Strengthening Local Community Engagement in Combatting Illegal Wildlife Trade

Case studies from Kenya

IUCN Conservation Areas and Species Diversity Programme

About IUCN

IUCN is a membership Union uniquely composed of both government and civil society organisations. It provides public, private and non-governmental organisations with the knowledge and tools that enable human progress, economic development and nature conservation to take place together.

Created in 1948, IUCN is now the world's largest and most diverse environmental network, harnessing the knowledge, resources and reach of more than 1,300 Member organisations and some 10,000 experts. It is a leading provider of conservation data, assessments and analysis. Its broad membership enables IUCN to fill the role of incubator and trusted repository of best practices, tools and international standards.

IUCN provides a neutral space in which diverse stakeholders including governments, NGOs, scientists, businesses, local communities, indigenous people's organisations and others can work together to forge and implement solutions to environmental challenges and achieve sustainable development.

Working with many partners and supporters, IUCN implements a large and diverse portfolio of conservation projects worldwide. Combining the latest science with the traditional knowledge of local communities, these projects work to reverse habitat loss, restore ecosystems and improve people's well-being.

www.iucn.org

https://twitter.com/IUCN/

About IIED

IIED is a policy and action research organisation. We promote

sustainable development to improve livelihoods and protect the

environments on which these livelihoods are built. We specialise in linking local priorities to global challenges. IIED is based in London and works in Africa, Asia, Latin America, the Middle East and the Pacific, with some of the world's most vulnerable people. We work with them to strengthen their voice in the decision-making arenas that affect them — from village councils to international conventions.

International Institute for Environment and Development

80-86 Gray's Inn Road, London WC1X 8NH, UK

www.iied.org

@iied

www.facebook.com/theIIED

Strengthening Local Community Engagement in Combatting Illegal Wildlife Trade

Case studies from Kenya

Leo Niskanen[a], Dilys Roe[b], Wendy Rowe[c], Holly Dublin[d] and Diane Skinner[e]

[a] Technical Coordinator of the Conservation Areas & Species Programme for the International Union for Conservation of Nature, Eastern and Southern Africa Regional Office, based in Nairobi, Kenya

[b] Principal Researcher at the International Institute for Environment and Development (IIED) in London and leads the Institute's Biodiversity team, based in London, UK. Dilys also serves on the IUCN CEESP/SSC SULi Steering Committee

[c] Program Head, MA Global Leadership, and Professor, School of Leadership Studies at the Royal Roads University, Canada.

[d] Chair of the IUCN/SSC African Elephant Specialist Group, on the Steering Committee of IUCN CEESP/SSC SULi, and a Senior Adviser to IUCN's Eastern and Southern Africa Regional Office, based in Nairobi, Kenya

[e] Member of IUCN CEESP/SSC SULi, and a freelance consultant based in Harare, Zimbabwe

This material has been funded by UK aid from the UK government; however the views expressed do not necessarily reflect the UK government's official policies.

Published by: IUCN, Nairobi, Kenya

Citation: Niskanen, L., Roe, D., Rowe, W., Dublin, H. and Skinner D. (2018) Strengthening local community engagement in combating illegal wildlife trade - *Case studies from Kenya.* Nairobi, Kenya: IUCN. iii + 36p

Cover photo: Using beans to score different Theory of Change (ToC) pathways in Olderkesi. © Micah Conway / IUCN

Layout by: Gordon Arara (IUCN Publications Unit, Nairobi)

Available from: IUCN (International Union
for Conservation of Nature)
Conservation Areas and Species Diversity Programme
Nairobi
Kenya
Tel +254 (20) 2493561/(20) 2493565
www.iucn.org/resources/publications

The text of this book is printed on Avalon Matt Art 133 gsm.

Table of Contents

Acknowledgements vi
Acronyms vii

PART ONE: INTRODUCTION AND METHODS 1
1. Introduction 1
1.1 Engaging local communities in combatting illegal wildlife trade - A Theory of Change 1
1.2 Testing the ToC: The Strengthening Local Community Engagement in Combatting Illegal Wildlife Trade project 3

2. Methodology: The First Line of Defence (FLoD) process 3

PART TWO: THE CASE STUDIES 7
3. Context: The institutional and legislative framework for wildlife management in Kenya 7

4. Olderkesi Wildlife Conservancy Case Study 8
4.1 Overview 8
4.2 Testing the Olderkesi Designer ToC against the Baseline ToC 10

a) Enabling conditions/actions 10
1: Build community capacity to manage wildlife 10
2: Increase perceived fairness of wildlife laws 10
3: Strengthen laws for community wildlife management 10
4: Fight corruption and improve governance 11

b) Pathways 11
Pathway A: Disincentivise illegal killing of wildlife for IWT 11
Pathway B: Increase incentives for wildlife stewardship 11
Pathway C: Decrease the costs of living with wildlife 14
Pathway D: Support non-wildlife related livelihoods 15

c) Outcomes and impact 16

4.3 Does the CWCT initiative validate or modify the Baseline Theory of Change? 17

4.4 Testing the CWCT ToC against the Olderkesi Community ToC 19
Enabling conditions 19
Pathways 19

5. Kilitome Conservancy Case Study 21
5.1 Overview 21
5.2 Testing of the Kilitome ToC against the Baseline ToC 23
a) Enabling conditions/actions 24
1: Build community capacity to manage wildlife 24
2: Increase perceived fairness of wildlife laws 24
3: Strengthen laws for community wildlife management 24
4: Fight corruption and strengthen governance 24
Pathways 25
Pathway A: Disincentivise illegal killing of wildlife for IWT 25
Pathway B: Increase incentives for stewardship 25
Pathway C: Decrease costs of living with wildlife 28
Pathway D: Support non-wildlife-related livelihoods 29

5.3 Does the Kilitome initiative validate or modify the Baseline Theory of Change? 32

PART THREE: LESSONS LEARNED 35
(i) Substance lessons 35
(ii) Process lessons 36

References 37

Acknowledgements

The authors would like to thank a number of institutions and individuals for their support in developing this guidance: the UK government's Illegal Wildlife Trade Challenge Fund for funding this work; Professor Wendy Rowe of Royal Roads University for advising the team on the Action Research methodology, participating in the field work at Kilitome and for subsequent review of this case study; our local partners in Kenya – Big Life Foundation, Cottar's Safari Services, Kenya Wildlife Conservancies Association, African Wildlife Foundation and Tawi Lodge, and Rosie Cooney and Calvin Cottar for their review of the case study; and most importantly, all of the community members who have given so freely of their time and knowledge.

The authors would like to thank a number of institutions and individuals for their support in developing this guidance: the UK government's Illegal Wildlife Trade Challenge Fund for funding this work; our local partners in Kenya – Big Life Foundation, Cottar's Safari Services, Kenya Wildlife Conservancies Association, African Wildlife Foundation and Tawi Lodge, and Rosie Cooney and Calvin Cottar for their review of the case study; and most importantly, all of the community members who have given so freely of their time and knowledge.

Acronyms

AEMP..... Amboseli Ecosystem Management Plan
AfESG..... IUCN/SSC African Elephant Specialist Group
ALOCA..... Amboseli Land Owners Conservancies Association
AWF..... African Wildlife Foundation
CWCCC..... County Wildlife Conservation and Compensation Committee
CWCT..... Cottar's Wildlife Conservation Trust
CEESP..... IUCN Commission on Environment, Economic and Social Policy
FLoD..... First Line of Defence
HEC..... Human elephant conflict
HWC..... Human wildlife conflict
IIED..... International Institute for Environment and Development
IUCN..... International Union for Conservation of Nature
IWT..... Illegal Wildlife Trade
KWCA..... Kenya Wildlife Conservancies Association
KWS..... Kenya Wildlife Service
MMNR..... Maasai Mara National Reserve
NGO..... Non-governmental organisation
OCWT..... Olderkesi Community Wildlife Trust
SCP..... Situational Crime Prevention
SORALO..... South Rift Association of Land Owners
SSC..... Species Survival Commission
SULi..... IUCN CEESP/SSC Sustainable Use and Livelihoods Specialist Group
ToC..... Theory of Change
WCMA 2013.... Wildlife Conservation and Management Act, 2013, Republic of Kenya

PART ONE: INTRODUCTION AND METHODS

1. Introduction

1.1 Engaging local communities in combatting illegal wildlife trade - A Theory of Change

The illegal wildlife trade (IWT) and associated poaching -particularly of iconic species such as African elephants and rhinos - is one of the highest profile conservation challenges today. A recent analysis by the World Bank (Wright et al., 2016) estimated that donors have contributed over $1.3 billion to tackling IWT since 2010. There is growing recognition among practitioners and policy makers of the need to engage and invest in rural communities that neighbour or live with wildlife as key partners in tackling IWT, particularly as they form a "first line of defence". However, to date, this strategy has received far less attention than other approaches including law enforcement and demand reduction. This is partly because there is no "one size fits all" solution to community engagement and a framework to guide such interventions on the ground has been lacking.

In response, the International Union for Conservation of Nature (IUCN), International Institute for Environment and Development (IIED) and partners developed a dynamic Theory of Change (ToC) that seeks to better understand the different incentives and disincentives that influence whether local people engage in IWT or help to prevent it. An initial draft of the ToC (Figure 1) was developed for a workshop led by the IUCN Sustainable Use and Livelihoods Specialist Group (SULi) held in the run up to the Kasane Conference on Illegal Wildlife Trade in 2015 (IUCN SULi et al 2015) and was subsequently refined through expert consultation (Biggs et al., 2016; Roe et al., 2016). The ToC identifies four causal pathways for community-level actions, each underpinned by a series of key assumptions. The four pathways are: (a) strengthening disincentives for illegal behaviour; b) increasing incentives for wildlife stewardship; c) decreasing costs of living with wildlife; and d) supporting non-wildlife related livelihoods. Underlying all four pathways are a number of "enabling actions" to strengthen governance from the local to national to regional and to international scale including supporting the institutional framework to enforce against IWT; increasing the perceived fairness of wildlife laws; strengthening laws for community management of and benefit from wildlife; and fighting corruption. In addition, underlying all the actions in the ToC is the need for enhancing community capacity – to both manage and benefit from wildlife.

The ToC is informed by situational crime prevention (SCP) theory. SCP recognises that any individual is capable of committing an offence at any time if the opportunity arises, and that the likelihood of the opportunity arising is completely context specific. SCP is based on five key principles: increase the effort, increase the risks, reduce the rewards, reduce provocation, and remove excuses (Clark 2009). While the four pathways in our ToC do not directly mirror these principles, many of the strategies that underlie the SCP principles are reflected in the pathways, particularly Pathway A on increasing the disincentives for illegal activities and Pathway C on reducing the costs of living with wildlife. Our ToC however goes beyond SCP to also explicitly focus on increasing positive incentives for "good behaviour" - wildlife stewardship and alternative livelihoods. The SCP framework was developed in a context of general, non-wildlife related, crime prevention where such incentives are generally not relevant. In a wildlife management context, however, decades of experience of community based wildlife management point to their importance (Cooney et al 2017).

It should also be noted that our ToC focuses explicitly on community based interventions to tackle IWT and does not take account of efforts to reduce IWT through other means. Our ToC is just one part of the bigger puzzle. If evidence shows that IWT is declining or increasing in a particular location – be it at the local, regional or national scale – our ToC can help explain how community based approaches may have contributed to those observed outcomes. It is not intended to explore how other types of intervention such as conventional top-down law enforcement might also have contributed. It also cannot show causal linkages between community actions and IWT outcomes.

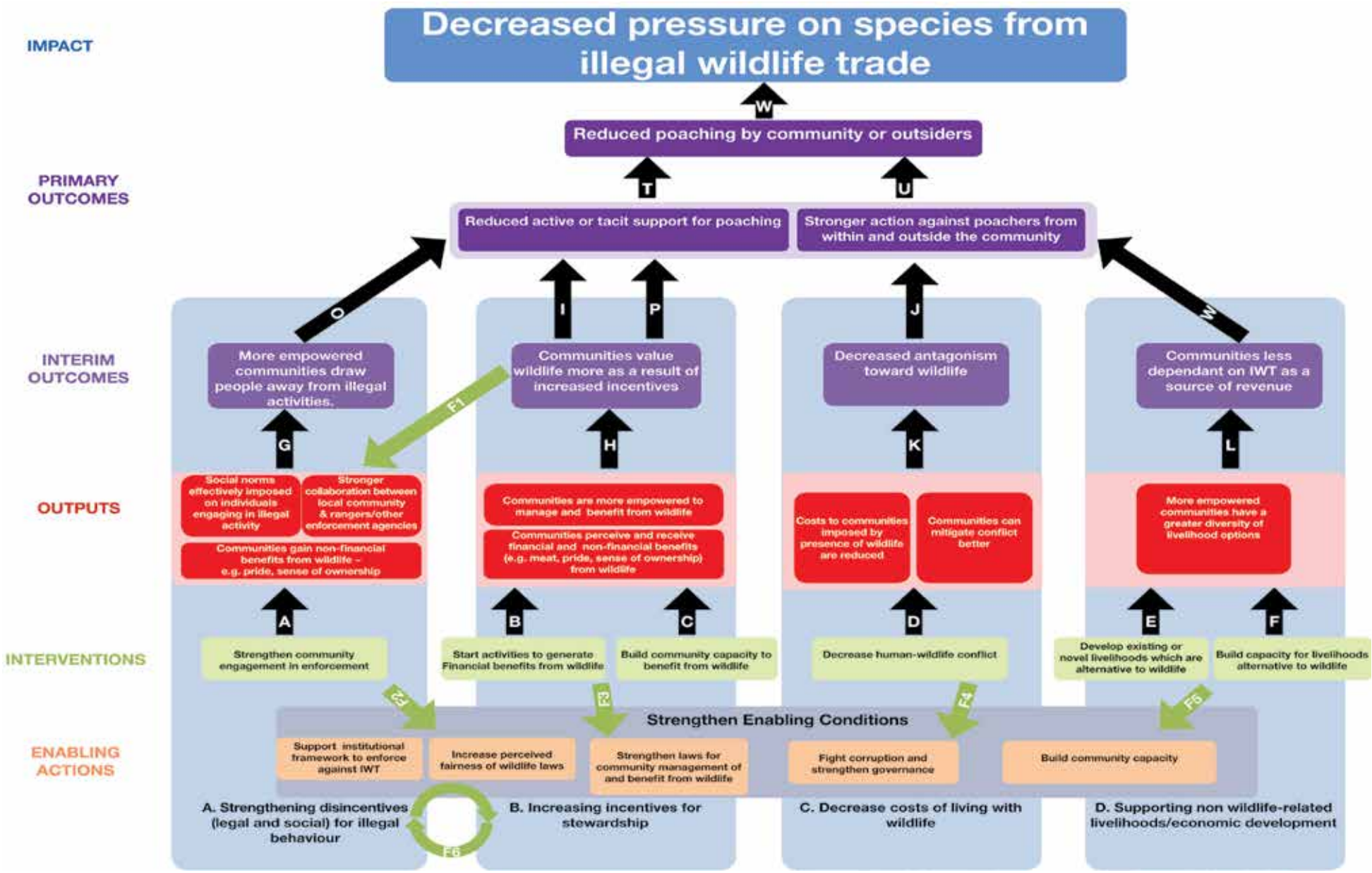

Figure 1: Draft Theory of Change for engaging local communities in combatting illegal wildlife trade (Biggs et al. 2016)

1.2 Testing the ToC: The Strengthening Local Community Engagement in Combatting Illegal Wildlife Trade project

The Strengthening Local Community Engagement in Combatting Illegal Wildlife Trade project (2016–2018) intends to test the ToC with the aim of further refining it and then providing practical guidance to conservation programme designers, implementers, donors and policymakers who have an interest in engaging communities to tackle IWT.

Funded by UKaid through the UK government's Illegal Wildlife Trade Challenge Fund (IWTCF), the project is implemented by IUCN (IUCN East and Southern Africa Regional Office, Conservation Areas & Species programme; the IUCN Species Survival Commission (SSC) African Elephant Specialist Group (AfESG); and the IUCN Sustainable Use and Livelihoods Specialist Group (SULi)) in partnership with the International Institute for Environment and Development (IIED); Royal Roads University; Big Life Foundation (BLF); the Cottar's Wildlife Conservation Trust (CWCT); and the Kenya Wildlife Conservancies Association (KWCA). The project is also sharing lessons and methodologies with the South Rift Association of Land Owners (SORALO), which works with Maasai communities in a large swathe of southern Kenya to help develop and enhance a network of conservancies and to strengthen its community-based approaches to reducing IWT.

The project's long term goal is *"More effective and widespread community engagement in tackling IWT resulting in reduction in pressure on African elephant populations and increased benefits from improved wildlife stewardship."* The anticipated outcome of the project is *"The conditions for stronger engagement of local communities to combat - rather than participate in - IWT while positively contributing to local livelihoods is better understood and forms the basis of practical guidance for anti-IWT policy and programme development in Kenya (and beyond)."*

2. Methodology: The First Line of Defence (FLoD) process

The project adopted a "participatory action research" approach (Rowe et al. 2013; Piggot-Irvine and Zornes 2016), a research methodology undertaken in communities that emphasises participation and action. Whereas conventional research tends to be characterised by detached researchers and research "subjects", participatory action research seeks to understand issues through a process of collaboration, reflection and stakeholder engagement.

The first project activity was therefore to hold an inception workshop in Nairobi in May 2016 at which the draft ToC and associated assumptions were discussed with project partners and refined following their feedback. The four pathways remained the same but the inception workshop helped to clarify some of the outcomes and outputs and also provided more insights into types of relevant interventions. This refined ToC, hereafter called the Baseline ToC (Figure 2), was then used as the starting point for the testing process. The refined set of assumptions for each causal pathway is discussed in Section 3 of this case study.

The second stage of the project was to ground-truth the ToC through testing in two case study sites in Kenya – Kilitome Conservancy, adjacent to Amboseli National Park, and Olderkesi Conservancy, adjacent to the Masai Mara National Reserve (MMNR). To do this we adopted a staged approach. The first stage involved seeking to understand the implicit ToC of the designers of the IWT intervention in each case study site. This was compared with the Baseline ToC, noting similarities and differences (as depicted at the bottom of Figure 3, comparing ToC 2 with ToC 1). The second stage involved seeking to understand the implicit ToC of the communities involved in the project and comparing this to the ToC of the project designers in order to determine if the two were fully aligned (I.e. from Figure 3, comparing ToC 3 with ToC 2). Non-alignment of the intervention logic of project designers and the communities is likely to limit the effectiveness of interventions. This process is a useful way to highlight flaws in project design and explore possible improvements.

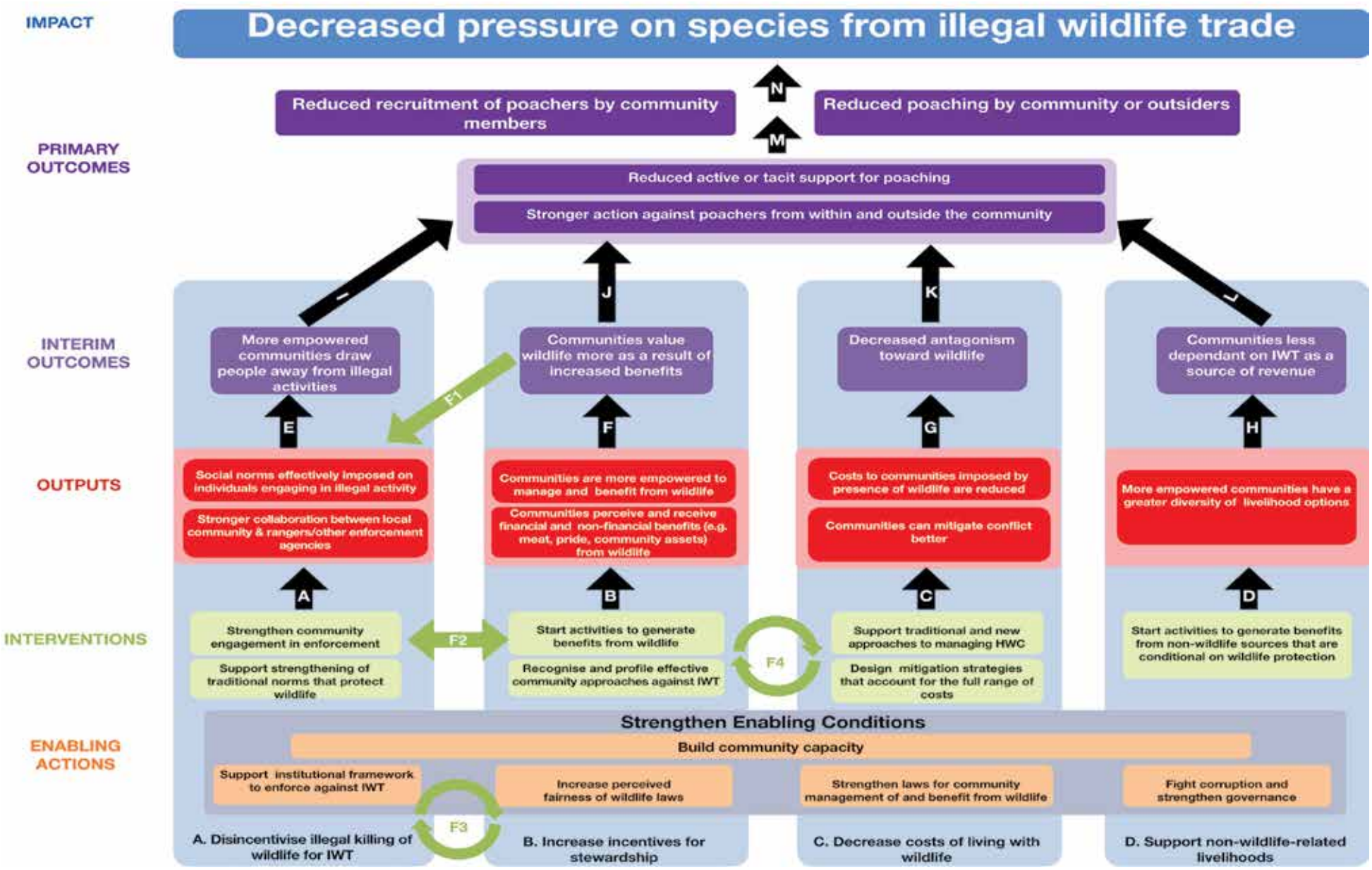

Figure 2: A Theory of Change for engaging local communities in combatting the illegal wildlife trade – Baseline ToC for testing

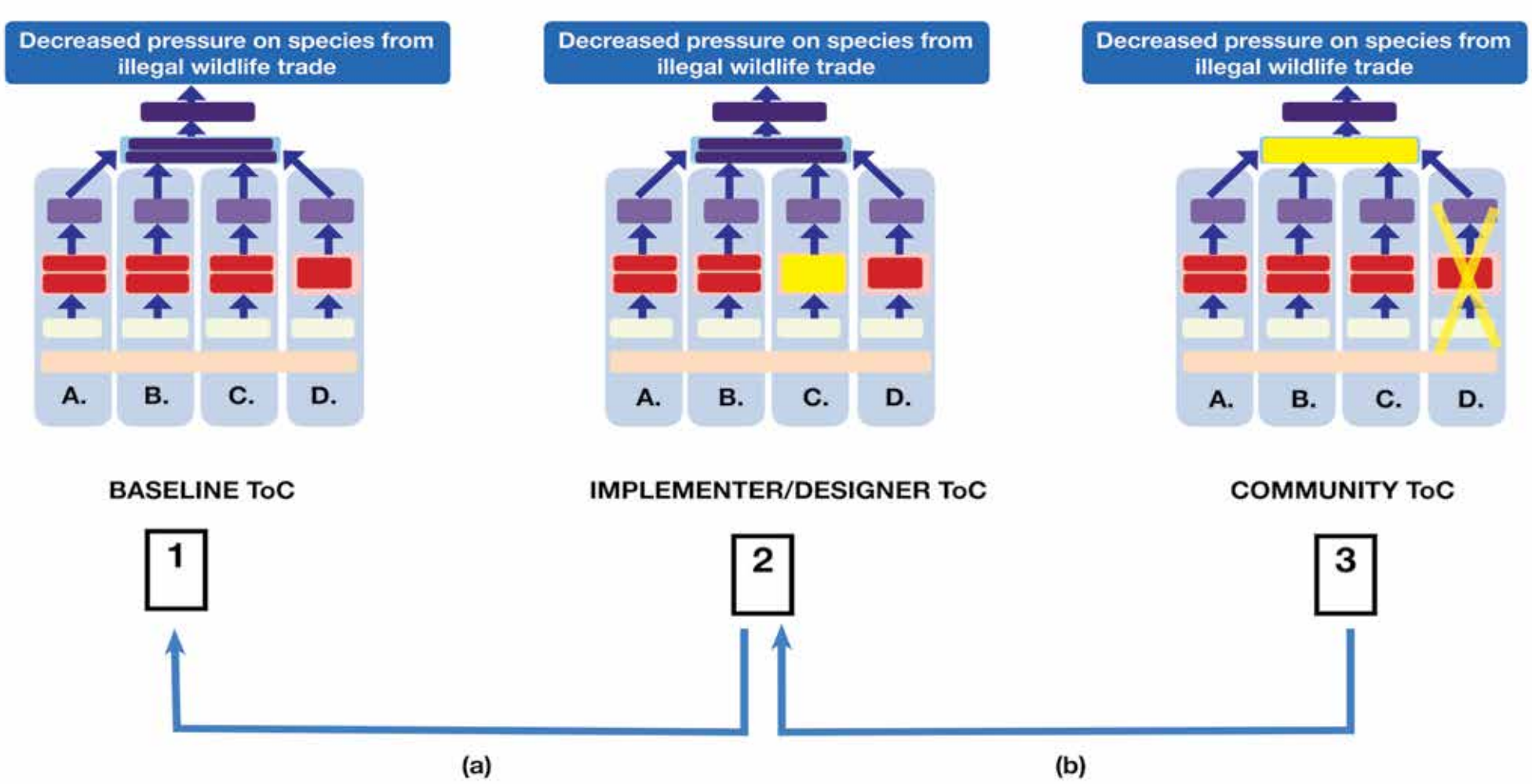

Figure 3: Understanding different perspectives on interventions to tackle IWT – exploring the ToCs of project designers and communities. The figure shows three different ToC's: 1) the baseline ToC; 2) the ToC of those designing or implementing interventions in each of the four pathways that are ultimately intended to reduce IWT and 3) the ToC that describes the community's view of how interventions can be used to reduce IWT. The blue arrows at the bottom of the diagram show the step-wise progression of the comparisons. The first comparison (a) is between the implementer/designer ToC and the baseline ToC and the second (b) is the comparison between the implementer/designer ToC and the community ToC. Through this process you ultimately derive the community's ToC.

In order to retrospectively construct the project designer ToC we conducted a semi-structured interview with the project designer. The questions aimed to provide insights into the relative importance of the four pathways; the specific actions employed in each pathway and outcomes anticipated; and the implicit assumptions underpinning the intervention logic. We also conducted semi-structured interviews with individuals closely associated with the project designer (e.g. staff members and colleagues) to gain further insights. We then drew up a draft 'Designer ToC' based on the interview findings, using the Baseline ToC as a template. We conducted a follow up interview with the project designer to verify our interpretations and confirm agreement with the Designer ToC.[1]

To explore community alignment with the Designer ToC we held a series of age- and gender-disaggregated focus group meetings with the case study communities. We asked community members to use a set of wooden elephants to score (from 0-6) their responses to a series of statements designed to provide insights into the relevance of each of the four ToC pathways to their particular context (Figure 4) and the underlying assumptions. We recorded the scores in an Excel-based tool and generated 'star diagrams' (with each point of the star representing one of the four pathways) which provided an illustration - though not an absolute measure - of the perceived relative importance of each pathway.[2] At the end of the focus group sessions we held a community meeting and played back the findings from each group to all the participants. We then facilitated a discussion between community members as to the differences between the perspectives of the different focus groups. We conducted a matrix scoring exercise to shed further light into the perceived relative importance of each of the different pathways by each group, again discussing similarities and differences between groups (Figure 5). The community meetings and focus groups were conducted in Maa, with the results translated back into English for the purposes of data analysis and case study compilation. We used the results of the community ranking and scoring exercises to construct a Community ToC and compare this to the Designer ToC.

Figure 4: Using wooden elephants to score Maasai women's perspectives on different pathways of the ToC
(© Micah Conway / IUCN)

Figure 5: Using beans to score different ToC pathways in Olderkesi
(© Micah Conway / IUCN)

In the case of Olderkesi Conservancy the overall process was quite straightforward as the intervention there was led by one private tourism operator. At Kilitome the situation was more complex with a number of non-governmental organisations (NGOs), a private investor and the local community collaborating to develop a joint initiative. In this case it was therefore not possible to identify a clear project designer, nor to separate out the designer intervention logic from the community intervention logic.

The third stage was to bring project designers and communities together to explore the differences between their respective ToCs, highlight any real or potential flaws in the project intervention logic and suggest improvements. We did this through a validation workshop which brought the two case study communities together with the project designers in order to share lessons and insights between the two sites.

Full details of the FLoD process are provided in a guidance document (Skinner et al 2018) available at http://www.iucn.org/files/flod-guidance

1 As a result of our experience in conducting these interviews we have since developed a FLoD tool for constructing a Designer ToC which provides a structured set of questions and method for scoring which can highlight variations in the weighting given to each of the four pathways.

2 Again, as a result of our experience we have since developed a set of tools for community-level ToC testing which systematically interrogates each assumption and provides a more quantitative analysis of the relative importance of each pathway.

PART TWO: THE CASE STUDIES

3. CONTEXT: The institutional and legislative framework for wildlife management in Kenya

Ownership of all wildlife in Kenya is vested in the state with the Kenya Wildlife Service (KWS) holding the primary management, protection and law enforcement responsibilities over that wildlife. Wildlife management policy in Kenya is articulated in the Wildlife Conservation and Management Act (WCMA, 2013). Under previous wildlife legislation, all consumptive use of wildlife was banned. WCMA 2013 maintains a ban on sport hunting - including bird shooting and other recreational hunting - but introduces the possibility of game farming, game ranching, live capture of wildlife, and research involving off-take, cropping and culling under KWS supervision. However, regulations that govern these activities have not yet been adopted. Non-consumptive use of wildlife is allowed under license from KWS and includes: wildlife tourism, commercial photography/ filming, education, research, cultural and religious practices. WCMA 2013 also provides for the establishment of wildlife conservancies – i.e. land areas set aside for wildlife outside of the formal protected area system. Any individual or community that owns land on which there is wildlife can set up a wildlife conservancy. Conservancies must be registered and government has set minimum requirements (e.g. management plan, constitution and governance structure) and reserves the right to ensure these are met before allowing registration. According to WCMA 2013, conservancies can also be de-registered by the government if poorly managed following an investigation by the County Wildlife Conservation and Compensation Committee (CWCCC).

The WCMA 2013 introduced stiff penalties for wildlife-related offences including KES 20 million (approximately US$ 195,000 in March 2018) or life imprisonment or both for poaching of species listed as endangered under Kenyan legislation including elephants and rhinos; KES 5 million or five years imprisonment for wildlife trafficking; KES 1 million and five years imprisonment for possession of trophies; KES 200,000 imprisonment or at least one year or both for commercial hunting for the bush meat trade; KES 30,000 or at least six months in prison for subsistence hunting; and KES 100,000 or six months imprisonment for illegal grazing inside national parks.

The WCMA 2013 also makes provision for compensation for human wildlife conflict. Individuals can, in principle, claim compensation from the CWCCC for loss of life, injury or damage to property although it remains unclear as to how the compensation fund will be resourced, and very few claims beyond some consolation payments for loss of life have been paid.

WHAT IS A CONSERVANCY?

A conservancy is defined as “land designated by a community or private land owner, groups of owners or corporate body for purposes of wildlife conservation and other compatible land uses” (KWCA, 2016). The term conservancy also refers to an institution that is set up to manage such land.

Prior to WCMA 2013 there was no specific legislation for conservancies and as a result their evolution over the past 20 years has resulted in several different models. Today there are 160 conservancies covering 6.36 million hectares or 11% of Kenya’s land mass, 89% of which is managed by communities, with a further 2.4 million hectares proposed. While wildlife conservation is a key objective, conservancies also focus on livelihood development, peace and security, good governance, pastoral movements and grazing and provide services such as health and education. Conservancies provide employment to over 2,900 rangers, host over 140 tourism lodges, and provide benefits to over 700,000 community households (KWCA, 2016).

4. Olderkesi Wildlife Conservancy Case Study

4.1 Overview

Olderkesi Wildlife Conservancy is a conservation area of 7,000 acres (28 km2) immediately adjacent to the south eastern boundary of the Maasai Mara Nature Reserve (MMNR) on the border with Tanzania. The conservancy falls within the Olderkesi Group Ranch, an area of 106,000 acres (429 km2). While the MMNR itself is only 1,500 km2, it is surrounded by group ranches and conservancies which collectively account for approximately 4,500 km2, meaning the Mara ecosystem makes up nearly one quarter of the 25,000 km2 Mara-Serengeti ecosystem. The MMNR is Kenya's most-visited protected area, world famous for its high density of herbivores and predators, and annual migration of wildebeest and other grazing mammals – a spectacle which has earned the park the status of one of the Seven Wonders of the World.

Poaching, at least of elephants, appears to have been brought under control in the Mara ecosystem. Data from Poole et al., 2016 showed the number of elephants illegally killed in 2016 was 23 compared to 102 in 2012 (Poole et al., 2016). A recent survey by Kenya Wildlife Service (KWS) revealed a 72% increase in elephant numbers from 1,448 in 2014 to 2,493 in 2017 (Waweru, 2017). Boynton (2014) also notes that there are significant lion prides evident in the conservancies at a time when lion populations across Africa are declining dramatically. In Olderkesi specifically, there are mixed views on levels and significance of IWT. Calvin Cottar, owner of Cottar's 1920s Camp notes, "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. 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. In addition, a small group of specialists operate in organised gangs." (Cottar, 2015). Case study interviewees provided contradictory perspectives including "Olderkesi is one of the hotspots for elephant poaching" and "there is not much poaching in Olderkesi although it used to be bad."

There are, however, other major conservation threats. The MMNR spans a rainfall gradient of 600mm/year on its eastern boundary to over 1,500mm/year in the west. This rainfall puts it well within the limits of rain fed agricultural production. For this reason and with a rapidly growing human population, the Mara ecosystem land outside the MMNR is under high pressure. To the north of the MMNR both small-subsistence farms and large-scale irrigated farms have been established, some as close as 10 km to the reserve boundary. Remaining group ranch land is increasingly being sub-divided[3] into individual, sometimes fenced, plots – a trend which has significant negative implications for wildlife movements. Olderkesi Group Ranch is a vital dispersal area for wildlife from MMNR and also acts as a corridor for elephant movements back and forth to the Loita Hills. It includes varied habitats from forest and woodlands to open grasslands to riverine. Olderkesi Group Ranch was adjudicated in 2010 and its subsequent sub division will result in each of the 6,000 members of the group ranch having an allocation of 33 acres. Recognising the potential danger this posed to conservation and the Maasai's pastoral way of life (and hence tourism potential) if these plots were subsequently fenced, farmed or sold, Cottar's 1920s Camp developed a plan to lease a conservancy area from the group ranch owners – with the proviso that the land be managed exclusively for conservation purposes (Figure 6).

Cottar's 1920s Camp is currently the only tourism operator within the Olderkesi Group Ranch area, accommodating up to 38 guests in its permanent, high-end, tented camp. It has operated in Olderkesi since the mid-1990s and leases land for its main camp, airstrip and smaller temporary camps in eight sites, each of which is owned by groups of 15–30 families from the Group Ranch. Cottar's Wildlife Conservation Trust (CWCT) was established in 2006 as a non-profit arm of Cottar's 1920s Camp in order to lead the negotiations for the conservancy and, ultimately, to act as the leasing entity and manager of the conservancy, once established. The Olderkesi community established the Olderkesi Community Wildlife Trust (OCWT) as the legal entity in which ownership of the conservancy would be vested, with every member of the group ranch (i.e. men, boys and widows – married women are members via their husbands and girls are not members) having an equal share. Overall there are 6,000 shareholders representing a total population of approximately 14,000 people.

At the time we conducted the case study research in October 2016, the conservancy had not been formalised. It was finally agreed in December 2016 after many years of negotiation and delays. Despite this, and well before the conservancy was formally established, CWCT, OCWT and the Olderkesi Group Ranch Committee reached an agreement to restrict certain activities – particularly livestock grazing – within the core conservancy area. This initial agreement, signed in January 2013, included the following provisions:

3 Since Independence in 1963, the Government of Kenya has pursued a policy of land privatisation, resulting in the emergence of "group ranches" (an area of land jointly owned and managed for livestock grazing) around the Mara from the 1970s onwards. Over the last 20 years or so, the government has pushed for subdivision of the group ranches into individual plots – in part as a mechanism to limit nomadism by binding land owners to their particular pieces of land.

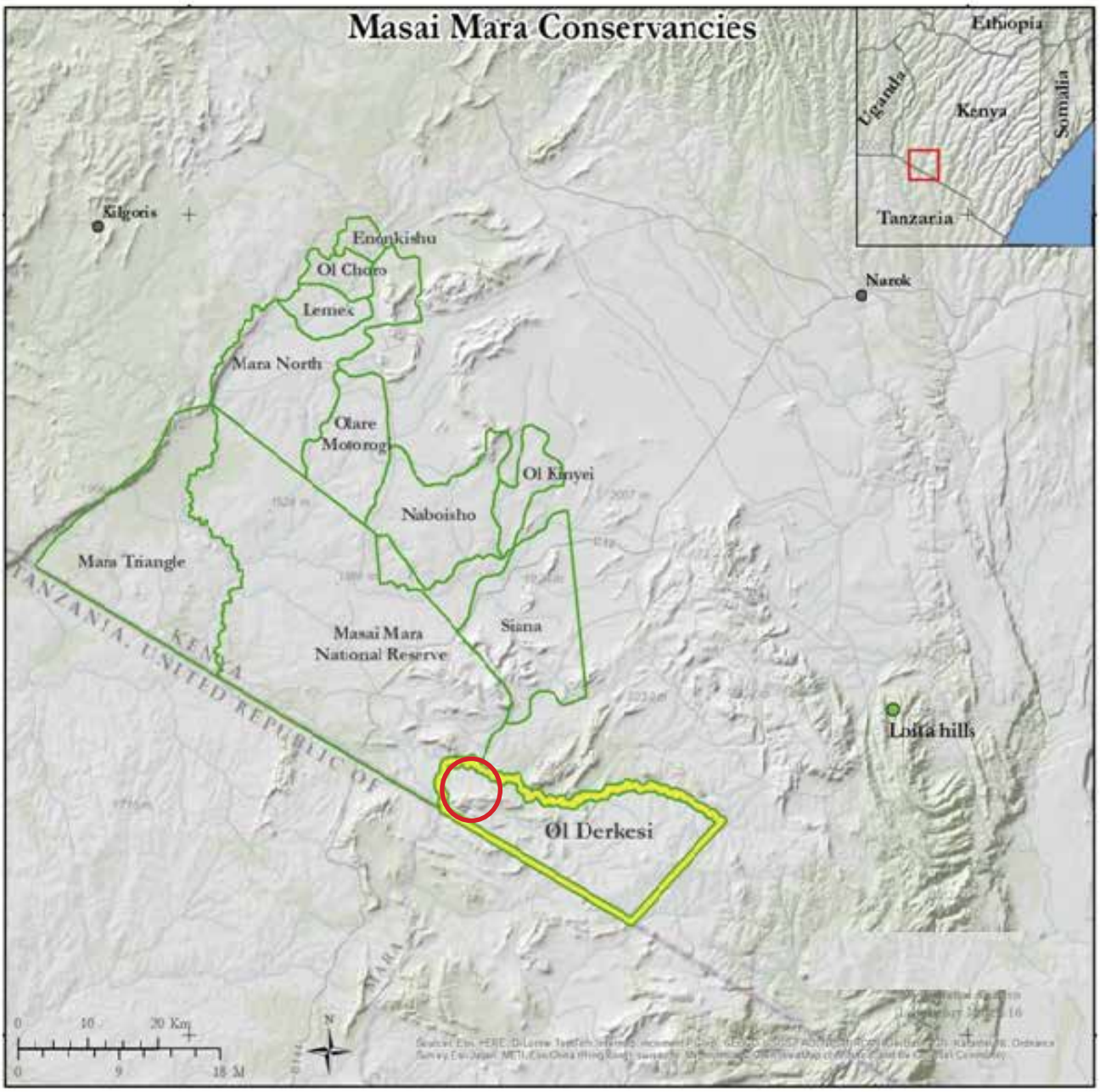

Figure 6: Location of Olderkesi Group Ranch and Conservancy (conservancy area circled).

- CWCT to pay an annual lease fee to OCWT for the conservancy land at a rate high enough to compete with alternative land-uses (agriculture, domestic stock). This was determined to be KShs 4,000/hectare for the core area (approx. US$ 39 in March 2018) for the first three years, KShs 4,500 (US$ 44)/hectare for the 4th year and then a further 7% increase of Kshs 1,500 for the remainder of the term.
- Land owners with plots within the conservancy area to relocate with assistance provided by CWCT in the form of transport and US$ 500 to build a new house.
- CWCT to conduct regular patrols to ensure there is no livestock in the conservancy core area. Where infringements occur, OCWT to issue fines to the individuals concerned which are deducted from the next installment of the lease payment.
- OCWT to use lease fees to fund initiatives that benefit the community including health services, infrastructure development, school bursaries, water supplies and so on.

In addition to these negotiated provisions, CWCT trained 20 community game scouts and employs two undercover informants to monitor illegal activities in the conservancy area and surroundings. It also pays the salaries of six local teachers and covers the salaries of two staff members of OCWT. Following the formalisation of the conservancy in December 2016 it is anticipated that school support will extend to all 26 villages that make up the Olderkesi Group Ranch, although it is hoped that over time these 26 villages will consolidate eventually into five key centres.

A ten-year management plan for the conservancy was produced in May 2014 through a participatory process involving representatives from the group ranch communities, the OCWT and CWCT. The management plan proposed a zoning approach to conservancy management with a core zone designated as strictly protected, with no livestock access at all, and a dual zone which allows for limited, regulated livestock use – specifically access to water and to salt licks. Following formalisation of the conservancy, CWCT anticipates the introduction of a managed cattle herd that can graze in the conservancy in the wet season when tourism numbers are low, according to stocking rates determined by CWCT (i.e. not open access grazing) under the management of a joint cattle management committee and with profits from sales accruing to the OCWT.

As a result of these activities CWCT reports that: (1) the negative consequences of land subdivision particularly fencing of individual plots is now much reduced; (2) agriculture and deforestation have been reduced in the conservancy area; (3) permanent villages have moved out of the conservancy area; and (4) livestock grazing has been reduced.

4.2 Testing the Olderkesi Designer ToC against the Baseline ToC

In this case study, it is clear that the CWCT serves as the 'designer' of the overall project. In this section we explore the CWCT ToC step by step, comparing to the Baseline ToC and assumptions, from enabling actions, through the pathways, to the anticipated outcomes and impact.

a) Enabling conditions/actions

Four key actions to strengthen the underlying enabling environment for effective community engagement to tackle IWT (as outlined in the Baseline ToC) were found to be relevant in the context of Olderkesi and, specifically, the vision of CWCT for the conservancy:

1) Build community capacity to manage wildlife;
2) Increase perceived fairness of wildlife laws;
3) Strengthen laws for community wildlife management;
4) Fight corruption and strengthen governance.

These are discussed below.

1: Build community capacity to manage wildlife

There are some pre-existing social norms around wildlife management and specifically about predator co-existence and killing of elephants (we are told that in Maasai culture killing an elephant is considered the same as killing a human). However wildlife is threatened in Olderkesi and elsewhere by illegal killing and also by habitat degradation and fragmentation. It is clear that traditional norms are not sufficient to manage wildlife under such pressures. CWCT is attempting to build community capacity through education and awareness raising, and also through training of community wildlife scouts. Twenty scouts have been trained to date, although six have gone on to work elsewhere. More investment in community conservation capacity is anticipated with the formalisation of the conservancy. Point 5 below, however, points out that the strong role that CWCT plays in managing the tendering process for contractors to work on conservancy projects could, arguably, be considered a constraint to developing appropriate community capacity to manage such processes.

2: Increase perceived fairness of wildlife laws

Wildlife-related offences carry stiff penalties under the WCMA 2013 (see section 3). CWCT staff consider these penalties are a deterrent to some extent, but do not address the issue of local people killing wildlife as revenge for human wildlife conflict or to reduce competition for grazing. In the absence of relevant regulations in support of the WCMA 2013 there has been no compensation paid out for human wildlife conflict. This results in significant resentment amongst local people. CWCT staff also noted that Olderkesi residents resent the MMNR rangers because they actively restrict access to livestock grazing in the reserve. So overall there is a mixed perspective on the extent to which wildlife laws are perceived as fair.

3: Strengthen laws for community wildlife management

Olderkesi has certainly benefitted from new laws that strengthen support for community wildlife management, without which its designation as a conservancy would not be possible. The WCMA 2013 makes specific provisions for the establishment of wildlife conservancies and their formal recognition as a legitimate land use option and the policy to support this is currently under debate (as at June 2017). However, Olderkesi

demonstrates that laws on their own are not sufficient without political support at all levels. At national and county levels there is political support for community wildlife conservancies – the proliferation of conservancies around the Mara and elsewhere in Kenya illustrates this. In Olderkesi, however, political undermining at the local level delayed the formalisation of the conservancy by four years. This was particularly exacerbated by the fact that the main driver behind the initiative – Calvin Cottar – is a white Kenyan, a fact used by political activists to spread rumours that "the white man is after your land".

4: Fight corruption and improve governance

The conservancy has a transparent governance structure. OCWT is a community-based organisation and the registered owner of the conservancy in which every registered member of the Olderkesi Group Ranch has a share. The method of payment from private sector investors (Cottar's 1920s Camp) to the community, via CWCT and OCWT, precludes elite capture or corruption. Community decisions on which projects the funds raised from the conservancy lease fee are to be spent on are communicated to CWCT via OCWT. CWCT then tenders for bids from private contractors and selects based on cost and their past history of satisfactory completion of similar projects. It could be argued, however, that while this mechanism is preventing elite capture, by retaining decision-making authority within CWCT, it is not building local capacity to make and manage these processes (see point 1 on capacity above). Furthermore, the system works in part because there is currently only one tourism investor in the area. If other investors are attracted to the conservancy then CWCT may not be able to retain oversight into how funds are used.

b) Pathways

Pathway A: Disincentivise illegal killing of wildlife for IWT

Pathway A of the Baseline ToC predicts that, in addition to existing state-led law enforcement, strengthening community engagement in enforcement activities, as well as efforts to strengthen existing social norms in favour of wildlife protection, can help reduce poaching and decrease the pressure on species from illegal wildlife trade. The approach at Olderkesi is broadly consistent with this logic, although given that the conservancy is not yet functional it is not possible to say whether the anticipated outcomes will be achieved. The Baseline ToC suggests two main types of intervention for this pathway:

1) Strengthen community engagement in enforcement; and

2) Support strengthening of traditional norms that protect wildlife.

Olderkesi does employ interventions to strengthen community engagement in enforcement, specifically the training of community wildlife scouts and the recruitment of undercover informants. Feedback from interviewees was that this was resulting in a more collaborative and therefore more effective relationship with government rangers (both Kenya Wildlife Service and MMNR rangers) although there were clearly still tensions between community and MMNR rangers over grazing access for their livestock.

At Olderkesi there is currently no intervention to strengthen existing social norms to protect wildlife - although such norms do exist -, and CWCT staff reported that they did use these beliefs to start conversations about wildlife conservation.

Additional interventions in the CWCT ToC that were not reflected in the Baseline ToC include providing top-up payments to MMNR rangers and imposing penalties in the form of deductions from the land lease for illegal behaviour.

The assumptions associated with Pathway A are detailed in Table 1. Not all the assumptions were explored with CWCT staff but those that were investigated largely held true, or partly so. The main exception was assumption E3 - that police and government rangers are not involved or linked to illegal activities - which did not hold true – a number of interviewees and focus group participants suggested that rangers were involved in poaching although we have no way of testing the validity of this suggestion. In addition to assumptions in the Baseline ToC, the CWCT ToC was underpinned by another assumption – that additional payments to government rangers will reduce illegal grazing. It was too early to test this assumption during the case study visit, but large numbers of cattle, sheep and goats, many apparently originating from outside Olderkesi, were observed grazing at the MMNR boundary in October 2016.

Pathway B: Increase incentives for wildlife stewardship

Pathway B predicts that interventions that generate financial and non-financial benefits from wildlife, as well as those that recognise and profile effective community approaches against IWT will result in communities gaining pride; being more empowered to manage and benefit from wildlife; and improving their wellbeing.

This in turn will provide incentives for ongoing wildlife stewardship and hence resistance to IWT. The CWCT approach at Olderkesi is consistent with this logic, and indeed this is the causal pathway that is most strongly emphasised – particularly in terms of generating local benefits from wildlife. Interventions employed by CWCT at Olderkesi include paying a land lease; paying a bed night levy; providing jobs in the tourist camp and as community rangers; providing social benefits such as school bursaries and transport for medical emergencies; providing infrastructure such as bridges and road maintenance; selling local crafts in the camp shop; and supporting the legal and administrative process of conservancy development. CWCT has also undertaken activities to raise the profile of community approaches by promoting the conservancy to tourists visiting the camp and using the conservancy as a case study at various international and national events.

The Baseline ToC assumptions associated with this pathway, and the degree to which the CWCT vision for Olderkesi shares these assumptions, are detailed in Table 2.

Table 1: Assumptions underpinning Pathway A

Co	Baseline TOC assumptions	CWCT Alignment with Baseline ToC assumptions
A1	Community rangers will use equipment and training to combat IWT and not poach themselves or for other purposes.	The assumption holds: there have been no reported poaching incidences since community rangers were trained.
A2	Collaboration between communities and other enforcement agencies will lead to stronger action against IWT and not stronger collusion in IWT or other activities	CWCT staff strongly believed this assumption to be true with no evidence to suggest otherwise.
A3	Communities are willing to enforce more strongly against IWT both within their communities and outside them.	Not explored with CWCT, but no evidence that this assumption does not hold.
A4	Communities are willing to collaborate with external enforcement agencies and that historical or existing tensions with the police force and/or park rangers are not excessively high.	Assumption only partly true: CWCT staff highlighted tensions between rangers and community members, mainly over incursions into the MMNR for grazing. An increase in levels of criminality in the area and concerns over security have, however, led to an increase in cooperation more recently.
A5	Formal sanctions are fair and are a deterrent.	Assumption only partly true: CWCT staff agreed that the new penalties under the WCMA were well known and that they were a deterrent to some extent, but not in terms of dealing with killing associated with human wildlife conflict and grazing competition. They also pointed out that few people are actually prosecuted and over time this will reduce the deterrent effect. One staff member suggested that incentives for good behaviour might be more effective than sanctions for bad behaviour.
A6	The community understands and agrees that there is a wildlife poaching problem.	Assumption holds true: CWCT staff all agreed there was a poaching problem – particularly since Olderkesi is an elephant corridor – and there was no suggestion that they thought community members might disagree with this. However, most also thought the poaching threat was not as severe as it had been and was largely driven by outsiders rather than community members.
A7	Social norms to mitigate against IWT exist.	Assumption holds true: CWCT staff highlighted traditional Maasai norms around killing of elephants in particular and noted that they found these norms useful to start discussions about conservation.
E1	Local people are willing to engage in law enforcement as scouts and informants.	Assumption holds true: CWCT employs local people as both scouts and informants.
E2	Better trained, better equipped guards do not use their more advanced equipment for poaching or other illegal purposes.	The assumption holds: there have been no reported poaching incidences since community rangers were trained.
E3	Police and government rangers are not involved or linked to illegal activities.	Assumption does not hold true: CWCT staff all suggested that it was highly unlikely that Mara rangers were *not* involved in poaching in some way. They pointed out that their low salaries made it inevitable that they would be involved and highlighted as evidence poaching incidences that could only have happened with ranger collusion. It was noted, however, that MMNR ranger communications (e.g. via phones) could now potentially be tracked and that this might act as a deterrent.
I1	Collaboration between communities and other enforcement agencies leads to stronger action against IWT and not stronger collusion for IWT or other. activities, (Governance and control of corruption is at an adequate	Not explored – too early to tell.
I2	Poachers continue to intimidate communities through better capacity and equipment.	Not explored – too early to tell.

Table 2: Assumptions underpinning Pathway B

Code	Baseline ToC assumptions	CWCT alignment with Baseline ToC assumptions
B1	Local communities have some form of user rights over wildlife.	Assumption holds true: local people have clearly defined user rights under the WCMA – although CWCT staff pointed out that these exclude consumptive use rights in the form of hunting, which limits the potential benefits from wildlife.
B2	Communities will be interested in and willing to exercise their user rights.	Assumption holds true: CWCT vision for the conservancy is premised on community user rights to benefit from tourism. CWCT staff were mixed in their opinion as to whether the local communities would be interested in other activities such as wildlife ranching.
B3	There is a competitive market for wildlife products and services.	Assumption partly holds true: Land leases paid by CWCT are fixed at a level that is competitive against other uses of the land. However the land lease payments are currently reliant on income through tourism and this is notoriously fickle. To be sustainable in the long term the tourism market needs to expand and/or alternative payment mechanisms found.
B4	Protected area authorities are willing to share revenues.	This assumption does not hold true for Olderkesi – no revenue is shared from the MMNR directly with the conservancy.
B5	Ownership/user rights lead to pride and a sense of importance.	Assumption not specifically discussed with CWCT staff.
B6	There is a sufficient understanding and appreciation of the link between wildlife and revenue that it generates.	Assumption holds true: The CWCT vision for the conservancy is strongly based on this assumption.
B7	Resources and capacity for managing, including monitoring, of the target resource is in place.	Assumption partly holds true: All CWCT staff recognised this as an essential factor but all agreed that capacity needed to be increased.
B8	Elite capture does not undermine the revenue stream.	Assumption holds true for the CWCT model – the payment system is based on avoiding elite capture.
B9	Communities feel that costs and benefits are equitably and transparently distributed.	Assumption not discussed with CWCT staff.
B10	Finance required for benefit generation is sustainable.	This is a critical assumption for the CWCT model but staff agree that current levels of finance are not sufficient for long term sustainability and that more tourism investors (or other types of investment) are needed.
B11	Communities have sufficient information and power to resist third party interference.	Assumption holds true: CWCT staff found that establishment of the conservancy had been disrupted because of third parties (local politicians) spreading rumours about land grabbing but reported that eventually the community members were aware of the politicians motivations and suspicious of them.
F1	Communities that are more empowered to manage wildlife value it more.	Assumption not explored – too early to tell.
F2	When communities receive benefits from wildlife e.g. employment they will value it more	Another critical assumption for the CWCT model and appears to hold true as evidenced by interest of the community in setting up the conservancy and entering into an agreement with CWCT, despite restrictions it will place on grazing.
F3	The community has full knowledge about how benefits are being shared and distributed.	Assumption not explored with CWCT staff.
J1	Income from wildlife based land use is sufficient to deter other uses.	Assumption is valid for a successful conservancy but too early to test.
J2	Financial flows from wildlife are sustainable.	Assumption is valid for a successful conservancy but too early to test, however CWCT staff recognise that current levels of financial flows are not sustainable.
J3	Financial flows from wildlife are distributed widely enough to ensure community-wide adherence to grazing restrictions.	Assumption is valid for a successful conservancy but too early to test.

Pathway C: Decrease the costs of living with wildlife

Pathway C predicts that activities that address human wildlife conflict including traditional and novel approaches to reducing conflict or mitigating the costs associated with it will lead to less local antagonism toward wildlife and thus less likelihood of either active or tacit support for poaching – particularly poaching associated with problem animals. The CWCT approach at Olderkesi is somewhat different to this in that the focus is predominantly on physical separation of people and wildlife rather than on reducing or mitigating the costs of co-existence. To this extent, in the Olderkesi case, this pathway would be more accurately titled 'Reduce the human-wildlife interface and conflict'. So, for example, the conservancy management plan includes zoning of a core wildlife area preferably exclusive to wildlife or to very restricted livestock use managed by the conservancy staff. It also includes physical relocation of people away from the core wildlife area into areas which are allocated for mixed wildlife-livestock grazing, or even over the longer term more permanent, peri-urban settlements. The logic for this is that, although there are specific incidences of human wildlife conflict at Olderkesi including livestock predation and crop raiding the overarching problem is a continuous process of competition for land between livestock and grazing wildlife. Physical separation of people -and associated livestock - and wildlife is thus seen as central to address problems of declining wildlife habitat. By changing this dynamic, the Olderkesi model predicts that as habitat in the core wildlife area improves, so will the tourism product, leading to more benefits. As a result wildlife will come to be seen as a viable economic opportunity that can provide development opportunities both outside and in addition to the livestock economy.

The assumptions underpinning Pathway C are described in Table 3. There was significant divergence with the Baseline ToC because the Olderkesi approach to reducing the costs of living with wildlife is more about the physical separation of people and wildlife through the establishment of an exclusive wildlife zone, than dealing with specific cases of human wildlife conflict. In addition there are a number of other assumptions which are implicit in the Olderkesi model and on which the success of the conservancy relies including:

1. That competition for land i.e. grazing is the major factor affecting the coexistence of wildlife and livestock;
2. That providing separate spaces for livestock and for wildlife will eliminate competition for grazing as long as communities receive payments for the opportunity costs; and
3. That local people will be willing to remove their livestock from exclusive wildlife areas i.e. the conservancy proper if payments are sufficient.

Table 3: Assumptions associated with Pathway C

Code	Baseline ToC assumptions	CWCT alignment with Baseline ToC assumptions
C1	Traditional measures to manage HWC are insufficient and not viable.	Assumption was not explored in detail with CWCT staff but is true – staff note much of the HWC is a result of local people killing ungulates in order to reduce competition for grazing, more so than revenge killing for livestock predation or crop raiding.
C2	Funding is available for non-traditional mechanisms to manage HWC (e.g. compensation).	Assumption is not true: Although the WCMA 2013 provides for compensation in cases of human wildlife conflict no payments have yet been made, and according to a Narok County government representative, there is no budget currently to make any payments.
C3	The non-traditional strategies to mitigate human wildlife conflict actually work including compensation.	Assumption is not true: as above, no compensation mechanism is in place and due to the approach being adopted at Olderkesi, CWCT is not focussing on other forms of HWC mitigation other than physical separation.
C4	Intangible and indirect costs of living with wildlife (e.g. disease) are known and can be accounted for.	CWCT staff thought this assumption held and pointed to knowledge about diseases transmitted from wildlife to livestock such as malignant catarrhal fever as evidence.
C5	Opportunities for land use planning and zoning to mitigate HWC exist and can be implemented.	This assumption is the premise on which the CWCT Olderkesi model rests. To date there is a plan to zone the land but too early to test the effectiveness of this.
G	Communities who are better able to mitigate human wildlife conflict feel decreased antagonism towards wildlife.	This assumption is consistent with the CWCT model but too early to test.
K	Communities who experience a decreased cost of living with wildlife have a decreased incentive to actively or tacitly support IWT and are more willing to stand up to it.	This assumption is consistent with the CWCT model but too early to test.

Pathway D: Support non-wildlife related livelihoods

Pathway D predicts that by investing in activities to generate benefits from non-wildlife sources that are conditional on demonstrated wildlife stewardship, there will be a greater diversity of livelihood options and consequently less dependence on IWT as a source of revenue. This should thus result in less active or tacit support for poaching either by community members or by outsiders.

The CWCT ToC broadly follows this logic although the focus on developing alternative livelihoods is as much about introducing alternatives to livestock - which place pressure on wildlife habitat - as it is about generating alternatives to IWT. At Olderkesi, with the signing of the formal conservancy agreement, there are plans for investment in agricultural development (maize); a microfinance mechanism for small enterprises (e.g. motorbike taxis, butcheries and small hotels); and a high- quality conservancy cattle herd for commercial meat production. The CWCT logic is less that communities will be less dependent on IWT as a source of revenue as a result, but rather that they will be less dependent on livelihoods that compete with wildlife i.e. livestock. This is particularly important in the face of the rapid transformation that is happening amongst pastoralist communities towards keeping large herds of goats and sheep in order to generate income from livestock sales. This is transforming Kenya's rangelands including the fate of their wildlife populations more rapidly and to a greater extent than most other factors (Ogutu et al 2017).

The assumptions that underpin this pathway are detailed in Table 4 but the majority of them were not testable in Olderkesi at the time of the case study research due to the conservancy not being formalised. The CWCT ToC also includes an additional assumption that was not in the Baseline ToC - that alternative livelihoods are a culturally acceptable addition to pastoralism.

Table 4: Assumptions underpinning Pathway D

Code	Baseline ToC assumptions	CWCT alignment with Baseline ToC assumptions
D1	Elite capture does not undermine the revenue stream.	Implicit in CWCT model but not yet testable.
D2	Alternative livelihood schemes do not generate perverse incentives, e.g. money earned is not reinvested in poaching or other land-uses that negatively affect wildlife.	Implicit in CWCT model but not yet testable.
D3	Adequate support is available to develop and maintain alternative livelihood schemes.	Implicit in CWCT model but not yet testable.
D4	Alternative livelihoods provide jobs or income to actual or potential perpetrators of wildlife crimes.	The assumption is valid for CWCT if wildlife crime is interpreted to include killing wildlife to reduce grazing competition since most targets for the alternative livelihoods initiatives are livestock owners not poachers.
D5	Alternative livelihood schemes that are conditional on wildlife protection are adopted and are effective	Implicit in CWCT model but not yet testable.
H1	IWT is not so high in value that all other potential forms of income through tourism etc. cannot compete financially.	Implicit in CWCT model but not yet testable.
H2	Income from alternative livelihoods acts as a substitute for income from IWT.	Assumption not particularly relevant for CWCT where the focus on alternative livelihoods is to reduce grazing pressure rather than specifically to tackle IWT.
L	The relative value of illegal wildlife products is not so high that communities participate in it anyway.	CWCT agreed that this assumption was part of their model but equally noted that there had been some recent poaching with involvement from individuals in the community. However, this assumption would require further testing once the Conservancy is fully functioning.

c) Outcomes and impact

The four pathways of the Baseline ToC lead to a number of common outcomes:

1. Stronger community action against poachers from within and outside the community;
2. Reduced active or tacit support for poaching;
3. Reduced recruitment of community members by poachers;
4. Reduced poaching by community members or outsiders.

These outcomes are expected to lead to an ultimate impact of decreased pressure on wildlife species from IWT. As with the four pathways, a number of assumptions underpin the achievement of these outcomes and impacts (Table 5).

Table 5: Assumptions underpinning the Baseline ToC at outcome and impact level

Code	Baseline ToC assumptions
M1	Community contributions to anti-poaching lead to reduction in IWT.
M2	Communities are willing to enforce more strongly against IWT both within their communities and outside them.
M3	Poachers do not intimidate communities to the extent that they are too scared to take action against poachers from inside and outside the community, even when the benefits from wildlife increase.
M4	The relative value of illegal wildlife products is not so high that new players enter into the system and negate the stronger action against poachers that has come into place (e.g. a powerful private security firm, or army unit, called in to defend wildlife does not itself become an offender because the relative gains are so high).
M5	The relative value of illegal wildlife products is not so high that communities participate in it anyway.
N	Poaching is reduced to within sustainable levels.

Discussions with CWCT staff revealed that the anticipated outcomes and impacts of the current and planned interventions were significantly different to the Baseline ToC and so different assumptions were also evident. The anticipated outcomes of the CWCT initiative at Olderkesi are that as a result of the land lease paid for the conservancy that wildlife becomes an economically viable land use option and that this in turn results in:

1. Reduced poaching of high value species for illegal wildlife trade;
2. Reduced killing of grazing competitors (mainly ungulates);
3. Reduced livestock grazing in wildlife areas;
4. Reduced physical demarcation (i.e. fencing) of individual land plots; and
5. Reduced immigration of non-conservancy members for grazing.

The ultimate impact the CWCT intervention is seeking to achieve goes beyond decreased pressure from IWT and is concerned with the long term maintenance of a functioning and intact natural ecosystem. The assumptions implicit in this logic model are that:

1. Community contributions to anti-poaching will lead to a reduction in IWT;
2. Income from alternative livelihoods will act as a substitute for income from pastoralism;
3. Income from wildlife is sufficient to maintain land under traditional extensive communal management (i.e. unfenced) in areas adjacent to the conservancy;
4. Land demarcation and individual title deeds will provide sufficient incentives to prevent immigration; and ultimately that
5. Destructive activities can be reduced to within sustainable levels and wildlife restored or sustained.

Again, because the conservancy was not formalised at the time of the case study visit and land demarcation was still ongoing, it was not possible to test whether these assumptions would hold true. However indications from the interviews and focus groups were that they would. For example, community representatives strongly believed that they could play an active role in anti-poaching activities if given the chance and they also emphasised that living with wildlife was part of their culture and always would be.

4.3 Does the CWCT initiative validate or modify the Baseline Theory of Change?

Overall, the CWCT initiative to establish and support a wildlife conservancy at Olderkesi is broadly in line with the Baseline ToC - both in terms of its activities prior to the formalisation of the conservancy agreement and its future plans - but with some notable differences. First, the emphasis on each pathway is not equal. At Olderkesi there is a major emphasis on increasing incentives for wildlife stewardship (Pathway B) compared to the other pathways, with land leasing being the key route for operationalising this pathway. Second, there is a markedly different approach to Pathway C which, for Olderkesi, emphasises the physical separation of people and wildlife (in order to reduce competition by cattle and goats for grazing needed by wildlife) rather than simply decreasing the cost of living with wildlife. And finally, the overall objective of the CWCT intervention at Olderkesi is not narrowly focused on tackling IWT but on putting conditions in place that will reduce current levels of habitat degradation as a result of over-grazing by livestock and result in the long term maintenance of the natural ecosystem. Table 6 summarises the key differences between the Baseline ToC and the CWCT ToC, and a modified diagrammatic representation of the CWCT ToC is presented in Figure 7.

Table 6: Key differences between the Baseline ToC and CWCT ToC (bold type indicates differences)

	Baseline ToC				**CWCT ToC**			
Impact	Decreased pressure on species from IWT				**Functioning and intact natural ecosystem**			
Outcomes 1	Reduced recruitment of community members into poaching; reduced poaching by community or outsider.s				**Reduced poaching, reduced conflict killing, reduced grazing, reduced land division, increased exclusion of outsiders.**			
Outcomes 2	Reduced active or tacit support for poaching; stronger action against poaching from within and outside the community.				**Wildlife becomes an economically viable land use option; communities forego destructive practices and support wildlife conservation.**			
	A: Disincentive illegal behaviour	B: Increase incentives for stewardship	C: Reduce costs of living with wildlife	D: Support non-wildlife related livelihoods	A: Disincentive illegal behaviour	B: Increase incentives for stewardship	**C: Reduce human-wildlife interface**	D: Support non-wildlife related livelihoods
Interim Outcomes	More empowered communities draw people away from illegal activities	Communities value wildlife more as a result of increased benefits	Decreased antagonism toward wildlife	Communities less dependent on IWT as a source of revenue	More empowered communities draw people away from illegal activities	Communities value wildlife more as a result of increased benefits	Decreased antagonism toward wildlife	**Communities less dependent on livelihoods that compete with wildlife**
Outputs	1. Social norms effectively imposed on individuals engaged in illegal activity; 2. Stronger collaboration between local community & rangers / other enforcement agencies	1. Communities more empowered to manage and benefit from wildlife 2. Communities perceive and receive financial and non-financial benefits (e.g. meat, pride, community assets) from wildlife	1. Costs to communities imposed by presence of wildlife reduced 2. Communities can mitigate conflict better	1. More empowered communities have a greater diversity of livelihood options	1. Social norms effectively imposed on individuals engaged in illegal activity; 2. Stronger collaboration between local community & rangers / other enforcement agencies	1. Communities are more empowered to manage and benefit from wildlife 2. Communities perceive and receive financial and non-financial benefits (e.g. meat, pride, community assets) from wildlife	1. Costs to communities imposed by presence of wildlife are reduced **2.Competition for land between wildlife and livestock reduced**	1. More empowered communities have a greater diversity of livelihood options
Indicative Interventions	Strengthen community engagement in enforcement; Support strengthening of traditional norms that protect wildlife	Start activities to generate benefits from wildlife; Recognise and profile effective community approaches against IWT	Support traditional and new approaches to managing HWC; Design mitigation strategies that account for the full range of costs	Start activities to generate benefits from non-wildlife sources that are conditional on wildlife protection	**Provide top up payments to county rangers; Train community scouts; Recruit undercover informants; Penalise illegal behaviour**	**Pay lease fees; Pay bed night fees; Provide jobs; Provide social benefits; (schools, transport bursaries etc. Provide infrastructure; Support conservancy development**	**Use land use planning to separate people and wildlife; Provide incentives for relocation away from wildlife areas (buy houses, provide water etc.)**	**Invest in agriculture development projects; Provide microfinance mechanism; Establish a conservancy herd**

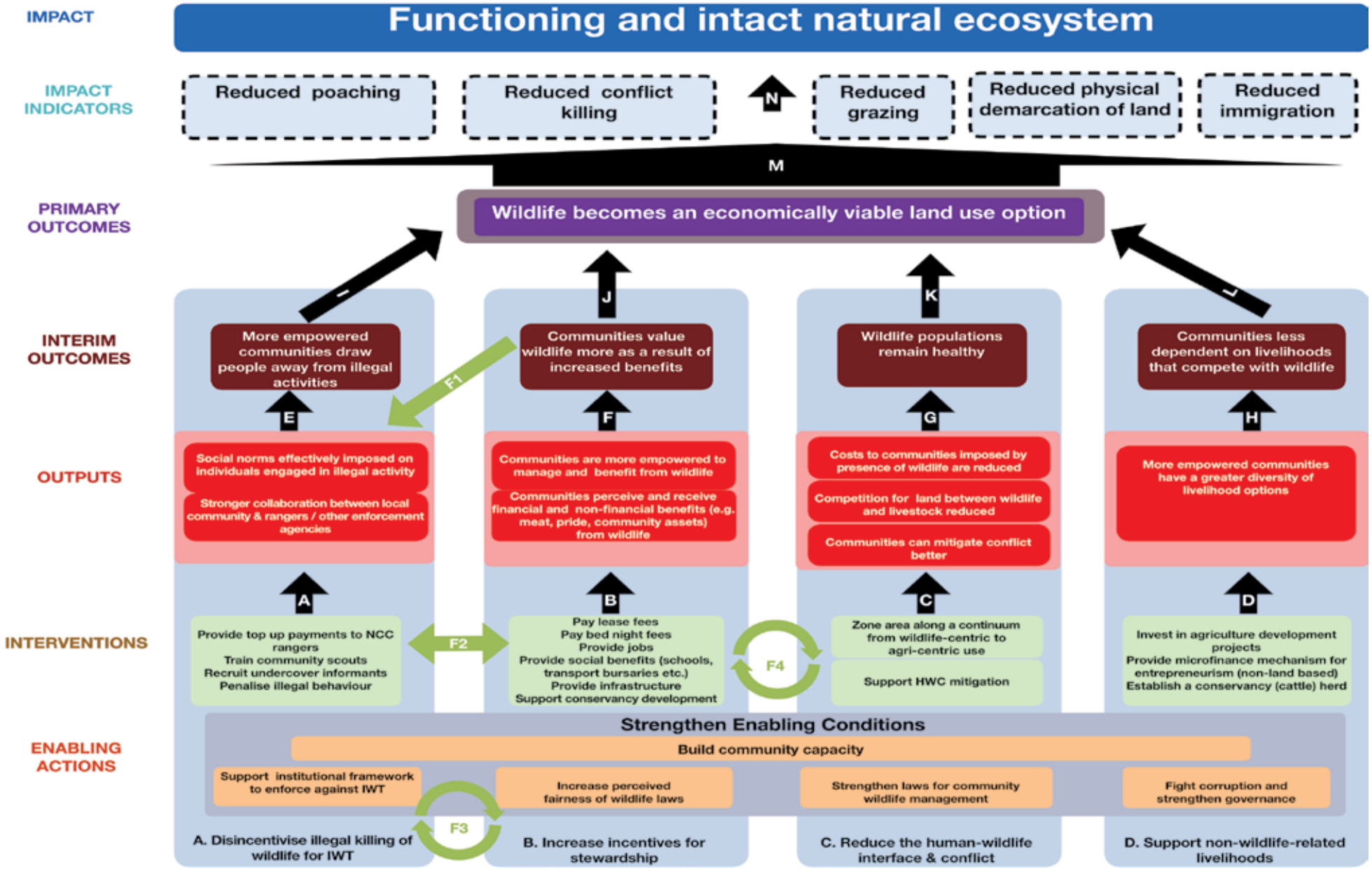

Figure 7: CWCT ToC for Olderkesi Wildlife Conservancy

4.4 Testing the CWCT ToC against the Olderkesi Community ToC

Enabling conditions

In terms of the perceived fairness of wildlife laws, while local people agreed with CWCT staff that the strict penalties introduced by the new wildlife act were fair and that they have helped to deter poaching, the discussions also revealed high levels of frustration over the priority given to wildlife crime compared to that given to the costs accrued from human wildlife conflict: "If you kill an animal you can get 10 years in prison. If an animal kills you there is no compensation".

The enabling condition "Fight corruption and improve governance" also highlighted how, to date, women had largely been excluded from consultation and decision-making about the conservancy. Furthermore, a lack of awareness about some of the benefits that had been generated by Cottar's Camp to date highlighted that these benefits are clearly not well distributed and nor are the decisions fully transparent. The families on whose land Cottar's 1920s Camp (and associated facilities such as the private airstrip) currently sits were the major beneficiaries prior to the formalisation of the conservancy. It will be interesting to see whether this situation changes with the formal conservancy agreement.

Pathways

Local people were generally in agreement with the four different pathways, but different members of the community placed different emphases on the different pathways. The elders and youth in particular emphasised the need for more benefits from wildlife (Pathway B), while the women highlighted the importance of law enforcement and disincentivising illegal behaviour (Pathway A).

Pathway A: This was recognised as a key component of the community vision for Olderkesi although not everyone agreed on how much illegal killing of wildlife actually happens. Some suggested it was a hotspot for poaching, others that there was very little. While there are some traditional Maasai beliefs that prevent killing of wildlife – especially elephants – these are not strong enough on their own to stop outside poachers. Most people trust the MMNR rangers and will report poaching or suspicious activities to them - elders and young men more so than women. But some think MMNR rangers themselves might be involved in poaching in some cases. Others are fearful that they will be arrested if they report poaching. The most significant conflict between local people and rangers is not about poaching but rather about grazing in the reserve.

Pathway B: The community at Olderkesi reported a strong sense of ownership over wildlife but only the men (both elder men and young men) felt that they had strong rights to decide how it was used and managed. Women did not feel they had rights to decide what happened to wildlife in their conservancy. The majority of benefits that local people pointed to were intangible in particular pride in the Maasai culture of co-existing with wildlife. Tangible benefits in the form of cash income and/or jobs were limited. Assumption B8 (that elite capture does not undermine the revenue stream) is important here. Prior to the formal establishment of the conservancy this assumption clearly did not hold since despite benefits being captured by a few (the families on whose land Cottar's 1920s Camp, along with the fly camps and air strip is located), the CWCT initiative was still proceeding. This assumption will require further testing once the formalised conservancy has been running for some time and benefits are distributed. Similarly B9 assumes that costs and benefits are equitably distributed within the community and again, prior to conservancy formalisation, this did not hold true in Olderkesi. Furthermore, many people were not even aware of some of the benefits that had been generated by CWCT such as the support to schools and bursaries. Again, time will tell whether this assumption holds true for the formalised conservancy.

Pathway C: The overwhelming response from local people at Olderkesi when asked about wildlife is that they are proud of it, they see it as part of the Maasai culture, and do not want to eliminate it. But most also thought it unfair that killing of wildlife by people is given more attention than killing of people by wildlife. We were not able to test the main assumption (Assumption C5) s on which the CWCT model of livestock and wildlife separation rests since the conservancy zoning plans had not been implemented at the time of the case study. However since the case study visit the conservancy agreement that was signed between the Olderkesi community and CWCT means that no grazing is allowed. The validation workshop held in February 2017 confirmed that most people had relocated away from the core conservancy area but a number of community representatives stated that they might still need to access the conservancy for grazing in times of drought or other hardship.

One option CWCT is investigating is the development of a high-quality conservancy cattle herd -to be owned by OCWT rather than individuals - that would be allowed to graze in the conservancy on a strictly controlled basis and used to produce beef for income generation rather than domestic consumption. This was discussed during the validation workshop in February 2017 (after the conservancy agreement had been signed) but some strong differences of opinion emerged between the community representatives and the CWCT representatives over the acceptability of this approach.

Pathway D: The CWCT approach to alternative livelihoods rests on the assumption that any livelihood strategies introduced would be a culturally acceptable alternative or an addition to livestock production. Although it was too early to test this assumption, it appears to be valid based on community consultations which suggested that the additional income is needed and that there was an openness to non-livestock livelihoods. For example, there was some evidence of the development of small shops and other enterprises such as barbers and bars.

Only time will tell if the CWCT vision for Olderkesi is compatible with the community vision, but the issue of whether or not people/livestock and wildlife can share land though co-existence rather than separation appears to be the crux of any difference between the two.

Overall then the CWCT ToC for Olderkesi differed from the Baseline ToC in a number of key ways:

1) The emphasis on each pathway is not equal - there is a major emphasis on increasing incentives for wildlife stewardship (Pathway B) compared to the other pathways.

2) The approach to Pathway C is focused on physical separation of people and wildlife rather than on mitigating the costs of co-existing with wildlife.

3) The planned outcome of the CWCT intervention is much broader than simply tackling illegal wildlife trade.

The community ToC is broadly in line with the CWCT ToC but it is important to note that different members of the community placed different emphases on the different pathways. The men (elder men and young men) were more aligned with the CWCT emphasis on Pathway B than the women. The major difference in opinion, however between the CWCT ToC and the Community ToC is around the approach to Pathway C. While CWCT favours physical separation of people and wildlife - and hence competitive livestock and wildlife - the community is more in favour of co-existence. Going forward it may be important for CWCT to find a mechanism to accommodate that – particularly in terms of allowing grazing in the conservancy during times of drought.

5. Kilitome Conservancy Case Study

5.1 Overview

The Kilitome Conservancy was established in 2008 by the African Wildlife Foundation (AWF) and Tawi Lodge - a 26-bed/13 cottage luxury eco-lodge. The conservancy is situated on the eastern boundary of Amboseli National Park in southeastern Kenya. Amboseli is a prime tourism destination due to its wildlife, particularly elephants, which are exceptionally easy to view there. The snow-capped summit of Mount Kilimanjaro, situated immediately across the border in Tanzania provides a world-famous scenic backdrop for the tourism experience.

There are six group ranches in the Amboseli ecosystem: Kimana/Tikondo, Olgulului/Olararashi, Selengei, Mbirikani, Kuku, and Rombo (ALOCA, 2015). Kilitome Conservancy covers an area of 24km2 and forms a critical part of the wildlife corridor connecting Amboseli to the Chyulu Hills and Tsavo West National Parks. It is one of the seven conservancies managed under the umbrella of the Amboseli Land Owners Conservancy Association (ALOCA). The other six are: Nailepu, Nalarami, Osupuko, Olepolos, Oltiyani and Elerai (see Figure 8). The boundary of the Kilitome Conservancy and Amboseli National Park is unfenced and wildlife moves freely between the park and the conservancy in search of water and food.

Like the Mara, the Amboseli ecosystem faces a number of threats. Poaching of elephants and rhino, mainly for ivory and rhino horn, was a major threat in the past. Rhinos have now largely disappeared from the ecosystem, except those in the Chyulu Hills. Elephant poaching for ivory was widespread up to 2011, declining over the following several years to no incidences since 2014 although it has not been possible to verify this through independent data and information sources. The reduction in poaching of elephants corresponds with a similar national trend, so it is not possible to say to what extent the interventions at Kilitome, or the other ALOCA conservancies, specifically, have contributed to the reduced poaching. There is widespread belief among the interviewees that the increased penalties and fines under WMCA 2013 have been a strong deterrent.

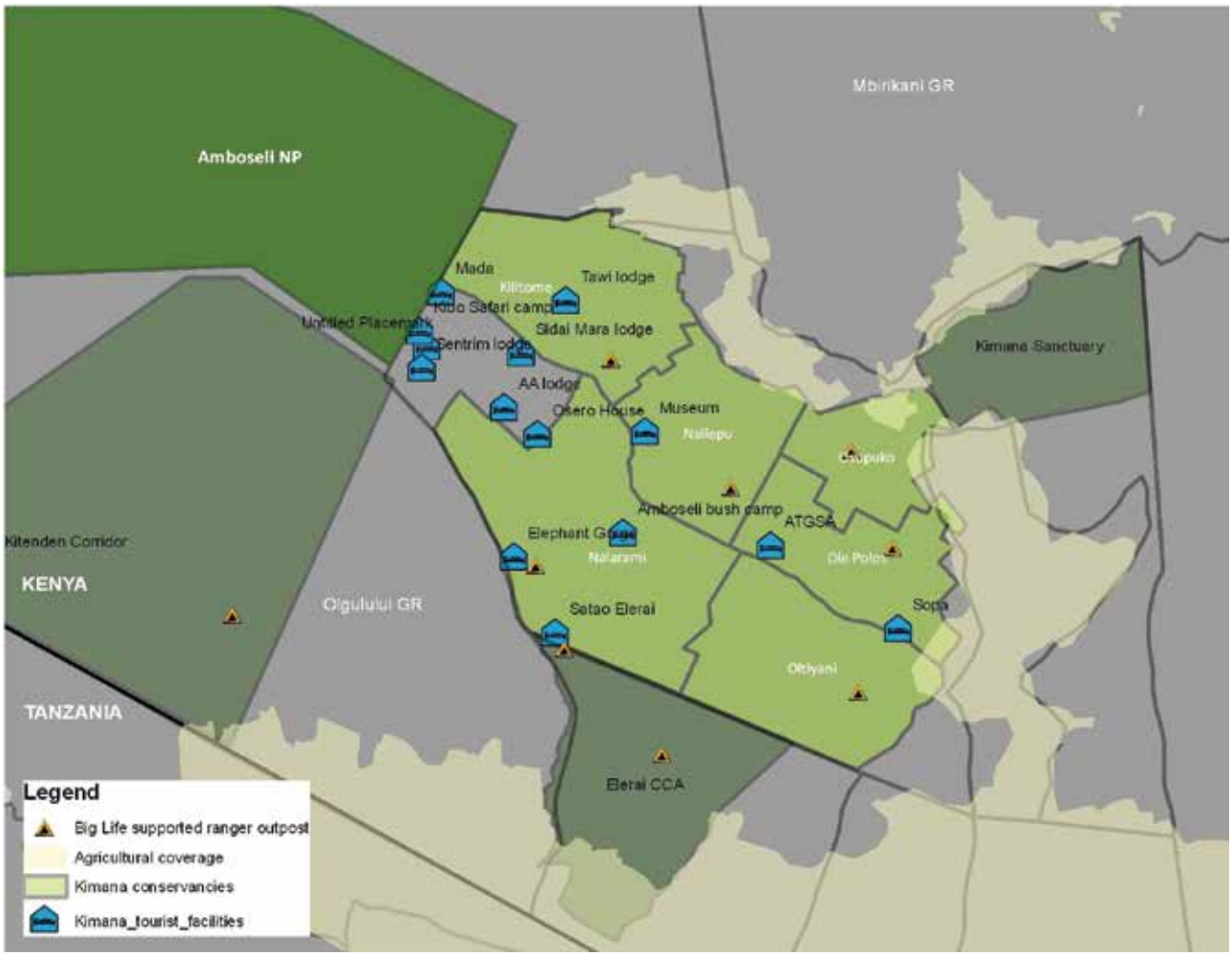

Figure 8: Geographical location of Kilitome Conservancy (African Wildlife Foundation)

However, poaching of other species for bushmeat remains a widespread problem, as does the deliberate killing of lions in retaliation for lost livestock. In the Kilitome area specifically, there have been several recent examples of elephants being killed in revenge for a number of human deaths and injuries.

Habitat loss and fragmentation is a major threat to the viability of the entire ecosystem. Land is being sub-divided with title deeds given and sold at alarming rates, including within Kilitome Conservancy, where more than 10 parcels of land have been sold. All of Kimana Group Ranch has been sub-divided except for the 6,000-acre Kimana Sanctuary which is still owned by the group ranch. Once sold, the land is usually fenced and converted into agriculture or another land use that is incompatible with wildlife (Figure 9). Permanent water availability for irrigation is a contributing factor to the expansion of agricultural activities, with much of the irrigation in the Kimana area conducted without proper permitting (K. Fitzgerald, pers. com). While the Maasai continue to graze their livestock alongside wildlife throughout the ecosystem, increasingly they are also practicing small scale agriculture and there is a rapid increase in permanent settlements in the area as seen by the rapid and recent growth of towns such as Kimana near the Kilitome Conservancy. There appears to be widespread disregard for land use planning. As a result, wildlife corridors and dispersal areas are rapidly disappearing and remaining wildlife populations are increasingly fragmented. It is widely recognised that the Amboseli National Park is dependent on the continued existence of dispersal areas and buffer zones in the surrounding group ranches for its elephant population and other wildlife to continue thriving (e.g. Kenya Wildlife Service 2008, Fitzgerald 2011 & 2013). This underscores the importance of conservancies like Kilitome for the continued viability of the ecosystem.

Initially part of the 251.2km2 (62,072 acres) Kimana Group Ranch, Kilitome was formed when the area was sub-divided into 60 acre plots, motivated largely by the Maasai landowners wanting to diversify into agricultural activities (Kenya Wildlife Service, 2008). Of the 100 landowners who had initially committed 60 acre plots to form the Kilitome Conservancy, 92 had set aside their parcels of land by 2008.

Figure 9: Recently sold and fenced land in a wildlife area near the Kilitome Conservancy. (© Leo Niskanen / IUCN)

To enter into an agreement with the community, AWF and Tawi Lodge formed a company, with equal shareholding, which subsequently negotiated a 15 year lease with the Kilitome landowners. It also negotiated an agreement to pay a tourism lease fee to the conservancy for use of the land. As Tawi Lodge was still under construction in 2008 when the agreement was formulated, AWF agreed to pay the full lease fee in year one, phasing out by year four as the lodge opened and assumed operations.

The landowners are paid a fixed amount per acre per year (KES 750/acre/year – approximately US$ 7/acre/year in March 2018 with an annual cumulative increase of 3%) – which is known by all stakeholders. The lease fee payments are paid directly to the accounts of the individual landowners. It is important to note, however, that prior to AWF's entry into the negotiation the investor had already negotiated a lease agreement with the landowner of the plot that Tawi Lodge was subsequently built on. Although it was not possible to get information about the lease fee paid to this landowner, several interviewees suggested it was considerably higher than what the other Kilitome Conservancy members were receiving.

Guests at the lodge pay a one-off conservancy fee of US$20 per visitor, which is used for the lease fees and to support conservancy management and wildlife protection.

AWF paid the salary costs of six unarmed community game scouts from 2008-2014. Tawi Lodge now pays the salary of the community game scouts who carry out patrols and report trespassers and poachers. These scouts also gather intelligence on potential and suspected IWT activity; help to monitor the status of wildlife; respond to reports of human-wildlife conflict; help with fire management and provide other community services. In the wider ALOCA area, the scouts often work with KWS to conduct wildlife surveys. Another NGO, Big Life Foundation, manages the Kiltome Scouts and provides them with training, equipment and pays rewards for successful apprehension of poachers. However, while Big Life pays the salaries of all the scouts in the other Amboseli conservancies, in the case of Kilitome, these are now paid by Tawi Lodge.

The lease agreement provides for user rights for the landowners including collecting firewood and grazing in designated areas in the conservancy but imposes restrictions and penalties on any building of permanent infrastructure. Logging, illegal hunting, agricultural activities and other kinds of resource extraction or pollution are also prohibited.

The management of Kilitome Conservancy is guided by the ALOCA Management Plan, 2016-2026 (ALOCA, 2015), which is still pending final sign-off by Kenya Wildlife Service and the Kajiado County Wildlife Committee. The primary ownership and responsibility for the implementation of the management plan rests with the ALOCA Board of Management. The ALOCA Board is responsible for appointing a Joint Plan Implementation Committee comprising of elected representatives from each of the seven conservancies who can make decisions regarding the management of the area. It is unclear at the time of writing this case study whether the Committee has been established.

The Management Plan has been designed to fulfil the following specific functions:

- Set an agreed future vision for the conservancies;
- Provide a framework for practicing multiple land uses by dividing the conservancies into different zones with clear land use prescriptions for each zone;
- Establish clear management objectives that are agreed by the conservancies' stakeholders and managers and that, if achieved, will ensure the conservancies' purpose will be fulfilled;
- Provide specific management actions that conservancies' managers will need to implement to achieve the management objectives; and
- Set out an implementation strategy to deliver the plan.

Kilitome Conservancy is managed by a committee consisting of a Chairman (who is also a member of ALOCA), Secretary, Treasurer and nine community members. The Kilitome Committee meets four times a year. The conservancy has a constitution and agreed byelaws which regulate the use of the conservancy including zoning of grazing and tourism areas. It has not been possible for the authors of this case study to obtain a copy of the zoning plan and byelaws.

5.2 Testing of the Kilitome ToC against the Baseline ToC

As noted in the methodology (Part 2), in Kilitome the conservancy intervention was jointly developed by AWF and local Maasai landowners. Unlike Olderkesi there is, therefore, no separate 'Designer' ToC and 'Community' ToC. So here we review the overall Kilitome ToC against the Baseline ToC, from enabling actions, through the four pathways and to the anticipated outcomes and impact.

a) Enabling conditions/actions

Four key actions to strengthen the underlying enabling environment for effective community engagement to tackle IWT (as outlined in the Baseline ToC) were found to be relevant in the context of Kilitome:

1) Build community capacity to manage wildlife;
2) Increase perceived fairness of wildlife laws;
3) Strengthen laws for community wildlife management;
4) Fight corruption and strengthen governance.

These are discussed below.

1: Build community capacity to manage wildlife

There has been a significant investment at Kilitome and the surrounding conservancies to strengthen community law enforcement through an extensive community scouts programme. There seems to be widespread consensus that this programme has been a key factor in discouraging IWT and other illegal activities. Not all scouts have been trained to the same standard and most stakeholders felt that more than the current six scouts were needed to cover the conservancy adequately.

2: Increase perceived fairness of wildlife laws

The interviewees almost unanimously agreed that the state penalties introduced in WCMA 2013 were fair. They also agreed that the conservancy-specific penalties restricting access and use of resources inside the conservancy were fair and effective.

Although WCMA 2013 provides for compensation for human wildlife conflict incidents, and a mechanism (the CWCCC) to review incidents and allocate compensation, resentment is widely expressed that this provision is not being honoured. Elephant crop-raiding is widespread, especially around the adjacent Namelok irrigation scheme in which many Kilitome community members have a stake, but there has been no compensation to date from the county government for losses incurred. It is unclear but unlikely that the county government has either the financial or human resources to implement a crop-damage compensation scheme.

The compensation for loss of human life by elephants is often delayed and has led to several recent revenge killings of elephants in the area.

The existing Predator Compensation Fund for the wider area, which provides compensation to livestock owners whose livestock have been killed by predators, is financed from external sources plus contributions from the communities themselves, is generally seen as a positive mechanism by those interviewed. However, there is criticism that it does not compensate for the market value of livestock affected and is thus better characterised as a 'consolation' fund. The amount of payment made depends on the species involved as well as whether sufficient measures were taken to protect livestock (Okello et al., 2014).

3: Strengthen laws for community wildlife management

Several interviewees felt that having full ownership and user rights over wildlife including rights for consumptive use would make a big difference in incentivising more wildlife based land use.

Many questions were raised about the lack of effective implementation of land use plans. According to interviewees the Amboseli Ecosystem Management Plan (AEMP) and many of the individual conservancy zoning plans are not being effectively implemented due to lack of resources, awareness, capacity and coordination. A county spatial plan is still under development.

4: Fight corruption and strengthen governance

Some interviewees mentioned suspicions of nepotism and elite capture on the part of the Kilitome Conservancy Committee, but generally it was believed that the direct payments to individual landowners for their plot in the conservancy was effective in reducing the risk of corruption. Some expressed resentment that "the individual whose land the lodge is on was making all the money while others were making very little." This is due to the fact that the lease agreement and rental fee for the 60-acre plot on which the lodge is built, was negotiated with the landowner before the conservancy was established.

Pathways

Pathway A: Disincentivise illegal killing of wildlife for IWT

Pathway A of our Baseline ToC predicts that strengthening community engagement in enforcement activities, as well as efforts to strengthen existing social norms in favour of wildlife protection can help reduce poaching and decrease pressure on species from IWT. The ToC suggests two main types of intervention for this pathway:

1) Strengthen community engagement in enforcement; and
2) Support strengthening of traditional norms that protect wildlife.

The approach at Kilitome is very consistent with the logic that strengthening community engagement in law enforcement serves to act as a strong disincentive against the illegal killing of wildlife for IWT. This has been the underlying logic behind the interventions at site level, particularly the community scouts programme supported by AWF and Big Life Foundation.

Informant networks and information sharing/law enforcement coordination occurs across the whole Amboseli ecosystem in seven conservancies, including Kilitome and the Amboseli National Park. The scouts are all hired from the local community which builds trust (between them and members of the community as well as proving an effective information/intelligence system. This also further discourages any scout from engaging in poaching themselves. Scouts receive extensive law enforcement training and are provided with equipment and conservation education.

Community scouts collaborate well with state-led law enforcement agencies (e.g. KWS) to address local poaching issues as well as other problems related to human-wildlife conflict. The community scouts are often able to respond more swiftly to incidents than KWS. However, the relationship between the wider community and the state-led law enforcement agencies is not strong and is in some cases characterised by a lack of trust. This may partly stem from historical grievances around the establishment of the Amboseli National Park (K. Fitzgerald pers. com). In particular, KWS is seen as non-responsive on many issues, such as wildlife crop damage, yet over-reactive when the community is forced to take measures into their own hands to protect their crops or their livestock.

There is a strong feeling among communities that KWS and the county government should be paying the community scouts directly as they benefit most from their services.

Community members discourage outsiders from participating in illicit activities in the conservancy and the wider ecosystem and are quick to report their presence or any suspicious activity. Elephant poachers who are reported to come largely from outside the community - allegedly mostly from neighbouring Tanzania - are apparently now more aware of the high risk of getting caught and the severity of punitive measures. Cross-border collaboration with Tanzanian authorities and conservation groups has also helped improve the situation. Community members stated that they were completely in agreement with enforcing the laws against poaching and indicated they would report anyone - even a community member - if they saw or heard of anyone engaged in poaching.

A further disincentive for community members to engage in poaching is the negative cultural attitude towards killing of wildlife and traditional taboos against killing wildlife unless one's person or property is being threatened. In historical times, individuals were said to be cursed if they killed a wild animal unnecessarily or for economic motives. While such social norms remain fairly strong many of those interviewed believed these norms are weakening.

There are no active programmes at Kilitome to try and strengthen traditional norms that protect wildlife. The "Maasai Olympics" supported by Big Life Foundation are inspired by traditional Maasai culture and aim to reduce lion killing for initiation of warriors by promoting sports prowess instead. However, this strategy is not specific to Kilitome and is not aimed at reducing the killing of wildlife other than lions.

The assumptions in the Baseline ToC and the Kilitome ToC are compared in Table 7. The assumptions seem to largely hold true with the exception of assumption A6.

Pathway B: Increase incentives for stewardship

Pathway B predicts that improving benefits from wildlife to communities and building capacity of communities to take advantage of these opportunities increases the value communities place in wildlife. According to the Baseline ToC this leads to reduced poaching and decreased pressure on species from IWT. The ToC suggests two main types of intervention for this pathway:

1) Start activities to generate benefits from wildlife; and
2) Recognise and profile effective community approaches against IWT.

Table 7: Summary of results for Pathway A

Code	Assumptions in Baseline ToC	Alignment with Kilitome ToC assumptions
A1	Community rangers will use equipment and training to combat IWT and not poach themselves or for other purposes.	Implicit in the Kilitome ToC. Assumption seems to hold. There has been no poaching of elephants for ivory in the last three years. Stakeholders attribute this largely to the effectiveness of the community scouts programme and deterrent penalties in WCMA 2013.
A2	Collaboration between communities and other enforcement agencies will lead to stronger action against IWT and not stronger collusion in IWT or other activities.	Implicit in the Kilitome ToC. Assumption seems to hold. Stakeholder interviews suggest that community scouts work well with other enforcement agencies and that this has been a key success factor in efforts to curb IWT in elephants.
A3	Communities are willing to enforce more strongly against IWT both within their communities and outside them.	Implicit in the Kilitome ToC. Assumption seems to hold.
A4	Communities are willing to collaborate with external enforcement agencies and historical or existing tensions with the police force and/or park rangers are not excessively high.	Assumption seems to hold as far as collaboration between community scouts and enforcement agencies is concerned. However many individual community members expressed resentment and distrust towards KWS.
A5	Formal sanctions are fair and are a deterrent.	Assumption seems to mostly hold. Heavy penalties in WMCA were cited as a strong deterrent. However the community feels the response of enforcement authorities is not fair – little or no response to HWC incidents where people or property are harmed but swift and heavy-handed approach when a wild animal is killed or injured.
A6	The community understands and agrees that there is a wildlife poaching problem.	Assumption does not hold. Poaching is not seen as a problem at the moment.
A7	Social norms to mitigate against IWT exist.	Assumption holds. Social norms exist and play a role in curbing poaching but these norms are not as strong as they used to be.
E1	Local people are willing to engage in law enforcement as scouts and informants.	Assumption holds. Community members are employed as scouts, and some act as informants.
E2	Better trained, better equipped guards do not use their more advanced equipment for poaching or other illegal purposes.	Assumption seems to hold. There is no evidence that community scouts use their training or equipment for poaching or other illegal purposes.
E3	Police and government rangers are not involved or linked to illegal activities.	Assumption seems to hold. No evidence found that this was a problem. Those interviewed generally felt it unlikely that state authorities are involved.
I1	Collaboration between communities and other enforcement agencies leads to stronger action against IWT and not stronger collusion for IWT or other activities (governance and control of corruption is at an adequate level).	Assumption seems to hold. The community works with KWS and other law enforcement to report suspicious activity and to report IWT activities.
I2	Poachers do not continue to intimidate communities through better capacity and equipment.	Assumption seems to hold. The community has not been recently intimated by poachers using sophisticated equipment and resources.

The ToC at Kilitome is broadly consistent with the Baseline ToC. All stakeholders agreed that benefits from wildlife are crucial to prevent poaching and to securing land for wildlife. Interviews with the Kilitome Conservancy members and other stakeholders indicate there are strong incentives for protecting wildlife including preventing poachers from operating in the area. Direct and tangible economic benefits from wildlife tourism, actual and potential, are seen as the strongest incentive.

As explained in the overview section of this case study, for the Kilitome Conservancy members the primary direct economic benefit is from the bi-annual lease fee payments, the conservation fee and employment of the six community scouts who are all from local communities. The income from cultural bomas (cultural displays held for tourists in Maasai villages) and selling of beaded products to tourists is seen also as an incentive, especially by the women.

The social cohesiveness of the Maasai communities is an important factor in how benefits are perceived – several interviewees mentioned that even if they were not directly benefiting financially from the scouts programme, the fact that youth from their community were employed was highly valued by the wider community.

Despite acknowledging the positive economic benefits from wildlife, conservancy members felt that the benefits received were lower than expected. Lease payments were perceived to be low relative to the profitability of the lodge. Although guests at the lodge pay a one-off conservancy fee some commented that this was not sufficient and advocated for an additional bed night fee to be paid for each night spent in the conservancy. Promised levels of employment in guiding and other jobs at the Tawi Lodge seem not to have materialised as expected. Currently the lodge is only employing casual and unskilled people from the surrounding communities. The KWS does not share gate admission fees from Amboseli National Park with the surrounding community, despite the park being entirely reliant on Kilitome and the wider dispersal areas.

Most of the study informants also felt that the costs inflicted by wildlife through human and livestock death and injury, as well as damage to crops and infrastructure outweighed the benefits received from wildlife (see further discussion under Pathway C).

There are huge expectations from the communities for tourism to generate much greater benefits to the community than is currently the case. Despite the dissatisfaction with the level of current economic incentives, it was not perceived to be significant enough to increase tolerance for poaching by outsiders, or even community members. However several interviewees felt that should the costs of wildlife continue to increase, and the benefits remain low or reduce further, then community members might begin to withdraw from the conservancy agreement and possibly start to turn a 'blind eye' to outside poachers. In fact, it was discovered during subsequent consultations that several landowners had recently sold their parcels of land in the conservancy, some of which have been converted into agriculture. The conservancy was originally meant to comprise 100 parcels of land of 60 acres each. However, in 2008 the conservancy only had 92 parcels of land. At the time of writing this case study (August 2017), the number of parcels had fallen to just 85 and two of these were being farmed in violation of conservancy rules.

Several interviewees, particularly from Big Life and AWF, suggested that over-reliance on tourism is risky and that in the long term other financing mechanisms e.g. payment for ecosystem services may be needed. Several others also mentioned the importance of full ownership and user rights over wildlife.

The key assumptions associated with Pathway B are summarised in Table 8. A number of assumptions in the Baseline ToC were found not to hold at Kilitome:

- Assumption B4: Protected area authorities are willing to share revenues. There was a strong feeling that KWS should be sharing revenues from Amboseli with the Kilitome community, including paying scouts, as the park benefited from the conservancy as a key buffer zone and wildlife corridor. Sentiments expressed included: "KWS should pay 5% of gate revenues"; "KWS should do more as we own their grass"; "KWS should pay the scouts' salaries, that would go a long way to securing good will with communities"; "KWS should pay 50% of Kilitome lease fees".
- Assumption B9: Communities feel that costs and benefits are equitably and transparently distributed. Concern was expressed that benefits from Tawi Lodge were not being fairly shared with the community. Higher paying catering and managerial positions at Tawi have been given to outsiders, although there have been some efforts to train locals. This has led to accusations that the investor is reneging on his promise to create employment in the local community, despite the fact that all members of the conservancy are paid the same amount directly to their bank account. It was also felt that the practice of every community member getting an equal lease payment was unfair since it did not offset the costs being incurred by the community land owners e.g. the degree to which they had to give up their grazing rights or suffer from human-wildlife conflict.
- Assumptions B10 & J2: Finance required for benefit generation is sustainable. Total reliance on tourism for the lease and conservancy funds poses questions about the sustainability of the model.
- Assumption F3: The community has full knowledge about how benefits are being shared and distributed. A number of those interviewed expressed the view that information about benefits from Tawi Lodge were not transparently shared. The community did not seem to have full knowledge about how benefits are being shared and distributed.
- Assumption J1: Income from wildlife based land use is sufficient to deter other uses & J3: Financial flows from wildlife are distributed widely enough to ensure community-wide adherence to grazing restrictions. A number of conservancy members have recently pulled out of the conservancy or are violating conservancy regulations on grazing and agriculture. Most interviewed linked this to insufficient benefits derived by landowners from wildlife.

Table 8: Summary of Pathway B

Code in Figure 2	Assumptions in Baseline ToC	Alignment with Kilitome ToC assumptions
B1	Local communities have some form of user rights over wildlife.	Assumption seems to hold. Communities do have rights to benefit from wildlife through non-consumptive tourism.
B2	Communities will be interested in and willing to exercise their user rights.	Assumption seems to hold. Communities have entered a joint venture partnership to benefit from tourism.
B3	There is a competitive market for wildlife products and services.	Seems to partially hold. Tawi Lodge is in a prime wildlife location, adjacent to Amboseli National Park and there are good wildlife viewing opportunities. However, there is a great deal of competition from other lodges in the area and the recent tourism decline in Kenya has hit the area hard. Several interviewees expressed disappointment that the investors had not developed the area further, adding new attractions e.g. fly camps.
B4	Protected area authorities are willing to share revenues.	The assumption does not hold. There was a strong feeling that KWS should be sharing revenues from Amboseli National Park with the Kilitome community, including paying scouts.
B5	Ownership/user rights leads to pride and a sense of importance.	Assumption seems to hold. Communities feel that wildlife is important to their culture and way of life. They have a strong belief that wildlife belongs to them.
B6	There is sufficient understanding and appreciation of the link between wildlife and revenue that it generates.	Assumption seems to hold. Education, training and capacity development of community members provided through Big Life Foundation were seen as strengthening positive community attitudes and values towards wildlife conservation and prevention of poaching.
B7	Resources and capacity for managing, including monitoring, of the target resource is in place.	Assumption seems to largely hold. Big Life Foundation and KWS do regular wildlife surveys and monitoring; scouts are equipped with Cybertracker units and GPS, torches, uniforms and other basic equipment; community scouts also respond to HWC incidents. However, it was generally felt that Kilitome should employ more scouts to improve patrol coverage and effectiveness.
B8	Elite capture does not undermine the revenue stream.	Assumption seems to partially hold; some interviewees mentioned suspicions of nepotism and elite capture within the conservancy management committee, but generally it was believed that the direct payments to all individual landowners for their plot in the conservancy was effective in reducing the risk of corruption.
B9	Communities feel that costs and benefits are equitably and transparently distributed.	Assumption seems partly not to hold. Concern was expressed that some of the benefits from the conservancy lodge were not being fairly shared with the community.
B10	Financial flows from wildlife are sustainable.	Assumption seems not to hold. Total reliance on tourism poses questions about the sustainability of the model.
B11	Communities have sufficient information and power to resist third party interference (e.g. from NGOs or politicians).	It was impossible to independently verify whether this assumption held or not.
F1	Communities that are more empowered to manage wildlife value it more.	Implicit in the Kilitome ToC and seems to hold.
F2	When communities receive benefits from wildlife (e.g. employment) they will value it more.	Implicit in the Kilitome ToC and seems to hold.
F3	The community has full knowledge about how benefits are being shared and distributed.	Assumption seems not to hold. A number of those interviewed expressed the view that information about benefits from Tawi Lodge were not transparently shared.
J1	Income from wildlife based land use is sufficient to deter other uses.	Seems largely not to hold as a number of conservancy members have recently pulled out of the conservancy or are violating conservancy regulations on grazing and agriculture.
J2	Financial flows from wildlife are sustainable.	Assumption seems largely not to hold – see B10.
J3	Financial flows from wildlife are distributed widely enough to ensure community-wide adherence to grazing restrictions.	Assumption seems largely not to hold – see J1.

Pathway C: Decrease costs of living with wildlife

Human-wildlife conflict and particularly human-elephant conflict is a serious problem for communities, manifesting in widespread damage to crops and infrastructure, injury and death of people and wildlife. Livestock predation, not considered significant in Kilitome at present, is nevertheless widespread in the wider ecosystem and much resented by the Maasai due to the economic and cultural importance of cattle. The Predator Compensation Fund, spearheaded and supported by Big Life Foundation, seems to have been effective in reducing retaliatory killings for loss of livestock but may not be sustainable as it is entirely dependent on external funding. The Kilitome Conservancy members have recently requested that a small portion of their lease fee be put into the consolation fund for human-wildlife conflict (K. Fitzgerald, pers. com).

The current human-elephant mitigation and management strategies employed around Kilitome focus on efforts to use watchmen to drive animals away, using fire to scare them and sometimes spearing elephants. On occasion the community scouts are called upon to deal with an elephant problem. The scouts use lights, vehicles, thunder flashes and chilli pellets fired from paint ball guns to chase animals away. These have had varying degrees of success. In most cases the role of the community scouts is to calm a community member down after an incident has already happened and to do an investigation and verification of damages in the case of predation for subsequent compensation.

When a human death has occurred or an animal has shown a repeated pattern of aggression to the community, KWS is contacted to remove the problem animal.

Those interviewed identified a number of measures that could be taken to reduce human-wildlife conflict: the use of electric fencing to protect settlement areas and crops/livestock was perceived as the most effective and popular method. The importance of land use planning to maintain elephant corridors and to keep elephants away from agriculture and human settlements was also mentioned as an essential long term strategy. The stakeholders in Kilitome strongly believe that to reduce human-wildlife conflict, particularly when elephants are involved, agricultural areas should be separated from wildlife areas through land use planning and the use of fences.

Currently there is no evidence of human-wildlife conflict being used as an excuse to poach elephants for ivory in the Kilitome conservancy. However, the investigation revealed that it was a serious detriment to the community and that discontent is rising. It is clear that the level of tolerance for living with dangerous wildlife, particularly elephants, is eroding. This has led to incidences of elephant killings as retaliation for losses. It was noted that eight elephants had been killed by the community in the past year as retaliation for incidents that had resulted in human death. Most stakeholders anticipated that if levels of human-wildlife conflict were not reduced, it was likely the community would become less motivated to protect wildlife thus creating conditions by which poaching from outside (and possibly from within the community) could return. Therefore, while at present poaching of elephants for ivory is not a concern in the area, the persistent conflicts threaten to create conditions where poaching could again emerge as a serious challenge.

Most of the study informants felt that the costs caused by wildlife through human and livestock death and injury, as well as damage to crops and infrastructure outweighed the benefits received from wildlife.

The key assumptions under Pathway C are summarised in Table 9. Assumptions C3 (around compensation) and C5 (around land use planning) were found not to hold.

Pathway D: Support non-wildlife-related livelihoods

Many of the assumptions associated with Pathway D (summarised in Table 10) are implicit in the Kilitome ToC. Most Kilitome Conservancy members have recently become engaged in small-scale agriculture, each have been allocated two acres (0.8 hectares) for each family for cultivation outside the conservancy. During a validation workshop held in February 2017, the Kilitome community members present confirmed that they believe that the additional income from agriculture may have dissuaded some of the community members from engaging in poaching.

A key assumption in Pathway D in Kilitome's ToC is that land use plans are effectively implemented and enforced, separating wildlife from agricultural areas. This enables the community to maximise livelihood opportunities from their land through a mix of agriculture, livestock and wildlife based options. At the same time, land use planning tries to ensure that habitat quality and connectivity is maintained to support sustainable wildlife based land use options in the long term.

However, it is clear from stakeholder consultations, as well as field observations made by the research team, that this critical assumption does not currently hold. The expansion of unregulated irrigation schemes in the area and the subsequent problems with elephant crop-raiding point to weaknesses in the implementation of the land use plan. Furthermore, a number of individual plots in the Kilitome Conservancy, as well as adjoining conservancies, have recently been fenced and converted to agriculture. The expansion of agriculture is therefore undermining a key desired outcome of the Kilitome ToC which is to stop conversion of land into use that is incompatible with wildlife and also leads to reduced habitat connectivity. It should be noted that this is in direct violation of the AEMP, which was gazetted, but is not being enforced by the National Environmental Management Authority. Kilitome Conservancy is part of a designated corridor under the AEMP in which no agriculture and fencing are allowed.

Table 9: Summary of assumptions in Pathway C

Code	Assumptions in baseline ToC	Alignment with Kilitome ToC assumptions
C1	Traditional measures to manage HWC are insufficient and not viable.	The assumption seems to hold. Crop-raiding by elephants is the main form of conflict, and as the communities have started practicing agriculture relatively recently there are few traditional measures. Some households use fire and make noise to scare elephants away; community scouts use paintball guns with chilli pellets, thunderflashes and vehicles to chase elephants away.
C2	Funding is available for non-traditional mechanisms to manage HWC (e.g. compensation).	The assumption was found largely not to hold. There is no funding to compensate for crop damage or for building and maintaining elephant proof fencing.
C3	The non-traditional strategies to mitigate human wildlife conflict actually work (including compensation).	It was not possible to test this assumption. There is no mechanism in place to compensate for crop damage by elephants and is unlikely to materialise. Fencing has been tried before but has failed due to lack of maintenance. The Predator Compensation Fund seems to have been effective in reducing retaliatory killings for loss of livestock but may not be sustainable as it is entirely dependent on external funding.
C4	Intangible and indirect costs of living with wildlife (e.g. disease) are known and can be accounted for.	Assumption seems to hold. Examples given included elephant impacts on natural environment, disease transmission to livestock, restriction on people traveling at night and on women collecting firewood.
C5	Opportunities for land use planning and zoning to mitigate HWC exist and can be implemented.	The assumption seems not to hold. Land use plans and zoning exists but are largely not respected or enforced.
G	Communities who are better able to mitigate wildlife conflict feel decreased antagonism towards wildlife.	Assumption seems to hold. Implicit in the Kilitome ToC and supported by stakeholders' interviews and consultations.
K	Communities who experience a decreased cost of living with wildlife have a decreased incentive to actively or tacitly support IWT and are more willing to stand up to it.	Assumption seems to partially hold. No evidence that currently high levels of conflict have led to poaching but consultations confirm that this is a possibility in the future unless the situation improves.

As was discussed under Pathway C, much of the community discontent is directed at elephants, which enter agricultural areas in search of crops, and this has led to a number being killed and injured in recent times. Therefore, while the additional income from agriculture may have been a factor in stopping some community members from poaching, the expansion of agriculture in what was previously a predominantly pastoralist landscape, has led to a number of recent revenge killings of elephants.

In conclusion: the development of agriculture in the absence of effective land use planning and/or the poor implementation and enforcement of existing land use plans currently threatens the ultimate objective of Kilitome, which is to secure sustainable wildlife based land use and allow the continued co-existence of wildlife and livestock.

b) Outcomes and impact

The four pathways in the Baseline ToC lead to a number of common outcomes:

1. Stronger community action against poachers from within and outside the community;
2. Reduced active or tacit support for poaching;
3. Reduced recruitment of community members by poachers;
4. Reduced poaching by community or outsiders.

Table 10: Summary of assumptions under Pathway D

Code	Assumptions in Baseline ToC	Alignment of assumptions with Kilitome ToC
D1	Elite capture does not undermine the revenue stream.	Not directly relevant in the Kilitome ToC context.
D2	Alternative livelihood schemes do not generate perverse incentives, e.g. money earned is not reinvested in poaching or other land-uses that negatively affect wildlife.	Implicit in the Kilitome ToC. However the assumption does not seem to hold as in this case, the alternative livelihood scheme (agriculture) is threatening the ultimate aim of securing sustainable wildlife based land use.
D3	Adequate support is available to develop and maintain alternative livelihood schemes.	Not tested, not a relevant assumption in the Kilitome ToC.
D4	Alternative livelihoods provide jobs or income to actual or potential perpetrators of wildlife crimes.	Implicit in the Kilitome ToC. Stakeholders felt that additional income from agriculture may have contributed to reduced levels of poaching.
D5	Alternative livelihood schemes that are conditional on wildlife protection are adopted. and are	Not relevant to the Kilitome ToC.
H1	IWT is not so high in value that that all other potential forms of income through tourism etc. cannot compete financially.	Seems to hold. Currently there is no poaching of elephants for IWT.
H2	Income from alternative livelihoods acts as a substitute for income from IWT.	Implicit in the Kilitome ToC. Stakeholders felt that additional income from agriculture may have contributed to reduced levels of poaching.
L	The relative value of illegal wildlife products are not so high that communities participate in it anyway.	Seems to hold. Currently there is no poaching of elephants for IWT.

These outcomes are expected to lead ultimately to decreased pressure on wildlife species from IWT. As with the four pathways, a number of assumptions underpin the achievement of these outcomes and impacts (Table 11).

In Kilitome discussions with stakeholders revealed that the anticipated outcomes and impacts of the current and planned interventions were significantly different to the Baseline ToC and so different assumptions were also evident. The main anticipated outcome of the Kilitome model is that as a result of the land lease fee payments and other benefits generated by the conservancy, wildlife remains a viable land use option. This encourages communities to continue to maintain land under wildlife and support wildlife conservation. This in turn results in:

1. Reduced illegal killing of wildlife;
2. Reduced conversion of land into uses that are incompatible with wildlife; and
3. Maintenance of wildlife habitat quality and connectivity.

The ultimate impact that the Kilitome conservancy is seeking to achieve goes beyond decreased pressure from IWT and is concerned with securing sustainable wildlife based land use and securing a key wildlife corridor.

The key assumption in the Kilitome ToC is that good land use planning enables communities to derive income from agriculture in areas set aside for this purpose, while at the same time earn income from traditional livestock grazing and tourism from areas set aside for wildlife and occasional livestock grazing. It is also assumed that good land use planning ensures that wildlife habitat quality and connectivity is maintained in areas set aside for wildlife based land use. However, and as discussed above, these assumptions do not currently seem to hold in Kilitome.

Table 11: Assumptions underpinning the ToC at outcome and impact level

Code	Assumptions
M1	Community contributions to anti-poaching lead to reduction in IWT.
M2	Communities are willing to enforce more strongly against IWT both within their communities and outside them.
M3	Intimidation by poachers/traffickers does not deter community action against IWT.
M4	The relative value of illegal wildlife products is not so high that new players enter into the system and negate the stronger action against poachers that has come into place (e.g. a powerful private security firm, or army unit, called into defend wildlife does not itself become an offender because the relative gains are so high).
M5	The relative value of illegal wildlife products is not so high that communities participate in it anyway.
N	Poaching is reduced to within sustainable levels.

There appears to be little respect for or enforcement of the AEMP which has designated Kilitome as a wildlife corridor in which agriculture and fencing is illegal. There is also an assumption in the Kilitome model that communities will resist conversion of land set aside for wildlife into agriculture, or other uses, only if they continue to receive sufficient benefits from the wildlife based land use. This assumption also seems to hold only partially as a number of the conservancy members are cultivating crops in their conservancy plots, while others have pulled out of the conservancy altogether and sold their land to others for cultivation rather than conservation. In fact, if the AEMP were strictly enforced there would, in theory, be no need for lease fee payments to the landowners for keeping the Kilitome area under wildlife as this is the only legally designated land use for this area.

5.3 Does the Kilitome initiative validate or modify the Baseline Theory of Change?

Overall, the Kilitome ToC is broadly in line with the Baseline ToC with some important differences. First, the overall aim of the Kilitome conservancy is to secure sustainable wildlife based land use. It is not narrowly focused on tackling the IWT trade, but rather on ensuring that land is maintained for wildlife in the context of an overall land use plan that also accommodates other alternative land uses, such as small scale agriculture and pastoralism. Much importance is given to Pathway A - particularly the community scouts' programme - in deterring poachers, and to Pathway B, with high expectations of benefits from the tourism operations in the Kilitome Conservancy. The Kilitome ToC is also consistent with the post-inception workshop ToC with respect to Pathway C, and human-elephant conflict in particular. Pathway D is also broadly consistent between the ToCs. In the Kilitome ToC small scale agriculture is an important alternative livelihood that may help substitute for income from poaching. Table 12 summarises the key differences between the Baseline ToC and the Kilitome ToC and a modified diagram version of the ToC which reflects the situation in Kilitome is presented in Figure 10.

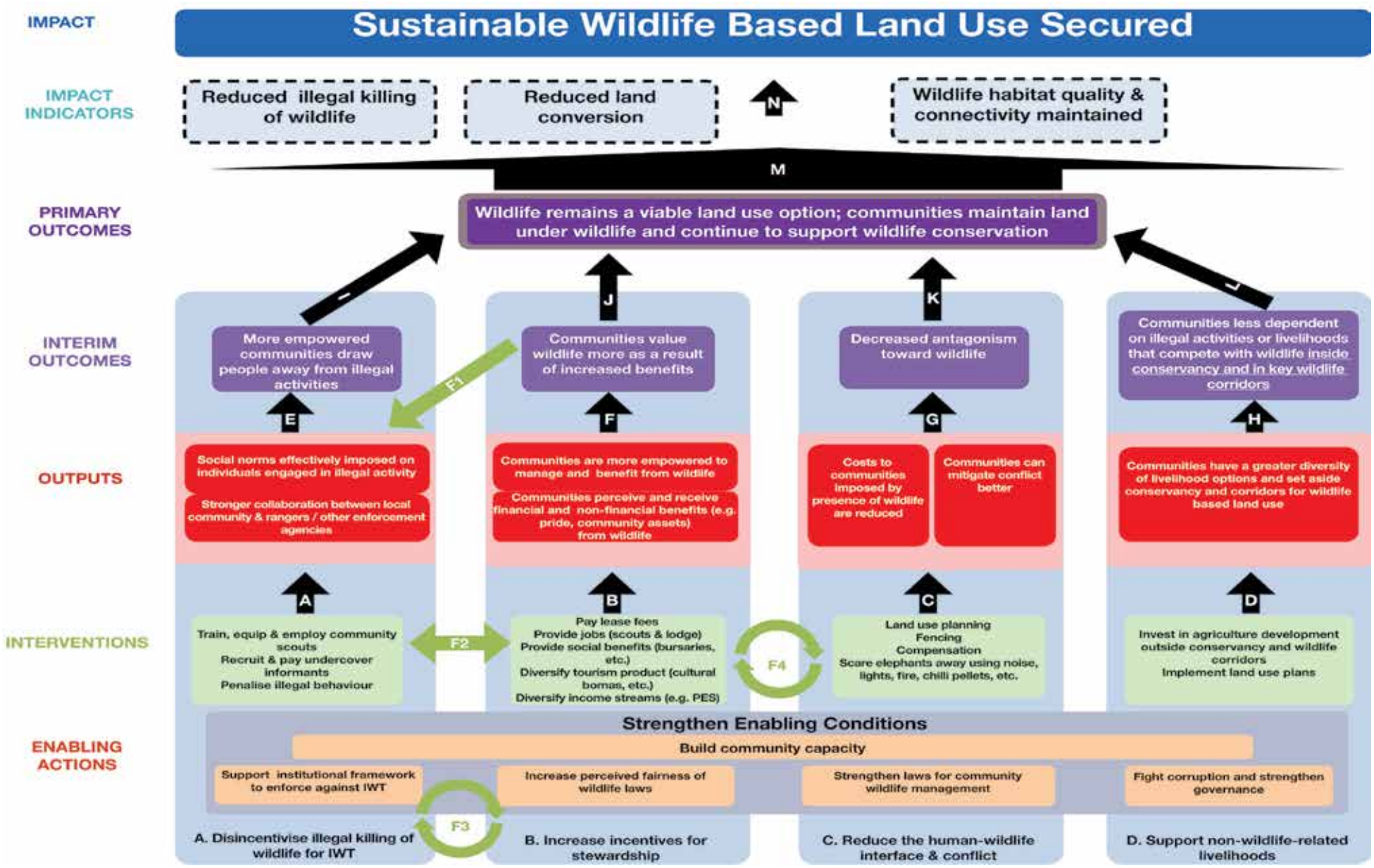

Figure 10: Assumptions underpinning the ToC at outcome and impact level

Table 12: Comparison of Baseline and Kilitome ToCs (text in bold indicates a change to Baseline ToC)

	BASELINE TOC				**KILITOME TOC**			
Impact	Decreased pressure on species from IWT				**Sustainable wildlife based land use secured**			
Outcomes 1	Reduced recruitment of community members into poaching; reduced poaching by community or outsiders				**Reduced killing of wildlife, reduced land conversion, improved habitat quality and connectivity**			
Outcomes 2	Reduced active or tacit support for poaching; stronger action against poaching from within and outside the community				**Wildlife remains a viable land use option; communities maintain land under wildlife and continue to support wildlife conservation including anti-poaching**			
	A: Disincentive illegal behaviour	B: Increase incentives for stewardship	C: reduce costs of living with wildlife	D: Support non-wildlife related livelihoods	A: Disincentivise illegal behaviour	B: Increase incentives for stewardship	C: Reduce costs of living with wildlife	D: Support non-wildlife related livelihoods
Interim Outcomes	More empowered communities draw people away from illegal activities	Communities value wildlife more as a result of increased benefits	Decreased antagonism toward wildlife	Communities less dependent on IWT as a source of revenue	More empowered communities draw people away from illegal activities	Communities value wildlife more as a result of increased benefits	Decreased antagonism toward wildlife	Communities have a greater diversity of livelihood options and set aside conservancy and corridors for wildlife based land use
Outputs	1. Social norms effectively imposed on individuals engaged in illegal activity; 2. Stronger collaboration between local community & rangers / other enforcement agencies	1. Communities more empowered to manage and benefit from wildlife 2. Communities perceive and receive financial and non-financial benefits (e.g. meat, pride, community assets) from wildlife	1. Costs to communities imposed by presence of wildlife are reduced 2. Communities can mitigate conflict better	1. More empowered communities have a greater diversity of livelihood options	1. Social norms effectively imposed on individuals engaged in illegal activity; 2. Stronger collaboration between local community & rangers / other enforcement agencies	1. Communities are more empowered to manage and benefit from wildlife 2. Communities perceive and receive financial and non-financial benefits (e.g. meat, pride, community assets) from wildlife	1. Communities can mitigate wildlife better 2. Costs to communities imposed by presence of wildlife are reduced	**. Communities have a greater diversity of livelihood options**
Interventions	Strengthen community engagement in enforcement; Support strengthening of traditional norms that protect wildlife	Start activities to generate benefits from wildlife; Recognise and profile effective community approaches against IWT	Support traditional and new approaches to managing HWC; Design mitigation strategies that account for the full range of costs	Start activities to generate benefits from non-wildlife sources that are conditional on wildlife protection	**Pay community scouts;** **Train and equip community scouts;** **Reward informers;** **Collaborate closely with scouts in neighbouring conservancies;** **Collaborate closely with enforcement agencies;** **Penalise illegal behaviour –apply wildlife laws;** **Apply strong social pressure against IWT**;	**Pay lease fees;** **Provide jobs;** **Provide social benefits (bursaries etc);** **Provide infrastructure;** **Diversify conservancy revenue streams from wildlife - new tourism products e.g. cultural *bomas;*** **Introduce innovative ways to finance conservation e.g. payment for ecosystem- type schemes**	**Use thunder flashes, vehicles, pellet guns;** **Improve response time to HWC incidents;** **Implement land use plans and fencing to separate people and wildlife;** **Fence wildlife out of agricultural and settled areas;** **Provide timely and fair compensation for all HWC, (including crop damage)**	**Invest in agriculture outside conservancy and wildlife corridors;** **Implement land use plans to separate people and wildlife**

PART THREE: LESSONS LEARNED

The testing of the First Line of Defence (FLoD) methodological framework at Olderkesi and Kilitome has generated a number of valuable lessons and insights. It has also demonstrated "proof of concept" of the FLoD approach as a useful methodology for interrogating the implementation of anti-IWT projects. The testing of the approach has enabled the development of a number of tools and methodologies which are now being incorporated into a comprehensive toolkit for use by others.

The lessons learned can be divided into two broad categories (i) substance lessons and (ii) process lessons. Each of these categories are discussed briefly below.

(i) Substance lessons

The overall structure and logic flow of the ToC for engaging communities in combatting IWT appears to be valid. All four pathways in the Baseline ToC have been validated by each the case studies with none found to be irrelevant. No additional pathways have been suggested. However, the level of emphasis given to each pathway differs quite substantially between the two conservancies. For example, while the Kilitome ToC places most emphasis on Pathway A, Pathway B is most central in the Olderkesi ToC.

Although both the Olderkesi and Kilitome communities are from the same ethnic group (Maasai), the views and belief systems of the two case study communities differ quite substantially on some issues. This may be partly a reflection of the fact that while the communities at Olderkesi still predominantly pursue pastoralist livelihoods, the Kilitome communities are better characterised as agro-pastoralist and peri-urban. However, further investigation amongst other communities would be needed to confirm that explanation.

There are clear differences of opinion and belief systems on key issues among different gender and age groups. This may have significant implications for the sustainability of some IWT interventions that may rely more heavily on the cooperation of one gender or age group.

The long term visions for both of the case study conservancies extend beyond the goal of reducing pressure from poaching to the much broader goal of securing intact ecosystems for sustainable wildlife based land use that is also beneficial to a core livelihood: livestock. This more holistic focus may be partially explained by the fact that neither conservancy is currently experiencing high levels of poaching pressure. However, it is also clear that both the project designers/implementers and the communities in Olderkesi and Kilitome are fully aware of the fact that while poaching needs to be dealt with as a matter of priority, ultimately the future of wildlife depends on whether it is possible to secure enough land to accommodate wildlife in human-dominated landscapes. The larger and more complex problem of preventing habitat loss requires different strategies, investments and a broader range of interventions than combatting poaching and wildlife trafficking.

While poaching for IWT may not be a pressing challenge at present in either conservancy, the persistent problem of human-wildlife conflict and the weak response to this issue by the Kenyan government has become a highly politicised issue that is causing widespread resentment. This is contributing to revenge killing of elephants and other wildlife, particularly at Kilitome. Strong objections were heard from both communities to the fact that the Kenya government responses to IWT and retaliation wildlife killings are stronger and faster than the response to human deaths, injuries and other losses caused by wildlife.

The benefits from tourism are critical for the ToCs in both Kilitome and Olderkesi. However there is a mismatch between the community expectations and what tourism can realistically be expected to generate for the local communities, even in these two prime wildlife areas where all the necessary conditions for a viable tourism operation are in place. This is particularly important in light of the growing human populations in these areas and the volatility of the international tourism markets in Kenya (as evidenced, for example by the dramatic decline in tourist numbers following the Ebola outbreak) and worldwide. It would also be a factor to consider in other sites which do not have such high tourism potential. In addition to the limitations of tourism revenue, both case studies underscore the importance of ensuring transparency in how revenues from tourism are generated and distributed. This is seen as a critical pre-condition for building and maintaining trust between communities and tourism operators.

Overall, revenues from wildlife were not seen as sufficient, and viable incomes from other means are seen as critical. Other non-wildlife related revenue streams, such as livestock-keeping and agriculture can help reduce dependency on tourism and may reduce incentives to poach. However some of these alternative livelihood strategies may not be compatible with wildlife based land use in the long term, a fact acknowledged by the communities.

The generation of revenue to local communities from multiple land uses while hoping to accommodate wildlife that require large areas is contingent on effective land use planning and governance at landscape level. These conditions are not being met in the Amboseli area, threatening the existence of Kilitome and the neighboring ALOCA conservancies. The Olderkesi model is also reliant on land use plans being effectively implemented and respected by all stakeholders. Management of conflict and coexistence through land zoning – traditional or contemporary is therefore critical to the success of both conservancies.

Local communities at both conservancies recognise the importance of law enforcement, provided it is in partnership with the communities. A well trained and equipped local community scout programme supported by a local community informer network can be a formidable first line of defence in the fight against IWT. This model seems to have been particularly effective at Kilitome and the surrounding conservancies. However the sustainability of such programmes is questionable as long as they remain dependent on external funding sources.

There seems to be consensus that the stiff penalties introduced by the 2013 Wildlife Conservation and Management Act has had a deterrent effect against poaching and wildlife trafficking. The penalties in this act, although extremely punitive, are generally perceived as fair. Both social sanctions and social pressures are believed to effectively reinforce the government penalties and help deter poaching.

(ii) Process lessons

Key process lessons emerging from the case study work include the following:

- The FLoD approach can help enhance stakeholders' understanding of (i) implicit ToCs of both communities and designers (ii) differences within communities and between communities and designers (iii) reasons for success or failure of particular components of a project. It can also provide useful lessons for other projects (existing and new).
- The FLoD approach can provide an excellent entry point for communities and project designers to engage in dialogue on fundamental issues of mutual concern. Although aimed at addressing the issue of IWT, the FLoD approach can also help to unearth issues and solutions that have broader applicability to community based natural resource management.
- There is a need to invest time and effort at the outset to gain a deep understanding of the designer/implementers ToC and the community ToC. Inconsistencies between these two ToCs can provide the valuable insights into reasons for low impact projects and interventions.
- Key informant interviews provide essential triangulation to help validate the ToCs.
- An initial scoping visit to the case study area and an inception workshop are critical to: (i) explain the process to the project designer/implementer and to local partners; (ii) collect the necessary background information; (iii) identify the key stakeholders and define the target community; (iv) define the geographical boundaries of the study site; and (v) to gain insights into the extent of poaching.
- Communities appreciate efforts to empower them and are willing and able to engage effectively in the action research process that underpins the FloD methodology. However, it is vital to ensure a good balance in community focus groups in terms of ethnic groups, gender and age.
- The community focus group discussions require expert facilitation. It is important to select a facilitator who is perceived by the communities as independent and not representing any particular interest or point of view. Facilitation tools must be well understood and appealing to participants. Local language interpreters are critical. Care must be taken to manage dominant voices (e.g. chiefs and other members of the community elite) and to make room for all segments of the community to be heard.
- Repeated feedback of findings from the FLoD process to the designers/implementers and communities is critical including a final validation workshop to ensure buy-in and ownership.

References

Albrecht. S. (2016) How Social Capital Shapes Community Participation – A Case Study on Community-based Ecotorism Intervention in Amboseli, Kenya MSc Thesis Wageningen University Department of Social Sciences

Boynton G 2014. Kenya: the Maasai Mara faces a fight for survival. The Telegraph, 14 July 2014 http://www.telegraph.co.uk/travel/destinations/africa/kenya/articles/Kenya-the-Maasai-Mara-faces-a-fight-for-survival/

Biggs, D., Cooney, R., Roe, D., Dublin, H., Allan, J. R., Challender, D. and Skinner, D. (2016), Developing a theory of change for a community-based response to illegal wildlife trade. Conservation Biology. Accepted Author Manuscript. doi:10.1111/cobi.12796

Clarke, R. V. (2009). Situational crime prevention: Theoretical background and current practice. In M. D.Krohn, A. J. Lizotte, & G. Penly (Eds.),Handbook on Crime and Deviance(pp. 259–276). NY: Springer.

Fitzgerald K.H (2011) AWF blog http://www.awf.org/blog/wildlife-recover-kilitome-conservancy . Date viewed: June 2017.

Fitzgerald K.H. (2013) Community Payment for Ecosystem Services in the Amboseli Ecosystem: Leasing Land for Livelihoods and Wildlife http://www.awf.org/sites/default/files/media/Resources/Books%20and%20Papers/PES_Community_Payment_Land_for_Livelihoods_Booklet_09092013[2].pdf

IUCN SULi et al (2015) Beyond enforcement: communities, governance, incentives and sustainable use in combating wildlife crime. Symposium report from the Beyond Enforcement conference, Muldersdrift, South Africa, 26-28 February. Available at http://pubs. iied.org/G03903.html) and was subsequently refined through expert consultation

Kenya Wildlife Conservancies Association (KWCA) State of Wildlife Conservancies in Kenya Report 2016 https://kwcakenya.com/news/publications/

Kenya Wildlife Service (2008) Amboseli Ecosystem Management Plan 2008-2018

King J., Kaelo D., Buzzard B. & Warigia G. (2015) Establishing a Wildlife Conservancy in Kenya: a guide for Private Land-owners and Communities. Kenya Wildlife Conservancies Association.

Okello M.M. & Kioko J.M. (2010) Contraction of Wildlife Dispersal Area in Olgulului – Ololorashi Group Ranch Around Amboseli National Park, Kenya. The Open Conservation Biology Journal, 2010, 4, 34-45

Piggot-Irvine, E and Zornes, D (2016) Developing a Framework for Research Evaluation in Complex Contexts Such as Action Research. SAGE Open July-September 2016: 1– 15 DOI: 10.1177/2158244016663800et

Poole, J., B. Okita-Ouma, P. Granli, D. Kimanzi, M. Goss, L. Tiller, S. Kiambi, and I. Douglas-Hamilton. 2016. Mara ecosystem connectivity: Information on elephant population status and movements for spatial planning and conservation in Narok. Pages: 1-28

Roe, D; Biggs, D; Dublin, H; Cooney, R (2016) Engaging communities to combat illegal wildlife trade: A Theory of Change. IIED Briefing http://pubs.iied.org/pdfs/17348IIED.pdf

Rowe, W. E., Graf, M., Agger-Gupta, N., Piggot-Irvine, E., & Harris, B. (2013). Action research engagement: Creating the foundations for organizational change [Monograph]. Action Research Action Learning Association, 5, 1-46.

Skinner, D., Dublin, H., Niskanen, L., Roe, D. and Vishwanath, A. (2018) Local communities: First Line of Defence against Illegal WildlifeTrade (FLoD): guidance for implementing the FLoD methodology. IIED and IUCN, London and Gland.

Waweru M (2017) Maasai Mara elephant population goes up by 72pc. Capital FM News Report June 21 2017; https://www.capitalfm.co.ke/news/2017/06/maasai-mara-elephant-population-goes-72pc/

Wright, Elisson M.; Bhammar, Hasita Mukeshkumar; Gonzalez Velosa, Ana Maria; Sobrevila, Claudia. 2016. Analysis of international funding to tackle illegal wildlife trade. Washington, D.C. : World Bank Group. http://documents.worldbank.org/curated/en/695451479221164739/Analysis-of-international-funding-to-tackle-illegal-wildlife-trade

INTERNATIONAL UNION FOR CONSERVATION OF NATURE

Conservation and Species Diversity Programme
Mukoma Road (off Magadi Rd)
P. O. Box 68200 - 00200
NAIROBI, Kenya
Tel: +254 20 249 3561/65
+254 724 256 804
+254 734 768 770
www.iucn.org