Briefing

Biodiversity, natural resource management

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Policy pointers

Conservation and development agencies can help the Uganda Wildlife Authority (UWA) combat high levels of wildlife crime in national parks by supporting efforts to build long-term partnerships with local communities.

Local people and UWA staff agree that tackling poaching will require a greater emphasis on providing livelihood opportunities, as well as steps to resolve conflict between people and wildlife and to strengthen law enforcement.

Efforts to tackle hunting by local people will help to reduce the volume of international wildlife trade from Uganda, since high value species are caught as 'bycatch' by hunters in search of bushmeat.

For the relatively small proportion of hunters who deliberately target high value species, authorities could make cost-effective interventions by setting up 'reformed poachers associations' to provide them with alternative sources of income.

Nature's stewards: how local buy-in can help tackle wildlife crime in Uganda

High levels of illegal resource use in two of Uganda's national parks show the need to rethink current approaches to combatting wildlife crime. Our research suggests that more than 40 per cent of households living adjacent to the Queen Elizabeth and Murchison Falls national parks have been involved in illegal hunting within the past year, mostly to catch bushmeat for local sale and consumption. Most hunters do not typically target high value internationally traded species, but may occasionally kill them as 'bycatch.' Though rare, this phenomenon has a significant cumulative impact. Effectively tackling the root causes of illegal hunting will require longer-term and more focused engagement between the Uganda Wildlife Authority and communities. Local people and wildlife officials identified mitigating human–wildlife conflict, supporting sustainable livelihoods and increasing employment opportunities as promising avenues for further investigation.

Drivers of wildlife crime

The international response to the recent global surge in wildlife crime has largely focused on the expansion and strengthening of existing law enforcement, with limited attention given to the potential role that engagement with communities living in and around protected areas might play.[1] Yet law enforcement can be a blunt instrument that has a disproportionate impact on the poorest, most vulnerable members of society who depend on protected areas for their livelihoods. For such households, particularly those that lack viable alternatives, it is highly unlikely that increased investment in patrolling will be the most effective approach. This is because raising the risk of sanctions does nothing to address the underlying social, economic, cultural and historical factors driving illegal resource use. For the government and wildlife authorities to develop coherent and effective policies and strategies, it is essential that they first understand the underlying causes of wildlife crime and critically assess how policies or interventions might influence the behaviour of resource users.

This briefing presents the lessons drawn from a three-year study undertaken around two national parks in Uganda: Murchison Falls Protected Area (MFPA) and Queen Elizabeth Protected Area (QEPA), two poaching hotspots accounting for the bulk of arrests in Uganda's protected area network. The aim of this research was to provide a greater understanding of the drivers and scale of wildlife crime in these national parks to help authorities identify and implement countermeasures that do not have an unfair impact on society's poorest members.

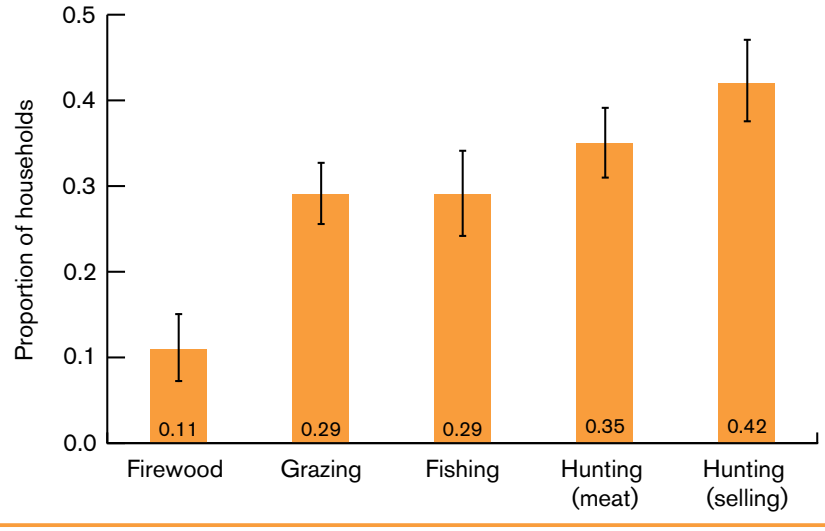
Very high levels of natural resource use

Many hunters indicated a willingness to renounce hunting if provided with the support to do so

We estimated the proportion of people from communities living around the two protected areas who had been involved in five types of resource use in the past year: collecting firewood, fishing, grazing, hunting for household consumption and hunting for sale. We used an empirical method that avoids posing questions about such activities directly to reduce the risk that respondents might misinform researchers to avoid incriminating themselves (see Figure 1). We found that only 11 per cent of households had collected firewood from protected areas, while 42 per cent had hunted animals for sale, with some hunters reporting that they enter the parks daily.

These findings demonstrate the significant contribution resources harvested illegally from within the two parks make to local livelihoods, and raise questions over the degree to which better law enforcement alone would be sufficient to prevent such activities. At 100 million shillings per year (about US$30,000), law enforcement patrols represent the greatest single annual expenditure by the Uganda Wildlife Authority (UWA) at MFPA,[2] yet more than half of the households in zones bordering certain parts of MFPA are estimated to be hunting illegally. This strongly suggests that law enforcement provides only a limited deterrent and that different approaches to reducing wildlife crime should also be considered.

Figure 1. Proportion of households estimated to be involved in resource use in the two protected areas



Local hunters told us that, despite the substantial financial rewards of hunting for high value commodities such as ivory and pangolin scales, most of them primarily set out to supply the domestic bushmeat trade. Elephants were considered too dangerous to hunt without firearms and other high value species like pangolins were rarely encountered. However, the indiscriminate use of traps and snares means that elephants are occasionally caught and the ivory sold, and rarer species may also be killed if the opportunity arises. Of the elephants reportedly killed by the hunters we interviewed, approximately 20 to 40 per cent were caught in traps set for other species or killed opportunistically.[3] This suggests that a significant number of animal products entering the international market from Uganda's national parks are 'bycatch' from the domestic bushmeat trade rather than the deliberate target of poachers. This is likely to be particularly true for smaller internationally traded species such as pangolins.

Lack of alternative employment is a major driver

Of the 1,955 households we interviewed, 53 per cent were categorised as poor using the Ugandan multi-dimensional poverty index. Despite poverty being one of the most commonly cited drivers of illegal hunting,[4] our results show that poor households are in fact less likely to hunt illegally than better-off households, suggesting that poverty is not a driver of hunting in these areas.

However, for those households that do engage in the illegal bushmeat trade, the lack of viable alternative sources of income is an important contributing factor. This shortage of options was widely cited by hunters as one of the main reasons that they hunt — a claim supported by the fact that hunting activity peaks during the off season of the main livelihood activity in any given area. For example, the peak hunting period for wet season farmers is during the dry season, when they have few alternative means of generating income. Such seasonal difficulties in earning money are likely to be particularly pronounced in areas that are still recovering from conflict.

Our research also found evidence that households that experience costs from living close to protected areas, such as through the predation of livestock, are more likely to hunt illegally for both subsistence and commercial purposes. Similarly, households that feel that they have not benefited from revenue-sharing schemes (which give a proportion of tourist fees to local communities) are also more likely to hunt.

Table 1. Predicted performance of different options aimed at reducing wildlife crime

	Labour allocation	Fairness	Likelihood of informing	Community preference	UWA preference
HWC mitigation	+	++	++	++	++
Enterprise schemes	++	++	++	++	++
Eco-guards	++	++	++	++	++
Withdraw resource rights	–	–	+ / –	not assessed	not assessed
Regulated hunting	–	+ / –	+	–	–
Increase law enforcement	not assessed	not assessed	not assessed	+	++

Notes: The policy and intervention options we investigated were assessed against five different criteria: i) labour allocated to the main household livelihood activity (rather than hunting), ii) perceived fairness, iii) the likelihood of a household informing on law breaking, iv) the relative preferences of local communities and v) the preferences of UWA staff.
++ indicates very good performance, + indicates good performance, + / – indicates neither a good nor bad performance, – indicates a poor performance. Not all options could be assessed by each method.

This suggests that people with negative perceptions of the two parks are more likely to become directly involved in poaching.

Options for changing behaviour

We used a range of methods (including from behavioural economics) to assess the likely effect of different intervention options for tackling wildlife crime identified through a review of national and international evidence.[5]
These included:

1. Designating a portion of the existing revenue-sharing funds to financing better human–wildlife conflict (HWC) mitigation measures
2. Improving local livelihoods through agri-environmental enterprise schemes (such as honey or chilli production)
3. Employing local villagers as eco-guards in frontline villages to prevent crop-raiding and to report on poaching incidents
4. Withdrawing all resource access and use rights within the protected areas (currently people with permits are allowed limited access to collect certain resources such as firewood and wild honey)
5. Expanding existing authorised resource access agreements to include regulated hunting, and
6. Increasing law enforcement patrol frequency and effectiveness.

Each option was assessed against a series of performance criteria based on responses from local communities and UWA staff (see Table 1).

This analysis suggests that the most promising approach to reducing wildlife crime would be improving relationships with local communities and providing them with greater opportunities. Strong support is evident for the introduction and expansion of agri-environmental enterprise schemes, the reallocation of revenue-sharing funds to finance HWC mitigation measures and the establishment of village eco-guards. Most of the support for the strengthening of law enforcement came from UWA staff, although some support was also expressed within communities. Any move to withdraw existing resource access schemes would be widely unpopular because communities would lose rights to harvest resources. Local people were also opposed to the idea of widening these agreements to include regulated hunting because they feared they would derive only marginal benefits and that allowing further resource access might exacerbate illegal activity.

Encouragingly, households that reported suffering from crop-raiding and predation of livestock by wild animals living in protected areas were significantly more likely to respond positively to the options considered in our research. For example, many wanted UWA to implement preventative measures, such as building fences or digging ditches, to stop animals straying into farmland. Such steps can in turn reduce farmers' incentives to hunt by increasing the profitability of agriculture and eliminating the need to catch bushmeat to compensate for lost harvests.

This virtuous circle is important because it suggests that authorities can regain support for conservation initiatives from local communities if management measures are tailored to address the issues they are most concerned about. Our research showed that authorised resource users are similarly predicted to respond more positively to these options, which suggests that engagement may work better for households that are already legally benefitting from conservation areas.

Successful engagement requires time and trust

The biggest barrier to the successful implementation of any of the options we considered would be the increased investment in

terms of time and money that would be required, though these costs vary between the different approaches. For example, the reallocation of existing funding to mitigating HWC would be quicker and cheaper than setting up new enterprises or improving existing livelihoods.

The sheer number of villages and the high population density around the two protected areas makes scaling up any programme more challenging. Community wardens employed by UWA are already struggling to run engagement programmes because they are spread too thinly to develop the necessary levels of mutual trust and strong working relationships with locals. The resulting short-term and patchy implementation has meant that interventions in individual communities are rarely sufficient to effect long-term behavioural change. UWA has a limited budget and must contend with a wide range of challenges, such as the difficulty of creating viable new livelihood opportunities and the residual poverty and displacement caused by recent conflict. These broader problems would be better addressed in coordination with other government departments and development partners.

One cost-effective option available to UWA would be to focus interventions on those individuals who cause the most damage. Although most hunters serve the local bushmeat market, a small proportion deliberately target high value commodities such as ivory and act as the main point of contact with middlemen. Many indicated a willingness to renounce hunting if provided with the support to do so. These individuals are held in high regard and are therefore likely to influence other hunters to reduce or halt their activities. However, significantly greater levels of trust and commitment on the part of all parties would be required for this approach to work. This will take time to achieve and requires a recognition that effective community engagement is a long-term process, not a one-off event.

With this in mind, we recommend a staggered strategy for community engagement. This would start with a policy to reallocate revenue-sharing funds to HWC, in order to support those households most affected by wildlife-induced losses of crops and livestock. Then, with a focus on villages where hunting is particularly rife, professional hunters could be targeted for engagement. Lessons could be learned from past trials of reformed poachers associations to identify the key factors for success. Our interviews suggested that the main stumbling block with these schemes in Uganda was that initial commitments by both UWA and the poachers were not followed through in practice. Provided these failings could be addressed, such schemes would have the advantage of focusing resources where they would have the greatest impact. Our recommendation to stagger the implementation of interventions would also foster trust by allowing UWA to concentrate its initial efforts on addressing the issues of greatest concern to communities.

Our study has shown that there are strategies that could transform the lack of trust between local people and UWA to reduce high levels of hunting and create a brighter future for both communities and wildlife. There is a great desire to move in this direction both within UWA and the villages surrounding the protected areas. To realise this vision, development partners and wildlife officials should make community engagement a priority in Uganda's wildlife crime strategy. International and national development agencies must work with UWA to develop a strategy to partner with local people to develop meaningful livelihood options and bring benefits to offset the costs of living with wildlife. The critical factor will be fostering a climate of trust uniting conservation officials and communities behind the common goal of protecting Uganda's wildlife.

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Notes

[1] Roe, D *et al.* (2014). The elephant in the room: sustainable use in the illegal wildlife trade debate. IIED, London. http://pubs.iied.org/17205IIED.html. / [2] UWA (2013). Murchison Falls National Park: General management plan (2012-2022). / [3] This estimate was calculated from the reported number of elephants killed deliberately and opportunistically by our sample of local hunters, which may not be representative of the wider population. / [4] Duffy, R and St John, F (2013). Poverty, poaching and trafficking: what are the links? Evidence on demand, UK. / [5] Harrison, M *et al.* (2015). Wildlife crime: a review of the evidence on drivers and impacts in Uganda. IIED, London. http://pubs.iied.org/17576IIED.html.