



Poverty Reduction Strategies Phase 1 Report

Biodiversity Challenge Funds: Building and Applying Evidence

Department for Environment, Food and Rural Affairs (Defra)

Date: April 2024

Contents

Authorship and acknowledgements	3
Disclaimer.....	3
1. Executive Summary.....	4
2. Purpose of the Report	5
3. Relationships between poverty and IWT.....	5
3.1. Defining Illegal Wildlife Trade (IWT).....	5
3.2. Poverty and Development.....	6
4. Methods.....	9
4.1. Methodological Caveats.....	12
5. Analysis of IWT Challenge Fund projects	13
5.1. Understandings of Poverty.....	13
5.2. How Poverty and IWT are linked.....	13
5.3. In What Ways Do the Projects Tackle Poverty?.....	15
6. Examples of Good Practice Across the Four Themes	17
6.1. Sustainable Livelihoods.....	17
6.2. Law Enforcement.....	17
6.3. Legal Frameworks.....	18
6.4. Demand Reduction.....	18
7. Recommendations and Knowledge Gaps.....	19
7.1. Recommendations.....	19
7.2. Knowledge Gaps.....	21
8. Conclusion	22
9. Appendix: Selected References	23

Authorship and acknowledgements

This report was authored by Rosaleen Duffy. Inputs to the planning and execution of the study, and comments on drafts of the report were provided by Rachel Beattie, Victoria Reilly-Pinion and James Kinghorn.

Disclaimer

NIRAS is the fund administrator for the Illegal Wildlife Trade Challenge Fund and commissioned this work on behalf of the Department for Environment, Food and Rural Affairs (Defra) under Workstream 5 of the Biodiversity Challenge Funds.

NIRAS works with a range of specialists and consultants to carry out studies and reviews on the Illegal Wildlife Trade Challenge Fund. The views expressed in the report are entirely those of the author and do not necessarily represent the views or policies of Defra, NIRAS or the Biodiversity Challenge Funds. Defra and NIRAS, in consultation with wider stakeholders as relevant, are considering all findings and recommendations emerging from this study in how they manage the Biodiversity Challenge Funds.

Your feedback helps us ensure the quality and utility of our knowledge products. Please email BCF-Comms@niras.com and let us know whether or not you have found this material useful, in what ways it has helped build your knowledge base and informed your work, or how it could be improved.

Cover photograph: Rhino Valley in the Intensive Protection Zone of Tsavo West - Kenya - Burrard-Lucas

1. Executive Summary

This report presents an overview of poverty-Illegal Wildlife Trade (IWT) interactions and an analysis of the IWT Challenge Fund poverty interventions. It explains how the projects define poverty, characterises the links between poverty and IWT, and outlines the ways that projects seek to tackle poverty. It brings together project documentation and wider peer reviewed literature as an evidence base. In order to be eligible to apply to the fund, projects are required to include a clear statement on how their strategies for tackling IWT do so in a way that contributes to poverty reduction. The projects funded under the IWT Challenge Fund offer a range of **direct and indirect ways of reducing poverty** as a means of tackling IWT.

Generally projects define poverty as more than an economic issue, and instead recognise it is about wider sustainable livelihoods and wellbeing. However, **very few offer a more expansive approach** in which poverty also means a **lack of power, prestige, and voice, and an inability to define one's future**. Instead, poverty reduction is more commonly interpreted as increasing material wealth and/or as developing alternative livelihoods via beekeeping, tourism development, handicrafts production, poultry farming or Village Savings and Loans. Furthermore, very few projects engage with the question of **how interventions to tackle IWT can themselves deepen poverty and inequality**, especially those related to enforcement. It is also clear that it is **more challenging for projects on law enforcement, legal frameworks and demand reduction to claim and evidence poverty reduction**, compared with those linked to sustainable livelihoods. However, projects that are focused on demand reduction, law enforcement and legal frameworks are vital parts of the wider jigsaw puzzle of tackling poverty as a means of reducing IWT. The report concludes with a series of recommendations:

- a) Fund guidance should encourage applicants to identify how tackling IWT could itself exacerbate poverty
- b) Encourage partnering with the development sector
- c) Require information on pre-application engagement with local communities and key stakeholders
- d) Consider 'Demand Management' strategies to diversify the pool of successful applicants
- e) Change or reduce the requirements to provide Theory of Change and logframes
- f) Consider funding rounds focused only on Sustainable Livelihoods and Demand Reduction
- g) Additional training for Applicants and Reviewers
- h) Provide a Masterclass on Good Practice

Central to these recommendations is that the Fund, and projects, should draw on more the **most up to date understandings of development**, and best practice in the development sector. More generally, projects designed by the conservation sector often **lag behind** in terms of understandings of development, including decolonial approaches, that emphasise moving away from top-down design and implementation. Projects should **define poverty more expansively**, operate in a **decolonial** way and **work more closely with communities and stakeholders** prior to application to develop poverty reduction strategies that are locally relevant and effective; this will mitigate top-down approaches that are likely to be less effective. This report concludes by also identifying three key knowledge gaps, including the relationships between **economic deprivation and poaching, poverty, health and IWT** and the need to '**ground truth**' the claims made by IWT Challenge Fund funded projects via research with people involved.

2. Purpose of the Report

This report sets out the intersections between IWT and poverty, and especially focuses on how IWT Challenge Fund projects can enhance their contribution to tackling poverty. Overall the key aims of this report are to:

- a) Understand the ways in which IWT exacerbates poverty
- b) Understand how projects tackling IWT can support poverty reduction
- c) Present an analysis of how IWT Challenge Fund projects articulate the links between poverty and IWT, and how they aim to address poverty
- d) Highlight examples of good practice and positive impact of projects from across the themes of the fund (Demand Reduction, Legal Frameworks Law Enforcement and Sustainable Livelihoods)
- e) Provide recommendations on how the fund can better address poverty through project selection, project support and Monitoring, Evaluation and Learning (MEL)
- f) Indicate the key evidence/knowledge gaps that can be addressed through funding calls or training for applicants and reviewers

The report combines data from the project documentation associated with the IWT Challenge Fund (applications, reports, project reviews, guidance for applicants) with peer reviewed literature on poverty and IWT. The analysis is most appropriate for fund managers, members of the IWT Challenge Fund Advisory Group and project reviewers, rather than for applicants and projects per se (a separate Information Note is provided aimed at applicants and projects).

3. Relationships between poverty and IWT

The relations between poverty and IWT are complex and multifaceted. Yet sometimes this complexity can be reduced to simple claims that poverty drives IWT (People Not Poaching, 2022; Duffy et al, 2016). However, effective strategies to tackle IWT are not well served by such simplifications. They require recognition of the complexities of motivations of people engaged across the whole chain of supply, transit and demand in IWT, as well as how specific political-economic-social contexts shape the trade. Further, it is important to recognise that IWT is gendered both in terms of patterns of involvement and in its impact on communities (see Agu and Gore (eds), 2022). These, combined with very different consumption patterns shape the range and nature of successful approaches to tackling the trade.

3.1. Defining Illegal Wildlife Trade (IWT)

IWT is the trade in whole animals and plants (alive or dead) as well as parts and derivatives, in ways that breach national and international regulations. IWT can be localised, national or international. Consumption of wildlife products is also varied; consumption can range from very localised use, such as wild meat use as a means of supplementing livelihoods, or products can be sourced and then traded to, for example, urban consumers at the national scale (Gore et al, 2021); or wildlife products can be sourced and then traded internationally (Wyatt, 2021). IWT is generally considered to be unsustainable, producing negative impacts on specific species, and biodiversity more widely (Fukushima et al, 2021).

Some discussions use ‘wildlife crime’ as a synonym for IWT. This is unhelpful. The term ‘wildlife crime’ emphasises the criminality of the laws that are being broken, and in so doing can fail to address whether the laws are locally seen as just or not. It can thus obscure the deeper dynamics that drive the trade in the first place, including global inequality, and historical or cultural patterns of consumption of wildlife products (Wong, 2019; Zhu, 2022).

3.2. Poverty and Development

In conservation and development debates it is now more commonly accepted that poverty is more than simply an economic matter of levels of material deprivation, and that it is instead multidimensional. There is no singular, agreed definition of poverty, as indicated by the 2002 UK International Development Act; instead, definitions reflect the range of thinking including the OECD (for IWT Challenge Fund applicants), the Sustainable Development Goals (SDGs), the World Bank and others. However, more recent thinking from development studies can enhance these definitions; debates in development studies have moved on substantially since the International Development Act was enacted in 2002. Defining poverty only in economic terms does not fully capture what being poor means – instead it is important to address how poverty also means a lack of power, prestige, voice, and an inability to define one’s future (Sen, 1999, Alkire and Foster, 2011; Brockington and Noe (eds), 2021). Such multidimensional poverty can be defined via indicators such as health, education and living standards (Alkire and Foster, 2011). Using this approach, it is possible to determine that involvement in IWT may not be just about money, it may also be about identity, status, customs and prestige (see Hubschle, 2018).

A key challenge, then, is how to approach tackling IWT through the prism of voice, status, and ability to define one’s future. In conservation, the importance of developing sustainable livelihoods as alternatives to IWT is now mainstream. This is often placed in the context of debates about sustainable development, and IWT is itself identified as a threat in the text of the SDGs. Furthermore, there have been important calls to decolonise conservation, which also intersect with and enrich the ways that the interactions between poverty and IWT can be understood. Decolonization is a necessary step in confronting some of the major weaknesses of contemporary conservation (Collins et al, 2021; Kashwan et al, 2021).

Since the early 2000s, there has been a growing sense that wildlife must be secured not just to maintain ecosystems and biodiversity, but also to enhance human well-being and secure global stability. The 2024 UNODC World Wildlife Crime Report highlights the multiple societal harms that are produced by IWT which include a range of interlinked negative environmental, social and economic, and governance impacts. However, it is also noted that establishing clear causal links between crime and harm is very challenging, for example estimating the losses to government revenue or the impact of illegal wildlife harvests on ecosystem functions and human well-being (UNODC, 2024: 86-88).

It is clear that tackling IWT is central to human security. Biodiversity is a key underpinning of human health and well-being, providing critical ecosystem services, so any threat to biodiversity (including IWT) constitutes a threat to human survival. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) *Global Assessment Report* in 2019 indicated that more than 2 billion people rely on wood fuel to meet their primary energy needs, an estimated 4 billion

people rely primarily on natural medicines for their health care and more than 75 per cent of global food crop types, (fruits, vegetables and cash crops, such as coffee, cocoa and almonds) rely on animal pollination. Yet an estimated 1 million species are threatened with extinction. Wildlife losses, therefore, can have a negative effect on human well-being and deepen poverty, whilst securing wildlife can have positive benefits in terms of poverty alleviation. As such, wildlife conservation can be framed as a critical aspect of human security.

First, IWT can negatively affect the ability of some subsistence and forest dependent communities to meet their basic needs. In areas where wildlife is sourced, poaching and trafficking can deprive some communities of important sources of food, which may be one of the few sources of protein (Mackenzie, Chapman and Sengupta, 2011). For example, forest-dependent peoples, such as the Baka, Aka, Bagyeli, Bakola and Batwa in Congo Basin, have traditionally engaged in hunting and fishing to meet their protein needs; poaching and trafficking wild caught meat for urban or external markets removes that resource. Further, the establishment of national parks and development of new wildlife laws, often under colonial rule (but maintained after Independence) criminalized that hunting. Consumption of wildlife is critically important for day-to-day survival, and increasing levels of enforcement of those laws have led to malnutrition in some communities (Pyhälä, Osuna Orozco and Counsell, 2016: 80-81).

Second, IWT can result in losses of income to communities, the private sector and governments, especially in the wildlife tourism sector where poaching can impact on the species that tourists pay to see or to hunt (UNODC, 2024; Muntifering, et al, 2020). Wildlife-based tourism is a critically important sector for several countries eligible to apply to the IWT Challenge Fund (see Novelli, 2015). However, it should not be assumed that conserving wildlife for tourism will automatically or directly produce benefits for marginalised and poorer communities. There is ample critical research on tourism demonstrating that wildlife-based tourism often benefits external companies and the national government, leaving communities bearing the costs, but receiving little benefit (see Muntifering et al, 2020). There is a substantial and long standing stream of critical research on tourism. For example, Adams and Infield (2003) clearly identified how gorilla tourism in a Ugandan National Park did not benefit local communities (also see Fletcher, 2014).

Third, IWT can be driven by perceptions and realities of relative rather than absolute poverty. Engaging in IWT can be central to the livelihood strategies of some of the poorest communities in the world but for others it is not a subsistence strategy per se. While there is an assumed link between economic deprivation and engagement in poaching and trafficking, this link is not well understood. Poverty is often identified as the root cause of illegal wildlife hunting, because poor people hunt to satisfy basic material needs (Twinamatsiko et al. 2014; Harrison et al, 2015; People Not Poaching, 2022). There is no simple, well evidenced link between economic deprivation and likelihood of engaging in IWT. For example, Lunstrum and Givá (2020) study of communities in Mozambique from which poachers operating in Kruger National Park originate, demonstrate that while economic factors including poverty are the most central drivers of rhino poaching on the ground-level, economic inequality rather than poverty per se is a more important explanatory variable. Similarly, Knapp, Peace and Bechtel (2017) undertook a study of 173 self-admitted poachers in communities surrounding Ruaha National Park in Tanzania. Using a capability deprivation approach, they found that that poachers are strongly motivated by the need to improve their incomes but are not necessarily the poorest of the poor. Therefore, the decision to engage in illegal hunting is often shaped by socioeconomic status and the available

livelihood opportunities. Therefore, poaching is more than just a matter of (narrowly defined) economic poverty, rather the drivers of poaching are multi-layered and complex, and relate to lack of opportunity, money, status, wealth, gaining respect as well as conspicuous consumption. The implication for supporting projects that tackle IWT is that projects which assume that increasing incomes will lead to a reduction in poaching are not necessarily the most effective. Relative poverty and availability of different opportunities matter (also see Challender & Macmillan, 2014). In addition, focusing on poverty as a driver of IWT overlooks the important role of wealth in shaping the dynamics of supply and demand. Luxury consumption of ivory, rhino horn, caviar and other products demonstrates how the world's wealthy can drive IWT (see Van Uhm, 2016; Dickinson, 2022).

Fourth, IWT can pose a significant threat to human health. IWT does pose a biosecurity risk, since viruses such as Ebola, Lassa, Marburg and COVID-19 are all zoonotic diseases that originated in wildlife (bats, chimpanzees and other wildlife) and then evolved to allow human-to-human transmission. In early 2020 the World Health Organisation (WHO) declared COVID-19 a global pandemic, and conservation NGOs quickly pointed to the origins of the disease in markets in China where live animals are traded and are in close proximity to humans. A group of 200 conservation and animal welfare organizations published an open letter to the WHO calling for a permanent ban on wildlife markets and a precautionary approach to the wildlife trade. Other experts cautioned against calls for blanket bans, arguing that they could be inimical to the livelihoods of some of the world's poorest people, and could have counterproductive conservation outcomes for some species that were sustainably traded (see Roe, Dickman, Kock, Milner-Gulland, Rihoy, 't Sas-Rolfes, 2020; UNODC, 2024: 44)

IWT has important human security dimensions, and is clearly linked to poverty in multiple complex ways. It is important to take a nuanced approach which includes recognition that for some communities, engaging in IWT itself can be an important means of local level poverty alleviation. Furthermore, it is critical to acknowledge that in some instances attempts to tackle IWT can themselves be responsible for deepening poverty for some communities, while alleviating it for others (UNODC, 2024: 87; Duffy 2022). As indicated by a recent systematic review by Rytwinski et al, 2024, there is a significant evidence gap in understanding why and how some counter wildlife strategies work in specific locations and others do not.

Finally, insecurity, corruption and the role of IWT in financing conflict is another dimension of how the trade can contribute to poverty. There are high profile claims that IWT is a source of funding for violent extremist groups (Lhoest et al, 2022). Indeed, this has prompted a turn towards security-oriented, and often militarised, responses to poaching and trafficking by the conservation sector. One of the central arguments for tackling IWT since the early 2010s has been that doing so enhances national and international security. IWT has been identified in global policy debates as a form of serious organised crime and as source of threat finance for criminal groups, rebels, militias, and terrorist networks (Duffy and Massé; 2021; Duffy, 2022). Doing so promotes and privileges responses such as legal and judicial reform, criminal investigations, intelligence gathering, law enforcement technologies, and use of informant networks (Massé et al, 2020). UNEP, UNODC, CITES, INTERPOL, the EU, WWF International, United for Wildlife, Wildlife Conservation Society, Conservation International, The Nature Conservancy, and many others have identified IWT as a form of serious organised crime that can have destabilising effects at the national and international levels (Duffy, 2022).

However, while it is the case that IWT can intersect with corruption, insecurity and conflict, many of the claims about the links to global security are poorly evidenced. The argument that IWT is used to fund global terrorist networks has circulated in international policy networks, and been repeated by a range of organisations from Elephant Action League, International Fund for Animal Welfare, The Trump Administration, UNEP reports and Wildlife Conservation Society amongst others. However, such high profile claims have little concrete evidence to support them. In particular, the claims about the role of ivory trafficking in funding Al Shabaab, which gained international attention in 2012 have been widely debunked; more recent claims about the role of wildlife trafficking in funding Lords Resistance Army, Boko Haram and Janjaweed have equally been thoroughly questioned (Duffy, 2022; Maguire and Haenlein, 2015).

It is also essential for any strategies that aim to tackle IWT to consider how enforcement can itself exacerbate poverty and inequality; this can be via cutting off existing streams of income or sustainable livelihoods strategies, or when enforcement results in the arrest, detention, injury or death of suspected poachers and traffickers leaving families with no breadwinner (see Ramutsindela, Matose and Mushonga (eds), 2022); Ashaba, 2021; Mabele, 2017; Lunstrum and Givá, 2020; Hubschle, 2017). Lunstrum et al's, 2023 study of the Mozambican borderlands indicates how the illicit rhino horn economy is an example of a conflict between ground-level hunters and increasingly militarised state conservation forces, which emerges from a context of radical inequality. Dynamics such as labour migration from Mozambique to South Africa as well as an intense focus on wildlife conservation that sidelines rural development has transformed the area; this is the area where many hunters originate from and these dynamics, including enforcement strategies for tackling IWT have generated poverty, exclusion, and vulnerability across the region.

It is clear that there is no straightforward link between IWT and poverty, the linkages are multifaceted and strategies to address IWT should reflect this with a diverse range of locally relevant approaches.

4. Methods

The IWT Challenge Fund has funded a total of 150 projects comprised of:

- 128 Main
- 18 Evidence
- 3 Extra

This report analyses a sample (71) of those projects: 62 Main, 7 Evidence and 2 Extra, proportionally spread across each funding round. The analysis, key themes and recommendations are relevant to both Main and Evidence projects. In each round at least 40% of applications were assessed (in some rounds 50% were assessed for this Deep Dive report due to a small or odd number of projects in those rounds).

In each Round, the sample included:

- **Geographical region:** A proportion of projects focused on Africa, Asia and Latin America respectively.
- **Theme:** A proportion of projects that applied under the themes of Demand Reduction, Legal Frameworks¹, Law Enforcement and Sustainable Livelihoods.
- **Final Report Review Score:** Where available, projects were selected to provide a range of scores. Each Round analysis includes at least one project that scored at B, A and where available A+ and A++. While projects have variable outcomes in terms of the extent to which they met their objectives, lower scoring projects (e.g. B) still have relevant information on how they defined and addressed poverty. Therefore, scoring was based on the original application and on the documentation related to MEL for the project.

Overall 45% of the total number of projects were analysed to determine:

- a) how they articulated the link between IWT and poverty
- b) how the project aimed to address poverty and the reported poverty-related outcomes of the project.

The projects in the sample were selected to ensure a spread across the four fund themes, geographical focus, and grading of the Final Report and Annual Reviews (note only applications were available for Round 9 at this time of this study).

A framework was developed to answer the following research questions:

- a) How does the project define poverty?
- b) How does the project articulate the link between IWT and poverty, including whether the project addresses how strategies to tackle IWT can exacerbate poverty?
- c) What impacts on poverty reduction are claimed/detailed?

A scoring system to address these questions is detailed in the tables below. It is important to note that the numbers do not mean *'better or worse'*, instead they are used to provide an immediate sense of how the project understands and tackles poverty. These scores are included in the attached dataset (Excel spreadsheet) which also provides: project number, title, lead organisation, geographical focus, FRR or ARR scores, themes and comments.

¹ Legal Frameworks was only introduced as one of the IWT Challenge Fund thematic areas from Round 4 onwards.

Table 1: Poverty definition score

1	Includes a basic definition poverty as income/economic deprivation. This may vary along intersecting lines such as gender or age within the same household.
2	Poverty is defined as lacking in resources for and access to basic needs such as health, education, security; encompasses livelihoods and is linked to wellbeing.
3	Poverty is defined as lack of power, prestige, ability to shape one's future and thrive which goes further than conventional interpretations of wellbeing. This definition acknowledges how intersecting characteristics may exacerbate inequalities (gender, race, ethnicity, caste, sexual orientation).

Table 2: The link between poverty and IWT

1	IWT removes resources from communities that use wildlife for e.g. food, trade, a source of employment
2	IWT depletes wildlife which impoverishes us all
3	IWT fuels instability and insecurity
4	Enforcement to tackle IWT can exacerbate poverty
5	Other definition – see notes in the comments section

Table 3: Project impact on poverty

1	Direct impact on poverty via raising incomes e.g. provision of employment, payments
2	Direct impact on poverty via a multidimensional approach focused on resources to meet basic needs e.g. sustainable livelihoods, land tenure, access to health and education, food security
3	Direct impact on poverty via empowerment e.g. more choice over lifeways
4	Indirect impact on poverty e.g. law enforcement, assumes saving wildlife = poverty reduction
5	Indirect impact on poverty e.g. demand reduction, assumes saving wildlife = poverty reduction
6	Does not fit category, see notes in the comments section

4.1. Methodological Caveats

This analysis should be read with the following caveats and notes of caution about the methods and analysis.

It is important to recognise that in this analysis the projects are being judged against a set of criteria they were not originally designed to meet. The projects were designed primarily as initiatives to reduce IWT; tackling poverty is an important part of that, and information on contributions to poverty reduction are required as part of the application and reporting process. However, the projects are not designed primarily as poverty reduction projects, and the reporting requirements have changed during Rounds 1 – 9.

Conclusions about how the projects articulated the links between poverty and IWT are drawn from sources of evidence that are not directly comparable. From Round 7 onwards, the Final Report Review Score was not available as the projects were still ongoing; in those later rounds of funding the most recent Annual Report and Annual Report Review were used to select a range of projects (AR2 and AR2R for Round 7, AR1 and AR1R from Round 8). From Round 9 only the application was available.

Fewer projects fell under the category of Demand Reduction or had a focus on Latin America. This is also clear from previous analysis (Overview of Round 10 presented at IWT Challenge Fund Strategy Day, January 2024; also see Duffy, 2022). Nevertheless, the analysis of the projects does include an appropriate proportion of projects on Demand Reduction and focused on Latin America to ensure a full range or types of projects were assessed.

The assessment is also based on partial evidence provided by what the project's own documentation says about its approach, the challenges faced and the successes claimed. While project documentation often does provide very clear and detailed information on challenges faced, and failures to meet goals and objectives, it may also provide a 'best case' outcome. As Catalano et al (2019) note it is the successes of conservation projects that are reported or detailed (including in peer reviewed literature), and failures are rarely reported. It is important that projects learn from failures and mistakes (see Chambers, Massarella and Fletcher, 2022). The project reports are independently verified by an external reviewer for Final Report Reviews, but these are based on information provided about projects by the projects themselves, which is a limitation.

An analysis of the poverty related impacts is necessarily limited because the voices of the people experiencing funded projects are not well represented or evidenced in project documentation. While some projects (e.g. IWT050, Developing elephant eco-guardians: fundamental for co-ordinated anti-poaching/trafficking initiatives in Mali, led by the Wild Foundation) provide quotes/evidence from the communities who have been supported by the projects, most do not. Therefore, the people most affected (positively and negatively) by IWT Challenge Fund funded projects are not well represented in the documentation; their voices are largely erased, and instead people are reduced to figures of, for example, numbers of household reached in a demand reduction campaign, numbers of jobs created, or range of incomes raised. In order to really determine how successful projects have been at tackling poverty as part of addressing IWT, it is essential to 'ground truth' the claims made in project documentation; this could be done via an independent research project (detailed in the final section of this report).

5. Analysis of IWT Challenge Fund projects

Below is an analysis of the different patterns of understandings of poverty, how poverty and IWT are linked as well as the claims made about how projects funded under the IWT Challenge Fund tackle poverty. Key examples of specific projects are provided throughout as illustrations of the overall findings. This section concludes with some specific exemplars of good practice across each of the themes of Demand Reduction, Legal Frameworks, Law Enforcement and Sustainable Livelihoods.

5.1. Understandings of Poverty

The project documents show a particular pattern of understandings of poverty, which do not draw on the most recent approaches from development studies. On the positive side, very few projects (9/71) define poverty only in a narrow material/economic sense (score 1). Instead projects tend to articulate poverty in multidimensional terms, centred on income levels, economic deprivation, lack of resources for basic needs, wellbeing and sustainable livelihoods (score 2). However, there is a lack of engagement with a more expansive approach (12/71) of understanding poverty through the prism of power, prestige and ability to shape one's own future (score 3); none articulate poverty in this way alone, and instead this approach to understanding poverty is combined with understanding poverty as lacking resources, livelihoods and wellbeing (scores of both 2 and 3). Please see table 1 for reference to scores.

As an example, project IWT020 (Strengthening local community engagement in combating illegal wildlife trade), led by IUCN Eastern and Southern Africa office, is an excellent illustration of a project that centres communities and their needs/aspirations throughout all stages of the project. It is also one of the few that took a more expansive definition of poverty and means to tackle it. The project focused on inclusion and on developing non-wildlife related livelihoods as means of persuading communities not to engage in IWT. The Final Report notes that *'The research has revealed that viable incomes from non-wildlife based livelihoods are critical to local communities as revenues from wildlife are not seen as sufficient. However, these livelihoods need to be managed carefully and holistically across the landscape through effective land use planning'*. It therefore approaches poverty reduction as about addressing inequalities, such as access to and use of land, not just about increasing incomes from activities related to wildlife.

5.2. How Poverty and IWT are linked

The projects clearly demonstrate a range of approaches to understanding how poverty and IWT are linked; these approaches then shape how the projects are designed to tackle poverty and IWT. Please see table 2 for reference to scores.

Link between poverty and IWT	Number of projects using the definition	Total number of projects reviewed
1. Removes resources from communities	64	71
2. IWT impoverishes us all	11	71
3. Increases instability and conflict	20	71

These above linkages are articulated in the project application for IWT006 (Educational Children's Videos Reduce Endangered Species Demand in Viet Nam), led by Humane Society International which articulated the linkages between poverty and IWT as all three approaches outlined. For example, the application states, the *'project will have a positive impact on human livelihoods. Poaching and illegal trade negatively impact livelihoods of people, including those living in poverty, in Asian and African countries that are range States for these species. Poaching and illegal trade also threaten national security and the rule of law. People in range countries, including those living in poverty in Low and Lower Middle Income Countries, will benefit from this project because fewer resources will need to be spent on protection, fewer lives of rangers will be lost fighting poachers, and people will be able to derive benefits, including livelihoods, from the existence of these animals.'*

One of the key omissions, looking across the IWT Challenge Fund portfolio, was that very few (9/71) reflected on how tackling IWT through enforcement might itself exacerbate poverty (score 4); yet it is clear from the literature that enforcement especially can have negative impacts on communities and their livelihoods (Ramutsindela, Matose, Mushonga (eds), 2022; Dutta, 2020). In theory every project that aims to tackle IWT also has the capacity to negatively affect poorer communities that may be involved in poaching and trafficking to meet livelihood needs. These negative impacts can be as a result of demand reduction campaigns which seek to deter consumers from buying illegal wildlife products; in so doing, communities that rely on selling those products will experience a negative impact on their ability to generate income. Furthermore, projects that focus on law enforcement, especially on surveillance and intelligence gathering, leading to arrests and prosecutions, have the capacity to remove key income earners from households (potentially for very long periods). However, in analysing the funded projects, it was clear that just nine project teams had articulated these risks in their applications and reports.

One project that does recognise this is IWT088, (Holding Uganda-based transnational wildlife criminals accountable by empowering financial investigations), led by Basel Institute on Governance (International Centre for Asset Recovery). The project acknowledges that enforcement itself can increase poverty, the team state in the application that *'The poor are also disproportionately impacted by existing law enforcement responses, such as the usage of paid informants. Too often the 'rewards' made available to informants result in them acting as an 'agent provocateur,' often at tremendous risk to a low-income individual with little prior involvement in IWT.... Accordingly, current successful law enforcement actions frequently leave behind families who are destitute and immensely vulnerable to exploitation. This can lead to a cycle of environmental destruction, where the remaining family is much more likely to enter protected areas seeking firewood and thatch for roofing. Children may enter the parks*

to seek bushmeat to help the family survive, leave school and risk incarceration, almost guaranteeing inheritance of poverty by the next generation.'

Furthermore, demand reduction itself can have a negative impact on the livelihoods of communities that have come to rely on IWT as part of their livelihood strategies. One project that articulates and addresses this link very well is IWT099, Securing Chitwan-Sindhuli Green Corridor: strengthening community stewardship and law enforcement (led by ZSL). It is primarily focused on law enforcement, but has a key component linked to poverty reduction. The project documentation is very well linked into the goals of the SDGs, including gender and social inclusion. The team have driven impressive levels of engagement with vulnerable and marginalised communities in advance of writing the project proposal. In so doing they have identified the structural barriers to addressing multidimensional poverty. Furthermore, there is a clear recognition in the original application that enforcement itself can create injustices, inequalities and deepen poverty. The successful design of community conservation initiatives to protect pangolins reflected this careful work with people affected by IWT.

5.3. In What Ways Do the Projects Tackle Poverty?

The projects displayed a range of different ways of tackling poverty, primarily shaped by their understanding of the links between poverty and IWT. These can be broadly grouped into projects that claimed a direct impact on poverty (**scores 1, 2, 3**) and those that claimed an indirect impact on poverty (**scores 4, 5**). Please see table 3 for reference.

In general, projects aimed to develop sustainable livelihoods or increase incomes via a small range of narrowly focused activities: tourism development, beekeeping, poultry projects, handicraft production and Savings and Loans Associations. All of these are ways in which people may enhance their incomes, and of reducing poverty in some households. However, there was a lack of creativity and diversity in types of schemes promoted by many projects; it may be that conservation organisations, in particular, are learning only from each other and not from a wider development sector about how best to reduce poverty. This means that these projects are often not led or inspired by what communities themselves want or what their wider aspirations are. It is essential to be familiar with and follow best practice in the development sector in order to ensure that projects aiming to tackle IWT and address poverty do so in the most effective and ethical ways.

There is a focus on top-down training rather than mutual knowledge exchange, learning or empowering. One way to address this is to encourage partnering with development organisations to refine project approaches to poverty reduction. For example, project IWT074, Cracking wildlife smuggling in Madagascar led by Durrell Wildlife Conservation Trust (DWCT), focuses on law enforcement but capitalises on synergies with a related poverty reduction project funded by Jersey Overseas Aid. This could be a useful model going forward.

Several projects assume that conserving/saving wildlife through tackling IWT will provide economic benefits to communities via wildlife-based tourism. This is often stated but not evidenced (for example IWT002, IWT016, IWT017, IWT022, IWT033, IWT037, IWT056, IWT059, IWT070, IWT071, IWT072, IWT088, IWTEX003 amongst others).

A good example of this is in the Final Report for IWT092 (Disrupting the financing of Andean IWT networks through asset recovery), led by Basel Institute on Governance (International Centre for Asset

Recovery). The report states, *'The criminal organisations who monopolise and deplete natural resources that belong to the state, and therefore to the people of Bolivia and Peru, deprive entire communities not only from natural resources required to sustain life such as food, fresh water and clean air but also, from financial resources that derive from sustainable commercial activities and tourism. Rural communities which are already impoverished, lose access to natural resources that sustain their livelihood and are affected by illnesses caused by the same depletion of resources driving them deeper into poverty.'*

The prevalence of the statement that tourism will be a means of tackling poverty is illustrative of the assumptions that often underpin conservation projects. The over focus on the benefits of tourism obscures the problems with it as a form of poverty reduction (such as poorly paid and precarious work, gendered patterns of labour, capture of financial benefits by companies based in major cities or outside the country, the embedding of colonial ideas about the destination). Instead, in the projects funded by IWT Challenge Fund there is clearly an assumption amongst applicants and reviewers that tourism can be an unproblematic pathway to meeting conservation and development objectives. It is commonly stated as the rationale for why a project is necessary, that wildlife needs to be protected from IWT because it forms the basis of a national level wildlife tourism economy. There is a need for more critical reflection on the capacity of wildlife-based tourism to bring concrete benefits to communities that live with wildlife.

The IWT Challenge Fund requires projects to address gender, and many projects adhere to Gender Equality and Social Inclusion (GESI) principles, which is excellent. Projects provide details on gender balance of personnel involved in the project, and how the project aims to support poverty reduction for women. In several projects, however, the **gendered nature of poverty related interventions are underpinned by assumptions about appropriate roles for women**. This includes projects focused on making handicrafts and souvenirs for tourism, or narrowly defining development and poverty reduction in terms of access to family planning for women. For example, project IWT077, Reducing Illegal Wildlife Trafficking through a Community-based Conservation Approach (led by Yayasan Planet Indonesia) aims to create Conservation Cooperatives to fill the gap between conservation and poverty reduction in West Kalimantan. It highlights the need for improved healthcare and equitable financial capital to empower communities to move away from IWT. The approach to healthcare is narrowly interpreted as access to contraception for women.

It is important to acknowledge that **it is much more difficult for projects focused on Law Enforcement, Legal Frameworks and especially Demand Reduction, compared with those focused on Sustainable Livelihoods, to demonstrate how they address poverty**. They are critically important parts of the larger jigsaw puzzle of tackling IWT and poverty. Sustainable Livelihoods projects can claim and evidence substantive direct and indirect impacts on poverty but this is much harder to evidence for the remaining themes. For example, project IWT004 led by Save the Rhino applied under the theme of demand reduction; the Final Report states in relation to the impact of demand reduction amongst communities in Vietnam for communities living with rhinos in South Africa: *'We are unsure how to provide evidence of the impact of the project on these beneficiaries and would be keen if IWT Challenge Fund could help advise us how to do this'*. This is supported by the reviewer of the Final Report *'In hindsight, the selection of this indicator and the Outcome level target of a 25% reduction in the demand for rhino horn in two consumer groups may have been over ambitious within the project timeframe.'* As a result, the project was scored B – moderately met the objectives – by the reviewer. However, it is

important not to underplay the potential longer-term significance of the work. Showing change within a short project timeframe makes it difficult to capture the impact of the more painstaking and slow work that needs to be done to achieve durable outcomes in terms of demand reduction and the impacts on poverty.

6. Examples of Good Practice Across the Four Themes

The four examples below are for projects that applied under either a single theme (e.g. Sustainable Livelihoods) or a combination of themes (e.g. Law Enforcement and Legal Frameworks). It is important to note that the evidence base for identifying them as examples of good practice is very narrow: project applications, reports, Final Reports and report reviews. Therefore, **this judgement is based largely on what projects say about themselves, which provides a limited amount of information about how the actual impacts on poverty, and of the wider projects, were experienced by people affected by the projects.**

6.1. Sustainable Livelihoods

IWT076 Cross-Border Coordination to Reduce IWT in the Guatemala-Mexico Green Corridor (led by Wildlife Conservation Society (WCS)). This project took a very active approach to consulting with communities from the outset about what kinds of poverty reduction interventions would be most welcome and most effective. The team undertook consultations with five rural communities and community based organisations; as a result of that consultation the project team worked in partnership with communities to select and develop livelihoods interventions that were sensitive to the different needs of men and women. For example, poultry farming was selected for women, and beekeeping for men. The team also worked with local organisations to develop the sale of xate palm fronds for the international floral market. The project documentation also shows that the project team monitored the success of these projects, indicating that poultry farming did not take off, and that only 45% of poultry farming projects continued after 2 years. The team clearly reflected on the challenges and failures in order to learn from them. In terms of gender, the project also demonstrated that they had sought to meet the aspirations of women in the community to develop their skills and knowledge in ways that went beyond very localised agricultural projects. WCS worked closely with a coordinator on the community projects, who identified two young women from the village of San Miguel, and assisted them to pass entrance exams and matriculate in the University of San Carlos's branch in Petén (Centro Universitario de Petén). They were the first ever residents of San Miguel to study at the university level, and one of them completed her technical degree and is studying to obtain the university title of Licenciada en Trabajo Social. This is an excellent example of thinking beyond very local and small scale interventions, and instead supporting communities themselves in developing and pursuing ways to shape one's own life.

6.2. Law Enforcement

IWT018 Developing long-term law enforcement capacity to protect the Mali elephants (led by The Wild Foundation) is a rare example that effectively blends law enforcement with tackling poverty as a means of generating local support for conservation initiatives. Much of this is clearly the result of careful and longstanding efforts by the Project Leader, who quickly recognised that conserving desert elephants in a context of growing insecurity as a result of an insurgency, needed to address how to

provide alternative livelihoods to reduce recruitment by jihadist groups operating in the area. This livelihoods approach was coupled with training for ecoguards as well as working with a private training company (Chengeta Wildlife) and the international peacekeeping force operating in the area (MINUSMA). Through careful consultation with local communities and power networks, the project team were able to work in a participatory way, rather than imposing top-down schemes that did not fit the local context. As stated in the original application, *'the approach to community work rests first and foremost on local empowerment, using inclusive, participatory approaches to first unify the diverse clans and ethnicities around a common perspective. Through discussion, first of the problems they face in their lives, they arrived at a common understanding of how their challenges and those of the elephants are linked together and relate to social, political and environmental factors. This empowers them to find their own solutions which they can then implement with support from the project. This means that the end result is adapted to local conditions and more resilient to social and environmental impacts. It also enables people to take ownership of their actions and exert some agency over their lives, while caught in a whirlwind of forces over which they have little control'*. The benefits are monetary, but being part of the project also brings status and respect in the community. One of the strongest aspects of the project documentation is that it includes the voices of community members engaged in the project. The quotes provided show how it was locally regarded as a project that genuinely supported community aspirations.

6.3. Legal Frameworks

IWT083 Illegal trade & sustainable use of medicinal orchids in Nepal (led by Lancaster University)

focuses in on tackling the trade in wild orchids, by recognising that people in marginalised communities depend on the trade to meet their livelihood needs. The project addresses the legal frameworks surrounding the plant trade to develop clearer regulations; as the team note, there is confusion and lack of knowledge about the regulations governing the wild orchid trade in Nepal because at different times it has been both legal and illegal. In recognising the importance of the trade to marginalised communities, the project trained harvest monitors to gain knowledge of the sustainability of the trade and to provide training on legal and sustainable alternatives. It is an excellent model of working in equitable partnerships with locally based organisations (Greenhood Nepal) and engagement with local stakeholders at every stage. The project shows awareness of how the initial results led to increased enforcement, which itself could have a detrimental impact on levels of poverty and therefore produced a challenge for the remainder of the project. Therefore, the project set the groundwork in place to gain benefits from a legal and sustainable trade in the future by providing training to clarify the legal status of the trade. It was noted in the Final Report Review that the project may assist with poverty reduction in the future because the existing levels of orchid harvest were unsustainable and the project sets out the basis for a legal and sustainable trade, possibly also securing fairer prices for harvesters in the future.

6.4. Demand Reduction

IWT102 Demand reduction behaviour change in illegal Venezuelan threatened bird markets (led by Provita)

is a really good example of a project on demand reduction that works closely with communities and recognises community rights. The project clearly understands and engages with the wider structural issues that drive demand. This includes addressing the loneliness of women in poorer communities who rely on parrots for company while family members are away for extended periods in order to earn income from fishing. For example, the project team sought to replace pet keeping with more engagement with wild birds via group conservation activities that provided social interaction as

well. Furthermore, Provita interpreted tackling poverty through the lens of local empowerment. As a result, the GreenSky scheme has been successful at empowering women to engage in conservation activities, thereby reducing loneliness and reducing demand for parrots as pets. The project focused on designing an appropriate behaviour change programme, and did so in a participatory way and with full acknowledgement of community rights. The role of poverty in driving demand for wild-caught birds is defined as beyond the economic realm; instead it is clear that the team have sought to understand how communities in Macanao lack power and voice, and in the case of local breeders, by lack of access to knowledge and capacities. The second Annual Report Review indicates there has been good uptake of bird watching activities as part of the GreenSky initiative, which has gone beyond the original vision to include community participation in identifying good birding sites for tourism development.

7. Recommendations and Knowledge Gaps

All projects reviewed within this study articulate an understanding of poverty, how that links to IWT and different ways in which project activities can address poverty. The projects are primarily designed as conservation projects, not as development or poverty reduction projects. Therefore, it is important to remember that while all projects are required to engage in poverty reduction as part of tackling IWT, the requirements have varied over the course of ten rounds of the fund; furthermore, in this analysis, projects are being judged against a set of criteria developed for this report rather than the criteria detailed in the Guidance for Applicants and for Fund reviewers. Law Enforcement, Legal Frameworks and Demand Reduction are critically important parts of the wider jigsaw puzzle of the interactions between poverty and IWT. However, it is much more difficult for those projects to claim and evidence their contribution to poverty reduction than projects focused on Sustainable Livelihoods. The recommendations listed below should be read in tandem with the Phase 2 report on IWT Challenge Fund documentation.

7.1. Recommendations

- a) **Fund guidance should encourage applicants to identify how tackling IWT could itself exacerbate poverty:** Very few projects indicate an understanding of how tackling IWT itself can exacerbate poverty through either reducing demand for wildlife that some communities rely on to meet their livelihood needs, or how enforcement measures negatively impact households by (for example) removing the main breadwinner. It is essential that projects do consider and address these issues, failure to do so means that IWT Challenge Fund projects could be using ODA funding in ways that compound, rather than alleviate, poverty. This information can be included in the application, in MEL strategies for the projects and in the project reports and reviews.
- b) **Encourage partnering with the development sector:** this could be a pathway to more effective poverty reduction. There is a need for more creative and diverse thinking about the range of ways to address poverty. The projects are primarily conservation projects, designed and implemented by organisations operating in conservation not in development or poverty reduction. This results in narrowly conceived approaches such as assuming wildlife-based tourism will result in poverty reduction, or designing projects centred on beekeeping, handicrafts or poultry farming. There is a need to reflect the wider thinking about how to address empowerment, land rights, access to education and healthcare, supporting community

aspirations and so on. Law enforcement-oriented projects have partnered with experts and trainers from the law enforcement sector in order to design appropriate and effective interventions. Yet very few projects actively partner with local or international development organisations or development experts. Doing so could enhance the poverty reduction capacities of IWT Challenge Fund projects and lead to broader lessons for the sector as a whole.

- c) **Require information on pre-application engagement with local communities and key stakeholder groups:** the fund currently encourages applicants to do this to develop logframes, but it is not a requirement at present. The fund could ask at application stage for information about how the applicants have worked with communities and stakeholder groups affected by IWT to identify appropriate poverty reduction strategies as part of tackling IWT. This information can be included in the applications and in the MEL strategies for the project. This may mitigate top-down approaches and diversify the range of poverty reduction strategies in projects. Doing so could make the poverty reduction element of the projects more effective and durable because they are more locally relevant.
- d) **Consider 'Demand Management' strategies to diversify the pool of successful applicants:** The list of successful applicants indicates that a small number of organisations, based on those listed as lead organisation, have been primary beneficiaries of the fund; these include Wildlife Conservation Society (WCS), Zoological Society of London (ZSL), Fauna and Flora International (FFI), Environmental International Agency (EIA) and TRAFFIC International. These are global scale conservation NGOs, headquartered in the Global North. The fund could encourage more diversity of applicants through a range of strategies. These could include rounds where these more dominant players are not permitted to apply as lead organisations; requiring very successful organisations to implement an internal 'demand management' strategy by placing a cap on number of applications so that they have to internally prioritise which applications are submitted; requiring global north based organisations to act as secondary and supportive applicants for projects led by locally based Global South organisations, and if this is not feasible, requiring in-country partners to be part of the team could be set as a minimum threshold for funding; changing the levels of information needed for Theory of Change and reporting to render the fund more inclusive for smaller and Global South organisations.
- e) **Change or reduce the requirements to provide Theory of Change and logframes:** These are specific ways of presenting information and identifying the links between intervention and impact; however, these understandings may not map well on to locally based Global South organisations that might want to apply to the fund. Smaller organisations, especially may not have the capacity and expertise to write these very substantial documents in ways that map on to the fund criteria as they currently stand. Such onerous reporting requirements may exclude smaller scale Global South organisations that have excellent relationships with local communities and are able to design strategies that meet community needs more fully. Indeed the challenges of capacity are noted in the reports from project IWT048 'Tackling the Illegal Wildlife Trade in Muslim Communities in Sumatra (led by WWF-UK); the Final Report states that 'financial management has been somewhat challenging over the course of the project. It was not always easy for UNAS, a small team not experienced with managing this kind of grant, to coordinate the financial management among all the field partners.'
- f) **Consider funding rounds focused only on Sustainable Livelihoods and Demand Reduction:** The fund could consider a round that only allows or strongly encourages projects

that are focused on sustainable livelihoods or demand reduction and poverty reduction as a corrective to the dominance of law enforcement projects. This could be via ringfencing a certain level of funds solely for demand reduction and sustainable livelihoods or having a round which only permits applications under these themes.

g) Additional training for Applicants and Reviewers: in order to address some of these issues, the fund could offer in person, hybrid or online training for applicants and reviewers on the following areas:

- i. Multidimensional approaches to poverty, and novel approaches to development and poverty reduction in conservation projects, such as Conservation Basic Income, provided by development/poverty specialists rather than conservationists. This can also include training on direct and indirect measures of poverty and standard indicators for poverty alleviation (Alkire and Foster, 2011)
- ii. How projects can exacerbate poverty, especially those using law enforcement approaches.
- iii. Decolonisation – this can be provided by academics and practitioners to explain how applicants can approach project design in a decolonial way, and how the Advisory Group and reviewers can assess a project through the lens of decolonisation.
- iv. Gender and development, including feminist approaches to understanding the interactions between gender, development, health and environment.
- v. Criticisms of tourism as a means of meeting conservation and development objectives – this could be provided by academics working in critical tourism studies.

h) Provide a Masterclass on Good Practice: the fund could approach the four projects identified in this report to provide a 'Masterclass' for prospective applicants; this could be recorded or, better still, live/interactive using an online platform. It would be very useful for prospective applicants to hear directly from successful projects, and ask them questions at the design phase of their projects.

7.2. Knowledge Gaps

There are three key knowledge gaps, one that can be addressed by further research, and the other by encouraging applications on IWT, poverty and health.

Ground truthing: The analysis presented here is based on project documentation and reviews of project documentation. The voices of the people affected by the projects are largely absent/erased from these documents. It is important to 'ground-truth' the claims made in the documentation by, for example, undertaking on site qualitative research on the effectiveness of the projects for both tackling IWT and poverty (see Catalano et al, 2019; Chambers, Massarella and Fletcher, 2022).

IWT and health: The IWT Challenge Fund has funded COVID-19 Rapid Response Projects; but given the potential for wildlife trade to be a generator of future pandemics (Gore et al, 2019; Machalaba et al, 2021), there needs to be more information on how IWT Challenge Fund can support projects that work at the intersection of conservation, health and poverty reduction. Furthermore, the fund could consider specifically encouraging projects that link IWT, health and poverty reduction in future rounds.

Links between economic deprivation and poaching: the precise pathways linking poverty, or relative poverty to engagement in poaching is not well understood or evidenced (see literature review section). More information on how these dynamics play out in specific locations is needed.

8. Conclusion

In sum, the projects funded by the IWT Challenge Fund are already doing a great deal to address poverty as part of tackling IWT. It is clear that it is much more challenging for projects focused on Law Enforcement, Legal Frameworks and especially Demand Reduction to claim and evidence contributions to poverty reduction. However, the four examples of good practice demonstrate that it is possible to deliver poverty reduction in projects under all four themes of the fund. There is a clear understanding of poverty as multidimensional across the projects, but very little engagement with more recent thinking about poverty as being about voice, status and ability to shape one's own life. With more expansive and creative thinking about what poverty is and how to address it, perhaps via partnering with development and poverty organisations, IWT Challenge Fund projects have the potential to do much more. Overall, projects narrowly focus on a small range of poverty reduction strategies, which are often underpinned by gendered assumptions about appropriate roles for women. Project applicants can be encouraged to define poverty more expansively, operate in a decolonial way and work more closely with communities and key stakeholders prior to application to develop poverty reduction strategies that are locally relevant and effective; this will mitigate top-down approaches that are likely to be less effective. There is also a need for projects to clearly identify how interventions to tackle IWT can exacerbate poverty and provide pathways to avoid or mitigate such negative outcomes; several projects do this already, and can provide excellent guidance for future rounds. Finally, the IWT Challenge Fund can implement a range of changes, plus training for NIRAS, the Fund Managers, Advisory Board, reviewers and applicants (detailed above) to diversify the pool of successful applicants, enhance poverty reduction and increase its effectiveness.

9. Appendix: Selected References

This is not an exhaustive list of relevant references, instead it lists items that are cited in the report.

Adams, W.M. and M. Infield (2003) 'Who is on the Gorilla's Payroll? Claims on Tourist Revenue From a Ugandan National Park.' *World Development*, 31(1): 177-190

Agu, H. and M. Gore (eds) (2022) *Women and Wildlife Trafficking: Participants, Perpetrators and Victims* (Routledge).

Alkire, S. and J. Foster (2011) 'Understandings and Misunderstandings of Multidimensional Poverty Measurement.' *Journal of Economic Inequality*, 9(2): 289–314.

Ashaba, I. (2021) 'Historical Roots of Militarised Conservation: The Case of Uganda.' *Review of African Political Economy*, 48 (168): 276-288.

Brockington, D. and C. Noe (eds) *Prosperity in Rural Africa? Insights into Wealth, Assets, and Poverty from Longitudinal Studies in Tanzania* (Oxford University Press).

Catalano, A. S., J. Lyons-White, M. M. Mills, and A. T. Knight (2019) 'Learning from published project failures in conservation.' *Biological Conservation*, 238: 10822.

Challender, D.W.S. and D. MacMillan (2014) 'Poaching is More than an Enforcement Problem.' *Conservation Letters*, 7(5), 484–494.

Chambers, J.M., K. Massarella and R. Fletcher (2022) 'The right to fail? Problematizing failure discourse in international conservation.' *World Development*, 150: 1-13.

Collins, Y. A. & V. Maguire-Rajpaul, J.E. Krauss, A. Asiyani, A. Jiménez, M. Mabele, and M. Alexander-Owen (2021) 'Plotting the Coloniality of Conservation.' *Journal of Political Ecology*, 28(1):968-989.

Dickinson, H. (2022) 'Caviar Matter(s): The Material Politics of the European Caviar Grey Market.' *Political Geography*, 99: 102737.

Duffy, R (2022) *Security and Conservation: The Politics of the Illegal Wildlife Trade* (Yale University Press).

Duffy, R. and F. Massé, 2021, 'The integration of Conservation and Security: Political ecologies of violence and the illegal wildlife trade.' in J. Sowers, S. VanDeveer and E. Weinthal (eds), *The Oxford Handbook of Comparative Environmental Politics* (Oxford: Oxford University Press), pp.814-830.

Dutta, A. (2020) 'Forest becomes frontline: Conservation and counter-insurgency in a space of violent conflict in Assam, Northeast India.' *Political Geography*, 77 102117

- Enns, C., van Vliet, N., Mbane, J., Muhindo, J., Nyumu, J., Bersaglio, B., Massé, F., Cerutti, P., Nasi, R., (2023) 'Vulnerability and Coping Strategies Within Wild Meat Trade Networks During the COVID-19 Pandemic.' *World Development*, 170: 106310
- Fletcher, R. (2014) *Romancing the Wild: Cultural Dimensions of Ecotourism* (Duke University Press).
- Fukushima, C.S., P. Tricorache, A. Toomes, et al. (2021) 'Challenges and Perspectives on Tackling Illegal or Unsustainable Wildlife Trade.' *Biological Conservation*, 263: 109342.
- Gore, M. L. (ed) (2017) *Conservation Criminology*. (Wiley).
- Gore, M. L., R. Mwinyihali, L. Mayet, G.D.M. Baku-Bumb, C. Plowman, and M. Wieland, (2021). 'Typologies of urban wildlife traffickers and sellers.' *Global Ecology and Conservation*, e01557.
- Gore M.L., P. Braszak J. Brown, P. Cassey, R., J. Fisher, J. Graham, R. Justo-Hanni, A.E. Kirkwood, E. Lunstrum, C. Machalaba et al, 2019, 'Transnational Environmental Crime Threatens Sustainable Development.' *Nature Sustainability*, 2 (9): 784-786.
- Harrison, M., D. Roe, J.Baker, G. Mwedde, H. Travers, A. Plumtre, A. Rwetsiba, E.J. Milner-Gulland (2015) *Wildlife Crime: A Review of the Evidence on Drivers and Impacts in Uganda*. IIED.
- Hubschle, A. M. (2017) 'The Social Economy of Rhino Poaching: Of Freedom Fighters, Professional Hunters and Marginalized Local People.' *Current Sociology* 65 (3): 427-447.
- Hubschle, A. M. (2018) *Ending Wildlife Trafficking: Local Communities as Change Agents* (Global Initiative Against Transnational Organised Crime) <https://globalinitiative.net/analysis/ending-wildlife-trafficking/>
- IPBES (2019) *Global Assessment Report on Biodiversity and Ecosystem Services* (IPBES Secretariat).
- Kashwan P., R. Duffy, F. Massé, A. Asiyambi, and E. Marijnen (2021) 'From racialized neocolonial global conservation to an inclusive and regenerative conservation.' *Environment: Science and Policy for Sustainable Development* 63(4): 1-19.
- Knapp, E.J., N. Peace, and L. Bechtel (2017) 'Poachers and Poverty: Assessing Objective and Subjective Measures of Poverty among Illegal Hunters Outside Ruaha National Park, Tanzania.' *Conservation & Society* 15 (1): 24-32.
- Lhoest, S., J. Linchant, M.L. Gore and C. Vermeulen (2022) 'Conservation science and policy should care about violent extremism.' *Global Environmental Change*, 76: 102590.
- Lunstrum, E., N. Giva, F. Masse, F. Mate and P. Lopes-Jose (2023) 'The rhino horn trade and radical inequality as environmental conflict.' *Journal of Peasant Studies*, 50(3): 1085-1105.

- Lunstrum, E. and N Givá (2020) 'What drives commercial poaching? From poverty to economic inequality.' *Biological Conservation*, 245; 108505.
- Mabele, M. (2017) Beyond forceful measures: Tanzania's 'war on poaching' needs diversified strategies more than militarised tactics.' *Review of African Political Economy*, 44 (153): 487-498.
- Machalaba, C., M. Uhart, M.P. Ryser-Degiorgis, W.B. Karesh (2021) 'Gaps in health security related to wildlife and environment affecting pandemic prevention and preparedness, 2007-2020.' *Bulletin of the World Health Organisation*, 1;99(5):342-350B.
- Mackenzie, C., C. A. Chapman and R. Sengupta (2011) 'Spatial Patterns of Illegal Resource Extraction in Kibale National Park, Uganda', *Environmental Conservation*, 39): 38–50.
- Maguire, T. and C. Haenlein (2015) *An Illusion of Complicity: Terrorism and the Illegal Ivory Trade in East Africa*. (RUSI).
- Massé, F., Givá, N., Lunstrum, E. (2022) 'Women in the Rhino Poaching Conflict: A Feminist Political Ecology Analysis' in H. Agu and M. Gore (eds) (2022) *Women and Wildlife Trafficking: Participants, Perpetrators and Victims* (Routledge).
- Massé, F., H. Dickinson, J. Margulies, L. Joanny, T. Lappe-Osthege and R. Duffy (2020) Conservation and Crime Convergence? Situating the 2018 London Illegal Wildlife Trade Conference. *Journal of Political Ecology*, 27(1): 23-42.
- Muntifering, J.R., S. Clark, W. L. Linklater, S. Uri-Khob, E. Hebach, J. Cloete, S. Jacobs and A. T. Knight (2020) 'Lessons from a conservation and tourism cooperative: the Namibian black rhinoceros case.' *Annals of Tourism Research*, 82: 102918.
- Novelli, M. (2015) *Tourism and Development in Sub-Saharan Africa: Current issues and local realities* (Routledge).
- People Not Poaching (2022) *Engaging communities to tackle illegal wildlife trade – Lessons from Southeast Asia, South America and Sub-Saharan Africa*. IIED/IUCN.
- Pyhälä, A., A. Osuna Orozco and S. Counsell (2016) *Protected Areas in the Congo Basin: Failing Both People and Biodiversity?* (Rainforest Foundation UK).
- Ramutsindela, M., F. Matose and T. Mushonga (eds) (2022) *The Violence of Conservation in Africa: State, Militarization and Alternatives* (Edward Elgar).
- Roe, D. , A. Dickman, R. Kock, E.J. Milner-Gulland, E. Rihoy and M. 't Sas-Rolfes (2020) Beyond banning wildlife trade: COVID-19, conservation and development' *World Development*, 136: 105121.
- Roe, D. (ed). (2015) *Conservation, Crime and Communities: Case Studies of Efforts to Engage Local Communities in Tackling Illegal Wildlife Trade* (IIED).

Rytwinski, T. et al (2024) What is the evidence that counter-wildlife crime interventions are effective for conserving African, Asian and Latin American wildlife directly threatened by exploitation? A systematic map. *Ecological Solutions and Evidence*, 5(2).

Sen, A. (1999) *Development as Freedom* (Oxford University Press).

Twinamatsiko et al. (2014) *Linking Conservation, Equity and Poverty Alleviation: Understanding Profiles and Motivations of Resource Users and Local Perceptions of Governance at Bwindi Impenetrable National Park, Uganda*. (IIED).

UNODC (2024) *World Wildlife Crime Report: Trafficking in Protected Species* (UN).

Van Uhm, D. P. (2016) *The Illegal Wildlife Trade: Inside the World of Poachers, Smugglers and Traders* (Springer).

Wong, R. (2019) *The Illegal Wildlife Trade in China: Understanding the Distribution Networks* (Palgrave MacMillan).

Wyatt, T. (2021) *Wildlife Trafficking: A Deconstruction of the Crime, Victims and Offenders* (Palgrave Macmillan, Second Edition).

Zhu, A. L. (2022) *Rosewood: Endangered Species Conservation and the Rise of Global China* (Harvard University Press).