iied

A contribution to the symposium "Beyond enforcement", South Africa

February 2015

Background Paper

Conservation, crime and communities:

case studies of efforts to engage local communities in tackling illegal wildlife trade

iied

About the authors

Sarah-Louise Adams is the Conservation Programme Officer, Durrell Wildlife Conservation Trust

Susan Canney, is the Director of the Mali Elephant Project

Calvin Cottar is the Founder Director of Cottars Wildlife Conservation Trust and project implementer of Olderkesi Wildlife Conservancy, Kenya

Ian Craig is the Director of Conservation, Northern Rangelands Trust, Kenya

Kathleen H. Fitzgerald is Vice President for Conservation Strategy at the African Wildlife Foundation

Nomba Ganamé is the Field Manager for the Mali Elephant Project

Boas Hambo is a guide for Conservancy Safaris and a project implementer of the Namibia Rhino Rangers Incentives Programme

Max Jenes Swai is the Field Coordinator of the Ruvuma Elephant Project, Tanzania

Ambika Prasad Khatiwada is a Conservation Officer with the National Trust for Nature Conservation, Biodiversity Conservation Center in Nepal

Juliet King is the Strategic Advisor to Northern Rangelands Trust, Kenya

Gabriela Lichtenstein is the Chair of the IUCN South American Camelid Specialist Group
(IUCN SSC GECS)

Wayne Lotter is the Chairman of the PAMS Foundation and Project Coordinator of the Ruvuma Elephant Project, Tanzania

Collom Muccio is the Project Implementer of the Hawaii Integrated Coastal Zone Management Project, Guatemala

Jeff Muntifering is the Conservation Biologist at Minnesota Zoo (USA) and Science Adviser for Save the Rhino Trust (Namibia)

Philip Muruthi is Chief Scientist at the African Wildlife Foundation

Pierre du Preez is the National Rhino Coordinator for Namibia, and works in the Directorate of Scientific Services at the Ministry of Environment and Tourism

Hasina Randriamanampisoa is Project Coordinator of the Ploughshare Tortoise Protection Project, Madagascar

Dilys Roe is a Principal Researcher and leader of the Biodiversity Team at IIED, UK

Clara Lucia Sierra Diaz is Coordinator of the Mangrove Project, Colombia

Kenneth /Uiseb is Deputy Director for Resource Management in the Ministry of Environment and Tourism, Namibia

Giovanni Ulloa Delgado is Project Designer and Implementer with ASOCAIMAN, Colombia

The views of the authors expressed in this publication do not necessarily reflect those of IIED or the Beyond Enforcement Symposium organisers.

Contact

This compilation of case studies has been prepared as a background document for the symposium "Beyond enforcement: Communities, governance, incentives and sustainable use in combating wildlife crime" held in South Africa from 26 to 28 February 2015. The symposium has been organised by IUCN CEESP/SSC Sustainable Use and Livelihoods Specialist Group (SULi); the International Institute of Environment and Development (IIED); the Austrian Ministry of Environment; the ARC Centre of Excellence for Environmental Decisions (CEED), University of Queensland; and TRAFFIC – the wildlife trade monitoring network.

Wildlife crime is at the top of the international conservation agenda. Current strategies for addressing it focus on law enforcement, reducing consumer demand and engaging local communities in conservation. To date considerably more attention has been paid to the first two strategies than to the third. This volume of case studies explores a range of different models of community engagement – from awareness-raising to community-based rapid response teams – and a wider range of conservation incentives – from land leases, to sustainable use schemes, to reinvigorated cultural institutions and social status. The case studies highlight that while community engagement is not a panacea for tackling wildlife crime – and indeed there are examples where it has proved to be a real challenge – it can, under the right circumstances, be highly effective. We need to learn from these examples. In the long run, the survival of some of the world's most iconic wildlife species lies in the hands of the communities who live alongside them.

Contents

Introduction

1

Wildlife crime is a conservation *and* development issue

Wildlife crime is at the top of the international conservation agenda. Poaching and associated illegal wildlife trade (IWT) is devastating populations of iconic wildlife species such as rhinos and elephants, as well as a host of lesser known ones such as pangolins, some birds, reptiles, primates, medicinal plants and timber species. Wildlife trade is big business and there has long been an illegal component to it. TRAFFIC – the wildlife trade monitoring network – estimates that legal international trade was worth US$324 billion in 2009[1] while estimates of the illegal component vary from US$6 billion[2] to US$20 billion per year.[3] While this is a small proportion of the overall trade, wildlife trafficking is the fourth most lucrative transnational crime after the trafficking of drugs, people and arms.

The sudden and rapid escalation of illegal wildlife trade up the political agenda (Box1) has partly been driven by a huge increase in poaching of African elephants and rhinos and concerns for the longer term survival of these and other already endangered species, such as tigers. But another major driver is the link to large-scale organised crime and armed/militant groups and subsequent repercussions for national and international security and stability.[4] These immediate security threats mask a wider development issue. Wildlife can be a key asset for rural communities in Africa and elsewhere, providing a foundation for investment and economic development for example through tourism or timber trade. Depletion of this asset as a result of poaching can undermine this foundation, limiting options for local and national sustainable development. In South Africa,

BOX 1: HIGH LEVEL ATTENTION TO WILDLIFE CRIME SINCE JUNE 2012

- June 2012: Rio+20 conference highlights economic, social and environmental impacts of wildlife trafficking.

- September 2012: UN General Assembly highlights wildlife trafficking as a critical issue affecting rule of law.

- November 2012: US Department of State hosts meeting on addressing wildlife trafficking with Hillary Clinton.

- March 2013: Sixteenth Conference of the Parties to the Convention on International Trade in Endangered Species of Flora and Fauna agrees decisions to more effectively combat poaching and illegal wildlife trade.

- April 2013: UN Commission on Crime, Prevention and Criminal Justice passes a Resolution encouraging UN Member States "to make illicit trafficking in wild fauna and flora a serious crime".

- May 2013: UN Secretary-General presents report to the United Nations Security Council highlighting threat posed by Central Africa's heavily-armed elephant poaching gangs.

- May 2013: HRH The Prince of Wales and the UK Government host a conference at Clarence House calling for action at the highest level to end the trade in illegal wildlife.

- June 2013: G8 Summit describes fight against illegal trade in wildlife as equal in importance to fighting corruption, organised crime, drugs and people trafficking.

- July 2013: US President Barack Obama issues an Executive Order that establishes a Presidential Task Force on Wildlife Trafficking and external advisory council.

- September 2013: UN General Assembly calls for crackdown on wildlife crime.

- September 2013: Clinton Global Initiative announces new "Partnership to Save Africa's Elephants".

- September 2013: Prince William, Duke of Cambridge announces "United for Wildlife" – a new coalition of international conservation organisations.

- November 2013: CITES and INTERPOL convene meeting to discuss a strategy for improving law enforcement.

- December 2013: Government of Botswana and IUCN host African Elephant Summit and agree on a set of Urgent Measures to tackle elephant poaching.

- January 2014: European Parliament resolution on wildlife crime (2013/2747(RSP)) recognises the threat of wildlife crime to security, political stability, economy, local livelihood, natural resources and cultural heritage.

- February 2014: UK Government hosts intergovernmental London Conference on the illegal wildlife trade.

for example, protected area authorities have reaped substantial financial benefits by selling live rhinos to private ranches for tourism and trophy hunting. The revenue generated has been used, not only to fund protection of rhinos and elephants in South Africa's national parks, but also to subsidise other conservation initiatives. It has also enabled engagement of the private sector as a major actor – now holding more land for wildlife ranching than national or provincial protected areas.[5] The escalation of poaching and the costs entailed in effective protection and law enforcement have resulted in disinvestment from the private sector and the loss of important conservation revenue.[6,7]

Tackling illegal wildlife trade – a three legged stool

It is well-recognised that there is no simple solution to tackling illegal wildlife trade. The different initiatives that have emerged have adopted multiple approaches. These can broadly be classified into three types:

1. Increase law enforcement and strengthen criminal justice systems

2. Reduce demand/consumption

3. Support sustainable livelihoods and local economic development

To date, most attention has been paid to the first two approaches with relatively limited attention to the third leg of the stool. For example, a 2014 European Parliament resolution[8] on wildlife crime, includes over thirty wide-ranging actions in support of law enforcement, from the strengthening of intelligence, enforcement and judiciary systems to the introduction of trade moratoria and revised penalties. In contrast, only one action is directed towards local communities – promoting alternative (non-wildlife based) livelihood strategies.

IWT has an enormous impact on local communities, who are affected by insecurity and the depletion of important livelihood and economic assets. They can also be very negatively affected by heavy-handed militarised responses to wildlife crime. Law enforcement systems often make little distinction between the illegal activities driven by large scale profits ("crimes of greed") versus those driven by poverty ("crimes of need"). Most fundamentally, however, the long term survival of wildlife populations, and in particular the success of interventions to combat IWT, will depend to a large extent on the local communities who live with wildlife populations. Where the economic and social value of wildlife populations for local people is positive, they are likely to be motivated to support and engage in efforts to combat and manage poaching and illicit trade. But where local people do not play a role in wildlife management and where it generates no benefits,

there will be strong incentives for illegal use. Even the most focused and well-resourced enforcement efforts (which few countries can afford or have the political will to implement) will struggle to effectively control wildlife crime where there are strong incentives for complicity by local people.

There is recognition of this amongst the international community. The "London Declaration"[9] that was the output of a major intergovernmental meeting on illegal wildlife trade in February 2014 (and which in turn recognises The African Elephant Action Plan and the urgent measures endorsed at the African Elephant Summit in December 2013) includes a number of commitments to strengthening the role of local communities – as do other international declarations (Table 1). At the same time as the London Conference on Illegal Wildlife Trade was held, United for Wildlife[10] – a coalition of international conservation organisations convened by the Royal Foundation[11] – hosted a two-day meeting to explore International Wildlife Trafficking Solutions to a Global Crises[12]. One of the solutions to illegal wildlife trade announced by United for Wildlife was to support successful models of community wildlife management.

But what do successful models of community-led conservation and law enforcement look like?

There are a couple of well-known examples. In Namibia, for example, the NGO Integrated Rural Development and Nature Conservation (IRDNC) launched a community game guard programme over 30 years ago, paying local people to protect wildlife and turning poachers into conservationists. Following Independence in 1990 a policy change further transformed attitudes to conservation by devolving the rights to use and benefit from wildlife to local people. How do they benefit? They run small tourism enterprises, sell licences for tourism and trophy hunting to private operators (which in turn generates employment and a supply of game meat), and trade in handicrafts and cosmetics based on natural products. They also have an insurance scheme which means that local people get compensation for damage caused by wildlife – one of the downsides of successful conservation efforts. In recognition of the improved conservation status of black rhinos in Namibia and the potential for additional incentives from trophy hunting for conservation and habitat protection, the thirteenth Conference of the Parties to CITES in 2004 approved an annual export quota of five hunting trophies of adult male black rhinoceros from Namibia. Since then, black rhino populations in Namibia have continued to increase, from 1,435 in 2007 to 1,750 in 2012.[13]

Table 1: International Commitments on Engaging Communities in Tackling Illegal Wildlife Crime

LONDON DECLARATION COMMITMENT	OTHER RELATED INTERNATIONAL COMMITMENTS
Recognise the negative impact of illegal wildlife trade on sustainable livelihoods and economic development. This impact needs to be better understood and quantified...	United for Wildlife: support local communities, whose livelihoods are directly affected by the illegal wildlife trade.[14]
Increase capacity of local communities to pursue sustainable livelihood opportunities and eradicate poverty by (inter alia) promoting innovative partnerships for conserving wildlife through shared management responsibilities such as community conservancies, public-private partnerships, sustainable tourism, revenue-sharing agreements and other income sources such as sustainable agriculture.	African Elephant Summit: engage communities living with elephants as active partners in their conservation by supporting community efforts to advance their rights and capacity to manage and benefit from wildlife and wilderness.[15] United for Wildlife: develop a new United for Wildlife standard for sites with high-value species threatened by wildlife crime, including the identification of successful models for ensuring incentives for local communities to engage with and derive livelihood benefits from conservation.[16] European Parliament Resolution: is of the opinion that repressive measures alone are not sufficient to combat wildlife crime and encourages the Commission to make sure to have the support of local communities closest to the wildlife concerned and to develop programmes that would offer an alternative source of income.[17] Global Tiger Recovery Plan: engaging with indigenous and local communities to gain their participation in biodiversity conservation, minimize negative impacts on tigers, their prey, and habitats, and reduce the incidence of human-tiger conflict by providing sustainable and alternative livelihood options through financial support, technical guidance, and other measures.[18]
Initiate or strengthen collaborative partnerships among local, regional, national and international development and conservation agencies to enhance support for community led wildlife conservation. Work with, and include local communities in, establishing monitoring and law enforcement networks in areas surrounding wildlife.	

This volume of case studies explores well-known and less well-known examples of both the highs and lows of engaging local communities in tackling illegal wildlife trade. The case studies highlight that while community engagement is not a panacea – and indeed there are examples where it has proved to be a real challenge – it can, under the right circumstances, be highly effective.

This volume is dominated by case studies of initiatives to combat elephant poaching – a reflection of the scale and severity of this problem in some parts of Africa. However, illegal wildlife trade affects many more species beyond those that are currently prioritised in international policy discussions. It is hoped that this first set of case studies will encourage others to document their experiences so that the conditions under which community engagement does and doesn't work can be highlighted, explored, and efforts made to replicate success. It is only by learning from failures as well as successes that we can take the next steps in truly maximising the potential of local communities to safeguard wildlife for the benefit of themselves, their future generations and the international community.

Case studies

2

Northern Rangelands Trust, Kenya

Juliet King and Ian Craig

At a glance

COUNTRY	Kenya
LOCATION	Northern Kenya – 19 community conservancies covering 2.5 million hectares of community land
SPECIES	African Elephant (*Loxodonta africana*)
ILLEGAL WILDLIFE TRADE CONTEXT	High – and increasing – levels of elephant poaching for ivory
TYPE OF POACHERS	Predominantly members of the local community or neighbouring communities
TYPE OF COMMUNITY ENGAGEMENT IN TACKLING IWT	Community rangers/eco-guards Community intelligence gathering
CONSERVATION INCENTIVE MECHANISM	Revenue-sharing from tourism Conservation jobs Enterprise development Legally recognized community based natural resource management institutions

The story so far

Community conservancies are proving increasingly effective as partners in the fight against ivory poachers in Kenya. In the north of the country, conservancies now manage more than 2.5 million hectares of community land, much of it critical range for the African elephant.

Operating in areas which are remote, extensive and difficult for government agencies to control, the conservancies are in the front line of the battle against the illegal ivory trade.

The reason they are effective in conservation is linked to the broader benefits the conservancies bring to local communities. In essence, these well governed, community-owned and autonomous institutions are set up with the aim of improving social wellbeing, land management and wildlife conservation.

Conservancies represent constituent communities who own a defined area of community land, either legally or traditionally. Collectively, the landowners ensure the rights and responsibilities of conservation and share the benefits from conservation among the community.

First established in Northern Kenya in 1995, there has been growing demand from communities to set up conservancies since the mid–2000s. The Northern Rangelands Trust (NRT) has been a key player in their development in Northern Kenya since 2005, helping to set up and support 19 conservancies in that part of the country.

Kalama Conservancy Board meeting (NRT)

conservancies make a big difference to livelihoods

In the four counties where NRT operates, communities are mainly semi-nomadic pastoralists, with a minority of agro-pastoralists in the areas of higher rainfall. Soils are poor and recent droughts have led to high loss of livestock. Poverty, in general, is high with an average of 70 per cent of the population living below the national poverty line.

In this context, the conservancies make a big difference to livelihoods, generating financial and non-financial benefits.

During the course of 2013, NRT conservancies generated 700 full-time (including tourism operations) and 800 part-time jobs. Revenue from tourism was US$545,000, of which 60 per cent went into funding community development projects based on priorities determined by the communities themselves. Joint conservancy–NRT programmes raised livestock sales and revenue for women through micro-enterprise.

Non-financial benefits during the same period included better security (considered more important by communities than direct financial benefits), improved rangeland health and access to grazing, the use of conservancy transport for emergencies and increased social cohesion.

a legal foundation for their role

Conservancies have also been making their presence felt in conservation. Over the past decade, a growing appreciation by government of the contribution that conservancies make has led to a legal foundation for their role.

Naibunga Conservancy Scouts examining an elephant carcass (NRT)

The new Wildlife Conservation and Management Act (2013), which came into effect in 2014, affords great legal recognition to conservancies – both in the context of tackling illegal wildlife trade and other areas of insecurity, including inter-tribal conflict, livestock raids and banditry.

The conservancies' approach to tackling elephant poaching is multi-faceted, including community rangers, mobile rapid-response teams, intelligence gathering and social pressure.

The network of around 400 community rangers monitor and survey wildlife across their conservancies during daily patrols. All are in direct radio contact with national law enforcement authorities, and just over a third are armed. Those who do carry arms operate as National Police Reservists, under the Kenya Police.

Three armed mobile rapid-response teams, made up of 25 rangers drawn from the constituent communities, cover all NRT community conservancies. These specially trained and equipped multi-ethnic groups are able to move between different tribal areas, operating where traditional law enforcement agencies would not have access.

Conservancies maintain a local informer network which complements the KWS intelligence system. Increased NRT investment is making intelligence gathering more formal and strategic.

Not least of the conservancies' roles is applying social pressure to expose and shame criminals. Customary punishments, such as cursing individuals, still carry weight in traditional communities.

In spite of the risks involved, the benefits of anti-poaching activities outweigh the dangers.

The cost of all this is significant. The NRT and the conservancies together invest around US$1 million a year in the community policing programme. The government, so far, has given little financial support. However, new legislation, devolving power to county bodies is likely to change this.

What works and why?

Results are encouraging, although the impact of conservancies in addressing elephant poaching needs to be set in the context of changes in international trafficking and the local price of ivory, particularly since 2010.

Most conservancies in Northern Kenya were set up between 2001 and 2011, and appear to be effective in reducing poaching. Anecdotal evidence, carcass data and aerial survey data on elephants between 2002–2008 show that elephant populations increased by 27 per cent during this period, and the proportion elephants killed in NRT conservancy areas was significantly lower than outside.

Better ranger-based monitoring of elephant mortality since 2009 shows a steady increase in poaching activity from 2009–2012. During this time the percentage of carcasses found that had been killed illegally rose from 34 per cent to 81 per cent, and the overall elephant population between 2008 and 2012 declined by 14 per cent. However, in the past two years poaching has declined, from 59 per cent in 2013 to 43 per cent in 2014.

While conservancies were unable to contain the massive spike in poaching levels in 2011–12, they have upped their game in the past two years, working closely

Northern Rangelands Trust Rapid Reaction Team (NRT)

with the Kenya Wildlife Service and the Police and boosting investment.

Reports from rangers suggest that the number of elephant sightings are stable on conservancy land, in spite of overall population decline. This suggests the elephants concentrate in areas where they feel safe.

In more general terms, community conservancies have become highly effective and respected institutions bringing tangible benefits to the people they represent, as well as a significant force in countering illegal wildlife trade.

The inclusive nature of conservancies is key to their influence and success. They do not set up boundaries between people and wildlife, nor do they exclude other people from using the land.

Inherent in their structure and organisation is the capacity to resolve local issues, and ensure that the outcome is upheld.

Kenya is a highly supportive of public–private partnerships, and this is the framework for successful liaison between the conservancies and official anti-poaching efforts.

Challenges

- Funding constraints and financial sustainability: it costs US$50–70,000 a year on average to run a conservancy, and investment needs a minimum ten year timeline.

- The recent down-turn in tourism in Kenya has further reduced available funding.

- General insecurity remains an issue.

- Corruption within the Police and judiciary impedes prosecution of poachers.

Lessons learnt

- Ownership of all decision-making must be by the local communities; with government and NGO associates operating as supportive partners.

- Non-financial benefits should not be overlooked as an incentive.

- Peer process is the strongest influencing factor in changing established mindsets within communities.

- It is important for conservancies to have an identifiable headquarters in the community.

- For conservancies to survive cycles of poor governance under different leadership, maintaining strong community ownership is key: poor management will be exposed and addressed.

- A conservancy takes 12 months to set up and 2–3 years to become effective.

- It is important for a supportive partner to act as 'honest broker' in all technical aspects of conservancy operations.

COULD THIS WORK ELSEWHERE?

As a basic model, the community conservancy model developed in Northern Kenya can be replicated and adapted in other countries where communities are the owners of — or have strong rights over — natural resources, and where these are communally managed.

Olderkesi Wildlife Conservancy, Kenya

Calvin Cottar

At a glance

COUNTRY	Kenya
LOCATION	Olderkesi Conservancy, adjacent to Maasai Mara National Reserve
SPECIES	Elephant (*Loxodonta africana*)
	Maasai giraffe (*Giraffa camelopardalis tippelskirchi*)
	Lion (*Panthera leo*)
	Leopard (*Panthera pardus*)
ILLEGAL WILDLIFE TRADE CONTEXT	Elephants are at high risk from poaching
	Giraffes are under threat for bushmeat
	Big cats are killed as a result of human-wildlife conflict (livestock losses)
TYPE OF POACHERS	Bushmeat poachers are local and will also poach elephants when the opportunity arises
TYPE OF COMMUNITY ENGAGEMENT IN TACKLING IWT	Community rangers/eco-guards
CONSERVATION INCENTIVE MECHANISM	Performance-based land lease payments

The story so far

Elephants, big cats and Maasai giraffe are among the species to benefit from a community conservancy initiative, in which local landowners are paid to protect wildlife in a key corridor on the south east boundary of the Maasai Mara National Reserve in Kenya.

After more than a decade dedicated to resolving cultural and political resistance, the Cottar's Wildlife Conservation Trust (CWCT) is now implementing a programme which pays Maasai community landowners of Olderkesi for the lease of 7,000 acres for a designated conservancy.

The scheme is based on lease payments that are competitive with alternative land use, such as agriculture and domestic livestock grazing. During the first five years these payments will finance community projects – including schools, bursaries, a centre for girls and medical support. The money is paid via a direct payment scheme which is not susceptible to corruption.

the agreement promotes a collective liability

Infringements of the agreed land use – for example, poaching – will trigger deductions in lease payments to

the Maasai community leaders who are then responsible for making up the deficit. This aspect of the agreement promotes a collective liability which is a powerful mechanism to enforce land use for wildlife.

The land in question is the Olderkesi Wildlife Conservancy, an important corridor between the Loita/Ngurman hills and the Maasai Mara National Reserve for 3,000 + elephant and thousands of other transient plains herbivores, such as wildebeest, zebra, eland and gazelles. The land also supports a permanent population of around 110 Maasai giraffe.

All wildlife in Olderkesi is threatened by poaching and land use change. Most poaching in the area is to supply the local market with meat protein, and the Maasai giraffe suffers particularly from this illegal trade. Local market values of all animals poached for bushmeat is thought to be around US$110,000 (KES10 million) a year.

Those who kill for bushmeat are local, including members of the Maasai landowning community. However, the same poachers may also kill elephant for ivory if they get a chance, using poisoned spears and
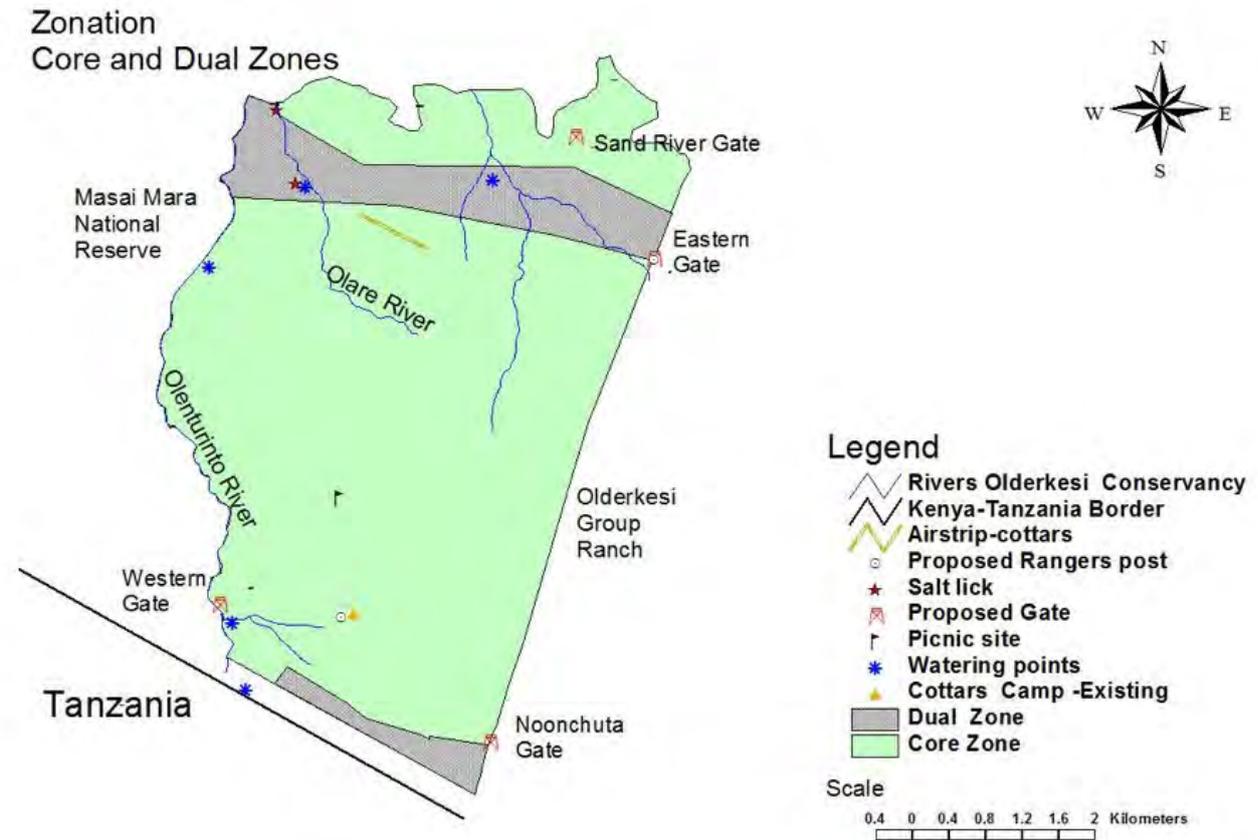
Olderkesi Wildlife Conservancy Zonation

arrows. In addition, a small group of specialists operate in organised gangs.

trade values of transient animals are hard to predict

The international market value – essentially illegal elephant ivory – could be between US$20–$40 million (based on current rates of US$5 million for ivory from a big bull). Accurate trade values of transient animals are hard to predict; the numbers of elephant on conservancy land at any one time varies between 200 and none.

As well as poaching, the trend in Olderkesi to subdivide and fence land for farming and livestock has a significant impact on wildlife; the big cats at high risk from retribution killings for livestock losses.

The conservancy scheme is based on giving the local community financial incentive to ensure wildlife protection within the conservancy area, by preventing poaching and stopping the fragmentation of land for farming.

The deal was struck after more than ten years of painstaking negotiations with the Olderkesi Maasai community; 3,400 registered members collectively own an area of 106,000 acres, and make up one third of the population living on the land. They stand to gain from community development and infrastructure, and a steady income stream, paid for by the lease fees.

The key to success was persuading the whole community to agree that a single land unit of 7,000 acres should be managed as a wildlife conservancy, as opposed to being subdivided into small plots for farming and livestock.

Olderkesi Wildlife Conservancy community scouts, trained by KWS (Calvin Cottar)

Winning over all the members has needed hundreds of community meetings and dozens of field trips over many years. Maasai leaders influence opinions, but do not make decisions for the community. Even minimal level opposition to a proposed project can considerably delay its implementation. On community land, just 1 per cent of the members can block a plan. At Olderkesi, even when 98 per cent of the community were in favour of full implementation, it took more years of negotiating to win over minority resistance.

it is up to the elders to police and fine culprits

Since that has been achieved, CWCT, as lessee, applies control of land use and pays the Maasai elders (the lessors) who act on behalf of all the community members. If payments are reduced, due to infringements, it is up to the elders to police and fine culprits (who are usually members of their community or local area).

CWCT raises money to cover the conservancy lease, management and operations by charging entry fees to tourism partners and from benefactors. The conservancy has a team of locally sourced scouts, runs a small undercover unit, and liaises with rangers from the Kenya Wildlife Service (KWS) and the Mara Elephant Project when evidence of poaching is found.

The Maasai community supports these operations, which help ensure they get their full lease payments. This amounts to US$10,000 (KES 1 million) per month for the Olderkesi community members, and there are additional rewards for information that leads to the capture of poachers, guns and ivory stocks.

The terms of the agreement mean that families and their livestock living within the area are being moved out by June 2015, and this relocation is currently underway.

However, the scheme includes provision for controlled livestock grazing during the wet season when tourism is low.

Tourism raises funds for conservancy lease (Calvin Cotter)

What works and why?

The project is still in its infancy it is a little early to judge results, but positive early indicators include a rise in the game count in the conservancy area, and the halting of fragmentation, fencing and farming.

For now, lease payments are high enough to be competitive and the community see themselves as partners in conservation rather than being victims of government-enforced wildlife protection. New methods of making these payments, designed to guard against corruption, have been put in place – in spite of resistance from the Maasai elders some of whom would like the land fully available, years round, for their cattle (90 per cent of cattle in Maasailand is owned by the 10 per cent of the elders).

Long term success will depend on whether the community decides that land for wildlife is economically worthwhile over time, and whether the rewards are worth the risks of protection.

Kenya's recent crackdown on wildlife crimes has dramatically raised fines and penalties and increased the rewards for informers. At the same time, ivory poachers have become more ruthless and violent; where they were once welcomed in villages, their tactics are now turning villages against them.

The general climate of better security works in the conservancy's favour, but it remains vulnerable to other external factors: if prices for wheat and maize rise, the returns from wildlife protection may not be enough.

Challenges

- Short term political interests inherent in Maasai culture, and the nature of decision-making on community land.

- The polarised nature of the Maasai community in Olderkesi, which comprises a small minority of very rich cattle owners and the vast majority living in poverty.

- The legacy of Kenya's historical heavy-handed approach towards local people in the name of wildlife conservation.

Lessons learnt

- There is no quick fix to setting up a community conservancy; 100 per cent buy-in is key to success, especially in pastoral communities, and this takes time.

- Protracted discussions make it more difficult for influencers and leaders to back down when decisions are made.

- Collective decision-making process means that results are likely to be more lasting than deals struck with individual landowners.

- A secure source of funding is essential.

COULD THIS WORK ELSEWHERE?

The conservancy scheme has been implemented in a way that could be repeated on any other community-owned land in Kenya. The project area has every possible feature of pastoral lands, and also borders a national reserve and a neighbouring country.

The Ruvuma Elephant Project, Tanzania

Max Jenes Swai and Wayne Lotter

At a glance

COUNTRY	Tanzania
LOCATION	Five Wildlife Management Areas (community land) in the Selous-Niassa Wildlife Corridor.
SPECIES	Elephant (*Loxodonta africana*)
ILLEGAL WILDLIFE TRADE CONTEXT	Extremely high levels of elephant poaching
TYPE OF POACHERS	Mostly local, but financed and organised by outsiders
TYPE OF COMMUNITY ENGAGEMENT IN TACKLING IWT	Community rangers/eco-guards Community intelligence-gathering
CONSERVATION INCENTIVE MECHANISM	Enterprise development Human-elephant conflict mitigation

The story so far

Remarkable results in reducing elephant poaching in the Selous–Niassa wildlife corridor are attributed to a strategy that is built on extensive community participation, intelligence-led and involves multiple-agencies.

The Ruvuma Elephant Project (REP) covers a 2,500,000 ha area of Tanzania between two protected areas: the Selous Game Reserve, in the south of the country and the Niassa National Reserve, just across the border, in Mozambique.

It includes an important wildlife corridor, dominated by miombo woodland, supporting a range of different land uses and rubbing up against an international border; factors which have contributed to it being one of the most notorious areas for elephant poaching in Africa.

Yet, in spite of the recent resurgence in poaching for ivory in Tanzania and Mozambique – and especially in the Niassa area and the Selous ecosystem – results show that the REP has managed to curb elephant poaching in the area. If current anti-poaching activities can be maintained, elephant populations in the REP should remain stable.

The REP explains its success by having a strong focus on working closely with communities to achieve reciprocal support and participation, joint patrols and operations, and intelligence-led activities both in and outside the protected areas.

The area in question is a mosaic of administrative zones, falling within three local government districts, and including five Wildlife Management Areas (WMA) – managed by community-based organisations that have Authorised Association status to protect and sustainably manage the natural resources.

There are also five forest reserves, managed by District Forest Officers; a game reserve managed by the Wildlife Division; and village land managed by local village governments and the Districts.

a reliable picture of elephant status and threat

The Ruvuma Elephant Project was established in 2011, organised by the not for profit organisation PAMS Foundation. Its goals are to establish a reliable picture

Ruvuma Elephant Project scouts (PAMS Foundation)

of elephant status and threat in the area, to understand seasonal movements, control poaching, to ensure law enforcement and prosecution is a real deterrent, and to reduce elephant mortality due to human-elephant conflict.

To achieve these aims, the project implementers have been pursuing a range of activities:

- Patrolling has been strengthened through training game scouts and rangers in anti-poaching skills and case reporting. The project has also been implementing joint field patrols where village game scouts accompany wildlife officials and rangers from the District or Wildlife division.

- Monitoring and data collection has improved through regular air surveillance, carried out over set routes. This provides geogrphical positioning system (GPS) data for elephant count, carcasses and illegal activity.

- Establishing incentives and giving rewards to individuals for good performance and information. The resulting intelligence is then fed into special intelligence-led operations.

- Setting up a human-elephant conflict (HEC) mitigation programme – including putting up chili pepper fences and beehive fences to deter elephants from crops.

- Supporting income generating activities for WMA communities.

In essence, community engagement in combating ivory poaching boils down to three types of action on the part of local people: they act as informants, they act as guards, and they change their own behaviour.

The project actively facilitates all three. In return, the people get paid for information, and for carrying out tasks. They get help to protect crops and sell the chilli peppers which are used for crop protection. They are also rewarded for good performance in law enforcement.

Their involvement is not without risk. Community guards have been shot and had their homes destroyed by fire. The project, however, is quick to provide compensation and to rebuild morale among those who are committed to wildlife protection. The commitment levels suggest that overall, the rewards outweigh the risks.

What works and why?

In the three and a half years since the project got underway, the impact on poaching has been greater than any other unit or project in Tanzania, with one exception. The Friedkin Conservation Fund (FCF) project, which operates in the north and western parts of the country, and which adopts a very similar approach to REP, has comparable levels of effectiveness.

REP project patrols and aerial surveillance show a substantial drop in elephant carcasses seen during the
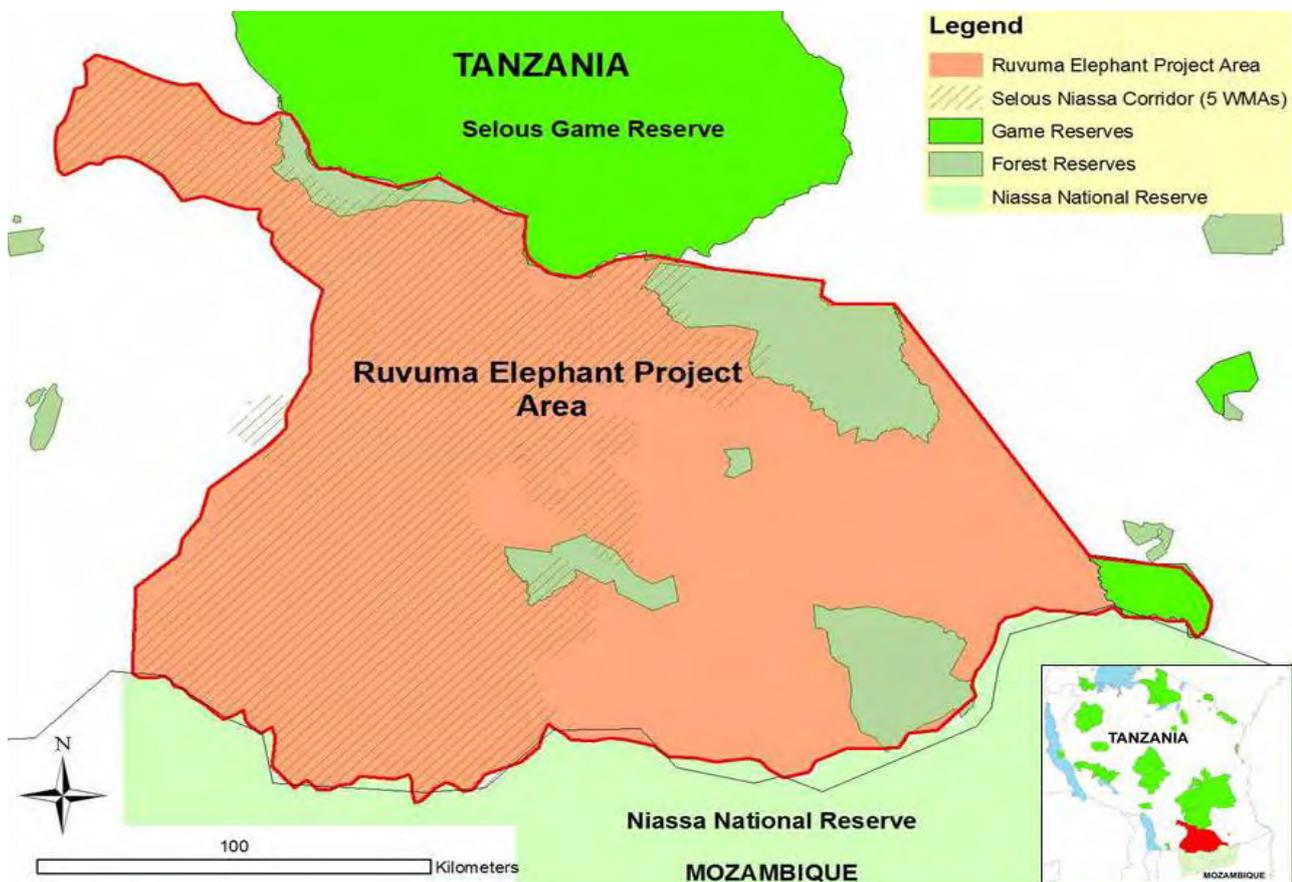
Ruvama Elephant Project Area. Copyright: PAMS Foundation
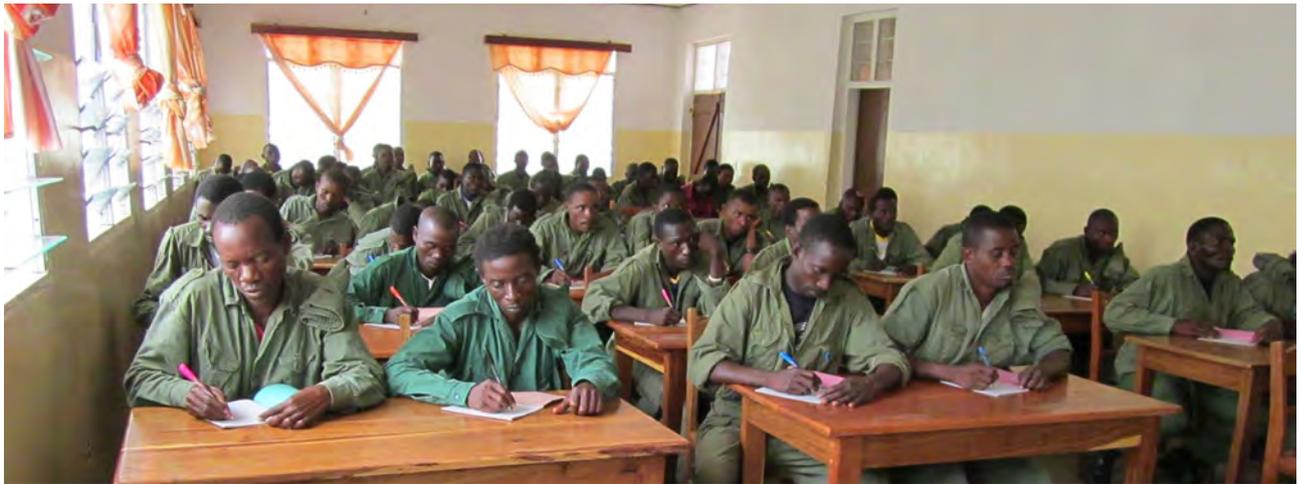
Scouts in training (PAMS Foundation)

first three years of operations (216 were spotted in year one compared to only 68 in year two and less than half of that in year three) – a decline that is not explained by a decline in the elephant population over all. Indeed the population of live elephants has remained stable or marginally increased over the same period. In the last five months of 2014, only one illegally killed elephant carcass was found.

Interventions have led to the seizure of 1,582 snares, 25,586 pieces of illegal timber, 175 elephant tusks, 805 firearms, 1,531 rounds of ammunition, 6 vehicles and 15 motorbikes. So far, law enforcement activities have led to the arrest of 562 people.

Those involved in the REP believe that the project works because the area is protected by multiple agencies, rather than a single authority. These include community-based organisations, and a non-government organisation which is a specialist in protected area management support (PAMS Foundation) assisting them and the relevant government authorities. Multiple agency involvement increases transparency which hinders corruption.

Another key factor is the high levels of community engagement, which is integrated into and supported by formal law enforcement. This aspect of REP strategy is based on the premise that local involvement in commercial poaching is a manifestation of other problems: the need for case, lack of viable alternatives, lack of understanding of the importance and value of conservation, and lack of good relationships. All these causes need to be recognised and addressed before there can be any long term progress.

Challenges

▪ The proximity of the project area to a long, porous national boundary.

▪ Working within funding and capacity constraints.

▪ The sheer scale of the opposition; the poachers' weaponry and tactics.

▪ Limited resources and weaponry available for the community scouts.

Lessons learnt

▪ Don't raise expectations of communities and then be unable to deliver on those expectations. Promising less and delivering more has proved to be an effective approach to win the support of communities.

▪ It is important to be sincere, reliable and timely (e.g. with payments) in all dealings.

▪ Sometimes the path of least resistance is not the path that is right. It is critical not to compromise on principles or do anything that could be legally used against you in the future – even when this might provide a short term fix .

▪ Don't limit your friends and allies to a single source – successful projects require support from a wide variety of sources if they are to be sustainable in the long term.

▪ While financial resources are essential, an integrated strategy, commitment and determination affect success more than just funding.

▪ Adaptive management is essential. Projects need to be prepared to change course and change tactics if what was originally planned is not working.

COULD THIS WORK ELSEWHERE?

The REP model could be widely replicated elsewhere, but only by NGOs who have the expertise and who are prepared to do everything it takes to implement a full, holistic approach. As noted earlier, there is a similar project in the north and west of Tanzania which uses similar strategies and has also proved to be effective.

The Mali Elephant Project, Mali

Susan Canney and Nomba Ganamé

At a glance

COUNTRY	Mali
LOCATION	Gourma Region - mainly communal land
SPECIES	African elephant (*Loxodonta africana*)
ILLEGAL WILDLIFE TRADE CONTEXT	Escalating poaching of ivory in a region previously unaffected
TYPE OF POACHERS	Outsiders who enlist local guides
TYPE OF COMMUNITY ENGAGEMENT IN TACKLING IWT	Community rangers/eco-guards
CONSERVATION INCENTIVE MECHANISM	Community-based natural resources management Human-wildlife conflict mitigation Legally recognized community based natural resource management institutions Social status

The story so far

Poaching for ivory in the Gourma region of Mali – a biodiversity hotspot and elephant migration route – had been virtually non-existent before 2012. However, the rebellion and subsequent coup in March that year led to occupation by armed groups in the north, and an influx of lawlessness and firearms into the elephant range.

In spite of the escalating threat to elephants from poaching since this time, losses have so far been mitigated to a remarkable degree thanks to the mobilisation of local communities whose support for elephant conservation is part of a wider system of community-based natural resource management (CBNRM), set up through the Mali Elephant Project.

However, the challenge is huge. The Gourma range – through which 12 per cent of all West African elephants pass – is now being targeted by illegal traders to finance war and terrorism, with rumours of a new trafficking network operating in the area that is said to offer around US$6,000 per tusk. At the beginning of 2015, nine elephants were killed in just two weeks.

The size of Switzerland, Gourma is an extensive and remote area, and rule of law there is weak. Government enforcement agencies are tarnished by corruption and have virtually no resources. With such poor official protection, local community support for elephant conservation is crucial.

Before the threat of poaching intensified, the Mali Elephant Project had already been working (since 2009) with local communities to help them find sustainable solutions to managing their natural resources that benefit both people and the elephants.

a continuous dialogue with local people
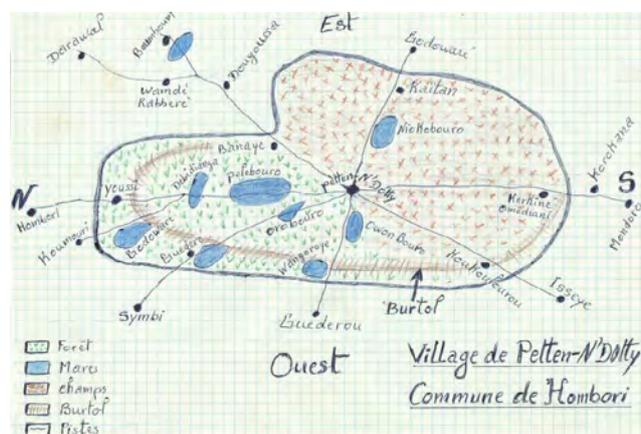
Village land mapping

After beginning in 2003 with three years of scientific studies to understand the elephant migration, the MEP approach broadened to consider local attitudes, concerns and socio-economic factors. Project field staff – all of them Malian – maintain a continuous dialogue with local people through informal meetings and surveys.

Any problem is discussed in the context of peoples' daily lives, allowing them to talk about the challenges they face, as well as living alongside elephants. The result is a detailed picture of how the elephants and people interact.

It shows that the threats facing the elephants are often the same as the threats to local livelihoods, and derive from an ecosystem under strain from environmental change. The list includes population pressure from outside the area as people search for new land to farm, dispossessed herders try shifting agriculture, refugees flee rebel held zones in the north, and increasing resource exploitation from urban centres.

At the root of all the rivalries that occurred was an anarchic use of natural resources; a 'free for all' that has degraded habitats and resources, impoverished livelihoods and exacerbated human-elephant conflict.

In response, the Mali Elephant Project has helped local communities to set up community management of natural resources and land use. These work along traditional resource management lines, but include all local ethnic groups and clans.

The rules for resource use are set by a representative committee of elders, and enforcement is ensured by patrols of young men – the "Brigades de Surveillance" – who can call on the support of government forest officials.

tangible benefits

It's a system that brings tangible benefits to the local population: resource management decisions include protecting pasture by creating fire breaks, and allowing tree regeneration – thereby increasing the natural resource availability.

The local population is able to earn additional income by charging outside users – such as the wealthy owners of "prestige herds" from neighbouring towns, who want access to water and forage for their cattle.

Wherever possible, the Mali Elephant Project has used existing national policies to back up local community-based initiatives. One example is the ability to protect 'reserve pasture' under the 'Charte Pastorale'. Another is the formal designation of the community brigades as 'Associations' which gives them added authority.

In the post-conflict period, the project has played a role in improving local security. Effective resource management and elephant protection both depend on united communities, and knowing MEP's success in achieving this, some leaders asked the project to help

Meeting of the vigilance network (Susan Canney)

run community meetings to work towards reconciliation, disarmament, the apprehension of bandits, and re-integrating former fighters into their communities.

The MEP influence on social cohesion prompted the army to deploy additional troops which improved security: with fewer attacks, people felt able to travel and markets were reopened in September 2014.

This experience has laid foundations for an integrated community-government response to the latest spate of IWT. The project held a meeting to strengthen solidarity and has fast-tracked plans to coordinate community brigades, government foresters and the military.

Knowing the national and international significance of the elephant population has given a sense of pride in the 'specialness' of their country.

What works and why?

The local people understand the need to regulate resource use, and they understand that elephants are indicators of a 'healthy' environment. By helping the communities to establish control over the resources in their area (including the elephants), and prevent abuse by outsiders, the project brings tangible benefits, a sense of empowerment and improves livelihoods.

The project's success in building strong community solidarity was largely due to the personal qualities and skills of the field manager, who is from the area. Indeed the project team was entirely Malian, which meant the project was able to continue, even during the conflict period.

The CBNRM system is well grounded in law, giving the local communities legitimate rights to manage

and protect their natural resources. Although Mali's decentralisation legislation has been generally deemed something of a failure, the project made the most of it.

Leaders have exercised their influence to help stigmatise poaching. They have issued edicts saying that killing elephants amounts to stealing from everyone; a powerful message in a culture where being labelled a thief is a disgrace.

The community brigades are an effective force. They are active in resource management activities, such as building fire-breaks; they help to enforce agreed land use decisions, and, in the context of anti-poaching they also provide IWT intelligence to government authorities. Being a brigade member confers status on young men in the community, which is at least as valued as the small incentive payments they receive.

Challenges

- Operating in an area where post-conflict insecurity remains an issue.

- The limited and minimal resources available to deal with the consequences of major geo-political forces (civil war, terrorism, a global economy that externalises environmental costs).

- A lack of government capacity to provide security and law enforcement.

- Ineffective policy and legislation for dealing with wildlife crimes.

Lessons learnt

- Establishing community solidarity needs deep cultural understanding. (The presence of Westerners can distort perceptions.)

- Helping local people to find solutions is more effective than imposing them.

- Transparent processes build trust and prevent some individuals benefitting at the expense of others.

- Local communities respond to actions, not words.

- Using existing supportive features of the local context are more cost effective than imposing new infrastructure.

- Making assumptions based on simple observations can lead to misunderstanding.

COULD THIS WORK ELSEWHERE?

The process is transferable and individual features could be. The key point is that these emerge from the process of listening to and working with local communities. They are therefore adapted to the local context and owned by the community.

Brigade-Forester patrol (Susan Canney)

The Greater Kilimanjaro Landscape, Kenya and Tanzania

Kathleen H Fitzgerald and Philip Muruthi

At a glance

COUNTRY	Kenya and Tanzania
LOCATION	Greater Kilimanjaro Trans-Boundary Ecosystem; protected areas, community lands and private land
SPECIES	African Elephant (*Loxodonta africana*)
ILLEGAL WILDLIFE TRADE CONTEXT	Severe risk of ivory poaching
TYPE OF POACHERS	Locals hired by middle-men
TYPE OF COMMUNITY ENGAGEMENT IN TACKLING IWT	Community rangers/eco-guards Community intelligence gathering
CONSERVATION INCENTIVE MECHANISM	Revenue-sharing from tourism Conservation jobs Enterprise development

The story so far

The Greater Kilimanjaro area – a 25,623 km² transboundary landscape that spans the Kenya–Tanzania border – is a critical region for elephant, lion and other species. Effective collaboration between local communities, NGOs and national wildlife authorities has proven successful in anti-poaching efforts, and more broadly in protecting the region's wildlife.

The project, which brings together communities, the African Wildlife Foundation, Big Life Foundation, Kenya Wildlife Service, Tanzania Wildlife Division and Tanzania National Parks, started in 2001. Joint transborder patrolling, increased coordination amongst all parties, mobile units and sharing of intelligence has resulted in a poaching decline. Between 2013 and 2014 the Kenyan side recorded a 54 per cent decrease in elephant poaching, while there has been no known elephant poaching on the Tanzanian side since 2012.

The Kilimanjaro landscape is a mosaic of ownership and land use. Protected areas include Amboseli, Kilimanjaro, and Chyulu Hills National Parks; there are community lands, such as group ranches and Wildlife Management Areas (WMA); private land includes former group ranches that have been sub-divided and are held in title by Maasai. The whole area is home to around 1,930 elephants, as well as other animals, such as lions, cheetah and black rhino.

Strong wildlife protection laws exist in both Kenya and Tanzania, but there remains a growing threat of elephant poaching in the area. This is driven by the rising consumer demand for ivory – mostly in Asia – and the presence of corruption in the region.

Poachers are mainly outsiders, with local Maasai rarely involved. The current value of ivory in Beijing is US$2,100 per kilogramme; a local poacher receives less than US$200 per kg.

wildlife is owned by the government

In both Kenya and Tanzania, wildlife is owned by the government, and there are provisions in both countries for local communities to earn benefits from wildlife.
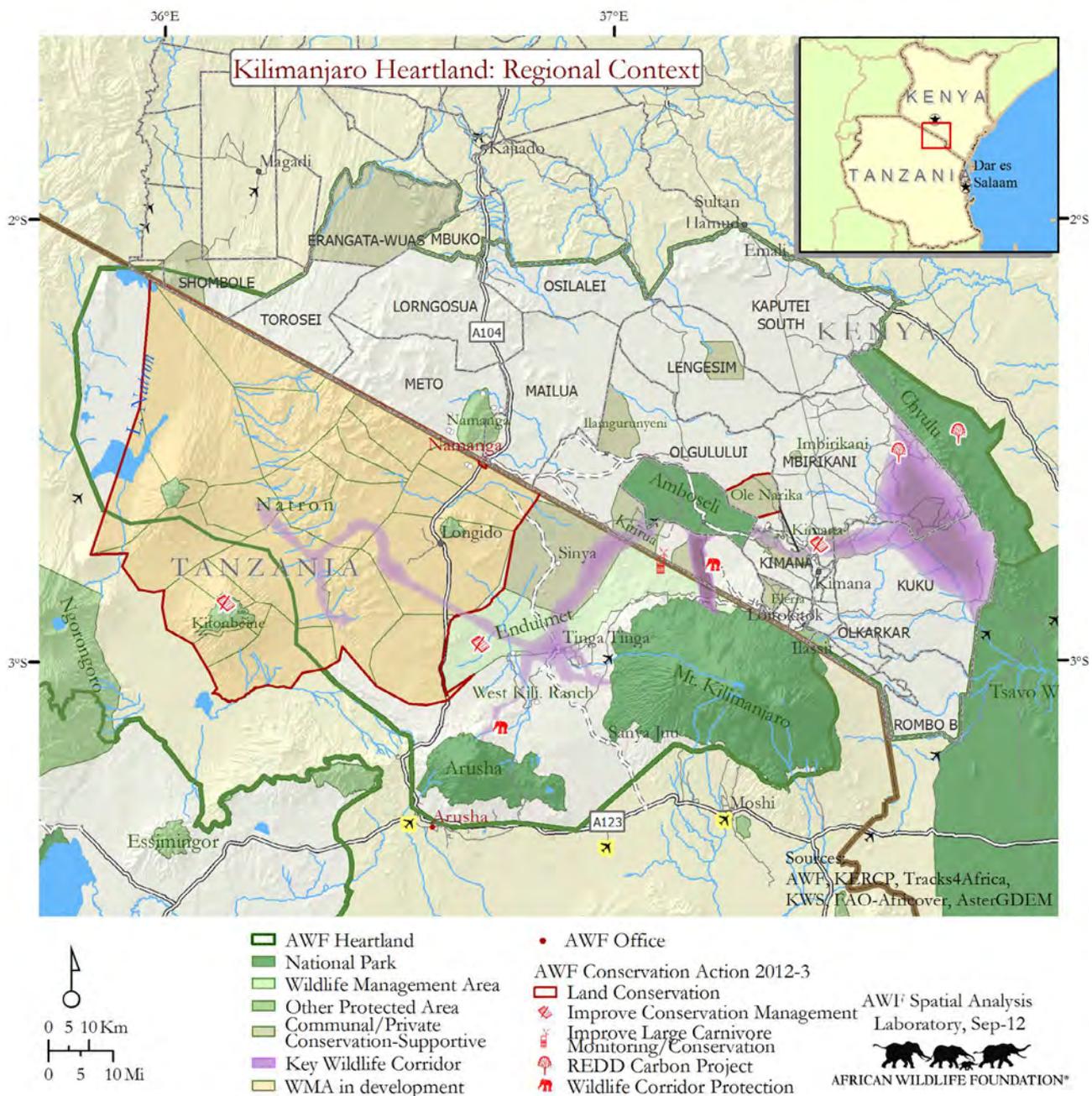

Community scouts (AWF)

In Kenya, outside protected areas, communities have land tenure rights via group ranches (which are communal lands leased by the government) and private land held by Maasai. In both cases, communities earn financial benefits from wildlife on the land through tourism fees, conservation fees, bed-night fees at tourism facilities, and other activities, such as walking safaris.

In Tanzania, on village lands, communities can set up Wildlife Management Areas (WMA) where they manage both land and wildlife, and can reap the benefits from wildlife-based tourism. Unlike Kenya, Tanzania permits consumptive – as well as non-consumptive – use of wildlife.

In this policy context, communities on both sides of the border in the Kilimanjaro area are partially dependent on wildlife, based on tourism. A decline in wildlife, therefore, has an impact on jobs and income. Consequently, communities generally stand to benefit from legislation to tackle illegal trade in wildlife.

community engagement integral to formal anti-poaching programmes

The recent Kenya Wildlife Conservation and Management Act 2013 sets a minimum penalty of US$220,000 (KES 20 million) and/or life imprisonment for crimes relating to endangered species. Other legislation applies for related offences including money laundering, anti-corruption and economic crimes.

Kilimanjaro Heartland: Regional Context

AWF Heartland
National Park
Wildlife Management Area
Other Protected Area
Communal/Private Conservation-Supportive
Key Wildlife Corridor
WMA in development

AWF Office

AWF Conservation Action 2012-3
Land Conservation
Improve Conservation Management
Improve Large Carnivore Monitoring/Conservation
REDD Carbon Project
Wildlife Corridor Protection

AWF Spatial Analysis Laboratory, Sep-12

AFRICAN WILDLIFE FOUNDATION®

Sources:
AWF, KERCP, Tracks4Africa, KWS, FAO-Africover, AsterGDEM

In Tanzania, the 2009 Tanzania Wildlife Conservation Act is the main statute to control poaching, hunting and trade, although Zanzibar is exempted from its application. Within parks, the 2002 National Parks Act controls hunting and poaching, with penalties determined by the endangered status of the animal concerned. The Forest Resources and Management Act is also relevant to illegal wildlife trade, but penalties are lenient.

Throughout the area, community engagement in wildlife protection is integral to formal anti-poaching programmes. The Big Life Foundation, with support from the African Wildlife Foundation (AWF), and working closely with Kenya Wildlife Service and the Tanzania Wildlife Division, oversees anti-poaching in the region.

Big Life – whose senior staff include individuals drawn from the local communities – provides training and coordination for 200 community scouts who provide routine surveillance, anti-poaching and monitoring activities on community and private land.

Trans-boundary wildlife protection is coordinated by AWF.

What works and why?

The key to the project's success lies in its collaborative partnership and a holistic approach to conservation. The parties have succeeded in leveraging each other's skills and resources, while recognising specific roles and responsibilities.

Anti-poaching activities are seen as one element in a programme which is also focussed on developing community-based tourism, community capacity building, grazing management, livestock improvement and compensation schemes for loss from wild animal predators.

The integration of these varied activities results in protection of wildlife and land in a way that directly engages and benefits local communities.

The local communities themselves fulfil a number of roles. Their members are wildlife scouts and guards; they also serve as community committee managers and leaders (e.g. on Group Ranch Committees and WMA Committees) with overall responsibility for programme management and implementation.

Conservation jobs are highly popular. Working as a wildlife scout, as a guide or in a tourism facility all confer prestige, as well as offering training and an income.

There are risks involved in anti-poaching activities – notably from possible encounters with armed poachers – but also from dealing with the difficult community relations that arise if a local person is killed by elephants.

Generally speaking, such risks are balanced by the benefits of community engagement in wildlife protection. They receive training, revenue from tourism, revenue from hunting (in Tanzania), management engagement

and leadership roles (on Group Ranch and WMA committees), ownership of tourism facilities, and social benefits such as water services, schools, bursaries and medical facilities.

Another significant factor is that the region is mainly inhabited by Maasai pastoralists whose traditional way of life depends on open rangelands. Conservation activities help to maintain these rangelands, as well as creating additional jobs and revenue through tourism.

Challenges

- The benefits from wildlife-based revenues do not impact every member of local communities; a single community poacher can have a negative impact.

- Population increases in the area means more pressure on wildlife, and more opportunities for human-wildlife conflict, with resulting animosity towards wildlife.

- Opportunity costs increase as agriculture expands into the area's wetlands, floodplains and rivers, with resulting sub-division of land for crop production.

- The increase in demand and rising price of ivory creates a significant incentive for community members to poach.

- The Tanzanian Wildlife Division is slow to release funds that are collected in WMAs and due back to the communities.

Lessons learnt

- Community engagement in wildlife protection needs professional management from experienced anti-poaching specialists.

- Consistency – in terms of funding, benefits, engagement and management – is key.

- Long term commitment – and therefore funding – is needed to identify and develop community conservation scouts, to maintain a presence in the region and to ensure a sustainable effect on wildlife conservation.

COULD THIS WORK ELSEWHERE?

The trans-boundary element of the programme could be replicated. A similar holistic approach to conservation could be applied in areas with potential for wildlife-based tourism and other conservation activities that bring benefits to local communities.

The Rhino Rangers Incentive Programme, Namibia

Jeff Muntifering, Boas Hambo, Kenneth /Uiseb and Pierre du Preez

At a glance

COUNTRY	Namibia
LOCATION	Communal land in north west Kunene and Erongo Regions
SPECIES	Black Rhino (*Diceros bicornis*)
ILLEGAL WILDLIFE TRADE CONTEXT	Relatively low, but significantly increasing level of rhino poaching for the international black market
TYPE OF POACHERS	Poachers and middlemen outsiders, but some local people are complicit by providing information and/or not reporting criminal or suspicious behaviour
TYPE OF COMMUNITY ENGAGEMENT IN TACKLING IWT	Community rangers/eco-guards
CONSERVATION INCENTIVE MECHANISM	Revenue-sharing from tourism Enterprise development Legally recognized community based natural resource management institutions Social status

The story so far

In response to the escalating threat from poachers, communities in Namibia's northwestern region are themselves the catalyst in an initiative to strengthen their commitment and capacity to protect the last truly wild population of Black Rhino.

Already engaged under the Ministry of Environment and Tourism's innovative Communal Rhino Custodians scheme, community leaders and game guards sought help to improve their monitoring skills and effectiveness while, in turn, expanding their income-generating opportunities from emerging rhino tourism. This community-driven demand led to the creation of the Rhino Ranger Incentive Programme.

The programme's overall aim is to further reduce local tolerance to poaching by enhancing the relationship between rhinos and local people. In the first step to achieve this, a new generation of 'rhino rangers', chosen by and accountable to their local communities, were trained and equipped to carry out rhino monitoring. The next step will be to co-develop rhino tourism activities that will fully integrate the rangers' work and provide a sustainable source of funding for the monitoring as well as additional benefits to the broader community.

Backed by the Ministry of Environment and Tourism, the programme draws on the experience of a small group of locally-based rhino and tourism specialists, known as the Communal Rhino Custodian Support Group. They also serve to leverage the skills and expertise from a diverse group of Conservancy support organisations, primarily: Save the Rhino Trust, Namibia; Integrated Rural Development and Nature Conservation, Namibia; and Minnesota Zoo, USA.

The approach is guided by the belief that securing a future for wild rhino depends on local people refusing to tolerate poaching, and rhino being more valuable alive than dead.

serious about enforcement

With the value of rhino horn on the black market at an estimated US$65,000 per kilogramme, the rhino is under siege. Across Africa, three rhinos are currently being killed by poachers every day. In Namibia poaching is also on the rise with middlemen purportedly offering at least US$2,500 for horn.

Namibia is a stronghold for the black rhino, with one third of global population occurring in the country. The country is tough on poachers. Penalties are among the highest on the continent: a maximum of 20 years in prison or

A Conservancy Rhino Ranger stands proudly before a cow and calf that he has tracked during a patrol (Minnesota Zoo and Save the Rhino Trust)

a US$200,000 fine. To add to this commitment, the Defense Force recently publicised their intention to assist in anti-poaching activities countrywide.

In this national context, the Rhino Ranger Incentive Programme in the rugged northwest Kunene region, is building on existing partnerships between government, local communities, conservation NGOs and private sector tourism, established over 30 years.

A key incentive for community involvement in rhino protection was the 1996 Nature Conservation Amendment Act. This gave a legal framework for local people living in communal areas to form conservancies as a basis for conditional rights to manage and benefit from wildlife on their lands.

Although managing rhinos remains a highly centralised government-led initiative, the Rhino Custodianship Programme was created to promote a more open and collective decision process with commercial farmers and, more recently, communal conservancies that volunteered to become 'custodians' of the rhino on their land.

It was envisaged that this innovative public-private partnership would help significantly expand the rhino range, leverage additional monitoring support from registered custodians and create new revenue-generating opportunities from rhino tourism at the local level to help increase the value citizens attach to conserving them.

improving the amount and quality of monitoring

With poaching on the increase, leaders from the Communal Rhino Custodian Programme asked for help (in 2011) to raise the rhino monitoring capacity of appointed community rangers. The first stage of the programme, which began in 2012, focused on improving overall monitoring effectiveness with state-of-the-art equipment and on-the-job skills development through joint patrols with rhino specialists. Other incentives, such as new camping kit and performance-based cash bonuses, have dramatically improved the quality and quantity of community-based rhino monitoring.

Stage two is now delivering training that integrates the Rhino Rangers' work with rhino tracking tourism activities that are in high demand. This more structured and strategic community-based rhino tourism model will increase security for the rhino by tightening tourism regulations as well as boosting the number of 'boots on the ground' in the rhino areas. It will also generate new local income that not only finances the monitoring work by the rangers but also provides additional revenue that may benefit the broader community.

What works and why?

After just two years, the programme has already resulted in a twelve-fold increase in the number of Communal Rhino Custodians actively monitoring rhinos on communal land and tripled the number of trained and equipped rhino monitoring personnel in the region. Focused rhino patrols and associated patrol days as well as confirmed, individually-identified rhino sightings by community-appointed rangers have shot up from nothing in 2011 to 88 joint patrols which produced 1,013 patrol days and 727 ranger rhino sightings in 2014. Of the eighteen rangers who joined the programme in 2012, only two have left for other jobs and were quickly replaced by their respective conservancy. While around 40 per cent of the region's rhinos live within Communal Rhino Custodian land, only 22 per cent of the confirmed poaching cases through 2014 have occurred in these areas.

Providing professional uniforms creates pride and identity (Minnesota Zoo and Save the Rhino Trust)

There was high interest in the programme and strong local support from the outset; no doubt linked to the fact that it was the Communal Rhino Custodians themselves who desired and demanded more support.

It is also helpful that the programme is building on existing relationships between rural communities and institutional initiatives.

The long term interests of the local people lies at the heart of the Rhino Rangers Incentive Programme and this has driven an inclusive approach to understanding what incentives and which elements of the programme will maximise the value local people place on conserving rhino.

Although hard to quantify, it seems that motivational ideas – such as uniforms, bi-annual team building events, training seminars, certificates for achievement in exams and bonus payments – have helped to increase the Rhino Rangers' enthusiasm and pride in their role.

The programme has also introduced Rhino Profile Cards; simple tools which help rangers to identify individual animals and find out about their life history. Not only have these cards improved identification, they have also built a stronger bond between the rangers and 'their' rhinos.

While the focus of the programme is reducing tolerance of poaching, training also includes recording and reporting criminal behaviour or suspicious activity to the appropriate officials. The point of this is to better align enforcement-based and incentive-based strategies, increasing the ability and willingness of locals to detect and report wildlife crime.

Conservancies have contributed roughly US$25,000 per year to support their Rhino Ranger team salaries with performance based bonuses (up to around US$150 per ranger per month) awarded by the Communal Rhino Custodian Support Group.

Although low by international standards, this level of pay is competitive at the local scale and is complimented by the suite of non-financial incentives as mentioned above. The significant measured increases in the quantity and quality of recorded sightings certainly suggests that current rewards are indeed yielding improvements in local knowledge, attitude and pro-rhino behaviour.

Challenges

- The distance between the homes of some rangers and rhino areas creates a management challenge and increased costs for these individuals (transport and time).

- Turnover in conservancy leadership has strained communication between conservancies and the programme support group in a couple of cases.

- Anecdotal evidence suggests that witchcraft beliefs could be discouraging people from reporting suspicious behaviour.

- Sustaining local interest and support while ranger patrol and tourism training is completed, and full benefits are realised and appreciated.

- Longer term uncertainty about whether new revenues from rhino tourism will actually change attitudes in the wider community.

- Available resources currently limit the project to working with conservancies that already have resident rhinos.

Lessons learnt

- Taking time to fully understand the social context (key players, their perspectives and values) has helped identify the right mix of instruments and incentives that so far suggest that impact is being achieved.

- It takes time to carry out a needs assessment that takes account of how to increase local benefits from rhino.

- A transparent and inclusive decision process that works closely with appropriate local institutions is key for ensuring decisions are made that reflect the common interest

- Anticipating potential and actual barriers to effective implementation increases success. Simply providing training and equipment is not enough.

- Carefully drafted letters of agreement, developed and signed by both parties, helps clarify roles and responsibilities among the partners.

COULD THIS WORK ELSEWHERE?

Many aspects of the programme are transferable, although noteworthy factors inherent in this specific case include: high tourism appeal, low human population density, rugged terrain and strong social and institutional networks.

The key to a successful policy is that it must be structured to engage, empower and benefit the local communities living alongside rhino.

The Ploughshare Tortoise Protection Project, Madagascar

Hasina Randriamanampisoa and Sarah-Louise Adams

At a glance

COUNTRY	Madagascar
LOCATION	Baly Bay National Park
SPECIES	Ploughshare tortoise (*Astrochelys yniphora*)
ILLEGAL WILDLIFE TRADE CONTEXT	Increased poaching levels resulting from government instability, and further threatened by nearby mining development
TYPE OF POACHERS	Locals often the first link, either by collecting and selling tortoises themselves or turning a blind eye to poachers from outside
TYPE OF COMMUNITY ENGAGEMENT IN TACKLING IWT	Community rangers/eco-guards
CONSERVATION INCENTIVE MECHANISM	Conservation jobs Investments in community development projects

The story so far

Community patrols, recruited from some of Madagascar's poorest communities, are giving much needed support to national authorities to protect the critically endangered ploughshare tortoise.

Endemic to Madagascar, the ploughshare tortoise is a victim of its exotic appearance. Its high domed golden shell is much sought after by collectors and rare animal enthusiasts whose demands drive an illegal trade that has pushed the tortoise to the brink of extinction in the wild.

In spite of the highest level of protection status at national and international levels, the wild population of ploughshare tortoise is now thought to be less than 600 adults – all occurring in the Baly Bay National Park. Poaching is seen as the main threat to species survival, although bush fires are also a threat.

The trade chain for the ploughshare tortoise is a familiar one. Animals are taken from the park opportunistically, or to order, by locals who then pass them on to traffickers who arrange their illegal shipment out of the country. Smugglers also come down from the regional town of Mahajanga and enter the park clandestinely.

the absence of law enforcement

In the context of local poverty, the payment they receive from traffickers encourages local villagers to get involved in poaching. However, the main reason is the absence of law enforcement at national, regional, local and 'traditional' levels.

Poaching levels are directly linked to political stability. The downfall of the Madagascan government in 2009 led to a contested regime which lacked international recognition. Bilateral aid was cut and weak internal legitimacy led to increased corruption levels and unemployment.

Ploughshares and radiated tortoises siezed in Bangkok (Panjit Tansom, TRAFFIC)

This weak governance, and the resulting reduction in tax revenues and aid, has not helped efforts to prevent illegal exploitation of the country's unique natural resources – including the ploughshare. During the past five years, the tortoise population has dropped by a third.

As poaching levels have risen, so too has the value of tortoises traded. In 2009, an animal would sell locally for US$2. Today, villagers are offered between US$20–40 by traffickers. The value depends on the size and age of the animal, and increases rapidly along the trade chain: ploughshare tortoises have been advertised for sale on the international black market for as much as US$50,000.

Adult male ploughshare tortoise (L. Woolaver)

Adding to the threat, a major mining project is underway 50km south of the national park which includes plans for a large port in Baly Bay and an access road that will cut through the park. In the absence of support from the mining consortium – and the government – the mining will raise poaching pressure and facilitate smuggling by introducing new exit routes.

the key to better protection

While villagers in the bay area have been identified as the first link in the illegal trade chain, local communities are also the key to better protection. Engaging with

these communities, the Durrell Wildlife Conservation Trust has built a trusting relationship over 20 years that is the foundation of today's community participation in protecting the tortoise.

Working with 18,000 people in 52 villages, the DWCT has helped to raise living standards and develop opportunities for income. Durrell has built 47 wells, supplied 1,500 fishing nets, and improved education for 1,500 children by building and rehabilitating 18 schools.

The current project began in 2010 to give these communities a stronger stake in tortoise protection. In partnership with the Madagascar National Parks and Baly Bay communities, the project supports community-led anti-poaching patrols which reinforce the park staff's own operations, and fits into national policy for community involvement in conservation.

Rangers are selected from local villages, and trained in using GPS, radio-receivers and camera equipment. With a strong focus on safety, rangers learn how to call for help and report incidents rather than engage with poachers.

Although they are the only people physically present in the National Park, neither community rangers nor park rangers are authorised to stop, search or arrest poachers. Their role is limited to reporting suspicious behaviour or illegal activity to state enforcement authorities, namely the police, gendarmes and forestry department.

Inherent in the project's approach is respect for tradition and custom, including its support for the development of a regional Dina, the forum for traditional Malagasy law. The Dina can enforce fines for poaching activities which are paid back to the community. It also raises social pressure not to poach.

What works and why?

It is still early days to be able to judge how effective the community-led patrols will be as a deterrent to poaching in the long term. However, the project has raised patrolling presence on the ground through a regular routine around five permanent field sites, and interest levels suggest that the rewards currently outweigh the risks for rangers.

The Baly Bay project has so far enlisted 165 community rangers, drawn from 11 of the 28 main villages surrounding the bay. Together, they patrol one third of the ploughshare habitat, and spend 1,400 hours per month on duty.

Results from the first three years of this extra presence include five arrests for poaching, and raised community awareness of legal and illegal activity in the ploughshare habitat. The community patrols generate daily reports to the park authorities: 2,888 per year.

Ploughshare Guardian Fidelis (Henri Rakotosalama, DURRELL)

The project offers a degree of modest income stability in an area which is among the poorest in Madagascar. Wages for community rangers – paid for by the project – work out at US$2 per patrol, plus meals, with rangers working an average of 15 days per month. Additional payments – up to US$200 – for information leading to successful arrests provide further incentive, and a scheme is being developed to offer rangers rewards linked to wild tortoise numbers in the park.

Ranger selection is an important element in the project's success. Village elders help the DWCT to choose suitable candidates, which both strengthens community support for the patrols, and gives the rangers a degree of respect from their villages.

Challenges

- The size of the National Park (57,142 ha) and difficulty of access raise the cost and challenge of effective patrolling.

- Fear of reprisals by poachers has been a disincentive for some communities to engage in the programme.

- Slow government response to reports of poaching activities risks reducing morale and sense of purpose among community rangers.

- The lack of conviction and sentencing for poaching offences raises doubts in the communities about the project.

- Demonstrating the impact of the project on tortoise populations is difficult, which poses a challenge for incentive-based reward schemes.

Lessons learnt

- A trusting relationship, based on a long term and permanent presence of partners in the project area, is pivotal to engaging local communities.

- Successful implementation depends on project partners agreeing a shared vision.

- In very poor communities, the participation of local people in project activities depends on distributing funds, through wages and incentives, and on development programmes to raise living standards.

COULD THIS WORK ELSEWHERE?

It already does. The DWCT adopts a similar approach to community-based conservation in four other sites in Madagascar. The hallmarks of the project — seeking shared goals and engaging local communities in the management of natural resources — are widely replicable, and being used elsewhere in the world.

The Hawaii Integrated Coastal Zone Management Project, Guatemala

Collom Muccio

At a glance

COUNTRY	Guatemala
LOCATION	Hawaii beach, Santa Rosa (Pacific Coast of Guatemala)
SPECIES	Olive ridley sea turtle (*Lepidochelys olivacea*)
	Leatherback sea turtle (*Dermochelys coriacea*)
	Green sea turtle (*Chelonia mydas*)
ILLEGAL WILDLIFE TRADE CONTEXT	Illegal harvesting of olive ridley, leatherback and green turtle eggs
TYPE OF POACHERS	Mainly local although some outsiders
TYPE OF COMMUNITY ENGAGEMENT IN TACKLING IWT	Community rangers/eco-guards
CONSERVATION INCENTIVE MECHANISM	Sustainable harvesting of eggs

The story so far

Widespread community engagement in a scheme based on the sustainable harvesting of sea turtle eggs in Guatemala has contributed to a conservation success story in spite of a lack of government resources and weak legislation.

Conservation of Sea Turtles in Guatemala is almost entirely dependent on an informal system of egg donation to a network of hatcheries. Eggs may only be taken from olive ridley turtle nests, and collectors must donate 20 per cent of their harvest to the hatcheries. Taking the eggs of all other species, and any adult turtles is banned.

In the context of high rates of poverty in coastal communities in Guatemala, turtle eggs are important for subsistence, and prized by locals as a supplement to their income and diets.

competition for nests is intense

During the season when the turtles come ashore to lay their eggs, competition for nests is intense and it is extremely rare that a nest escapes plunder. Turtle eggs are sold to local buyers who transport them to restaurants and egg stalls in the capital and other large towns.

As the ability to continue harvesting the eggs is important to them, local communities assist in enforcing the sea turtle egg donation system.

The country's sea turtle nesting beaches stretch for approximately 254 kilometres along the Pacific coast and for 50 km along the Caribbean. Although the first hatchery was set up in 1971 in Hawaii, turtle conservation projects did not begin until the 1980s. Since then, efforts to maintain turtle populations have focussed almost solely on the hatcheries.

In the absence of any centralised coordination and finance, the number of hatcheries has fluctuated over

Hatchling on the beach (ARCAS)

Hawaii Hatchery (ARCAS)

the years between 16 and 24. Most of them lack human, technical and logistical resources to incubate eggs effectively, and to collect data in a scientific way. Few make the most of the potential of hatcheries as an environmental educational facility.

A variety of organisations are currently involved in hatchery sponsorship and management, including the navy, the Austrian High School, trade associations and NGOs.

The Wildlife Rescue and Conservation Association (ARCAS) is a conservation NGO which manages the country's most productive hatchery and has been running the collaborative Hawaii integrated coastal zone management project since 1993.

Under the project, egg collectors who donate are given a receipt which gives them the right to sell and transport the rest of the nest. Donated eggs are then buried in hatcheries and after a 45–55 day incubation period, the hatchlings are released into the sea.

demographic, environmental and institutional change

Turtle conservation in Guatemala has developed in the context of considerable demographic and environmental change. The human population has doubled from 7 million to 14 million since the 1980s, and tourism has taken over from fishing and farming as the biggest source of employment. Where most beaches were once sparsely populated, now they are likely to have holiday homes and hotels.

There has been institutional change too. The National Sea Turtle Strategy, launched in 2002 was renewed by ARCAS in 2013, with more emphasis on the regulation of the turtle egg trade. Guatemala has been a signatory of the InterAmerican Sea Turtle Convention since 2003. However, the country has not developed a management plan and proven the sustainability of current use in order to warrant an 'exemption' which allows egg collection and consumption.

These developments have highlighted the need for better data on the egg trade and turtle populations in general. ARCAS has taken a lead in research, carrying out crawl count surveys at nine sites along the Pacific coast and conducting socio-economic surveys to learn more about the importance of sea turtles in the local economy and culture.

The results show that nesting density for olive ridley is significantly higher in the south east than the south west, with the peak area at Hawaii. However, taking this relative density into account, alongside reliable crawl count data from Hawaii, means a considerable drop in the number of eggs laid on the Pacific coast, compared to previous estimates. The new comparative density data suggests an estimated 673,304 olive ridley eggs are laid each year, with a beach value of US$ 148,007. Very little open ocean research is carried out.

Each year, ARCAS publishes a situational analysis which provides information that will help to better regulate egg donation and ensure that it is sustainable.

Leatherback eggs in the market (ARCAS)

What works and why?

Getting local communities interested and involved in turtle conservation based on sustainable use has been generally easy, because it is in their interests.

Ironically, the lack of government resources and the informal system of egg donation has galvanised other organisations, like ARCAS, to take the initiative in conservation and research. In the absence of official direction, the private sector has been more willing to contribute more to conservation. In particular, the growth of tourism in some areas has further encouraged this.

As a result of collaboration between different non-government organisations and the private sector the number of turtle eggs rescued on a national level has risen dramatically from 60,000 in 2003 to almost 270,000 today. Most of this increase is thanks to hotels, NGOs and eco-tourists buying eggs for incubation. In 2013, 40 per cent of the eggs laid on the Pacific coast were rescued and incubated.

The number of olive ridley sea turtles nesting have doubled in the past ten years in the Hawaai area. This site is the focus of ARCAS's conservation efforts that include community outreach, education, egg rescue and research. The ARCAS volunteer programme is crucial for the project's sustainability.

Challenges

- Lack of government resources and leadership has led some to lose confidence in the egg collection system, and made the harmonisation of data gathering difficult.

- More government facilitation of private sector participation could improve conservation efforts and help to ensure that best hatcheries management practices are used.

- More data is needed to give a better picture of turtle population status and trends in the country as a whole.

- While olive ridley sea turtle numbers are rising on Guatemala's beaches, the leatherback – a much less frequent visitor – is critically endangered.

Lessons learnt

- Where government agencies are lacking in resources, they can still do more as facilitators; for example, working with tourism and community participation to promote and support conservation goals.

- Well managed, strong volunteer/intern/ecotourism programmes increase project sustainability.

- Relations with the tourist sector are important in meeting conservation goals.

COULD THIS WORK ELSEWHERE?

The Hawaii model is the only one of its kind in Guatemala but similar models are already being used in Central America so it has proved itself to be replicable.

ASOCAIMAN, Colombia

Giovanni Ulloa Delgado and Clara L. Sierra Díaz

At a glance

COUNTRY	Colombia
LOCATION	Bahia de Cispatá – protected area
SPECIES	American crocodile (*Crocodylus acutus*)
ILLEGAL WILDLIFE TRADE CONTEXT	Illegal trade of live animals and eggs has continued after a national ban was imposed and the inclusion of Colombian populations in CITES
TYPE OF POACHERS	Mainly local
TYPE OF COMMUNITY ENGAGEMENT IN TACKLING IWT	Awareness raising and behaviour change of poachers
CONSERVATION INCENTIVE MECHANISM	Revenue-sharing from tourism Anticipation of future sustainable harvesting and trade of skins

The story so far

The American Crocodile is a threatened species in which international trade is banned — except for captive bred species (for which there are six facilities in Colombia that are authorised to produce and export skins). In Cispatá Bay a protected mangrove swamp of 115 km2, the species has been the subject of an active management programme since 2003 involving egg harvesting, incubation and re-release of juveniles into the wild. Community participation is a major component of the Cispatá Bay conservation programme with ex-hunters of crocodiles forming a co-operative — ASOCAIMAN — to support the conservation activities in conjunction with the local regional enviromental authority (CVS).

Juvenile Crocodile (Dennis Cavanzo)

ASOCAIMAN members (Gaviero films)

When ASOCAIMAN was established in 2006, there was a prevailing culture where wildlife crime was not treated as serious and despite Cispatá Bay being a protected area there was little law enforcement and protection of the crocodiles.

The aim of the ASOCAIMAN initiative was twofold: to conduct a pilot programme for crocodile conservation based on sustainable use which would form the basis for a model that could be transferable to other wild American crocodile populations in Colombia; and to draw up guidelines for a national conservation programme.

Over the past 12 years, studies conducted in the bay area have shown the crocodile numbers rising to the point where there is a stable and viable population that can be exploited on a sustainable basis as one element of a conservation plan.

Local engagement is largely motivated by the expectation that once a viable crocodile population has been established and the conservation plan is in place, they will be able to sell a controlled number of skins, legally. While waiting for the populations to recover, ASOCAIMAN has been establishing the legal framework for future sustainable use and working with the communities to provide them with training.

Community participation in the management of mangrove areas in the Bay of Cispatá is not new. Colombia's first integrated mangrove management plan, was established in 2003/4: a joint initiative developed by the regional environment authority (CVS) and the Ministry of Environment and Sustainable Development with support from the International Tropical Timber Organisation (ITTO).

The plan, implemented in 2005, involves more than 500 people from the community who are engaged in the sustainable use of the mangrove's wood, fisheries and hydro-biological resources. The crocodile conservation project has been conceived in a similar context of environmental sustainability.

The fate of American crocodile populations in Colombia suffered dramatically from a prolonged period of heavy trade in skins that started in 1928. During the next five decades, the species was practically razed from its natural habitats. In a mere four years from 1928 to 1932, it is estimated that between 700,000 and 800,000 animals were sacrificed for their skins. Most of them were harvested from areas of high population density: from the Magdalena, Sinú, San Jorge and Cauca river catchments, and from the complex wetland areas of the Caribbean coast — notably in mangrove deltas. The Bay of Cispatá is one of these areas, where populations still persist today.

What works and why?

Working closely with Colombia's environment authority from the outset, the project has developed a standard methodology for crocodile research and management which covers five elements: census and monitoring of wildlife populations; habitat management; nest harvesting; controlled incubation, and ex situ management of neonate and juvenile release programmes.

Over the past twelve years, organised collections from an average of 50 crocodile nests a year have resulted in 8,000 neonates hatching and the release of 3,500 of these into the wild.

Support for community development lies at the heart of the initiative. This started with training for the former crocodile hunters so that they become effective conservationists, and establishing the legal association under which they can operate. This training programme was further developed with help from the National Learning Service (SENA) which offered eco-tourism training based on the conservation project and the site's natural mangrove habitat.

In the longer term it is hoped that the conservation success with result in the Cispatá population of crocodiles being transferred from CITES Appendix I to Appendix II — allowing limited trade of eggs and skins.

A Crocodile Population Management Plan is under development, which will be integrated with the existing mangrove management plan in the Bay of Cispatá. The sustained enthusiasm of the local people for the conservation project over a number of years is based on knowledge that communities would be able to benefit from sustainable use in the context of a management plan.

The project has introduced a process for local and scientific knowledge exchange, and taken the lead role in developing an ecosystem management plan to support the species

Challenges

- Community interest and commitment needs to be maintained over a number of years, before legal sustainable use can be permitted.

- Establishing relationships and building confidence with former hunters takes time.

- The prevailing government policy and the legislative framework limit the benefits to local communities from the scheme.

Lessons learnt

- The relevant environmental authority needs to be involved from the outset.

- It takes time to establish a standardised methodology needed to underpin a sustainable crocodile conservation and management plan.

- Even if the annual resource requirement is low, ensure that sufficient funds will be available for the duration of the project.

COULD THIS WORK ELSEWHERE?

Sustainable harvesting and use of crocodiles for eggs, meat and skins has been a successful conservation model in many locations once the local population has reached a size that will sustain some level of consumptive use. The success therefore relies on the long term incentive of being able to engage in trade and so this would work elsewhere where trade regulations will allow this.

Vicuña management in the Andes, Latin America

Gabriela Lichtenstein

At a glance

COUNTRY	Argentina, Chile, Bolivia, Peru
LOCATION	Not site speciific
SPECIES	Vicuña, (*Vicugna vicugna*)
ILLEGAL WILDLIFE TRADE CONTEXT	Globalized market of vicuña fiber increasing and getting more complex with exports and re exports. Rising levels of poaching in some countries
TYPE OF POACHERS	Mostly outsiders; organized well equipped gangs
TYPE OF COMMUNITY ENGAGEMENT IN TACKLING IWT	Community rangers/eco-guards Community intelligence gathering
CONSERVATION INCENTIVE MECHANISM	Legally recognized community based natural resource management institutions Sustainable harvesting and trade of vicuna fibre

The story so far

Vicuña are endangered camelids – listed on CITES Appendix II and I – whose ranges cover the Andean countries of South America. Vicuña fibre is a valuable commodity and community-based management has been used as a mechanism for encouraging conservation and tolerance of vicuñas in community lands, while at the same time contributing to local economic development and poverty alleviation.

An international Vicuña Convention agreed in 1979 has long specified that it should be local people who are the beneficiaries from vicuña use. However, this has not been consistently translated into national laws by the countries concerned. Indeed, policy affecting local rights to use natural resources varies from country to country.

In Argentina, reform of the constitution 20 years ago devolved rights over natural resources to the local level but the absence of specific legal reference to ownership rights over the vicuñas created a opening for private companies that are not even based in the Andes, to establish a foothold in vicuña management.

Vicuña carcasses, Vilama, Argentina (Freddy Burgos)

In Peru and Bolivia, by contrast, communities have been granted custody and legal ownership of the vicuna living within their jurisdiction.

an international success story

Vicuna conservation in the Andes is an international success story of collaboration in conservation. Fifty years ago, over-exploitation coupled with a lack of management threatened the animal with extinction. The global population was down to 10,000 individuals.

A trade ban under CITES on the export of vicuña pelts and the creation of the Vicuña Convention paved the way to creating a shared vision and collective conservation effort which led the recovery of the species. Today, the vicuña population is around 500,000 individuals. Once population recovery was underway, the opening up of trade — albeit regulated — and the subsequent incentives for sustainable use by local communities has further improved the status and long term outlook for the vicuña.

illegal trade continues

Poaching levels dropped dramatically in the face of coordinated trade regulations and the rise in local management initiatives. However, illegal trade continues to persist, and illegal hunting is the primary threat to vicuña. In all Andean countries of the vicuña's range, how to combat illegal wildlife trade remains a test for policy makers and local communities.

The scale of the problem was highlighted in reports submitted to the XXVII Technical Meeting of the Vicuña Convention, held in La Paz in July 2014. The worst figures came from Bolivia - which has an important domestic market for fibre and handcrafts - where at least 3,289 vicuñas were hunted illegally between 2008 and 2013.

In Argentina, poaching of 149 vicuña was reported between 2012 and 2013, and 94 skins were seized in 2014. In Peru, 1,723 vicuña were reported killed for the period 2009 to 2013. In Chile, at least 49 dead vicuñas were found by patrols during the first few months of 2014.

All these figures are based on official reports, which means it is likely that the true loss is much higher. Poaching is facilitated by numerous factors, such as the extensive area of vicuña ranges, low population density and high community isolation.

Poverty is widespread across the area concerned, and with limited support and incentive to develop legal vicuña use, there is sometimes more financial gain from illegal than legal use. Security and enforcement, both in and between countries, is weak.

Most of the trade in vicuña fibre is international, although there is a local black market for fibre in Bolivia for ritual use, handcrafts and folk costumes. Black market trade values are between US$100–200 per kg, depending on colour and quality. These rates are significantly lower than the cost of fibre traded legally, which ranges between US$300–600 per kg.

Illegal Fiber at El Alto, Bolivia (Corsino Hualhata)

difficulties in fibre traceability

Distinguishing illegally-traded fibre is hampered by the difficulties in fibre traceability and complex patterns of exports and re-exports. More communities, and private companies, are getting involved in vicuña management without any increase in government's investment towards fibre traceability.

The role of local communities in combatting poaching is typically as informants. Many communities have local guards and some have developed monitoring systems. However, it is rare for a community to have the resources to pay for their members to work as rangers. Furthermore, in most countries other than Peru, community members are not allowed to use guns during their patrols leaving them vulnerable to attack from armed poachers.

Only in exceptional cases, such as Lucanas in Peru, are the numbers of vicuña and fibre production high enough to generate rewards for anti-poaching activities. Most communities are unable to match the vehicles and communication systems used by poachers, who are also often armed. Not surprisingly, local people fear the illegal hunters.

When incidents occur, many go unreported for a number of reasons. There is a fear of reprisals and the distances between communities and towns where there is a police force can be considerable. Most of the areas lack communication and a good road system. In general, the police tend not to act, and people worry that if they do report hunters they will become suspects.

What works and why?

Collectively, throughout the Andean region, the principle of community-based management of sustainable use has had a dramatic impact in reversing the decline of vicuña populations. In addition, community-based vicuña management has been able to achieve multiple goals such as strengthening local communities, revitalising old traditions, creating relationships among communities, recuperating local knowledge, developing a framework for local participation, solidifying land claims, providing incentives to avoid migration to cities, and providing alternative sources of income to communities that are usually forgotten by nation states. This success was due to a concerted collaborative effort over many years.

Common factors that occur where indigenous management schemes are particularly effective include strong community organisation, community empowerment, state support, multiple stakeholder involvement including NGOs, sufficient funding and technical and scientific support.

Challenges

- In some communities, low levels of income generated by vicuña management and the difficulties of fibre commercialisation reduce interest in support for vicuña management and anti-poaching.

- Better means of communication is needed within vicuña management communities.

- Poor infrastructure in rural areas, such as roads, isolates communities and reduces their ability to participate in anti-poaching.

- A fairer distribution of benefits derived from vicuña use within local communities is needed.

- Lack of funding reduces support for community management initiatives and investment in fibre traceability.

- National policies, legislative frameworks and enforcement are generally weak; poachers can operate with impunity.

- Local communities are increasingly at risk from poaching activities.

Lessons learnt

- Strengthening community participation is key.

- Local communities need exclusive user rights over the vicuña.

- It is not enough to rely solely on community engagement to fight poaching. Vicuña fibre has such high market value and the potential reward for illegal trade is so high, that government involvement is crucial.

- Collaboration between authorities at national and international level is important.

- Community management would be more effective if linked with awareness-raising in the destination countries so that consumers demand certified, legally produced fibre.

COULD THIS WORK ELSEWHERE?

Community-based initiatives for sustainable management of vicuña is already widespread throughout the Andes. However, to fight poaching you have to fight poverty. If communities had access to better communication, roads and transport systems, more state presence and a greater stake in decision-making, a strategy could be designed so that the authorities would do their job but rely on local communities for support and vigilance at local level.

Community-based Pangolin Conservation, Nepal

Ambika Prasad Khatiwada

At a glance

COUNTRY	Nepal
LOCATION	Non-protected area, Taplejung District, Eastern Himalayas
SPECIES	Chinese pangolin (*Manis pentadactyla*)
ILLEGAL WILDLIFE TRADE CONTEXT	Increasing activity by local people in illegal trade
TYPE OF POACHERS	Local people
TYPE OF COMMUNITY ENGAGEMENT IN TACKLING IWT	Community intelligence gathering Awareness-raising and behavior change of poachers
CONSERVATION INCENTIVE MECHANISM	Awareness raising of IWT penalties

The story so far

The need to raise public awareness about the threatened status of the Chinese pangolin and the laws that exist to protect the animal in Nepal has put community-engagement at the heart of a conservation programme in the east of the country.

The project – one of only a handful of community-based pangolin conservation projects worldwide – is being run by the National Trust for Nature Conservation (NTNC) with support from the Zoological Society of London (ZSL) EDGE Fellowship scheme. Set up in 2012, the project aims to collect baseline information on ecology, status,

distribution and specific threats facing the Chinese pangolin, and to generate support for their conservation.

Local villagers are engaged through conservation sub-committees, set up within the existing local administration network. Through training workshops, these individuals learn about the Chinese pangolin and the consequences of illegal trade, which they then in turn share with their communities. The goal is to tackle widespread ignorance about these increasingly rare animals, and to strengthen community commitment to stop illegal trade.

Awareness Raising Programme 2013 (Ambika Prasad Khatiwada)

Chinese Pangolin, (Ambika Prasad Khatiwada)

The Chinese pangolin has the dubious accolade of being the world's most illegally traded mammal. Up to one million animals are thought to have been taken from the wild during the past decade; a loss that has resulted in the Chinese pangolin being recently upgraded to Critically Endangered on the IUCN Red List of Threatened Species.

unaware that the pangolin is endangered

Chinese pangolins are one of two pangolin species that occur in Nepal. They are widely distributed in non-protected areas, but local communities — often unaware that the pangolin is endangered — have been increasingly involved in the illegal trade. The meat is appreciated as a delicacy and the demand for scales is driven by the market for traditional medicine.

The price that illegal traders pay for scales varies at local level, depending on the bargaining experience of local individuals and their knowledge of the trade. In the project area, the value can reach US$700 per kg; a 350 per cent increase in local value over the past eight years. Most of the scales are fed into the international market, and their value at their final destination is unknown.

In Nepal, tough laws are in place to protect endangered species, but enforcement is weak and the government does not have the level of human resources needed to police the illegal wildlife trade outside protected areas.

Community engagement programmes for natural resource conservation in the country are gaining in popularity, backed by relevant acts and policies such as the 1991 Forest Act of Nepal and the 1999 local self-governance act.

a transit point for illegal trade

The project focuses on two villages (Nangkholyang and Dokhu) in the Taplejung municipality in the east of Nepal — a transit point for the illegal trade in pangolin into Tibet and India. The population here is characterised by local ethnic diversity and the main sources of income are agriculture, livestock and labour.

Most households live close to subsistence level, with some being better off due to income from farming or government jobs (such as teachers). However, data from the project revealed that those who get involved with illegal trade were generally not the poorest.

Poaching isn't the only threat to the pangolin in the area. Habitat loss due to road building and deforestation is a challenge, as well as the loss of prey (termites and ants) due to the increased use of insecticides in agriculture.

Against this backdrop, not only do conservation committees build awareness of the pangolin's plight and win the support of villagers to feel a sense of responsibility for 'their' pangolin; they also strengthen the local community's capacity for law enforcement.

The project was designed on the basis of existing local governance. In Nepal, districts are divided into administrative units run by Village Development Committees (VDCs). These VDCs are each subdivided into nine wards. Working with two VDCs, the project has established a pangolin conservation sub-committee in each ward.

A representative from each sub-committee was then appointed to a VDC level conservation committee, tasked with launching and supporting conservation activities to raise awareness and control illegal trade in the village's jurisdiction.

What works and why?

The sub-committees form the front line of support and endorsement for the project's aims. Through them, a total of 263 local people (192 men and 71 women) have been affiliated in conservation work, including surveys, community meetings, workshops and school teaching programmes.

Local leaders were involved in project design from the outset, and the main Nepalese project implementor was himself a resident of one of the villages, which boosted interest.

Before the project began, villagers who came across a pangolin by chance would more likely than not have killed it to have its meat as a delicacy and the scales to sell. Now, however, there is evidence of a change in attitudes. This change is seen in the growing number of cases where locals who come across a live pangolin in the road or fields, choose to bring it back to the village and to the attention of conservation sub-committee members. They then use the opportunity to gather people around to talk about the pangolin and explain the law before releasing the animal back into the wild.

The role of the sub-committees in reducing illegal trade in pangolins works on various levels. They are educating

Training Local Youths in Pangolin Monitoring (Ambika Prasad Khatiwada)

those locals who did not realise that killing pangolins was illegal, and exerting their influence and authority over neighbours, relatives and friends who may have been knowingly engaged in illegal activities. Finally, they discourage outsiders from coming into the villages in search of scales because they are ready to inform the authorities and security services.

Local press interest in the conservation project has helped to build stronger community self- esteem, and there is a sense among villagers that their efforts could help them to develop local tourism and gain government support.

Overall, there has been a genuine interest and support for the conservation programme, which helps to stigmatise and discourage local poachers. There is a virtuous circle driven by social cohesion and community values, backed by the threat of enforcement.

Challenges

- There is little direct benefit to the communities from participating in pangolin conservation.

- The initial high levels of interest and curiosity during the start-up phase of the project could be difficult to maintain.

- Illegal trade is more widespread and more sophisticated than initially thought realised.

- Illegal traders who used to operate openly — for example coming into villages to buy scales - are now setting up underground networks.

Lessons learnt

- Communication and raising awareness about the threatened status of local animals influences attitudes and wins support for conservation.

- Conservation programmes need to bring benefits, directly or indirectly, to local communities if their support and engagement is to last.

- Illegal trade at a local level is not always intentional.

COULD THIS WORK ELSEWHERE?

Yes. In Nepal, the National Trust for Nature Conservation has started similar community-based conservation work in five VDCs to support the USAID-funded Hariyo Ban Programme which focusses on Goral (a threatened goat-like species) conservation. This project raises public awareness to stop poaching at local level (people were killing Goral for local consumption) and supports communities through livelihood improvement initiatives (home stay tourism, tree planting, improved livestock rearing) and establishing community conservation groups.

Conclusions

3

Engaging local communities in tackling wildlife crime – lessons from the case studies

It is clear from the case studies presented in this volume that there is no blueprint as to how to design and implement a successful initiative to engage local communities in tackling wildlife crime.

The majority of case studies employ some kind of community ranger/eco-guard approach but the models for these eco-guards vary hugely from trained and armed rapid response teams in the Northern Rangelands Trust conservancies who have to tackle heavily armed poachers, to informal monitors in Nepal who seek to raise awareness amongst would-be poachers themselves as to the conservation value of pangolins and the potential penalties that could be incurred from killing them and thus bring about a change in behaviour. The type of approach used clearly has to vary with the specific context in which wildlife crime is occurring.

The case studies highlight that anti-poaching activities generally take place as just one element of a wider programme of conservation, land management and community development.

increase incentives for conservation

The case studies reveal an interesting variety of different mechanisms for generating local incentives for conservation – beyond direct engagement of individual community members in anti-poaching activities. In the majority of cases financial incentives are critical. The maintenance of an attractive tourism resource is a common strategy – particularly in Africa. The benefits from wildlife tourism can take a number of forms. In some cases communities benefit from a share of the revenue derived from tourism on their land. So for example the Northern Rangelands Trust case study reports that in 2013 over US$ 0.5 million was raised in tourism revenue of which 60 per cent was allocated to community development projects. In other cases, wildlife species provide the basis for communities to establish their own tourism enterprises – the rhino rangers programme in Namibia is now expanding into community based rhino tracking, while Asocaiman in Colombia has encouraged eco-tourism as a means of generating revenue while waiting for the possibility for opening up a limited trade in crocodile skins.

reduce disincentives

In other cases the issue is as much about reducing the disincentives for conservation. This largely relates to the problem of human-wildlife conflict and the negative attitudes that this engenders towards wildlife. In some cases poachers could be perceived as doing a favour to local farmers whose crops are regularly raided by wildlife. The Ruvuma Elephant Project specifically addresses human-elephant conflict as one of its packages of activities to incentivise conservation and tackle poaching. The strategies adopted to reduce elephant incursions into farmland – planting of chilli pepper hedges – in turn lend themselves to revenue generation, further bolstering the overall benefits from conservation. The Kilimanjaro Landscape project similarly emphasises the need to tackle human-elephant conflict as part of an integrated conservation strategy.

build on traditional institutions

In Mali, considerable success has been achieved in protecting a remnant population of elephants without any incentives in the form of revenue derived from tourism or other income generating schemes that are linked to the elephants. Instead, the elephants are seen as part of a wider ecosystem on which local pastoralists are heavily dependent. Protecting the elephants is part and parcel of protecting their pastoralist livelihoods which depend on well-maintained grazing lands and water supplies. Resurrecting – and clarifying the legal basis for – traditional natural resources management institutions has thus proved to be effective in protecting elephants – along with other natural resources. This need to understand the cultural setting and to build on traditional institutions is emphasised in a number of other case studies. In Nepal, for example, pangolin conservation sub-committees have been developed as part of the local governance structure of Village Development Committees.

encourage partnerships and collaboration

The case studies also emphasise the need for partnerships and collaboration. The vicuña case study clearly highlights that "It is not enough to rely solely on community engagement to fight poaching. Vicuña fibre has such high market value and the potential reward for illegal trade is so high, that government involvement is crucial." At the time of writing, there is a new, concerted campaign by a well-organised poaching network that is targeting the elephants in Mali and it is unlikely that under this situation the community brigades will be enough of a deterrent. Equally, however, the resources of the state conservation are not sufficient either. BBC News recently reported an interview with a member of the nature conservation division who noted "We have about 10 rangers covering about 1.25 million hectares, so it's quite insufficient,"[19] The Mali Elephant project reports that all efforts are currently focused on mobilising a co-ordinated response composed of military, government foresters and community brigades (who are providing information, guiding and checking that local people are not complicit.[20]

tackling wildlife crime is risky for communities

The challenges in dealing with wildlife crime in a context where poachers are heavily armed and well organised, commodities are hugely valuable, and local people are exceptionally poor are enormous. In the case of vicuña, community management (rather than intolerance) has been incentivised by the ability to trade fibre on the international market making the animals worth far more alive than dead. But there is currently an increase in poaching – coupled with an increase in drug smuggling and people trafficking. At this level of organised crime, communities have very limited capacity to stop poaching particularly in the absence of support from formal law enforcement agencies. Indeed, in most of the case studies presented it is the partnership between law enforcement agencies and local communities that is a key ingredient of success.

Nevertheless, the risks the communities face in engaging in anti-poaching activities are significant. The case studies reveal the community rangers have been wounded or killed by poachers, have had their houses burned and property destroyed. The fear of reprisals from poachers can be a major disincentive to local involvement in wildlife protection.

Beyond the sheer scale, level of organised and degree of militarisation of modern day wildlife poaching, the case studies highlight a number of other key challenges. High amongst these are the amount of time and resources that it takes to build community trust and capacity and the size and remoteness of the areas that they are seeking to conserve – particularly when these have long and porous borders.

community-based initiatives are replicable

Despite the challenges, however, the majority of case studies consider their initiatives to be replicable – if the conditions are right. Of course the "right" conditions vary but common themes that emerge include an enabling policy framework whereby communities own or have strong rights over land and wildlife resources; an enabling policy framework where communities are able to generate benefits from wildlife (whether through consumptive or non-consumptive use); and involvement of a support NGO that is committed to community engagement and to a multi-faceted strategic approach. In some cases such as the Mali Elephant Project, the process of community engagement is considered transferable while the actual activities employed are context specific.

Key lessons learnt that could inform the transfer of these approaches elsewhere include:

- Community-based natural resource management initiatives need a long period of support and investment. For example NRT has found that a conservancy takes 12 months to set up and two to three years to become effective. The Olderkesi case

study similarly highlights that there is no quick fix to setting up a community conservancy because 100 per cent buy-in is key to success and this takes time. The Rhino Rangers Programme notes, however, that taking the time to fully understand and appreciate the social context, especially key players, their perspectives and values, has helped identify the right mix of instruments and incentives to employ.

- Decision-making must be community-led and not imposed by outsiders. The role of external agencies is to support and facilitate this process rather than to distort it. Helping local people to find solutions is more effective than imposing them.

- A transparent and inclusive decision process that works closely with appropriate local institutions is key for ensuring decisions are made that reflect the common interest. Transparent processes build trust and prevent some individuals benefitting at the expense of others.

- A secure source of funding is essential but an integrated strategy, commitment and determination affect success more than simply funding.

- Conservation programmes need to bring benefits, directly or indirectly, to local communities if their support and engagement is to last. But non-financial benefits should not be overlooked as an incentive.

- Peer pressure and social sanctions can be one of the strongest influencing factors in changing established mindsets within communities.

- Supporting existing initiatives that are integrated into local context are more cost effective than imposing new infrastructure.

- Illegal trade at a local level is not always intentional. Education and awareness about the threatened status of local animals can influence attitudes, change behavior, and win support for conservation.

- Partnerships are critical – between support NGOs and communities; between community law enforcement efforts and formal law enforcement efforts; and between community enterprises and private sector enterprises. Community-based initiative on their own will never be enough to combat wildlife crime but are a crucial ingredient.

The case studies presented here are just beginning to scratch the surface in terms of understanding the different contexts under which community engagement to tackle wildlife crime can work and those under which it is likely to be difficult. We urgently need more case studies of both successes and failures in order to help us better understand these conditions and to design interventions and partnerships that can help. We encourage funders, implementers and participants in projects and other initiatives to share their stories and their lessons learnt.

References and notes

1. www.traffic.org/trade

2. Warchol GL (2004) The transnational illegal wildlife trade. Criminal Justice Studies. Vol. 17, No. 1, pp 57-73

3. Wyler, LS and Sheikh, PA (2008) International illegal trade in wildlife: threats and US policy. Congressional Research Service. opencrs.com/document/RL34395

4. UNODC (2010) The Globalization of Crime: A Transnational Organized Crime Threat Assessment. United Nations Office on Drugs and Crime, Vienna, Austria

5. Standley, S and Emslie, RH (2013) Population and poaching of African rhinos across African range states. Evidence on Demand. www.evidenceondemand.info/population-and-poaching-of-african-rhinos-across-african-range-states

6. Duffy, R et al (2013) Rhino Poaching: How do we respond? Evidence on Demand. www.evidenceondemand.info/rhino-poaching-how-do-we-respond

7. Milliken, T and Shaw, J (2012) The South Africa–Vietnam rhino horn trade nexus: A deadly combination of institutional lapses, corrupt wildlife industry professionals and Asian crime syndicates. TRAFFIC, South Africa. www.traffic.org/species-reports/traffic_species_mammals66.pdf/

8. www.europarl.europa.eu/sides/getDoc.do?type=MOTION&reference=B7-2014-0013&format=PDF&language=EN

9. www.gov.uk/government/uploads/system/uploads/attachment_data/file/281289/london-wildlife-conference-declaration-140213.pdf

10. www.unitedforwildlife.org/

11. www.royalfoundation.com/

12. www.royalfoundation.com/

13. www.evidenceondemand.info/population-and-poaching-of-african-rhinos-across-african-range-states

14. www.zsl.org/conservation/news/united-for-wildlife-commits-to-tackle-the-illegal-wildlife-trade

15. African Elephant Summit Urgent Measures: cmsdata.iucn.org/downloads/african_elephant_summit_final_urgent_measures_3_dec_2013.pdf

16. United for Wildlife Briefing and Solutions www.slideshare.net/foundation2012/united-for-wildlife

17. www.europarl.europa.eu/sides/getDoc.do?type=MOTION&reference=B7-2014-0013&format=PDF&language=EN

18. globaltigerinitiative.org/publication/global-tiger-recovery-program-2010-2022/

19. www.bbc.co.uk/news/world-africa-31373711

20. Susan Canney, email to editor, 11 Feb 2015

Appendix
Case study template used by contributors

QUESTION	ANSWER
Name of person writing case study	
Organisation	
Relationship of author to case study	e.g. project implementer, independent researcher, funder etc
KEY FACTS AND FIGURES	
Country where case study is located	
Site(s)	e.g. name of protected area(s) or other intervention sites. Please explain if not site specific
Species of concern	Which species affected by crime does the project seek to address?
Name of project/case study	
Date (year) project started	
Current status	
Which of the commitments of the London Conference (or other international initiatives) on IWT does the project/case study address?	
Illegal wildlife trade context that the project seeks to address	e.g high/low/increasing/decreasing levels of poaching and trends, species involved, subsistence/local or national commercial/international; trafficking
Value of trade item	What is the local trade value and final consumer trade value of the wildlife product?
Local or international trade	Is trade in the wildlife product mostly local or national or is it mostly international?
Poachers	Are the poachers that the project/case study targets primarily from the ownership community or are they outsiders? And if outsiders are they individuals or part of organized crime gangs?
Political context in which project operates	e.g strong/weak rule of law; conflict zone; high levels of corruption; weak governance
Geographical context	e.g inside or outside a protected area
The approach to community engagement that the project has taken and the rationale for this approach	e.g community game guards, intelligence providers, sustainable use schemes; co-management of protected area: livelihood alternatives in lieu of wildlife use; allocation of ownership rights of protected areas or wildlife

LINKS BETWEEN COMMUNITY ENGAGEMENT AND IWT TRENDS

Is the community engagement project part of a wider response to wildlife crime in the areas?	e.g is there a parallel law enforcement activity being implemented and if so how does the community engagement activity interact with this? Or does it replace the need for formal law enforcement?
What is the national policy context for community involvement in conservation? (please identify relevant policies if known)	e.g do local people have rights over land and resources? And for what purposes? Is sustainable use allowed etc? Do local people have weak or strong tenure or user rights explicitly over the species in trade?
What is the national policy context for the treatment of illegal wildlife trade? (please identify relevant policies that make provisions for IWT if known)	e.g is wildlife crime treated as serious crime? What penalties are provided for – eg scale of fines, length of prison sentences? Is the military involved or only the wildlife management authority?
Have case study communities been negatively affected by government responses to IWT?	e.g community members having reduced access to areas for their cattle grazing, for collecting food. Or community members get confronted aggressively by enforcers in their search for poachers in a way that impacts on their livelihoods?
What is the poverty context in which the project operates?	e.g do the communities the project works with fall above/below national poverty lines? Are they the poorest of the poor? Is poverty a motivating factor behind involvement in IWT if the project is focused on changing community behaviour?
How effective has the project been? (please provide evidence)	e.g has wildlife crime reduced as a result of the project? Have wildlife numbers increased/stabilised? Has the effect of IWT on local people changed?
Accountability – Who has the responsibility for monitoring and assessing the relationship between the participation of the local community and the trends observed in these species in trade?	e.g the community? The management authority? The project implementers?

RISKS AND REWARDS TO LOCAL COMMUNITIES IN TACKLING ILLEGAL WILDLIFE TRADE

What role do the local communities play in tackling IWT?	e.g they act as informants; they act as guards; they alter their own behaviour away from poaching
What rewards do they get? (please provide details of type and scale of rewards received including any trends over time)	e.g salaries, revenue share from protected area entrance fees; direct income from tourism or trophy hunting concessions/sales; non-financial benefits
What risks do they encounter?	e.g are the poachers they deal with armed? Do community guards get shot? Do they get stigmatized if they are identified as informants? Does involvement of local individuals in tackling wildlife crime threaten the social cohesion of villages/communities, or do whole villages/communities become involved?
Do rewards appear to adequately balance risks taken?	

What law enforcement back-up do they have?	e.g are they connected to the police if they apprehend a poacher? Are they armed (and if so how does this compare to the types of arms the poachers carry)? Have they had specialist training? Are they covered by military law in the case of someone being killed?

CHALLENGES

How easy/difficult was it to get communities interested/engaged in the project?	
What have been the major barriers to success?	e.g political barriers, capacity constraints; sheer power of the challenge brought on by the value of species/commodities involved; complicity with illegal activity within the community; weaponry and tactics of poachers; funding constraints; policy and legislative framework etc
In what ways these have hindered progress?	e.g do they reduce the level of benefits available? Increase the level of risk?
What have been the major factors that have helped the project be successful (if applicable) and how have these aided success?	
How have the links between key factors and success/failure been measured?	e.g how do we actually know whether or not there is a correlation between community engagement and success/failure?

LESSONS LEARNT

What are the key lessons that you would pass to someone else in terms of what works well and what doesn't?	
What could you say about the timelines involved and resources required to achieve success?	
What could you say about the extent to which your project operates in a unique context (because of the species involved, scale of poaching, political context etc) or whether it is a model that could be widely replicable elsewhere?	

SUMMARY DESCRIPTION

In your own words please tell us the overall story of your case study that we can use as the basis for the entry in the compilation volume. Much of the information will be included in the table above but please feel free to use anecdotes, quotes, photos to bring your story alive and to cover any points that may not have been capture above or where more detail would be useful. Please stick to a maximum of 1000 words.

We welcome additional case studies using this template. Please send to Dilys Roe: dilys.roe@iied.org

Wildlife crime is at the top of the international conservation agenda. Current strategies for addressing it focus on law enforcement, reducing consumer demand and engaging local communities in conservation. To date considerably more attention has been paid to the first two strategies than to the third. This volume of case studies explores a range of different models of community engagement – from awareness-raising to community-based rapid response teams – and a wider range of conservation incentives – from land leases, to sustainable use schemes, to reinvigorated cultural institutions and social status. The case studies highlight that while community engagement is not a panacea for tackling wildlife crime – and indeed there are examples where it has proved to be a real challenge – it can, under the right circumstances, be highly effective. We need to learn from these examples. In the long run, the survival of some of the world's most iconic wildlife species lies in the hands of the communities who live alongside them.

Event Materials

Biodiversity

Keywords:
Wildlife crime, illegal wildlife trade, community-based approaches, livelihoods

iied