles; d) drafting of the proposal and the approach, including the do's and don'ts; e) developing activities, indicators and assumptions; f) budgeting; and g) reporting and end of project management. The training tackled basics of monitoring and evaluation using the logframe approach with a focus on developing measurable indicators and means of verification. Real calls for proposals were used to give trainees a hands-on experience of developing proposals to suit different donors and interests. The three officers who benefited from the training are Simon Semuko, Lennard Masa and Nick Moracha. NRCN reports that the three staff are perfecting their skills and jointly developing fundable proposals to help sustain NRCN work.

**Activity 2.3** Provide NRCN with resources to prosecute and follow up convicted offenders.

While a significant number of arrests associated with wildlife crime are made by UWA and the Uganda police every year, there are many reports of cases that end up not being prosecuted because of bribery and other forms of corruption. Some of the arrested offenders do not even make it to the courts and those that receive sentences, end up not serving their full jail sentence terms.

[1] http://news.nationalgeographic.com/2016/12/wildlife-watch-hippo-teeth-trafficking-uganda/

In order to ensure that wildlife traffickers are effectively prosecuted, and to fight the corruption/bribery that enable suspects and convicts to escape rule of law, NRCN was given resources to engage one specialized wildlife crime prosecutor to follow up cases registered with the police and to document all the bribery attempts from police up to the court. The assigned prosecutor is responsible for the quality of the paperwork prepared for court and ensuring that wildlife traffickers are not released on police bond, as is typical in Uganda. NRCN works in collaboration with court orderlies and clerks to monitor the bribery attempts against the magistrates through reporting and documenting instances of specific persons who are close to the suspects (relatives or legal representatives) have been trying to or have visited the magistrate chambers for a private talk. The NRCN legal team also carry out in-person visits to ensure that the convicts are behind bars and are serving their sentence as passed.

In October 2016 to March 2017, a total of 44 suspects were arrested in 25 different locations and under various operations in Uganda. Sixteen middlemen were successfully prosecuted, convicted and sentenced to imprisonment and given the option of a fine. Of all these, some paid their fines and others were serving their jail sentence as confirmed though jail visits. Items confiscated from these middlemen include 5 kgs pangolin scales, 3 Bushback skins, 3 Vervet monkey skins, 3 Serval cat skins, 2 Sitatunga horns, 1 bush back horn , 2 python skin  83 kilogrammes of ivory, 1 leopard skin , 434 pieces  of hippo teeth and 9 other pieces of ivory.

**Output 3: UWA, police, judiciary, URA, and Uganda military share information and collaborate in law enforcement to improve anti-trafficking efforts through a Wildlife Crime Coordination Task Force (WCCTF)**

**Activity 3.1** Conduct a meeting to establish the WCCTF, bringing together individuals from UWA, police, judiciary, customs, URA, military and immigrations.

The first meeting with heads of the law enforcement agencies to discuss the idea and what is needed to formalize the Wildlife Crime Coordination Task Force (WCCTF) was conducted in September 2016, and representatives were very supportive. WCS, together with our project partners, are now in the process of developing an MoU and identifying appropriate officers to participate on the Task Force. Following these meetings, WCS together with UWA and NRCN have conducted several meetings to discuss the best way to constitute the WCCTF; however, we have noted three critical issues that impact our ability to proceed.

First, we noted that there are already ad hoc arrangements for cooperation comprising of various – but not all – law enforcement agencies. These arrangements, however, are not formalized, done on a case by case, and involve may UWA, Interpol Police, Uganda Peoples Defence Forces (UPDF), and Elite Police. As such, they are not fully representative of all the law enforcement agencies, leaving out Uganda Revenue Authority (URA), Judiciary, and Customs and Immigration. We also learned that NRCN, out of necessity and interest from champions within some of these law enforcement agencies has cooperated with the ad hoc group when it has dealt with wildlife crime cases of interest. Second, realizing that the development and negotiation of an MoU among law enforcement agencies might take longer than expected, WCS believes it will be more efficient to support the activities of the ad hoc law enforcement cooperation arrangements initially, and then work toward formalizing these arrangements and bringing other key players (URA and Customs) on board.

Third, the various law enforcement agencies pointed out the challenge of identifying the right individuals to serve on the coordination task force without compromising the purpose of this initiative. They all recognize that dealing with wildlife crime is a sensitive issue. WCS has had discussions with the Judge who heads the Standards, Utilities and Wildlife court of Judicature, Justice James Jumire Ereemye Mawanda, and he is very supportive and willing to help identify the right individuals to serve on the law enforcement agencies coordination task force.

Therefore, in acknowledgement of the above, WCS seeks the approval to do the following:

1. Rather than continue to pursue the establishment of the WCCTF, WCS supports and helps to regularize the activities of the ad hoc law enforcement group initiative;

2. Support the operations of the ad hoc group;
3. Improve on the composition of UWA-led ad hoc arrangement by including URA, Customs and Immigrations, and the judiciary with the aim of formalizing this arrangement;
4. Work toward institutionalizing this coordination framework.

**Activity 3.2** Facilitate quarterly meetings and joint operations of WCCTF for its first two years.

Apart from the first meeting of senior staff of the selected law enforcement agencies, the project is yet to support the activities of the task force. If our suggestion in activity 3.1 is accepted, we will begin to support the joint operations of the ad hoc group.

**Activity 3.3** Provide materials to law enforcement agencies outside UWA structures on value of wildlife to Uganda and importance of halting wildlife crime.

WCS has shared reports on the value of wildlife to Uganda at various workshops, including materials produced from a sister project that was implemented by IIED in partnership with WCS (Travers et al. 2017; Taking action against wildlife crime in Uganda: http://pubs.iied.org/17604IIED/). The other reports are the National Red lists for Uganda (http://www.nationalredlist.org/nationally-threatened-species-for-uganda-2016/); Conserving Uganda's Biodiversity: Identifying critical sites for threatened species and habitats (Plumptre et al. 2017); a study that was funded by USAID, TOTAL E&P Uganda, Tullow Uganda Operations and Production, and UWA; and a biodiversity survey reports of Murchison Falls Protected Area with funding from the Norwegian Government (WCS, 2016).

**Output 4: Local law enforcement officers in protected areas use new capabilities in SMART to more efficiently and effectively conduct ranger patrols**

**Activity 4.1:** Test UoY's new innovative method of deploying rangers on patrol in a randomized and unpredictable way at two sites, Murchison Falls NP and Queen Elizabeth NP, and use lessons learned to improve and finalise approach/tool.

University of York developed a statistical method of analysing the probability of the occurrence of an illegal activity across a protected area using data collected by rangers entered in SMART (Critchlow *et al.* 2015). This approach can be used to generate maps that can then be uploaded in SMART to help orient patrols to predicted illegal activity hotspots. The University of Southern California's Computer Science Department has also been helping WCS to develop dynamic models to predict activity of poachers based on previous SMART data and the University of York maps of illegal activity probability, but incorporating a change in behaviour of poachers as the rangers change their patrolling. Both types of prediction are complex because they are based on biased data from ranger patrols, and ranger patrols do not always detect illegal activity. Poachers will also change their behaviour as ranger patrols adapt to where the poachers are operating.

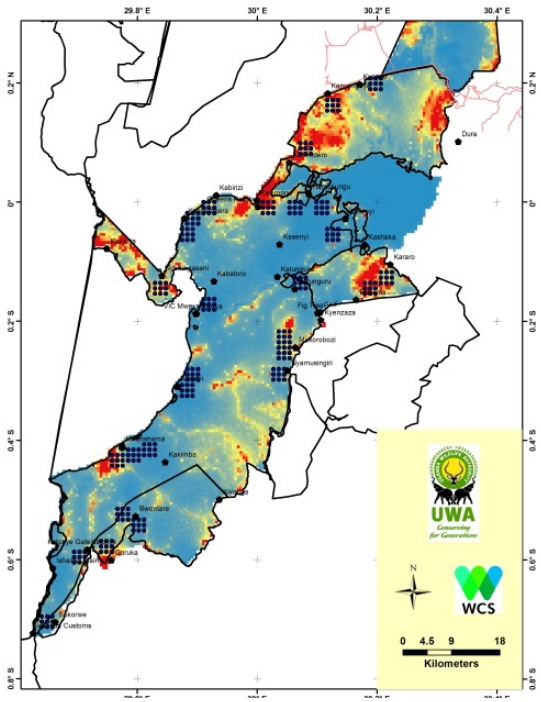


**Figure 1**. Location of 1 km grid of points in the Queen Elizabeth National Park overlaid on a probability map of snaring activity based on SMART data

In 2016, we tested the approach made by University of York (Critchlow *et al.* 2016) to assess whether reorienting ranger patrols to hotspot areas could increase the detection of illegal activities. At two of three test sites, we more than doubled the detection of snares. In 2016/7, we also wanted to test the University of

Southern California models in a new situation across a larger part of Queen Elizabeth Park by orienting ranger patrols to sites where it was predicted that there would be low or high levels of illegal activity. Ranger deployment was tested at 27 sites within 5 km of a ranger patrol post (figure 1) in the Queen Elizabeth National Park in western Uganda.

A grid of nine points, each 1 km apart was assigned to the ranger patrols and they were requested to patrol this area at least twice every month. Training in the methods was given in October 2016 (SMART refresher training report in the annexes) and deployment of rangers started in November 2016 and continued up to the end of April 2017 to make the test. CAT Smart Phones and accessories were purchased and donated to UWA to facilitate implementation of SMART in the protected areas. The statistical tests showed that in these new patrol areas, sites predicted to have a high prevalence of illegal activity were accurately predicted (Table 1) with a sighting per km walked (Capture per unit effort – CPUE) that was ten times the CPUE of the low prevalence areas. Therefore, the predictive modelling is giving reasonable results. As a result, WCS will move ahead with University of Southern California and University of York to develop an app for the cell phones that rangers will use to collect data that would help orient patrols from each patrol post.

Table 1. Results of the testing of the predictions of illegal activities by reorienting ranger patrols.

| Experiment Group | Observation Count (%) | Mean Count(std) | Effort(%) | CPUE |
|---|---|---|---|---|
| High (1) | 14 (78%) | 2.8 (4.26) | 132.55 (29%) | 0.11 |
| Low (2) | 4 (22%) | 0.18 (0.49) | 322.33 (71%) | 0.01 |

Similar models are being developed at the moment for Murchison Falls National Park and these will be tested in the second year of the project.

**Activity 4.2:** Develop SMART analysis toolkit Plug-in linked to smartphone package using the new finalised ranger deployment method.

While this activity was scheduled to commence in the second year of the project, we thought it prudent to give it an early start to allow enough time for developing and testing the software and statistical models. The subcontract to develop the plug-in for SMART has been contracted to York University as proposed. The aim of this aspect of the project is to develop a plugin for SMART software that incorporates novel statistical models to produce accurate maps and trends of the occurrence probability of different types of illegal activities across protected areas. The aim of developing this plugin is to make it usable across all protected areas where SMART is actively used. The first main task for this project is to ensure that the statistical method works on a diverse set of input variables and at different temporal and spatial scales because the data availability (such as habitat and animal density information and time period of data collection) will vary among SMART sites. The second task is to successfully translate the statistical model to the Java programming language so the plugin can be used with SMART.

Since October 2016, University of York has focused on improving existing data analyses scripts and ensuring that the data processing and modelling methods are fully flexible to account for differences in data availability where SMART is used. The existing scripts, which clean and transform the SMART data into a format that can be run with our statistical models, are being improved to work faster and be flexible with any difference in the format of input which will occur among SMART databases. For example, illegal activities are recorded in different ways and illegal activities are being recorded at some sites and not others (e.g. if there is a conservation focus on a particular species). We are also improving the scripts to ensure that covariables data, which are required for the modelling process, can be implemented from different sources. For example, some protected areas may have data layers on detailed habitat and animal densities, which may be in a different structure compared to data from

global layers of land use or habitat. Therefore, all input variables need to be in a standardized structure and format.

Progressing from this, the process to employ a Java programmer who will implement the development of the SMART Plugin and translate our models for use in SMART software has started with the target of engaging someone by June 2017.

**Activity 4.3:** Formally roll out ranger deployment SMART analyis toolkit Plug-in across Uganda's protected areas with high levels of elephant poaching (Queen Elizabeth, Murchison Falls, Kidepo Valley and Kibale National Parks).

The method for the analysis of the probability of illegal activity across a protected area developed by University of York (Critchlow et al. 2015) and the testing of ranger deployment made first by University of York (Critchlow et al. 2016) and then with more dynamic models by University of Southern California (Shahrzad et al. 2017) has already been published in peer reviewed literature. Once the plugin is finalised towards the end of the second year (its development was deferred to the second year at the request of IWT), it will be made available to all the SMART databases in Uganda which have been established for all seven conservation areas and trained in its use. It will also be made available to the SMART community online with a manual so that it can be used at other sites around the world.

### 3.2 Progress towards project Outputs

**Output 1:** An effective and functioning Wildlife Crime Unit (WCU), currently known as SLEU, collects and analyses intelligence information to increase arrests of middlemen

At the beginning of the project, UWA's SLEU did not have any staff trained to the required level that would enable them to conduct effective intelligence. By end of March 2017, at least 4 senior staff at UWA had been trained and mentored to a level where they are able to carry out intelligence operations with minimal support from the intelligence expert. Their analytical skills have greatly improved, and the unit has managed to establish the necessary infrastructure for better intelligence.

In addition to the four headquarter staff, over 17 staff from protected areas and headquarters have received their first training in human intelligence and are now better positioned to recruit and manage informers.

Though not yet completed as planned, development of the protocol for information sharing between local law enforcement and SLEU at headquarters is expected to be finalised in the next quarter with the approval of UWA's Top Management.

With all the developments in the SLEU so far, we are optimistic that by end of the project at least 50% of the cases prosecuted by UWA headquarters will use analyses provided by SLEU compared to less than 10% that used the same in 2015. At the moment efforts are geared towards building the capacity to produce quality and indisputable analyses. Hence, with computers at each national park and other wildlife crime hotspots, like Entebbe airport, to capture wildlife offenders' data, UWA is expected to produce good and informative wildlife crime analyses within the next year of this project.

**Output 2:** Through the work of NRCN Uganda, prosecuted offenders are held accountable for wildlife crimes committed.

NRCN, being an organisation founded on a legal background, had not been exposed to media campaign dynamics. Due to the fact that media campaigns were going to form a major part of this project, NRCN recruited a media specialist to fill this gap. However, it was discovered that the person recruited used her role to disclose vital and classified information to individuals not in support of NRCN's work. This staff was fired, delaying the work, but another person was hired, trained in media campaigns, and attached to a mentor for three months. Assisted by the mentor, this media specialist will share media campaign skills with prosecution staff.

Before this project, NRCN had never published any newspaper or television features within Uganda highlighting its activities to prosecute wildlife crime offenders and planned to produce at least 6 features in the second year of the project. However, in the first year alone, NRCN has surpassed this

target by featuring in 27, 22, 8 and 15 wildlife crime stories published via the internet, print media, radio and television respectively.

Whereas 5% of wildlife offenders are currently monitored to ensure they serve their full sentences, this project aims to increase that to 75%. In the past one year of the project, NRCN has expanded its areas of influence and is able to monitor cases countrywide. From October 2016 to March 2017, for example, NRCN documented a total of 44 suspects arrested from 25 different locations and was able to monitor all 16 cases that were successfully prosecuted in court. The annual report indicating the number of people monitored and percentage meeting their fine is yet to be produced.

**Output 3: UWA, police, judiciary, URA, and Uganda military share information and collaborate in law enforcement to improve anti-trafficking efforts through a Wildlife Crime Coordination Task Force (WCCTF).**

WCS introduced the idea of a WCCTF to the law enforcement agencies and it was well received, but need to be fully discussed internally by each law enforcement agency, an MoU developed and work plan developed for the task force. In principle, the law enforcement agencies appreciate the need to have a formalized collaboration arrangement specific to dealing with wildlife crime since the existing ad hoc mechanism is really dependent on individual interest within the respective law enforcement agencies. We have proposed to work with the existing ad hoc group to include additional members and formalize their cooperation.

**Output 4: Local law enforcement officers in protected areas use new capabilities in SMART to more efficiently and effectively conduct ranger patrols.**

WCS has over the years built trust and a good working relationship with UWA wardens and rangers on the ground by ensuring full-time field presence of WCS staff to offer training and give technical backstopping to UWA in the use of SMART and other tools. Already, some of the new data collection and patrol approaches introduced by WCS have been well received and implemented. With activities to develop the SMART plug-in and associated statistical models ahead of schedule, and having put the necessary tools (smart phones) in place, we are confident that his output will be achieved in due time.

### 3.3 Progress towards the project Outcome

The project is progressing steadily towards achieving the outcome, and it is hoped that this will be fully achieved by the end of the project. So far good progress has been made on outcome Indicator 2 where all offenders sentenced or fined and monitored by NRCN have paid their full fines or are serving their prison terms.

NRCN reported that a total of 44 wildlife crime offenders were taken to court between October 2016 and March 2017. Of these, 16 cases including 3 believed to be middlemen (based on the amount of contraband wildlife products had on them) have been successfully prosecuted and the criminals sentenced. One suspected middleman was inappropriately given police bond but is being followed up to makes sure he is produced in court. Due to challenges in managing the offenders' database within UWA, figures of arrests, court cases and sentences have not been availed at this point though we are hopeful that they will be availed soon. Nonetheless, all the necessary tools are in place for data to be collected entered and analysed, and it will be possible to extract and analyse data from the offenders' database to show the trend in wildlife crime prosecutions and sentences.

Likewise, the necessary tools are in place to collect and analyse SMART data to monitor illegal killing of elephants. A quick summary of SMART data collected in Queen Elizabeth National Park from June 2016 to March 2017 shows a general decline in elephant carcasses encountered during patrols (Figure 2). Since QENP is one of the parks at greatest risk of elephant poaching due to its proximity to the politically unstable parts of the Democratic Republic of Congo, these results could reflect a general decline in the level of poaching in the country.

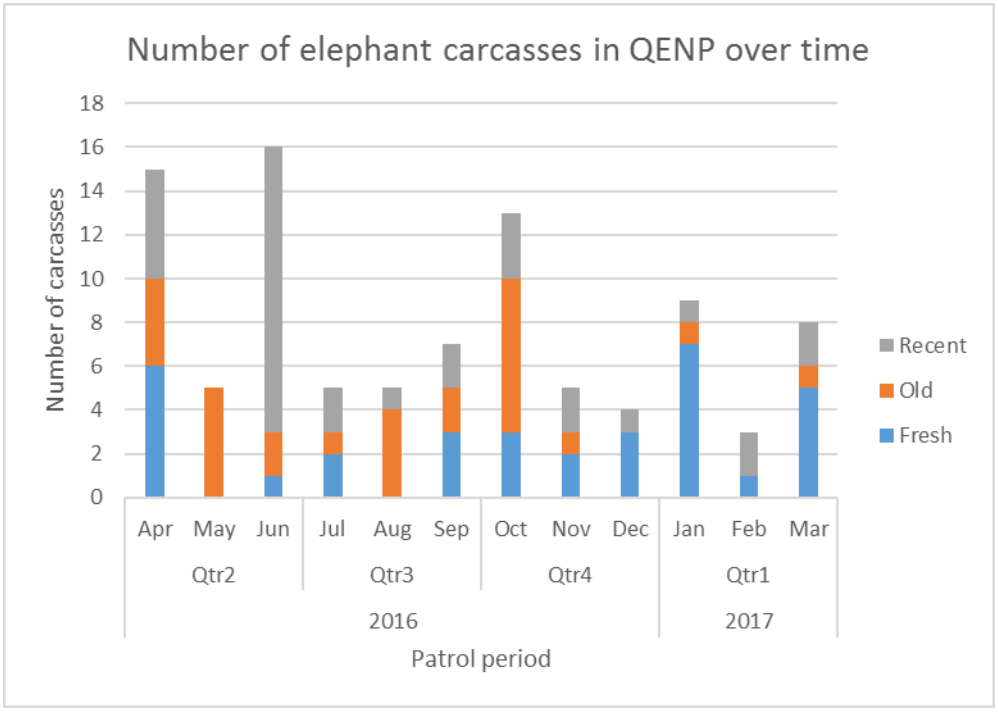


**Figure 2:** Trend in number of elephant carcasses encountered during ranger patrols in Queen Elizabeth National Park between April 2016 and March 2017 extracted from SMART data

Therefore, the indicators provided in the proposal of this document are still relevant adequate to measure the outcome of this project. Nothing foreseen would hinder achievement of the outcome

### 3.4 Monitoring of assumptions

**Outcome assumptions**

**Assumption 1**: NRCN Uganda is allowed access to check on prisoners serving wildlife-related jail sentences and payment of fines in judicial courts.

Comment: This assumption still holds true. NRCN is allowed and continues to monitor prisoners to ensure that they pay the full penalties handed to them.

**Assumption 2:** Police, Judiciary, army and customs are willing to work with UWA to tackle wildlife crime. We believe this will remain true, as provisional meetings with them indicate willingness.

Comment: This assumption still holds true. Preliminary meetings involving the different law enforcement agencies listed in the assumption showed a lot of good will towards collaboration. This was demonstrated in the recent operation that led to a seizure of 1.3 tons of ivory and arrest of 3 traffickers. See clipped article below from New Vision[2].

[2] http://www.newvision.co.ug/new_vision/news/1446682/ugandan-authorities-seize-tonne-ivory

New Vision
UGANDA'S LEADING DAILY

# Ugandan authorities seize a tonne of ivory

By AFP

**"In a joint operation with police, we recovered over 1000 kg of ivory suspected smuggled from either Tanzania or Democratic Republic of Congo."**

*PIC: Some 30,000 African elephants are illegally killed each year for their ivory tusks. (AFP)*

**Ugandan authorities have seized more than a tonne of ivory, chopped into small pieces and treated with a chemical intended to prevent it being detected, the national wildlife protection service have said.**

The haul was made in a Kampala suburb on Saturday, before it could be loaded at Entebbe international airport and flown off to an unknown destination, the authorities said.

A Liberian and two suspects from Guinea Bissau have been arrested in Kampala, Uganda's wildlife authority spokesman Simplicious Gessa told AFP.

"In a joint operation with police, we recovered over 1000 kg of ivory suspected smuggled from either Tanzania or Democratic Republic of Congo and the operation is ongoing," Gessa said.

He added that the Ugandan authorities suspect the smuggling network goes beyond the three in custody "involving shipping agents and other officials as the consignment was suspected to be going through Entebbe (airport)".

**Assumption 3:** UWA rangers work hard to increase the patrol coverage dictated by the new patrol methods to make patrolling more effective.

Comment: This assumption holds true. With the improved SMART-based law enforcement monitoring and patrol planning approaches introduced to the parks by WCS, patrol coverage in the protected areas has improved significantly. Figure 3 illustrates the amount of effort that the rangers invest in patrols.

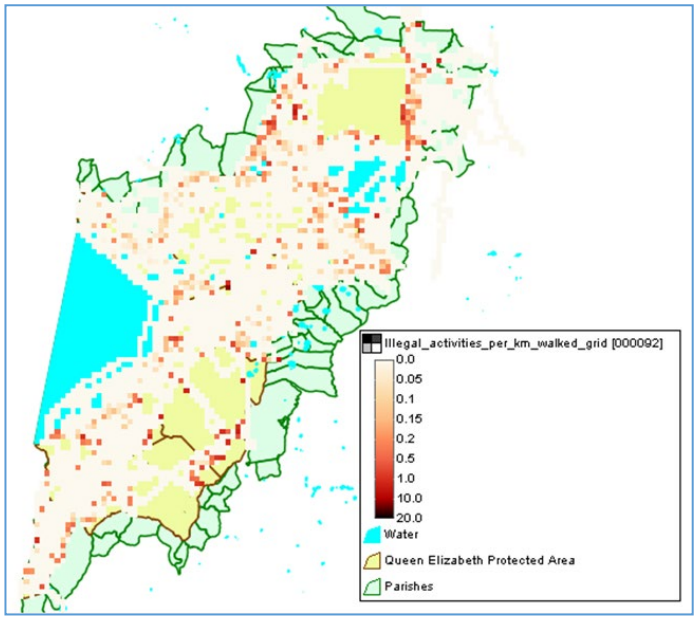


**Figure 3:** Encounters of illegal activities per km of patrol in Queen Elizabeth National Park in 2015

## 4. Impact: achievement of positive impact on illegal wildlife trade and poverty alleviation

**Project impact statement:**

Through effective law enforcement, Uganda disrupts regional wildlife trafficking routes and protects wildlife populations and the people who depend on them, while reducing insecurity and improving governance in the country.

This project is contributing to the achievement of the impact above though improving intelligence in the wildlife sector to crack down on middlemen and wildlife traffickers within the country as well as ensuring that those arrested pay the full penalties handed to them. The project is using different avenues to stamp out bribery from the courts and the police which has been major hindrance to prosecution of suspects. We are also strengthening collaboration between different law enforcement agencies and sensitising them on the need to crack down on wildlife crime.

The project contributes to human development and wellbeing in a number of ways: a) by creating opportunities for community members around protected areas to earn income upon recruitment as informers (sources of intelligence), b) protecting Uganda's iconic species that support the country's tourism industry on which many local people depend, and c) improving the overall security situation around the parks and elsewhere which would otherwise be jeopardised by increased cases of armed poaching.

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

This project contributes to Objective 2 ("strengthening law enforcement and the role of the criminal justice system") of the IWT Challenge Fund. By engaging the judiciary and other law enforcement agencies in various activities to better address wildlife crime, working towards stamping out ivory trafficking and killing of elephants through improved intelligence and prosecution, the project contributes to the Kasene statement and London declaration.

## 6. Impact on species in focus

The project focuses on securing African elephants by addressing the threats to their dwindling populations in Uganda and elsewhere in Africa. The data available at the moment is not enough to demonstrate impact on the species, but achievements to-date as indicated in this report show positive signs. For instance, targeting middlemen who organize wildlife crime reduces the number of poaching incidents for elephants, popular bushmeat species, and other species sold illegally in markets

In turn, this reduces markets for poachers at the local level, lessening the potential for outbreaks of disease such as Ebola and Marburgs virus, both of which have killed people in the recent past in Uganda. Wildlife trade has also been linked to other illegal trade such as the narcotics and arms trade, and the groups that deal in one product often deal in the others. Targeting the middlemen will also cripple these other operations and have knock-on effects on the availability of drugs and arms in the cities and towns of Uganda.

## 7. Project support to poverty alleviation

The primary beneficiaries of this project are the people of Uganda in general, as well as local communities adjacent to the parks and tourism operators, hoteliers and restaurants that rely on tourism to support their livelihoods.

Through efforts to improve governance, law enforcement and security at local, national, and regional levels, the project creates opportunities for UWA to recruit and employ intelligence agents from local communities around their 24 PAs to ensure security and law enforcement there. In addition, improving coordination between the SLEU, police, judiciary and UPDF enhances rule of law in and around these PAs hence contributing to improving governance and removing criminal networks throughout country.

By reducing the ability of middlemen to bribe their way out of prosecution, this project is also promoting a more just, less corrupt political atmosphere that will benefit the general public at large.

Removal of criminal networks driving illegal wildlife trade has additional benefits to local communities, including a reduction in other criminal activities (e.g., illegal logging), which are often driven by the same criminal networks and have significant impacts on local people.

These improvements in security and law enforcement at a national level also lead to better regional security. Once creation of the Wildlife Crime Coordination Task Force is completed, it will lead to better coordination of activities across borders throughout the East Africa Community, creating regional sharing of information and improved regional governance and rule of law. Measurable improvements in the coordination of Uganda's agencies will also serve as a model for neighbouring countries grappling with similar issues.

Poaching and illegal trafficking of ivory, hippo teeth, pangolin scales, and other biodiversity affects not only wildlife but entire ecosystems, effectively depriving local communities of their livelihoods. Tourism is the second largest source of foreign currency for Uganda, contributing over 7% to the national GDP and providing employment for many people. By protecting charismatic species that attract tourists, this project contributes to the sustenance of this important sector hence creating opportunities for benefit sharing with people living around protected areas.

## 8. Consideration of gender equality issues

In implementing the project, efforts are made to ensure that women are represented in the training and other project activities. However, due to nature of work and proportion of women in the targeted categories of people (especially law enforcement roles), achieving gender balance has been a challenge. WCS tries to ensure that women are considered for selection by agencies participating in project activities but actual representation depends on the competencies, skills and experiences needed to perform the task at hand. Two women were included in the intelligence training discussed under Activity 1.2.

## 9. Monitoring and evaluation

This project involves multiple partners from government law enforcement agencies and a national NGO. Therefore, one of the ways being employed to monitor its performance is through holding coordination, planning, and evaluation meetings with the partners on a regular basis. Through these meetings, partners are guided and reminded of their commitments. Partners are also tasked to report progress on a quarterly or semi-annual basis. Tracking of enforcement operations and prosecutions is done through the quarterly reporting at these coordination meetings. While the offenders' database is one of the tools the project intends to use for more detailed analysis of the impacts of individual arrests on repeat offences and the deterrence effects of punishments, it is not yet well populated with data to enable this to happen.

WCS, in collaboration with UWA, will analyse ranger-collected data in the SMART databases for each site to track the effectiveness of ranger patrolling.

## 10. Lessons learnt

The following are some of the key lessons learned during implementation of the project in this year:

- All wildlife cases need to be followed up from the time of arrest to prosecution processes and conviction. This is one of the ways to ensure that that the efforts invested in cracking down on wildlife crime pay off.
- It is important for the law enforcement team (whether UWA or police) to collaborate with the investigation and prosecution teams when dealing with wildlife cases. There needs to be a well-coordinated mechanism of sharing information in order to maximise opportunities to hold offenders accountable for their actions. Cases where one team sidelines the other often don't end successfully. However, identifying the right staff within the various institutions developing and developing an MoU acceptable to all law enforcement agencies is not straightforward due

to mistrust and entrenched corruption among Uganda's law enforcement agencies. On a positive note, a designated court named Standards, Utilities and Wildlife was established by the courts of Judicature and its head justice is very receptive to the idea of improving the prosecution of wildlife crime offenders, including handing heavy sentences. In addition, a wildlife bill with heavy fines and sentences proposed for wildlife crime offenders is highly supported by the cabinet and will be soon be presented to parliament of Uganda for discussion. WCS has already met with a section of members of parliament interested in this subject to raise the key issues in the bill and requested their support in approving those provisions in the bill.

- In order to create public awareness and to demonstrate the gravity and consequences of wildlife crime, all conviction stories reported in the media need to include the history of the cases developed from the time of arrest though prosecution to sentencing. This enables any irregularities in the case to be exposed but also compels those handling the cases to exercise prudence. The nature and magnitude of the sentence or fine also needs to be thoroughly reported to act as a warning to the intending offenders.

## 11. Actions taken in response to previous reviews (if applicable)

## 12. Other comments on progress not covered elsewhere

## 13. Sustainability and legacy

Combating wildlife crime is one of the priorities of the Uganda government. The Ministry of Wildlife Tourism and Antiquities through UWA's board of trustees has mandated UWA to make efforts to improve its capacity to fight wildlife crime. This project came at a point when the WCU had just been established and in need of immense support to be able to execute its mandate. The support offered to the unit though this project has enabled UWA to put in place intelligence infrastructure and systems that will be used for a long time. This, together with the training offered by NRCN and Maisha, will ensure long-term sustainability of this work.

Having supported conservation in Uganda for 60 years, WCS is committed to following up and continuing to mentor UWA beyond the lifetime of the project. WCS also plans to conduct complementary activities both in Uganda and the larger region to reinforce work carried out in the project.

In light of the above, the exit strategy as indicated in the project proposal remains unchanged.

## 14. IWT Challenge Fund Identity

We ensure that IWT Challenge Fund and the UK Government are mentioned as sponsors of this project in our meetings with partners and that presentations and publications all have the UKAID logo. All products (reports, papers, etc.) produced through this project will be uploaded onto our website for the global public.

## 15. Project expenditure

**Table 1: Project expenditure during the reporting period (April 2016-March 2017)**

| Current Year's Costs | 2016/17 Grant (£) | 2016/17 Total actual IWT Costs (£) | Variance % | Comments (please explain any variance ) |
|---|---|---|---|---|
| Staff costs (from Section 5) | | | | |
| Consultancy Costs | | | | |
| Overhead Costs | | | | |
| Travel and subsistence | | | | |
| Operating Costs | | | | |
| Capital items (from Section 7) | | | | |
| Others (from Section 8) | | | | |
| Monitoring and Evaluation | | | | |
| Audit costs | | | | |
| **TOTAL** | | | | |

## 16. OPTIONAL: Outstanding achievements of your project during the reporting period (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.

**Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2016-2017**

| Project summary | Measurable Indicators | Progress and Achievements April 2016 - March 2017 | Actions required/planned for next period |
|---|---|---|---|
| ***Impact***<br>Through effective law enforcement, Uganda disrupts regional wildlife trafficking routes and protects wildlife populations and the people who depend on them, while reducing insecurity and improving governance in the country. | | Intelligence in the wildlife sector to crack down middle men and wildlife traffickers is steadily improving; Project has created opportunities for community members around protected areas to earn income upon recruitment as informers; tourism and security around the parks is being enhanced though reducing armed poaching | [redacted] |
| ***Outcome*** The Uganda Wildlife Authority (UWA) disrupts operations of local and regional wildlife crime networks through effective use of intelligence by its SLEU (formerly Wildlife Crime Unit), increasing inter-agency collaboration and accountability, and strengthening law enforcement at multiple levels. By doing so, governance in the country is improved and wildlife populations are protected. | By the end of the project, successful prosecutions of middlemen with jail sentences increase from 21 people/ year to more than 40/year.<br>By the end of the project, more than 75% of convicted wildlife crime offenders pay their full fines or prison terms and cannot bribe their way out.<br>By the end of the two-year project, poaching of elephants in Uganda drops from 60-80/year to less than 25/year. | Of the 44 cases monitored by the project that were taken to court for prosecution, 16 middlemen have been successfully prosecuted and sentenced/fined. One other suspected middleman has been arrested but is yet to be prosecuted.<br>So far, 100% of the cases monitored have paid their full fines, served or are serving their prison terms.<br>Tools are in place to collect reliable data to estimate rate of elephant poaching across the country. A quick look at SMART data from QENP shows a general decline in elephant poaching since April 2016. | Enhance NRCN and UWA's capacity investigate, prosecute and monitor wildlife criminals from arrest through their full sentences; Complete development of SMART plug-in and implement across the country; Enhance coordination between law enforcement agencies; Continue training and mentoring UWA's SLEU to improve investigations and intelligence. |
| **Output 1 An effective and functioning** SLEU **(WCU) collects and analyses intelligence information to** | 1.1 By the end of year two a minimum of 8 UWA staff trained and mentored in intelligence gathering methods, forming an effective Wildlife Crime | 1.1 A total of four UWA HQ staff trained and mentored intelligence gathering methods by Maisha expert | |

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| | Unit (WCU). Baseline = 0 staff trained to level required to manage data and analyse information.<br><br>1.2 By the end of year 1, at least 28 UWA law enforcement and prosecutions staff at PA level receive training in recruitment and management of informers. Baseline = some management of informers by staff at PA sites but with little to no training in how to do this.<br><br>1.3 By the end of year 1, a protocol for sharing information between local law enforcement and WCU headquarters has been established and implemented in all 24 Protected Areas in the country. Baseline = no protocol exists at present; there is some sharing of information but only through personal contacts.<br><br>1.4 By 2018, UWA prosecutors are using WCU analyses in at least 50% of cases prosecuted by UWA Headquarters. Baseline = fewer than 10% of cases from UWA HQ were used in WCU analyses in 2015. | 1.2 A total of 17 UWA field and headquarter staff trained in recruitment and management of informers. Training of additional staff will be conducted in the first quarter of the second year of the project.<br><br>1.3 Protocols developed and awaiting approval by UWA top management<br><br>1.4 Not enough data to estimate this at the moment |
| Activity 1.1 Train UWA staff quarterly for two years in intelligence gathering and data analysis, with continual mentoring between training courses. | | Mentoring has been done and will continue through the first quarter of the second year of implementation. Priority for the next quarter will be to make the intelligence units self-sufficient to execute operations on their own |
| Activity 1.2 Train UWA Law Enforcement Wardens and Intelligence Officers at PA level in the recruitment, management and handling of informers as well as | | Training has been done for 17 staff. Priority for next year is to train more staff and monitor application of learned skills. |

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| in packaging and transmitting intelligence information for WCU at UWA HQ | | |
| Activity 1.3 Establish intelligence networks at park level to feed information to the WCU. | | This is in progress; commenced soon after training. |
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| **Output 2. :** Through the work of NRCN Uganda, prosecuted offenders are held accountable for wildlife crimes committed. | 2.1 During year 1 three NRCN prosecutors receive training in media campaigns and a media campaign plan is developed. Baseline = no training in media campaigns for NRCN staff to date.<br><br>2.2 During the second year of the project, NRCN Uganda publishes at least 6 newspaper/television features highlighting its activities to prosecute wildlife crime offenders. Baseline = 0 newsletters produced by NRCN (although Eagle Network produces summaries for Uganda) and one TV program aired news by them in 2015.<br><br>2.3 By the end of the second year of this project, at least 75% of criminals arrested and prosecuted are monitored to ensure they pay full penalties, compared to about 5% monitored at present. | 2.1 NRCN hired media specialist and mentor to enhance their capacity to do media campaigns and are in process of developing media strategy. Priority for next year is to complete and implement media strategy.<br><br>2.2 This output has been achieved. NRCN has featured in 27, 22, 8 and 15 wildlife crime stories published via the internet, print media, radio and television respectively.<br><br>2.3 The project has documented 44 suspects arrested from 25 different locations and 16 cases had been successfully prosecuted in court. All the 16 sentenced or fined paid their full fines or are serving their sentences. This momentum will be sustained in the next year. |
| Activity 3.1 Conduct a meeting to establish the WCCTF, bringing together individuals from UWA, police, judiciary, customs, URA, military and immigrations. | | One planning meeting with law enforcement agencies to discuss the idea of setting up the WCCTF; five meetings with NRCN and UWA to discuss the ad hoc law enforcement groups |
| Activity 3.2 Facilitate quarterly meetings and joint operations of WCCTF for its first two years. | | None yet |
| Activity 3.3 Provide materials to law enforcement agencies outside UWA | | At least four different reports shared with the other law enforcement agencies |

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| structures on value of wildlife to Uganda and importance of halting wildlife crime. | | in two separate workshops and meetings. |
| **Output 3.** UWA, police, judiciary, URA, and Uganda military share information and collaborate in law enforcement to improve anti-trafficking efforts through a Wildlife Crime Coordination Task Force (WCCTF). | 3.1 Wildlife Crime Coordination Task Force (WCCTF) established within first six months of project. Baseline = no task force currently exists.<br><br>3.2 By the end of the second year, WCCTF information sharing leads to arrests and prosecutions, increasing the number of wildlife crime prosecutions from such collaboration by 200%. Baseline = minimal sharing of information. 5 prosecutions for poaching per year currently from collaboration with Police.<br><br>3.3 By the second year of the project, judiciary increases fines for wildlife crime by 100%, and prison terms by at least 50% as a result of a better understanding of the importance of these crimes and improved monitoring of judiciary activities. Baseline from Offenders database - average fine for poaching is 5,000 UG shillings (about £1); average prison term is 185 days for poaching. | 3.1 No WCCTF yet formed, but analysis of two ad hoc law enforcement groups; UWA-led, and NRCN-led has been done. |
| Activity 3.1 Conduct a meeting to establish the WCCTF, bringing together individuals from UWA, police, judiciary, customs, URA, military and immigrations. | | First meeting with senior staff for selected law enforcement agencies was conducted on 13 September 2016 |
| Activity 3.2 Facilitate quarterly meetings and joint operations of WCCTF for its first two years. | | We plan to start this activity once the decision to work with the ad hoc law enforcement group is approved. |
| Activity 3.3 Provide materials to law enforcement agencies outside UWA structures on value of wildlife to Uganda and importance of halting wildlife crime. | | Four reports shared and materials presented in two separate workshops |

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| **Output 4:** Local law enforcement officers in protected areas use new capabilities in SMART to more efficiently and effectively conduct ranger patrols. | 4.1 Method to effectively deploy rangers based on new analyses of SMART data developed and tested in Queen Elizabeth and Murchison Falls National Parks during first year of project. Baseline = pilot testing at one site in Queen Elizabeth Park.<br><br>4.2 By end of year two, SMART plug-in analysis toolkit developed and made freely available to enable any site to deploy rangers effectively (using method referenced in indicator 1). Baseline = no toolkit exists<br><br>4.3 In year 2, SMART data from Queen Elizabeth NP and Murchison Falls NP show a 50% increase in detections of snares and poaching incidences compared to 2012-2015 detections. Baseline from 2015 SMART data = a) QENP: 1.1 snares per 100 km walked; 1.6 hunting signs per 100 km walked; b) MFNP: 1.6 snares per 100 km walked; 2.5 hunting signs per 100 km walked<br><br>4.4 By end of Year 2, UWA is compiling and analysing data in SMART from Community Conservation Rangers to identify human-wildlife conflict hotspots and working to target revenue sharing funds to help these communities. Baseline = no such analyses made presently. | 4.1 New data collection and patrol approaches introduced by WCS have been well received and implemented. Activities to develop the SMART plug-in and associated statistical models have commenced. Necessary tools (smart phones) and training have been provided. |

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| Activity 4.1 Test UoY's new innovative method of deploying rangers on patrol in a randomized and unpredictable way at two sites, Murchison Falls NP and Queen Elizabeth NP, and use lessons learned to improve and finalise approach/tool. | 4.1 We tested the approach made by University of York to assess whether reorienting ranger patrols to hotspot areas could increase the detection of illegal activities. Ranger deployment was tested at 27 sites within 5 km of a ranger patrol post in QENP. Training in the methods was done and deployment of rangers started in November 2016 and continued up to the end of April 2017 to make the test. |
| Activity 4.2 Develop SMART analysis toolkit Plug-in linked to smartphone package using the new finalised ranger deployment method. | Development of the plug-in for SMART has been subcontracted to University of York. Priorities for next year include ensuring that statistical method works on a diverse set of input variables and at different temporal and spatial scales, translating the statistical model to the Java programming language so the plugin can be used with SMART. Recruitment of a Java programmer to develop the SMART Plugin and translate of our models for use in SMART software has started with the target of engaging someone by June 2017 |
| Activity 4.3 Formally roll out ranger deployment SMART analyiss toolkit Plug-in across Uganda's protected areas with high levels of elephant poaching (Queen Elizabeth, Murchison Falls, Kidepo Valley and Kibale National Parks). | To be done once the plugin is finalised towards the end of the second year |

**Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)**

*N.B. if your application's logframe is presented in a different format in your application, please transpose into the below template. Please feel free to contact IWT-Fund@ltsi.co.uk if you have any questions regarding this.*

| Project summary | Measurable Indicators | Means of verification | Important Assumptions |
|---|---|---|---|
| **Impact:** Through effective law enforcement, Uganda disrupts regional wildlife trafficking routes and protects wildlife populations and the people who depend on them, while reducing insecurity and improving governance in the country. | | | |
| **Outcome:** The Uganda Wildlife Authority (UWA) disrupts operations of local and regional wildlife crime networks through effective use of intelligence by its Wildlife Crime Unit, increasing inter-agency collaboration | By the end of the project, successful prosecutions of middlemen with jail sentences increase from 21 people/ year to more than 40/year.<br>By the end of the project, more than | Reports of arrests made by the Wildlife Crime Unit and documented in UWA Offenders database.<br>Natural Resource Conservation Network | NRCN Uganda is allowed access to check on prisoners serving wildlife-related jail sentences and payment of fines in judicial courts.<br>Police, Judiciary, army and customs are |

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| and accountability, and strengthening law enforcement at multiple levels. By doing so, governance in the country is improved and wildlife populations are protected. | 75% of convicted wildlife crime offenders pay their full fines or prison terms and cannot bribe their way out.<br><br>By the end of the two-year project, poaching of elephants in Uganda drops from 60-80/year to less than 25/year. | (NRCN) Uganda reports of monitoring of prosecuted offenders.<br><br>Reports from SMART of elephant carcasses and poaching incidents. | willing to work with UWA to tackle Wildlife Crime. We believe this will remain true, as provisional meetings with them indicate willingness.<br><br>UWA rangers work hard to increase the patrol coverage dictated by the new patrol methods to make patrolling more effective. |
| **Output 1: An effective and functioning Wildlife Crime Unit (WCU) collects and analyses intelligence information to increase arrests of middlemen.** | 1.1 By the end of year two a minimum of 8 UWA staff trained and mentored in intelligence gathering methods, forming an effective Wildlife Crime Unit (WCU). Baseline = 0 staff trained to level required to manage data and analyse information.<br><br>1.2 By the end of year 1, at least 28 UWA law enforcement and prosecutions staff at PA level receive training in recruitment and management of informers. Baseline = some management of informers by staff at PA sites but with little to no training in how to do this.<br><br>1.3 By the end of year 1, a protocol for sharing information between local law enforcement and WCU headquarters has been established and implemented in all 24 Protected Areas in the country. Baseline = no protocol exists at present; there is some sharing of information but only through personal contacts.<br><br>1.4 By 2018, UWA prosecutors are using | 1.1 Reports of training workshops and mentoring visits every quarter.<br><br>1.2 Reports of training of UWA law enforcement staff and prosecutors at Protected Areas.<br><br>1.3 Written protocol for UWA use internally.<br><br>1.4 Results of prosecutions in UWA's Offenders database. | Government of Uganda remains committed to tackling the wildlife trade and supports inter-agency collaboration. |

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| | WCU analyses in at least 50% of cases prosecuted by UWA Headquarters. Baseline = fewer than 10% of cases from UWA HQ were used in WCU analyses in 2015. | | |
| **Output 2:** Through the work of NRCN Uganda, prosecuted offenders are held accountable for wildlife crimes committed. | 2.1 During year 1 three NRCN prosecutors receive training in media campaigns and a media campaign plan is developed. Baseline = no training in media campaigns for NRCN staff to date.<br><br>2.2 During the second year of the project, NRCN Uganda publishes at least 6 newspaper/television features highlighting its activities to prosecute wildlife crime offenders. Baseline = 0 newsletters produced by NRCN (although Eagle Network produces summaries for Uganda) and one TV program aired news by them in 2015.<br><br>2.3 By the end of the second year of this project, at least 75% of criminals arrested and prosecuted are monitored to ensure they pay full penalties, compared to about 5% monitored at present. | 2.1 Report of training in media campaigning.<br><br>2.2 Newspaper articles and video clips of wildlife crime publicity.<br><br>2.3 Annual report on the number of people monitored and percentage meeting their fines/prison sentences. | NRCN is allowed to operate freely and can support UWA as an independent NGO. |
| **Output 3:** UWA, police, judiciary, URA, and Uganda military share information and collaborate in law enforcement to improve anti-trafficking efforts through a Wildlife Crime Coordination Task Force (WCCTF). | 3.1 Wildlife Crime Coordination Task Force (WCCTF) established within first six months of project. Baseline = no task force currently exists.<br><br>3.2 By the end of the second year, WCCTF information sharing leads to | 3.1 Report of meeting to establish WCCTF and cuttings of press coverage in newspapers.<br><br>3.2 Annual report of arrests and prosecutions made by UWA detailing the number that benefited from | |

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| | arrests and prosecutions, increasing the number of wildlife crime prosecutions from such collaboration by 200%. Baseline = minimal sharing of information. 5 prosecutions for poaching per year currently from collaboration with Police.<br><br>3.3 By the second year of the project, judiciary increases fines for wildlife crime by 100%, and prison terms by at least 50% as a result of a better understanding of the importance of these crimes and improved monitoring of judiciary activities. Baseline from Offenders database - average fine for poaching is 5,000 UG shillings (about £1); average prison term is 185 days for poaching. | collaborations with other institutions in WCCTF.<br><br>3.3 A report assessing the average fine/prison term for different classes of offence comparing the current situation with the first and second year of the project. | |
| **Output 4:** Local law enforcement officers in protected areas use new capabilities in SMART to more efficiently and effectively conduct ranger patrols. | 4.1 Method to effectively deploy rangers based on new analyses of SMART data developed and tested in Queen Elizabeth and Murchison Falls National Parks during first year of project. Baseline = pilot testing at one site in Queen Elizabeth Park.<br><br>4.2 By end of year two, SMART plug-in analysis toolkit developed and made freely available to enable any site to deploy rangers effectively (using method referenced in indicator 1). Baseline = no toolkit exists<br><br>4.3 In year 2, SMART data from Queen | 4.1 Reports of park-wide testing of ranger deployment based on predicted maps of high illegal activities for both Queen Elizabeth and Murchison Falls Parks.<br><br>4.2 Smart plug-in working effectively and available for use at other sites. Reports of analyses made with smart plug-in at other sites in Uganda.<br><br>4.3 Reports from SMART of illegal activity detections, comparing the detection per unit effort (patrol day/km walked by patrols) of different illegal activities from 2013-2015 with 2016- | Government Resources such as rangers salaries continue to be available to support implementation of ranger patrol strategies. |

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| | Elizabeth NP and Murchison Falls NP show a 50% increase in detections of snares and poaching incidences compared to 2012-2015 detections. Baseline from 2015 SMART data = a) QENP: 1.1 snares per 100 km walked; 1.6 hunting signs per 100 km walked; b) MFNP: 1.6 snares per 100 km walked; 2.5 hunting signs per 100 km walked<br><br>4.4 By end of Year 2, UWA is compiling and analysing data in SMART from Community Conservation Rangers to identify human-wildlife conflict hotspots and working to target revenue sharing funds to help these communities. Baseline = no such analyses made presently. | 2018 after patrol re-deployment is affected.<br><br>4.4 Report of UWA human-wildlife conflicts (HWC) from SMART and number of Revenue sharing projects targeting reduction of HWC. | |

**Activities** (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

**Output 1**

Activity 1.1 Train UWA staff quarterly for two years in intelligence gathering and data analysis, with continual mentoring between training courses.
Activity 1.2 Train UWA Law Enforcement Wardens and Intelligence Officers at PA level in the recruitment, management and handling of informers as well as in packaging and transmitting intelligence information for WCU at UWA HQ.
Activity 1.3 Establish intelligence networks at park level to feed information to the WCU.

**Output 2**

Activity 2.1 Train NRCN in publicity campaigns, supported with website development and materials development to advertise their activities.
Activity 2.2 Train NRCN in proposal development, budget management and reporting.
Activity 2.3 Provide NRCN with resources to prosecute and follow up convicted offenders.

**Output 3**

Activity 3.1 Conduct a meeting to establish the WCCTF, bringing together individuals from UWA, police, judiciary, customs, URA, military and immigrations.
Activity 3.2 Facilitate quarterly meetings and joint operations of WCCTF for its first two years.
Activity 3.3 Provide materials to law enforcement agencies outside UWA structures on value of wildlife to Uganda and importance of halting wildlife crime.

**Output 4**

Activity 4.1 Test UoY's new innovative method of deploying rangers on patrol in a randomized and unpredictable way at two sites, Murchison Falls NP and Queen Elizabeth NP, and use lessons learned to improve and finalise approach/tool.

Activity 4.2 Develop SMART analysis toolkit Plug-in linked to smartphone package using the new finalised ranger deployment method.

Activity 4.3 Formally roll out ranger deployment SMART analyiss toolkit Plug-in across Uganda's protected areas with high levels of elephant poaching (Queen Elizabeth, Murchison Falls, Kidepo Valley and Kibale National Parks).

## Annex 3 Standard Measures

**Annex 4 Onwards – supplementary material (optional but encouraged as evidence of project achievement)**

**Checklist for submission**

| | Check |
|---|---|
| **Is the report less than 10MB?** If so, please email to IWT-Fund@ltsi.co.uk putting the project number in the subject line. | Yes |
| **Is your report more than 10MB?** If so, please discuss with IWT-Fund@ltsi.co.uk about the best way to deliver the report, putting the project number in the subject line. | No |
| **Have you included means of verification?** You need not submit every project document, but the main outputs and a selection of the others would strengthen the report. | Yes |
| **Do you have hard copies of material you want to submit with the report?** If so, please make this clear in the covering email and ensure all material is marked with the project number. | No |
| Have you involved your partners in preparation of the report and named the main contributors | Yes |
| Have you completed the Project Expenditure table fully? | Yes |
| Do not include claim forms or other communications with this report. | |