

CONSERVATION IN FOCUS: CAPTURING THE PAYMENTS FOR ECOSYSTEM  
SERVICES (PES) SCHEME THROUGH ECOTOURISM ACTIVITIES IN LAOS

KYLE DAVID WAGNER

A THESIS SUBMITTED TO  
THE FACULTY OF GRADUATE STUDIES  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
MASTER OF ARTS

GRADUATE PROGRAM IN GEOGRAPHY  
YORK UNIVERSITY  
TORONTO, ONTARIO

AUGUST 2017

© Kyle Wagner, 2017

## **ABSTRACT**

In the Nam Et-Phou Louey National Protected Area (NEPL-NPA) in the Lao People's Democratic Republic (PDR), the Wildlife Conservation Society (WCS) has deployed nature-based tourism activities as a market-mechanism for species conservation. After initially entering the country to increase a low tiger population, WCS since launched three programmes that aim to incentivize wildlife conservation by linking wildlife sightings by ecotourists with cash payments. Due an unpredictability in sightings, WCS has integrated infrared camera-traps into two programmes, similarly generating additional income to local communities for each wildlife photographed. While market-based governance schemes have been championed by environmental institutions, this thesis provides evidence that such processes are messy, variegated, and produce questionable results. Crucially, this thesis argues that the PES-ecotourism project spearheaded by WCS imposes a regulated market to replace a pre-existing market in wildlife trade, demonstrating that the process of value creation via commodification also requires a devaluation via decommodification.

## ACKNOWLEDGMENTS

I first and foremost would like to express my utmost gratitude toward my undergraduate professor, Maureen Sioh, who encouraged me to continue higher education, despite my initial reservations. Maureen was more than just a professor to me; rather, she was my mentor. Her encouragement gave me strength and helped shape me into the student that I am today.

I would like to thank Touy for being both my research assistant and my friend. Touy went above and beyond to help accommodate the many requests that I had during my fieldwork, providing access to places critical to my research. He even spent much of his day helping find my wallet that I had lost during my final few days of fieldwork, and for that I am eternally grateful to him.

I would like to thank the WCS staff, the GIZ staff, Lao government officials, and local tourism authorities all working together at the NEPL-NPA in Houaphan, Lao PDR. Their coordination and support was invaluable to this entire project.

Furthermore, I would like to give a special shout out to my friends at Tiger Trail Travel, a destination management company in Luang Prabang that I was employed at prior to entering graduate school. It was an incredible experience to be able to assist in the production of their short film on the NEPL-NPA.

I especially would like to thank my two supervisors, Peter Vandergeest and Elizabeth Lunstrum, for their continued support and encouragement. Not only did they push me to think more creatively about my topic, but they made me a better thinker and writer. Overall my thesis has greatly benefited from their constructive feedback and helpful advice.

I would like to thank the Geography department and the York Centre for Asian Research (YCAR). I want to make special note of my colleagues in Geography and a friend in Political Science at York University, who offered their unconditional support and assistance every step of the way, including those who expressed interest in reading early drafts of my thesis.

This research was supported and funded by the New Directions in Environmental Governance (NDEG) project at York University in Toronto, Canada.

## TABLE OF CONTENTS

ABSTRACT.....	ii
ACKNOWLEDGMENTS .....	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES .....	vi
LIST OF FIGURES .....	vii
LIST OF PHOTOGRAPHS .....	viii
LIST OF TERMS.....	ix
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background.....	1
1.2 Purpose of Study.....	5
1.3 Conceptual Framework.....	6
1.3.1 Conservation .....	8
1.3.2 Neoliberalism.....	12
1.3.3 Ecotourism.....	14
1.3.4 Payments for Ecosystem Services (PES).....	16
1.3.5 Commodification .....	19
1.4 Contribution .....	23
1.5 Chapter Outline.....	25
CHAPTER TWO: METHODOLOGY & RESEARCH SITE.....	27
2.1 Research Questions.....	27
2.2 Approach.....	27
2.3 Data Collection .....	28
2.4 Site Selection and Access .....	33
2.4.1 Vieng Thong .....	36
2.4.2 Ban Sonkhoua .....	38
2.4.3 Southern Laos .....	39
2.5 Participants.....	40
2.5.1 WCS Employees .....	41
2.5.2 Community Members .....	42
2.6 Positionality .....	43
2.7 Assumptions and Limitations .....	44
2.7.1 Assumptions.....	44
2.7.2 Limitations .....	45
CHAPTER THREE: THE CONSERVATION PROJECT IN NEPL .....	49
3.1 Creating the NEPL-NPA.....	50
3.1.1 International support and WCS's entrance .....	50

3.1.2	Territorialization and zoning in NEPL-NPA .....	55
3.1.3	Wildlife Enforcement and Awareness .....	57
3.2	Developing the PES-Ecotourism Project .....	63
3.2.1	Ecotourism and PES .....	63
3.2.2	Promoting Ecotourism in Houaphan.....	66
3.2.3	The Nam Nern Night Safari.....	67
3.2.4	Village Development Fund .....	71
3.2.5	Spotlighting Wildlife, Generating Benefits .....	77
3.2.6	The Nests & Cloud Forest Climb: Camera Traps for Conservation.....	81
3.3	Conclusion .....	84
CHAPTER FOUR: COMMODIFICATION/DECOMMODIFICATION OF ‘NATURE’ .....		86
4.1	Imposing Market-based Conservation .....	87
4.1.1	Former Hunting Value .....	88
4.1.2	Protecting Tigers and Tiger prey .....	93
4.1.3	Creating Conservation Value.....	98
4.2	Wildlife Commodification/Decommodification.....	101
4.2.1	Wildlife as Ecosystem Service.....	105
4.2.2	Monetizing Ecosystem Services .....	107
4.3	Tensions and Inequalities.....	114
4.4	Conclusion .....	123
CHAPTER FIVE: DISCUSSION AND CONCLUSION .....		125
5.1	Chapter Review.....	128
5.2	Potential Improvements to Market-based Conservation Schemes.....	131
5.3	A New Direction for Environmental Governance? .....	134
REFERNCE LIST.....		136
APPENDICES .....		146
Appendix A: Permission Letter .....		146
Appendix B: Fieldwork Questionnaire .....		148
Appendix C: Preliminary Fieldwork Questions.....		149

## LIST OF TABLES

Table 1: Interviewees associated with project .....	42
Table 2: Village interviewees .....	43
Table 3: A breakdown of the PES-Ecotourism project in NEPL-NPA .....	65
Table 4: Wages and additional bonuses distributed on NNNS .....	75
Table 5: Village Ecotourism Benefit Calculation for Year 5: 2013-2014 .....	77
Table 6: Average market prices in 2001 for wildlife species in Southeast Asia (Nooren et al. 2001) .....	89
Table 7: Allocation of funds generated by the sale of the original ‘Nam Nern River Trip’ .....	108
Table 8: Wildlife monitoring form in 2016 .....	109
Table 9: Wildlife monitoring form in 2010 .....	110
Table 10: Number of tourists participating in the NNNS by season .....	118

## LIST OF FIGURES

Figure 1: Location of the NEPL-NPA in Lao PDR .....	33
Figure 2: Detailed map of the NEPL-NPA in Houaphan province .....	35
Figure 3: Simplified map of Vieng Thong.....	37
Figure 4: Tiger conceptual model designed by WCS .....	55
Figure 5: The contract .....	73
Figure 6: The transformation of value as a result of the PES-ecotourism project .....	104

## LIST OF PHOTOGRAPHS

Photograph 1: Guns and snares collected and set on fire outside the NEPL office.....	60
Photograph 2: Wildlife board given to ecotourists on the NNNS .....	79
Photograph 3: Viewing wildlife on a digital camera with SD card from camera trap.....	83
Photograph 4: Tiger conservation sign in Sonkhoua placed near the start of the NNNS.....	95

## LIST OF TERMS

<b>Lao PDR</b>	Lao People’s Democratic Republic (also ‘Laos’)
<b>NEPL</b>	Nam Et-Phou Louey
<b>NPA</b>	National Protected Area
<b>NBCA</b>	National Biodiversity Conservation Area
<b>GoL</b>	Government of Lao PDR
<b>DoF</b>	Department of Forestry
<b>MAF</b>	Ministry of Agriculture and Forestry
<b>MoNRE</b>	Ministry of Natural Resources and Environment
<b>WCS</b>	Wildlife Conservation Society
<b>WWF</b>	World Wildlife Federation
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit
<b>NORAD</b>	Norwegian Agency for Development
<b>GEF</b>	Global Environment Facility
<b>CLIPAD</b>	Climate protection through avoided deforestation
<b>MA</b>	Millennium Ecosystem Assessment
<b>PES</b>	Payments for Ecosystem Services
<b>REDD</b>	Reducing emissions from deforestation and forest degradation
<b>KfW</b>	German Development Bank
<b>AFD</b>	French Development Agency
<b>FFEM</b>	French Facility for Global Environment
<b>AbC</b>	Accumulation by Conservation
<b>IUCN</b>	International Union for Conservation of Nature
<b>NTFP</b>	Non-Timber Forest Products
<b>USFWS</b>	U.S. Fish and Wildlife Service
<b>LNTA</b>	Lao National Tourism Administration
<b>SNV</b>	Netherlands Development Organization
<b>ADB</b>	Asian Development Bank
<b>NGO</b>	Non-governmental organization
<b>CBD</b>	Convention on Biological Diversity
<b>NNNS</b>	Nam Nern Night Safari
<b>MBI</b>	Market-based instrument
<b>CITES</b>	Convention on International Trade in Endangered Species
<b>ICEM</b>	International Center for Environmental Management
<b>UNDP</b>	United Nations Development Program
<b>ASEAN</b>	Association of Southeast Asian Nations
<b>GMS</b>	Greater Mekong Subregion
<b>MICT</b>	Ministry of Information, Culture and Tourism of Lao PDR

## CHAPTER ONE: INTRODUCTION

This thesis broadly focuses on novel forms of environmental governance in natural resource management by investigating the development of market mechanisms for biodiversity conservation and wildlife protection. I examine the engagement of a non-governmental organization (NGO), the Wildlife Conservation Society (WCS), in the development of market mechanisms for biodiversity conservation and wildlife protection in a national protected area that is situated in the uplands of the Lao People's Democratic Republic (Lao PDR). As a focal point for this inquiry, I highlight two mechanisms that rely on market forces to ensure the conservation and protection of key wildlife species: (i) ecotourism and (ii) payments for environmental services (PES) schemes. I draw together these two mechanisms to reveal the particularly modern construction of Nature<sup>1</sup> through conservation interventions; the materialization of neoliberal rationality in wildlife conservation; the active production and consumption of a revalued and monetized Nature; and the formation of hidden power asymmetries between actors at various scales. My analysis thus draws from empirical research on the conservation project, the PES-ecotourism project, that is unfolding at the Nam Et-Phou Louey (NEPL-NPA) in north east Lao PDR. I argue that the PES-ecotourism imposes a regulated market to replace a pre-existing market in wildlife trade, demonstrating that the process of value creation via commodification also requires a devaluation via decommodification.

### 1.1 Background

The Lao PDR is the only landlocked country in the Southeast Asian region, sharing a border with Thailand, Myanmar, China, Vietnam, and Cambodia. Its biodiversity, widely considered to

---

<sup>1</sup> I use the capital 'N' Nature to acknowledge the dualistic nature-society binary, a romanticized Nature that exists in absence of and external to humans.

be of *global* significance, consists of evergreen forests of the Annamite Mountains, the central Indochina limestone karst, dry dipterocarp forests of the Mekong Plain, the Bolavens Plateau, the northern highlands, and rivers and streams of the Mekong River (Robichaud et al. 2001, 10; Holmgren et al. 2003, 7; ICEM 2014, 7). This biological diversity that extends throughout the country is equally reflected in its ethnic diversity. As of 2015, the total population in the country was 6.9 million, with 45% of the population belonging to one of the 49 ethnic minorities officially recognized by the Government of Lao PDR (GoL) (CIA n.d.). The Lao PDR is thus highlighted as being one of the few countries in Southeast Asia's Greater Mekong Subregion (GMS) with such a high rate of ethnic, linguistic and biogeographic diversity.

In a recent publication from The Royal Society, some of the world's top scientists agreed that a "Sixth Mass Extinction" is underway due to rapid biodiversity loss worldwide. Out of the 301 terrestrial mammal species threatened with extinction by hunting, 113 of these species are concentrated in Southeast Asia (Ripple et al. 2016, 5). In addition to hunting, they argue that these countries "have poorer populations, generally lower food security than richer countries, and less capacity to deliver conservation" (Ripple et al. 2016, 8). Moreover, in the Global Environment Outlook (GEO-5), published by the United Nations Environment Programme (UNEP), the global threats to biodiversity are species extinction and a loss of habitats that are partly driven by a high demand for wildlife (UNEP 2012, 140-142). Thus, hunting is widely considered to be the main threat facing wildlife populations worldwide, given its demand in markets outside of Southeast Asia, with poverty considered one of its main drivers.

The implications of an increased integration of market rationality in biodiversity and wildlife protection initiatives are wide-ranging and largely unknown. As protected areas in the Lao PDR, and across the world, face budgetary constraints and a reduction of funds (James et al. 1999;

Bruner et al. 2004), policymakers and conservationists alike are turning toward the market for sustainably financing biodiversity conservation and wildlife protection. According to the GEOG-5, “innovative financial mechanisms are considered essential tools to mobilize additional resources for biodiversity. These include payment for ecosystem services, biodiversity offsets, ecological fiscal reforms, markets for green products and biodiversity in new sources of international development finance” (UNEP 2012, 157). Therefore, this thesis focuses on market driven conservation models that have been promoted as a win-win solution for both policymakers and on the ground community members (see Van Wilgen et al. 1998; Miles and Kapos 2008; Costello et al. 2012). In the NEPL-NPA, WCS has actively worked together with the government of the Lao PDR (GoL) to develop ecotourism that incorporates a PES-like scheme to help fund wildlife protection.

Nam Et and Phou Louey (NEPL) National Biodiversity Conservation Areas (NBCAs) are a single ecological and management unit referred jointly by their hyphenated name: Nam Et-Phou Louey. The protected area unit share a contiguous area and a common boundary that stretches 30 kilometers long. At approximately 595,000 hectares, it is the second largest protected area in Lao PDR, covering seven districts and three provinces: Houaphan, Luang Prabang and Xieng Khouang (WCS and MoNRE n.d.). Leading conservation scientists and forestry officials have considered the protected area to be the most biologically diverse areas in the northern region of the Lao PDR, harboring vulnerable and endangered species, and rare flora and fauna (Emerton 2005, 3; MAF and IUCN 1998).

In a review of protected areas for the International Centre for Environmental Management (ICEM) and IUCN, Lucy Emerton, chief economist at the Environmental Management Group, notes that national statistics for Lao PDR have miscalculated and underestimated the importance

of biodiversity. The full value of biodiversity, according to Emerton, contributes to three-quarters of per capita GDP, more than 90 percent of employment, almost 60 percent of exports and foreign exchange, provides under a third of government revenues, and represents half of foreign direct investments (Emerton 2009, 91). An IUCN report claimed that the direct use of biodiversity in the Lao PDR, at both household and commercial levels, could be worth approximately \$650 million per year (Emerton 2005, 7). In short, economists and non-governmental organizations alike believe that biodiversity generates very high — and quantifiable — economic benefits in the Lao PDR. This feeds into the dual objective of conservation and sustainable development that WCS seeks to reconcile by aiming to monetize ecosystem services as a PES-like scheme coupled with ecotourism activities in NEPL-NPA.

WCS has operated in the Lao PDR since the early 1990s, ensuring that communities and government institutions protect wildlife (Wildlife Conservation Society n.d.). Since 2004, WCS teamed up with the Netherlands Development Organization (SNV) and the provincial tourism office to survey the potential for ecotourism activities to benefit wildlife conservation and local residents (Johnson 2013, 86). In 2009, WCS and national protected area staff worked together with a consultant team from the University of California, Berkeley to develop an ecotourism business plan. This business plan led to the establishment of the Nam Nern Night Safari, a 24-hour boat-based ecotour into the protected area, in 2010 (Johnson 2013, 86). The success of the Nam Nern Night Safari was widely attributed to the process of placing a value on wildlife and incentivizing residents against poaching rare species through payments (WCS and MoNRE n.d.).

Building on this success, WCS announced in late 2015 the opening of two new ecotourism treks, ‘The Nests’ and ‘Cloud Forest Climb,’ which they planned to operate in late 2016. What sets these treks apart is the introduction of a new technology, automated camera-traps, as the main

mechanism by which WCS determines payments. Although the process of successfully surveying wildlife species via camera-traps requires months of work (WCS and Lux-Development 2008), a creative way to solve this dilemma is the use of camera-traps as part of the ecotourism experience (McCann 2014).

These three ecotourism tours form the basis of the ecotourism project that WCS is actively promoting within the NEPL. WCS asserts that ecotourism is an alternative livelihood practice that can benefit residents through the establishment of a village fund that channels financial resources to families living in the protected area (Wildlife Conservation Society n.d.). This aligns with advice given by the UC Berkeley team, that attracting ecotourists from abroad to learn about wildlife will incentivize residents to hunt fewer protected species and pressure the Lao government to support conservation and wildlife protection (Bhula et al. 2009, 20). This wildlife-based tourism model is the first in the Lao PDR to use tourism as an alternative livelihood strategy to compensate for reduced forest access. To put it another way, it is a model that aims to incentivize wildlife conservation — with the simultaneous disincentivization of hunting — through monetizing wildlife species via ecotourism.

## **1.2 Purpose of Study**

The purpose of this thesis is to critically investigate the widespread adoption of market-based conservation approaches in natural resource management schemes. I seek to highlight the vast and far-reaching implications of an increasing tendency of resource managers to incorporate market-based instruments (MBIs), that are informed by a neoliberal rationality, for reconciling development and conservation goals alike. This is largely driven by the assumption that wildlife conservation can be rendered profitable through its very monetization. Furthermore, the deployment of these market-mechanisms hinges upon a prior spatial separation of humans from

Nature, one rooted in the assumption that conservation occurs in the absence of human interaction with Nature. Relatedly, this lays the groundwork for an investigation into the construction of binaries and shifting frontiers that separate humans from non-human Nature, and commodities from an uncommoditized Nature.

My thesis demonstrates that the very process of *commodification* inherently includes a simultaneous process of *decommodification*. To put it a different way, by analyzing the nexus between ecotourism and PES, I demonstrate that the act of monetizing wildlife for its protection requires a simultaneous devaluation of wildlife. The implications of such an assertion provides a critique of the literature on PES and ‘Neoliberal Natures.’ Moreover, this casts doubt on the efficacy of markets to act as a corrective mechanism for environmental management. I then question the future directions of environmental governance in nature resource management in Lao PDR and abroad.

### **1.3 Conceptual Framework**

First and foremost, I situate my thesis within the political ecology tradition of geography. Political ecology is useful when investigating the development of ecotourism for conservation as the field approaches environmental issues through the lens of power relations, and sews together the concerns of ecology with a “broadly defined political economy” (Blaikie and Brookfield 1987, 3). A political ecological framework informs my analysis by considering “how struggles over human rights, social justice and poverty are linked to the politics of environmental conservation and degradation (Neumann 2005, 2–3). This elucidates power asymmetries that arise after the development and implementation of the conservation project, which I describe in Chapter 04. More importantly, political ecology crucially provides an ontological critique that, “legitimise[s]

coercive policies pursued by states and conservationists that seek to separate land managers from the land and resources from which they derive livelihoods” (Vandergeest and Peluso 2015, 29-30). I investigate this spatial separation, one which I claim forges a binary between Nature and people for the purpose of conservation, throughout my study of the NEPL-NPA. I am concerned with the way in which the project holds up the dualistic notion that species conservation occurs in the absence of direct human interference, when the hunting of such species relates more to income derived from livelihoods than the spatial location of villages.

Building on this political ecology foundation, I utilize the following five concepts as the theoretical underpinning to my thesis: conservation, neoliberalism, ecotourism, PES schemes, and commodification. I chose these specific concepts as they contribute to my overarching argument on the PES-ecotourism project unfolding in the NEPL-NPA in Northeastern Lao PDR. First, *conservation* plays an important role as a major justification for the development of ecotourism and PES activities within the protected area. Conservation hinges on the notion of ‘biodiversity,’ and this physically manifests itself in the territorial creation of protected areas nationwide, and arguably worldwide. Second, *neoliberalism* is important theoretical grounding when discussing new developments in natural resource governance through the combination of non-state actors in pursuit of market-based approaches as an attempt to correct conservation issues. Third, an analysis into both *ecotourism* and *PES schemes* is necessary for understanding all aspects of the conservation project spearheaded by WCS and the GoL as it unfolds in the NEPL-NPA. Finally, and relating to neoliberalism, my inquiry into commodification of nature, or how natural entities and processes are made exchangeable through the ‘market,’ is directly related to way in which the conservation project attempts to not only create a market, but supplant a market with a regulated one built upon ecotourism and PES.

### *1.3.1 Conservation*

I draw attention to ‘biodiversity conservation’ to complicate the push for protected area development in the Lao PDR. A significant objective for the promotion of conservation and development in protected area systems hinges on this concept of ‘biodiversity’ as reflected in Article 2 of Convention on Biological Diversity (CBD) (CBD n.d.). In a recent report on the assessment of biodiversity and protected areas, UNEP scientists noted, “protected areas in Asia are the last remaining strongholds for biodiversity, for preserving natural capital and providing ecosystem services to vulnerable local communities” (Juffe-Bignoli et al. 2014, 57). While broadly understood to be the variety of life, biodiversity is a concept considered to be a rather modern, scientific invention that is promoted by scientists for specific political endeavors (See Guyer and Richards 1996; Takacs 1996; Väliverronen 1998). Despite this, biodiversity continues to be mobilized by state and non-state actors for conservation initiatives through an expansion of territorially bounded protected areas. For instance, the World Wildlife Fund (WWF) claims that, “when we say we want to save the planet, we use the word ‘biodiversity’ to encompass this entire concept” (World Wildlife Fund n.d.). Moreover, leading ecologists agree that, “protected areas (both existing and future) are the main hope for preserving the biodiversity of Southeast Asia” (Sodhi et al. 2004, 658 [emphasis added]). International actors thus mobilize ‘biodiversity’ in an effort to push for conservation through the development of protected areas across Southeast Asia. This can be similarly seen in the call for biodiversity conservation in the development of a state-wide protected area system in the Lao PDR.

In the Lao PDR, as in much of Southeast Asia, World Bank economists have decided that the most pragmatic way to manage and effectively preserve biodiversity and the natural

environment is through the creation of a delimited and well-managed protected area system (Braatz 1992, ix). These international actors have even gone so far as to claim that the mere survival of many species in the region depends on the existence of protected areas (WWF 2013, 50). The development of highly regulated protected areas on a global scale gained traction in 1980, when the International Union for Conservation of Nature (IUCN) and the WWF joined hands in forming the World Conservation Strategy. The keystone of this strategy was the proposed establishment of a network of protected areas that were believed to conserve species and ecosystems to their “original state” (MacKinnon and MacKinnon 1986, 3). In other words, protected areas were believed to conserve and subsequently restore areas of biodiversity to a ‘pristine’ equilibrium state that existed prior to human intervention. In a 1986 report collaboratively prepared for the IUCN, the GOL suggested thirteen areas to be delineated as national parks (MacKinnon and MacKinnon 1986, 261). At that time, the Lao PDR had no formally protected areas other than several unmanaged forest areas established under the former colonial administration (Berkmüller et al. 1995, 254). Due to the significance of biodiversity to the international community at large, the commissioned report urged the Lao PDR to take an active lead in protecting its biological diversity. They concluded that the country “would benefit from international assistance in the form of funding and expertise for establishing a system of protected areas” (MacKinnon and MacKinnon 1986, 261). Thus, one of the only ways for the Lao PDR to become a modern country was to set aside large swaths of land to become protected areas.

Conservation plays an important role as a major justification for ecotourism activities to take place within the NEPL protected area. The discourse on conservation within national parks or protected areas worldwide can be traced to key debates regarding the protection of natural resources and wildlife through a “fortress-style” method of conservation, where residents are

marginalized and excluded (Brockington 2002; Hartter et al 2011; Neumann 1998; Spence 1999; Siurua 2006). These debates tend to stem from an understanding of an internal territorialization, whereby the state controls natural resources and the people who use them (Vandergeest and Peluso 1995). While these methods were popularized in the context of Africa, conservation practices have taken a similar route in Southeast Asia in the 1960s and 1970s. Though more recently in Southeast Asia, there has been more of a push for an integrated approach, one that allows for some sustainable use by local communities (Hirsch 2017, 166). The notion of a state-sanctioned removal of people through the process of internal territorialization, coupled with a more integrated approach of landscape management for local communities, is essential for understanding the process of boundary-making and internal zonation within the NEPL-NPA.

### Hunting and Wildlife Conservation

In Laos, strong hunting traditions among minority ethnic groups, the disruption of agricultural activities during the American War, and its geographical proximity to Vietnamese markets all contribute to high levels of hunting despite low population densities (Harrison et al. 2016, 5). Harrison et al. argue that there must be a refocus of tropical conservation away from deforestation prevention toward the immediate threat of hunting large mammals in Southeast Asia. For hunting to be reduced, they argue that authorities and conservation NGOs must not only improve cooperation with local communities through education, but develop “opportunities for co-benefits from wildlife” (2016, 18). Policy-makers make the assumption that continued wildlife hunting is a problem partially rooted in a lack in monetary benefits derived from conserving species (see Ripple et al. 2016). Similarly, the justification for WCS in developing a conservation programme that provides monetary benefits for conservation relies on this assertion. In other

words, there is a general consensus among such debates that poverty is the main deterrent to achieving conservation goals. According to Duffy et al., “it follows logically that illegal wildlife hunting can supposedly be tackled via provision of paid employment (e.g. as rangers, tour guides etc.) which increases levels of material wealth, or via alternative income generation of disbursement schemes...” (Duffy et al. 2016, 16).

Conservationists also recognize that conservation cannot rely on an ecological understanding alone, and must involve a deeper understanding of behaviours and motivations (Ripple et al. 2016, 9). One way is to develop innovative methods to alter human behaviours through incentive structures. For instance, positive incentives (e.g. monetary benefits) can encourage compliance, while negative incentives (e.g. punishment) can deter rule-breaking. Therefore, highlighting factors that would most strongly impact villagers’ intention to engage in illegal wildlife hunting “can provide valuable insights when seeking to influence behavior” (Duffy et al. 2016, 18-19). Policymakers that tout these positive incentives tend to favor the market as a panacea for wildlife protection. Their claims rest on the idea that tourism can reduce poverty, provide economic incentives to individuals and communities, and encourage people to change their behaviours toward wildlife (UNEP et al. 2013 cited in Duffy et al. 2016). However, these positive incentives may not provide adequate benefits to local communities. Thus, Duffy et al. conclude that, “effective responses will require viewing illegal wildlife hunting as a challenge related to development rather than purely conservation” (Duffy et al. 2016, 19-20). I empirically illustrate in my thesis that the project unfolding at NEPL-NPA includes development as an integrated approach that aims to achieve the dual objective of wildlife conservation and economic growth.

### 1.3.2 *Neoliberalism*

In the Lao PDR and throughout the world, market-oriented approaches toward managing the environment are increasingly becoming common as proponents consider them to be an incentive to efficiently conserve forests and the benefits they provide (Bishop and Pagiola 2002, 1). Simply put, these are an example of what Kathleen McAfee calls “selling nature to save it” (McAfee 1998). This turn toward the market signals a general shift toward neoliberalism (or rather neoliberalization): how governance over the environment is dictated by the forces and practices of markets with related knowledge systems, norms, institutions and rationalities (Fletcher, Dressler, and Büscher 2015; Forthcoming in Barney 2016). This neoliberal pivot follows market rationality by rearticulating former ways of regulating the behaviour of residents through coercive forms of conservation (Dressler and Roth 2010).

However, Keith Barney notes a central paradox with the portrayal of neoliberalism as a hegemonic form of political and economic order and rule in Southeast Asia. Barney contends that the Lao PDR could be considered an illiberal or “quasineoliberal” institution due to the military, certain Lao bureaucratic institutions, elite families connected to the Lao People’s Revolution Party (LPRP), and private entities profiting through patronage and rent-seeking instead of market-based competition. I build on Barney’s claim that scholars, “must understand how political-economic power and authority are being (re)organized in Southeast Asian states” (Forthcoming in Barney 2016, 9). This is not a rejection of neoliberalism’s force in transforming socio-natures, but an investigation into how authority and power are reconstituted in the management and development of market activities in the NEPL-NPA.

Elaine Hartwick and Richard Peet maintain that the relationship between neoliberalism and Nature is the promotion of markets by governments to reconcile growth with environmental

protection in mainstream environmental policy (Hartwick and Peet 2003). Bram Büscher argues that neoliberal conservation is an “amalgamation of ideologies and techniques” that informs how Nature is re-evaluated in capitalist terms, and is subsequently conserved in and through the expansion of capitalism (Büscher 2012). I find it useful to use this conceptual framing when investigating the promotion of PES schemes within the NEPL-NPA, one which revalues and recapitalizes Nature. Furthermore, James McCarthy and Scott Prudham drawn on Karl Polanyi’s “self-regulating market” to demonstrate the links between both liberal and neoliberal environmental conservation and governance (McCarthy and Prudham 2004). The idea of a self-regulating market provides one explanation as to why WCS is turning toward the market through ecotourism and PES activities in order to incentivize conservation and wildlife protection. In this case, the self-regulating market for wildlife trade is being replaced by an instituted, regulated market for ecotourism sightings.

Finally, I build on Megan Youdelis’s (2013) study of ecotourism as a conservation strategy in the village of Ban Mae Klang Luang in Northern Thailand, showing that the incorporation of PES into ecotourism’s mode of operations reveals an intensification of the governmentalizing process that produces a contradiction between development and conservation goals in the Lao PDR. This will better pave the way for understanding what scholars have termed “actually existing neoliberalisms” (Brenner and Theodore 2002; Peck and Tickell 2002; Cahill 2010; Peck et al. 2017), or the contextual *embeddedness* of neoliberalism that I aim to locate within natural resource management. I maintain that by centering this research inquiry on how neoliberalism plays out in practice can highlight the lived realities of those adversely impacted by the PES-ecotourism nexus.

### 1.3.3 *Ecotourism*

When describing tourist programmes in the NEPL-NPA, I employ the term ‘ecotourism,’ as it more clearly addresses the relationship between conservation and tourist engagement. Lotha Machura is often credited for first proposing in 1954 that tourism as a whole consider the protection of nature (Fennell 2015, 10; Machura 1954, 310). However, the origin of the concept of ‘ecotourism’ (or sometimes ‘eco-tourism’) is generally credited to Nicholas Hetzer, who in 1965, called for a form of tourism that fostered an intricate relationship between tourist, the natural environment, and local cultures (Hetzer 1965; Weaver 2001, 5; Fennell 2003, 17; Higham 2007, 2; Cheia 2013, 56).

In general, ecotourism is often defined as the antithesis to “mass tourism,” whose effects are particularly pronounced in areas of intense tourist growth with delicate environments, most of which are in developing countries (Cohen 1978, 232). Although it is contrasted with mass tourism, ecotourism presents a paradox by which proponents advocate for both preservation and development at the same time (Higham 2007, 24). For instance, critics have called ecotourism a short-term marketing ploy with few environmental benefits that has “metamorphosed into the equally deceptive oxymoron of mass ecotourism” (Wheeller 1997, 48). Similarly, the call for a “sustainable mass tourism” (Weaver 2007) has been criticized as being a contradiction by its very definition (Wheeller 2007). Despite this, ecotourism continues to take hold throughout the world, providing a method for conserving the environment.

There have been difficulties in coming to a consensus over the appropriate definition of ecotourism for scholars, many of who have drawn divided and often polarizing lines of debate within academia (Blamey 1997; Fennell 2001; Donohoe and Needham 2006; Björk 2007). Part of this stems from other terms with similar, overlapping definitions: nature-based tourism, alternative

tourism, sustainable tourism, ethical tourism, responsible tourism, progressive tourism, green tourism, wildlife tourism and so on (Fennell 2015, 13; Mowforth and Munt 1998, 100). To avoid giving a laundry list of definitions, I base my study on how WCS defines ecotourism. WCS describes it as, “an alternative livelihood that can benefit individual families and communities through village fund generation that [is] directly linked to ecosystem health” (Wildlife Conservation Society n.d.).

The first ecotourism project in the Lao PDR was launched in 1999 through the Office of the UNESCO Regional Advisor for Culture in Asia and the Pacific in the Nam Ha NBCA (Lyttleton and Allcock 2002, 8). Resource managers argue that there must be a powerful incentive for the conservation of protected areas at both the community and governmental level if “local communities are empowered as stewards of the natural resource base” (Schipani and Marris 2002, 10). The development of ecotourism in Nam Ha is predicated on the value of biodiversity conservation, which ecotourism advisors promote as a viable alternative to the conversion of large swaths of forests into rubber plantations (Schipani 2007). While rubber plantations are not a large concern in the NEPL-NPA, this programme has a similar rationale for the development of ecotourism by WCS; it is promoted as an alternative livelihood to the hunting and consumption of wildlife, among other ecological concerns.

Ecotourism is also associated with sustainable rural development, especially within the context of the Global South. This differs from what many have called “pro-poor tourism,” where poverty alleviation and human development are the ends rather than the means (Chok et al. 2007, 149). However, literature on ecotourism sometimes ignores the conceptually complex nature of biodiversity and poverty, often dealing with such terms as self-evident concepts, choosing to focus on simplistic economic measures of poverty and general understandings of conservation (Agrawal

and Redford 2006, 20-21). A promotional video for NEPL considers it to benefit “Asia’s most vulnerable people” (WCS 2015). Thus, one way to reconcile poverty, vulnerability and development is through paid employment. For instance, local people benefit from ecotourism via paid direct employment opportunities as guides, cooks or other service-based jobs. With the advent of PES in the NEPL-NPA, local people now benefit indirectly through the sightings of particular wildlife species by ecotourists on tour. However, this new form of employment unintentionally creates tensions within communities stemming from inequalities that can deter wildlife conservation.

#### *1.3.4 Payments for Ecosystem Services (PES)*

The justification for promoting conservation of protected areas, particularly the NEPL-NPA is its ecosystem and its ability to harbour select wildlife species. In the last few decades, there has been a shift in the way that ecosystems are conceptualized. This departs from a more ecological approach to ecosystems, one that broadly understands that humans benefit from ecosystems in a variety of ways, toward an economic understanding of ecosystems as *providing* particular services to humans. The ecosystem services concept itself was popularized and widely adopted by decision-makers worldwide after the publication of the “Millennium Ecosystem Assessment,” a UN-backed report in 2005 that assessed the state of global ecosystems. According to the MEA, Ecosystem Services (ES) are benefits obtained from *nature* that satisfy *human* needs and simultaneously fulfilling other species requirements (MEA 2005) [emphasis added]. Therefore, Payments for Ecosystem Services (PES) economically reward] resource managers for the provision of ecosystem services. While not promoted heavily as a PES scheme itself, I argue that the conservation project spearheaded by WCS in the NEPL-NPA consists of a PES-like scheme.

To help inform decision-makers on the important value of ‘Nature,’ economists helped assign monetary values toward these ecosystem services. Sven Wunder argues that there are two different type of PES schemes: area-based schemes and product-based schemes. The project in NEPL-NPA exemplifies a product-based scheme, one where “consumers pay a ‘green premium’ on top of the market price for a production scheme that is certified to be environmentally friendly, especially vis-à-vis biodiversity (Pagiola and Ruthenberg 2002 cited in Wunder 2005, 7). Wunder maintains that ecotourism is a premium that is “meticulously linked to the *use or non-use values* of pristine habitat” (Wunder 2005, 7) [emphasis added]. Drawing PES and ecotourism together, the ecotour programme in NEPL-NPA places a “premium” that, despite not formally certified as ‘environmentally friendly’ by any third-party certification scheme, pays for the sustainable non-consumption of ‘rare’ or ‘endangered’ animals species in NEPL-NPA. In other words, the product that is sold is not only the ecotour itself, but also the presence of wildlife. The project privileges the mere existence of wildlife for tourists as the “use value,” and disincentivizes former practices of wildlife hunting in these areas.

There is a fairly substantial, and rapidly growing, body of literature on the economic value of ecosystem services. In the Lao PDR, Lucy Emerton highlights the linkages between biodiversity and the economy, arguing that “biodiversity may in fact be one of the most important sources of economic production and consumption in the country” (Emerton 2009, 91). In particular, the Millennium Ecosystem Assessment pointed to the anthropogenic understanding that in the past fifty years, humans have altered ‘Nature,’ causing a “substantial and largely irreversible loss in the diversity of life on Earth” (MEA 2005, 1). While the authors assert that such changes have contributed to gains in human well-being and economic development, it has paradoxically created numerous “costs in the form of degradation of many ecosystem services....and the exacerbation

of poverty for some groups of people” (MEA 2005, 1). Furthermore, biodiversity loss can negatively impact populations living around the area that has been set aside for protection, many of whom otherwise lack alternative sources of income and are unable to bear social and economic costs (Emerton 2009, 92).

One way to help mitigate such an irreversibility in degradation, according to the MA report, is by way of financial and economic interventions. This would be in the form of monetary incentives for the regulation of ecosystem services and goods (MEA 2005, 21). This is a direct example of “selling nature to save it” (McAfee 1998); it is a fundamental contradiction of capitalism, one which seeks to solve the very problem that it creates. Such an approach can come in the form of ecotourism user fees, the creation of markets for carbon, payments for ecosystem services, or certification schemes that allow consumers to express their preference through the market (MEA 2005, 21–22). Ecotourism, according to the report’s authors, “can provide economic alternatives to converting ecosystems, however it can generate conflicts in resource use and the aesthetics of certain ecosystems...yet when conservation receives no budgetary subsidy, tourism can provide revenues for conservation” (MEA 2005, 130). In Cambodia, ecotourism-based revenue sharing schemes have become a common form of rewarding local people for conserving animals. Local people might not simply receive a share of tourism revenues on a regular basis but obtain payments on the basis of wildlife sightings by tourists (Clements et al. 2010). In the Lao PDR, WCS continues to expand and further develop ecotourism activities within the NEPL-NPA based primarily on the notion that funds generated from ecotourism operations constitutes a sustainable method to finance conservation outcomes.

### 1.3.5 Commodification

I draw on political ecology and Marxist geography to address the ‘commodification of nature,’ broadly understood through a Marxian lens. According to Arjun Appadurai, a commodity is basically defined as an “object of economic value” (Appadurai 1986, 3), or as Karl Polanyi notes, an “object produced for sale on the market” (Polanyi 2001, 75). Commodities take two forms of value: use and exchange. As Marx wrote, the use value of a commodity is tied to “the physical properties of the commodity” where its use is realized through its consumption, following the human need that it fulfills (Marx and Fowkes 1990, 126). Yet Karl Marx famously understood that commodities only exist insofar as they were produced for the *purpose of exchange*. For a good to be exchanged on the capitalist market, its exchange value “must be reducible to a third thing,” usually taken the form of money. Thus, according to Marx, “the exchange relation of commodities is characterized precisely by its abstraction from their use values” (Marx and Fowkes, 127).

Building on his close examination into commodities as exhibiting both use values and exchange values, Marx pointed out that such exchange value, money, often hides the labour it takes to produce a commodity. He concluded by stating that exchange values “are merely definite quantities of congealed labour-time” (Marx and Fowkes 1990, 130). While analyzing the notion of labour-time in the production of wildlife commodities would generate interesting contradictions, for reasons of time constraints I am only choosing to analyze only use value and exchange values in relation to wildlife commodification within protected areas of the Lao PDR.

The process of commodifying entails the way in which goods and services are converted into an exchangeable form. Principally, commodification has specific elements as described in contemporary Marxist writings: privatization, individuation, abstraction, valuation and displacement (Castree 2003). Throughout my project, I focus on *valuation*, the way capitalist

commodities are monetized and given a price. I want to center my critique on the particular *process* of commodification — or the way in which a non-commodity becomes a commodity and is ascribed value.

This relates back to ‘primitive accumulation,’ or the enclosure of the commons that Marx referred to in *Capital* (Marx and Fowkes 1990, 873). According to Scott Prudham, a fundamental pre-condition to primitive accumulation and commodification was the political creation of property rights (Perreault et al. 2015, 433). However, property is not a tangible item. To see property as mere objects or things would be what Marx described as “commodity fetishism” (Marx 1990, 165). Instead, property is a social *relationship* between persons, including a series of rules and everyday practices (Vandergeest 1997, 4). This is the case, according to MacPherson, because “for any given system of property is a system of rights of each person in relation to other persons” (MacPherson 1978, 4). This is crucial for understanding the argument laid out in this thesis, as I will point out that wildlife itself is not commodified, but certain aspects of its relationship become both commodified *and* decommodified.

While there is an abundance of literature on commodification, there has been far less attention from scholars on the process of decommodification. In fact, there are limited examples of what decommodification entails outside of its relationship with commodification. In their paper on hydropower development in Laos, Nathan Green and Ian Baird aimed to bridge this gap in the literature, asserting that decommodification is a structural tendency of capitalism and a socially directed movement that contests the commodification of all things (Green and Baird 2016, 2). Likewise, Henderson claimed that, “the potential, if not the certainty, of decommodification is immanent within commodity society, immanent within the very nature of accumulation” (Henderson 2004, 490). Moreover, Andrew Sayer points out that this also involves an overlooked

process of decommodification or “recontextualisation” of an object’s use value and not its exchange value (Sayer 2003, 344). Sayer’s analysis is crucial for describing how wildlife has been decommodified by analyzing its use value. As I highlight in my case study, the use value of wildlife as meat has been repressed through the creation of rules and regulations by both the WCS and the GoL. As property is a relationship and not a thing, what is being repressed is the relationship to wildlife: the ability for villagers to access its use value as meat or as medicine in the NEPL-NPA. Instead, villagers are incentivized to conserve these species for the purpose of ecotourism and biodiversity.

A large portion of literature on the environment focuses on the all-encompassing characteristic of capitalism to commodify all things. This expansionary quality of capitalism, as Neil Smith highlights, is such that there are no places left on earth that “are immune from transformation by capital” (Smith 2008, 79). What’s more, this spatial displacement and appropriation of land and resources for capitalist expansion plays prominently in new literature on ‘land grabbing,’ or the large-scale acquisitions of land in Africa, Latin America, Central Asia and Southeast Asia (see Cotula 2009), and more recently ‘green grabbing,’ the “appropriation of land and resources for environmental ends” (Fairhead et al. 2012, 237; Corson et al. 2012). This endless accumulation strategy is characterized more recently as ‘stretching and deepening,’ particularly the way in which it deepens to include more types of goods and services that which previously was not commodified. This can take the form of new ‘commodity frontiers’ for ecotourism ventures, or what Michael Kleinod terms the “recreational frontier” in the Lao PDR (Kleinod 2017). What I claim, however, is that this implicitly and broadly asserts that the commodification of Nature occurs where *uncommodified* Nature lies. Instead, I argue that a part of Nature becomes commodified simultaneously at the expense of another part becoming decommodified.

Specifically, I build on Derek Hall's critique of how authors have used the concepts of primitive accumulation and accumulation by dispossession in the global land grab literature, as people live under different conditions than during the time of Marx's writings (Hall 2013, 1597). Hall critiques the notion of what he sees as resources being brought 'inside' capitalism and assumptions that those resources were previously 'outside' of it (Hall 2013, 1594-1595). Hall argues that assuming people dispossessed through land grabs are 'outside' of capitalism misconstrues the politics and operations of resistance to land control. Hall states that it's wrong to assume people dispossessed today live under the same conditions as when Marx wrote about primitive accumulation (Hall 2013, 1597). Rather, Hall argues that this 'transition to capitalism' should be demonstrated, to show that it exists than merely assumed (Hall 2013, 1597). Put differently, I demonstrate that a part of Nature within the NEPL-NPA is decommodified through a new process of commodification. It has been recapitalized by being brought under a regulated market through the advent of market-based activities, PES and ecotourism, that has been pursued by non-state actors.

Finally, I find it beneficial to investigate commodification by focusing on the very commodity itself – the wildlife species within the protected area. Rosemary-Claire Collard is interested in what she terms a 'lively commodity,' where "capitalist value is derived from their status as living beings" (Collard and Dempsey 2013, 2684). Lively commodities, she claims, have both a 'wild' life, an *uncaptive* life, and a commodity life that is captured, bought and sold (Collard 2014, 153-154). I build on her acknowledgement of an uncaptive life as still being a commodity through ecotourism and particularly ecosystem services (Collard 2014, 154). In other words, wildlife within the NEPL-NPA are uncaptive, in that they are roaming the forests 'freely,' yet are commodities through the PES-ecotourism project, particularly their functionality in how they

produce value through sightings by ecotourists. Therefore, these ‘lively commodities’ produce value through their living status, a commodity that I assert had previously existed in a market for trafficked wildlife, or wildlife that is captive in the cross-border wildlife trade.

#### **1.4 Contribution**

In a broad sense, my thesis contributes to the literature on market-oriented conservation interventions within protected areas. To be more specific, this thesis provides three crucial critiques of neoliberalization, ‘neoliberal natures,’ and literature on PES schemes for conservation.

First, while neoliberalization typically involves the freeing up of rules and regulation in the pursuit of free market ideology with robust governance (see Dressler et al. 2015), I argue that this assumption is not so straightforward. Through the case of the PES-ecotourism project in the NEPL-NPA, I demonstrate that neoliberalization involves the imposition of a regulated market to induce conservation-friendly behaviours in villagers. In other words, neoliberalization actually *requires* further restrictions through increased rules and regulations.

Second, I contribute to literature on the notion that PES markets are ‘introduced,’ or that this process only requires an *uncommodified* Nature that exists beyond the frontier of an increasingly neoliberalized Nature. This entails the implicit assumption that ecosystem services or ‘Natural Capital’ were not giving a monetary price, or that benefits from Nature were either *unvalued* in markets or that markets for these services hardly existed in the Global South before PES schemes (Costanza et al. 1997; Wunder 2005, 5; TEEB 2010, 29; To et al. 2012, 239; Hahn et al. 2015, 76). This case shows that market mechanisms for environmental governance, in the case of the PES-ecotourism project, involves the twin process of commodification *and* decommodification.

Third, while much of the literature on conservation has noted the presence of ecotourism and PES schemes operating in similar time intervals, it falls short of describing a case whereby PES is facilitated *through* ecotourism in the same location. In other words, there is an extensive gap in the literature where both PES and ecotourism operate within a shared, geographical space for the purpose of incentivizing biodiversity conservation and wildlife protection. I therefore demonstrate that the convergence of PES and ecotourism allows for a critical investigation in analyzing the production of value and devaluation of ecosystem services as it relates to profit. I draw attention to issues of equity and the distribution of benefits when PES is rendered a more profitable endeavour due to its relationship with ecotourism in the NEPL-NPA.

This research also contributes to the New Directions in Environmental Governance (NDEG) research project, which investigates how market-oriented or non-state governance over resources remakes public authority in the forestry and fisheries sectors in Southeast Asia. The chief concern with NDEG is how new and old regulatory institutions interact with each other. The introduction of ecotourism, a market-oriented mechanism and incentive for conservation within the NEPL protected area, provides a lens into non-state actors remaking resource governance in the Lao PDR.

Finally, by utilizing a political ecology framework, I build on what Megan Youdelis recently argued in her case study of Ban Mae Klang Luang village located in northern Thailand, demonstrating the messy and contradictory ways that markets in conservation zones are both embraced and contested through local, on-the-ground engagements (Youdelis 2013, 170). My research thus contributes to this discussion by providing an analysis of how ecotourism is perceived by local communities with WCS as the main actor controlling access to the protected area. Furthermore, the inclusion of camera-traps and the protection of rare wildlife species into

this study raises some intriguing questions for the potential of ecotourism within protected areas regionally, and possibly globally.

## 1.5 Chapter Outline

The thesis is organized into five chapters following this introduction. In Chapter 02, I chart the transition from my initial set of research questions toward my current focus on commodification and decommodification in market-oriented conservation methods. I elaborate on the specific details of my field site and outline my research design and methodology that I employed throughout the research process. Moreover, I address the epistemological underpinnings of my fieldwork research while making note of certain assumptions and limitations of my thesis.

In Chapter 03, I broadly outline describe the conservation project that is unfolding within the NEPL-NPA. I describe the project's rationale, conservation goals, and underlying mechanisms that inform the creation of this project for conserving biodiversity, protecting key wildlife species, and improving the livelihoods of residents living in the uplands of Northeast Lao PDR. My intention is to frame the discussion primarily from the perspective of WCS staff members, project documentation, and official reports. In addition to providing the rationale behind the project, my purpose is to demonstrate that Nature is repurposed into a tourist spectacle to support the conservation of wildlife. This is analyzed through the development of ecotourism and PES as market mechanisms.

In Chapter 04, I explore how the conservation project operating at my fieldwork site, what I prefer to call the "PES-ecotourism project," produces value through the monetization of Nature for an assumed (non)consumptive use. As a project premised upon neoliberal rationality, I argue that the creation of a commodity through *commodification* — or more accurately — the valuing

of wildlife conservation through sightings by ecotourists, and payments made out to villages who are part of the project — is based in part on a simultaneous devaluation — a *decommodification*. To complement this argument, I assert that the very decision to place a value upon an ecosystem service, regardless of the numerical number represented by such value, is a political decision that imposes a regulated market to replace a pre-existing market in wildlife trade. Throughout this chapter, I draw attention to how power is formed, projected, reconstituted, and contested through new modes of environmental governance in the PES-ecotourism project. I argue that asymmetries of power, a by-product of value creation and the use of market-based incentives, creates or exacerbates existing tensions within local communities that are part of the PES-ecotourism project. Put simply, I argue that the issue of growing village inequality and jealousy expressed by community members complicates the goals of wildlife protection by WCS, presenting a contradiction for the very rationale of developing the PES-ecotourism project.

In Chapter 05, I provide an overall summary of my findings from the data gathered and the knowledge co-produced from my fieldwork research. I consider the future development of this PES-ecotourism project, and question the long-term ability of this project to adequately increase tiger populations and to improve the livelihood of village communities residing near the NEPL-NPA in Northeastern Lao PDR.

## **CHAPTER TWO: METHODOLOGY & RESEARCH SITE**

### **2.1 Research Questions**

Prior to departing to the Lao PDR to conduct my fieldwork, I assumed the main purpose of this study would be to better understand the specific mechanisms used in ecotourism activities to incentivize residents living around protected areas to protect wildlife species. At the time, my objective was to understand how these mechanisms and their underlying logics informed the overall creation of the ecotourism project in NEPL NBCA, and to understand how the ecotourism project has changed local interactions with their environment. This level of inquiry was ideal for moving my research forward to begin a broad investigation into the intentional design of the conservation project and how community members in villages perceived and reacted to it.

Ultimately, due to the unpredictable messy process by which research is carried out, I shifted the scope of my project after reviewing the data I co-produced and gathered from my field site. Instead of my initial inquiry, I now seek to investigate how the PES-ecotourism project values and devalues ecologies through the imposition of a market in the NEPL-NPA, and to highlight the power asymmetries that are formed out of this engagement (see Appendix B for fieldwork questionnaire; Appendix C for preliminary fieldwork questions).

### **2.2 Approach**

I conducted fieldwork research for this thesis for a period of four months, beginning in early May until the end of August 2016. I followed up with interviews and received further information with key informants, my interpreter, and my translator beyond the stated time frame and outside of the so-called 'field.' Research in this way is an inherently messy process, and thus it presents difficulties when trying to adequately define when my fieldwork officially began and ended.

Nevertheless, the design of this research focuses on a case-study of ecotourism coupled with a PES scheme in operation at the NEPL-NPA located in northeast Lao PDR. I employ a qualitative research methodology to provide a thematic analysis using fewer cases that are more in-depth to enrich the production of knowledge overall. Moreover, this methodology recognizes the involvement of myself, the researcher, as a participant integral to the co-production of knowledge both in and outside the ‘field.’ This is crucial when aiming to carry out the difficult task of representing my research findings. In this chapter I make explicit my involvement in the interactions with people with whom I work, and with whom I collect and construct my empirical data. I aim to situate myself and use my privileged status as a researcher, “to help the voices of others speak more loudly, or more clearly, in an academic arena” (DeLyser 2010, 4).

While doing research in the conventionally-defined field, I draw from a wide array of methods from the qualitative tradition. These methods involved participant observation, formal and semi-structured interviews, informal conversation, documentary-style interviews, and an analysis of relevant source documents. The combinations of methodologies were thus appropriate for investigating the questions guiding my research and overall objective, namely to better understand how the materialization of neoliberal rationality in wildlife conservation both values and devalues ecologies, forming power asymmetries that shape natural resource management.

### **2.3 Data Collection**

The types of data that I collected and assembled in the field consists primarily of field notes, interviews, photographs and short interviews captured on film. Throughout this process of gathering research, I aim to situate myself, making explicit how knowledge is co-produced. I do this to stride away from making any sweeping claims of objectivity. For instance, my interpreter

played a large, yet hidden role in helping produce data when I went to visit villages to conduct a series of interviews with key informants and members. Thus, these interviews, and other interviews that I conducted, should be contextualized within the space, place, and time with which they were documented. For my project, however, I assert that the data I have collected fits into particular narratives and stories that exist within multiple temporalities. I outline below key methods I employed when gathering research in the field.

When conducting my fieldwork, I coordinated interviews with various stakeholders, representatives, and key informants from locations across the Lao PDR. My approach consisted of in-depth, semi-structured interviews that were either voice recorded or filmed with the assistance of a local interpreter. I met with key village members involved in the ecotourism aspect of the project, and community members along with village chiefs living in the three villages part of the PES-ecotourism project. For the in-depth interviews with community members, I used life history and oral history approaches with key informants, many of whom were village chiefs. Moreover, I tailored these different strategies depending on the diverse range of actors I had included in the study, the variation in spatial and social contexts of the interviews, and varying levels of rapport with each interviewee. I now examine each of these interviewing strategies in turn.

I utilized *semi-structured interviews* primarily for my fieldwork because they afforded greater flexibility in the interview process, yet did not have the same unpredictability that an unstructured interview would create. When conducting semi-structured interviews, I would typically create a unique list of 15-20 questions. For each participant, I would add in clarifying questions and steer the conversation in a way based on responses I received from the participant.

When describing this style of conducting interviews to my interpreter, he was dismayed. He informed me that he normally has researchers come through the area with a list of questions

that village members “check off.” This indicated that most researchers utilized quantitative methods rather than a qualitative approach. I should note that the semi-structured interviews my interpreter and I conducted in visits to key villages were not entirely open for improvisation in a similar fashion to the interviews that I conducted in English. This is because I chose not to have my interpreter translate each response to me in English during the sessions with village members. I believed that such a tactic might inadvertently further distance myself from village members, and would waste a significant amount of time that could be used interviewing. Occasionally I did refer to my interpreter to quickly elaborate on a few answers given by the participants, but most the time was spent conversing in Lao language.

One set of interviews, occurring within the first weeks of my entrance into the Lao PDR, were shot on film for a promotional video for protected area. These interviews were semi-structured, yet they followed a script of roughly five to six broad questions. The purpose of these questions was to gather basic data on the history of the village associated with the ecotour programme, and describe the ways in which villagers benefit through WCS from the ecotourism project. The following were posed to a local guide:

1. What is your name, the village you are from, and your job?
2. What is the history of this village?
3. What is ‘The Nests’? Why is it located there?
4. What wildlife exists in these forests?
5. How do *you* benefit from tourism?
6. How do you work together with WCS?

In general, the purpose of these questions was not to delve into a critical discussion of the programme, but to rather begin understanding more about the programme from the voices of those involved with it, as this was the first instance I had to hear about the programme outside of what I had read on the website and in promotional materials.

While in the field I also collected, and scanned various pamphlets, booklets, journals, newspaper articles and other key paper-based documents in the country. This is because the Lao PDR is adapting to digital technologies for storing documents and archiving records in the public sector. Even so, many of the private sector companies continue to rely on paper over digital. I collected the bulk of my documents in two key locations: the NEPL-NPA headquarters in the town of Vieng Thong, Houaphan; and at the ASEAN ecotourism conference held in Pakse, Champassak. Much of my material came directly from the local town of Vieng Thong nearby the protected area as hard copies tend to be locally kept. For the ecotourism conference in Pakse, I collected a statistical information booklet outlining tourism in Laos and pamphlets that marketed ecotourism in Laos by various destination management companies. While traveling the country to various locations, I also picked up the national newspaper, the *Vientiane Times*. A few key articles discussing ecotourism were scanned, including one on the ASEAN conference that I attended.

I used *film and photography* as a medium to capture visual information for my project. I was an assistant producer for a three-minute promotional film on ecotourism in the protected area<sup>2</sup>. This film combined footage from preliminary interviews shot on a 4K Sony mirrorless DSLR camera, and aerial drone footage captured on a DJI Phantom 4. Photographs played a much larger role. I photographed the ecotour programmes and my surroundings to document information quickly rather than writing everything down in my field notes. However, while photographs may convey a great deal of information, perhaps more than field notes, much information exists outside of the framing of each photograph. The point here is that neither film nor photography will objectively capture data, and it is all subjective to the researcher determining where to aim the lens at that specific moment in time.

---

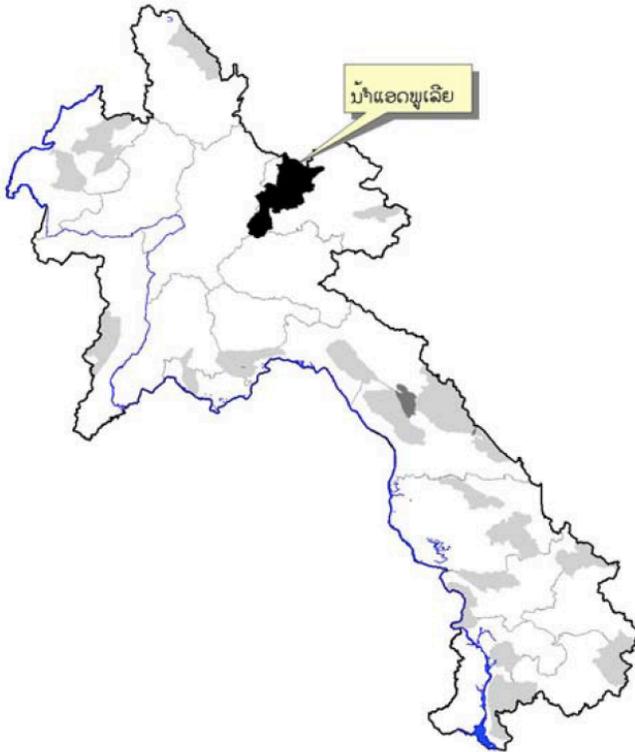
<sup>2</sup> Source: <https://youtu.be/V4s149adnvs> “Laos eco-tourism adventure in Nam Et-Phou Louey NPA”

Finally, I used *participant observation* to document and reflect on personal observations that were made based on my experience in the conventionally-named ‘field.’ This method not only entails a passive documentation of events and experiences that I encountered. Rather, I use personal observations as a, “reflection upon embodied and emotional experiences, intersubjective and material exchanges, and social and non-human interactions,” as it is “more a practice of discovery than an ‘objective’ form of reporting” (DeLyser 2010, 127). The embodied and non-human interactions are critical to my project when investigating the way in which ecotourists and village members alike collectively aim to contribute to the conservation of certain key wildlife species in the NEPL-NPA.

I made the bulk of my observations as a participant in ecotour programmes, through my time in Vieng Thong, and my association with a tour company in Luang Prabang that resells ecotour to the protected area. I participated in two ecotour programmes during a reconnaissance trip with other tour companies from the country. One ecotour, The Nests, was still in development — and thus we were shown a trial that concluded with a consultation about parts of the programme could be changed to better sell and market tours to potential clients. That said, while I did not participate in the tours in the similar way an ecotourist might, this involvement provided a rich insight into the programme, allowing for an atmosphere where more questions were asked and not at the expense of ecotourists that may otherwise prefer to enjoy their tour uninterrupted. During my time in Vieng Thong, the town where the park’s headquarters is located, I frequently visited the NEPL-NPA office and joined staff for games of *pétanque* with a generous consumption of BeerLao beer. This included some casual discussions of the programme and conservation in the area. My time in Luang Prabang with Tiger Trail, a destination management company, was useful

in gathering information on marketing of the tours, and included frank discussions of the efficacy of programmes with other foreign managers of restaurants and companies in town.

## 2.4 Site Selection and Access



*Figure 1: Location of the NEPL-NPA in Lao PDR*

I conducted research for this thesis in Houaphan province, north-eastern Lao PDR and included the districts of Hiam and Houa Muang. My field study site included the Nam Et-Phou Louey National Protected Area (NEPL-NPA), located in north-eastern Lao PDR (see [Figure 1](#))<sup>3</sup>. The NEPL-NPA is a national park that covers three provinces and seven districts in the country, making it the second largest protected area in the country (MAF 2001). There are 283

villages both within and surrounding the NEPL-NPA, consisting of 13,600 households and over 91,500 people, 23,000 of whom are located within the protected area. These villages are home to many ethnic groups including Tai Dam, Tai Daeng, Tai Kao, Tai Puan, Tai Lue, Tai Yuan, Khmu, Hmong Kao, Hmong Lai, and Yao (WCS and MoNRE 2016). This ethnically diverse area encompasses key villages that were the focal sites of my fieldwork research.

---

<sup>3</sup> Source: [aseanbiodiversity.org](http://aseanbiodiversity.org)

To address my research question centered on the lives of community members, I chose villages that were part of the PES-ecotourism project: Ban Sonkhoua, Ban Sakok, Ban Nampoung, and Ban Navaen (See [Figure 2](#))<sup>4</sup>. However, I was unable to travel out and conduct research on the fourth village, Ban Navaen, located in the Vieng Kham district of Luang Prabang Province. Therefore, I visited the three other villages for the purposes of conducting interviews during my fieldwork in the Lao PDR.

---

<sup>4</sup> Map courtesy of WCS staff during my fieldwork in the summer of 2016.

### NAM ET - PHOU LOUEY NPA

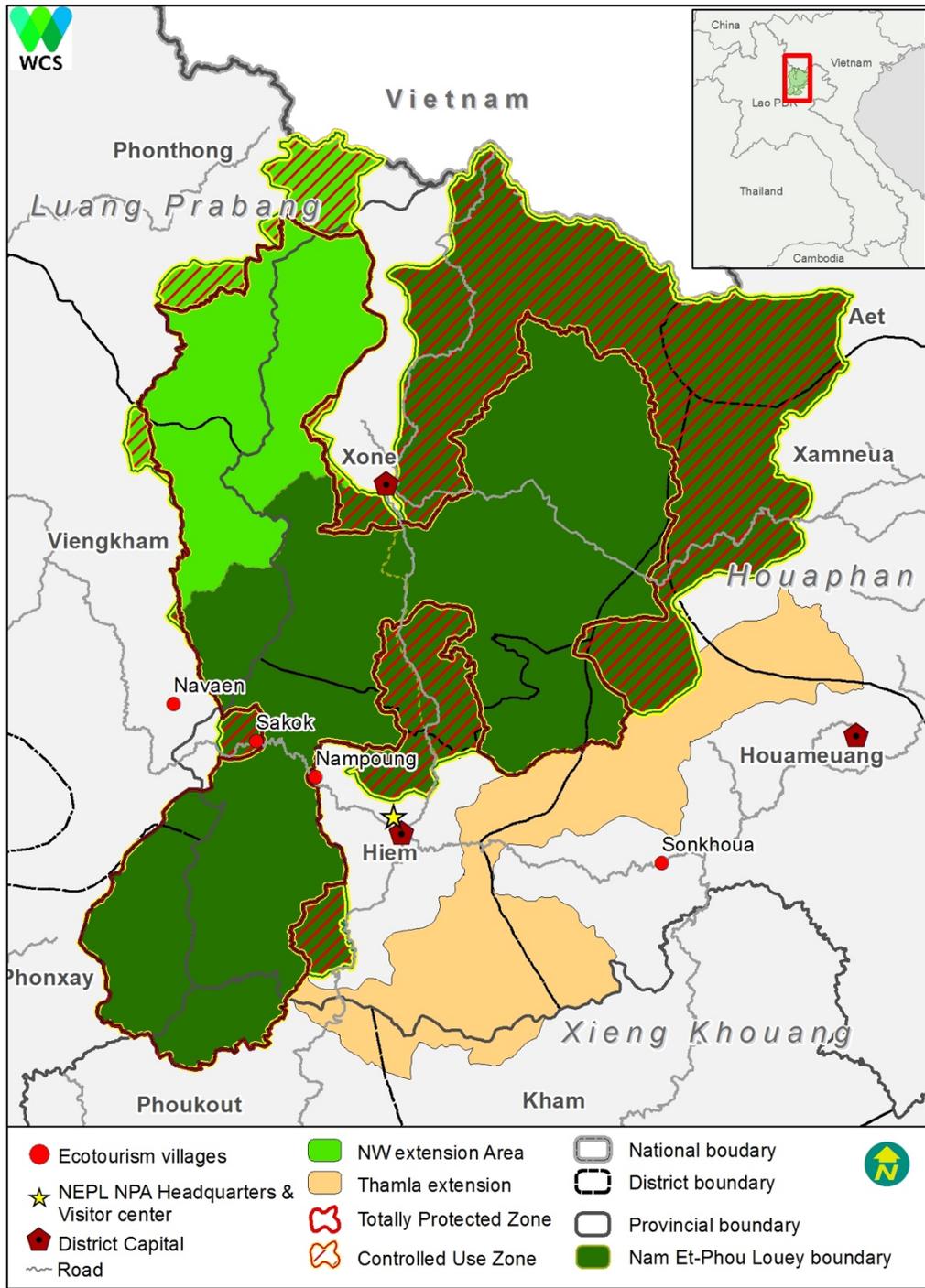


Figure 2: Detailed map of the NEPL-NPA in Houaphan province

Gaining access to these villages to conduct interviews required a formal letter and a pre-arranged visit to the NEPL-NPA office in Vieng Thong. This letter was submitted to the Lao

national programme director of WCS. In the letter I requested permission to conduct a series of interviews in select villages part of the project. I was required to state my purpose for entering these villages, and to provide a list of all the interview questions I would be asking people residing in these villages, so that these questions could be pre-screened by the director himself (see Appendix A). The entire process took two days before the director granted access to these villages part of the project.

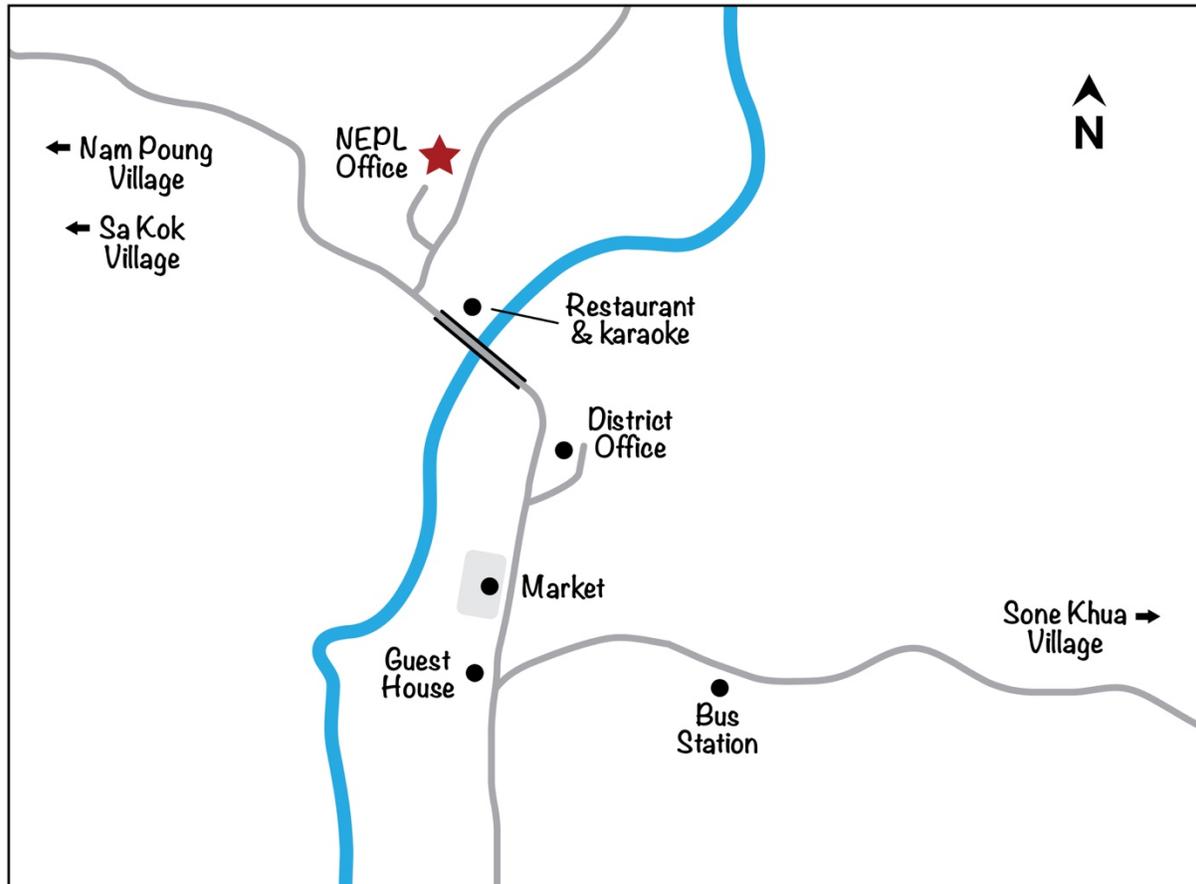
Alternatively, I had gained access into this village, and the two other villages, by participating in the following ecotour programmes: The Nam Nern Night Safari (for Ban Sonkhoua) and The Nests (for Ban Nampoung). The only other ecotour that I did not participate in, due to its limited availability during the months I conducted my fieldwork, was the Cloud Forest Hike programme. This ecotour is a 4/5-day trek that summits Phou Louey mountain, and it is associated with the following two villages: Ban Sakok and Ban Navaen.

#### 2.4.1 *Vieng Thong*

Vieng Thong is a small town that sits in between the capital of the province, Xam Nuea, and Luang Prabang, acting as a gateway to the protected area due to its proximity (see [Figure 3](#))<sup>5</sup>. The original name of Vieng Thong (ວຽງທອງ) is *Muang Hiam*, a Tai Daeng word that means ‘watch out’ or ‘beware of the tiger,’ alluding to tales of tiger attacks that had historically occurred in the surrounding areas (Lonely Planet n.d.). It was after the Lao revolution, according to WCS, that the name was officially changed to Vieng Thong. To this day, it is still referred to as Muang Hiam colloquially.

---

<sup>5</sup> Map designed by myself based on satellite data from Google Maps.



*Figure 3: Simplified map of Vieng Thong*

Vieng Thong is the location of the NEPL-NPA headquarters and visitor centre, where ecotours may be booked directly with local staff. Moreover, this building is the operational center for WCS for monitoring and running ground operations within the protected area boundaries. Moreover, WCS staff here are in frequent contact with district tourism authorities and the director of WCS-Lao PDR programme in Vientiane, the capital of the Lao PDR. While I did travel up to Vientiane to conduct interviews, the main focal point of this research was Vieng Thong and key villages related to the ecotour programmes in the NEPL-NPA.

It is important to note that this building in Vieng Thong is home to staff working for WCS, protected area authorities, and ecotour guides. For example, to gain access into the protected area

to conduct interviews, I wrote up a letter with WCS staff in the visitor centre that was sent to the director located just down the hall from us. Within 24 hours, I had permission to enter three villages and conduct interviews based on an interview script that he pre-screened. That said, I could deviate from the ‘script’ while in the field. Nonetheless, it is indicative of the way in which both WCS and protected area authorities work together, creating the possibility for either party to influence the other with respect to regulations and future developmental projects inside and surrounding the NPA.

#### *2.4.2 Ban Sonkhoua*

My main field site is a village located in the Houa Muang district of the province of Houaphan. It is located along one of the central roads that cut through the province (see [Figure 2](#)). This village, Ban Sonekhoua, was an ideal site for my fieldwork research as it is the original village that was part of the Nam Nern Night Safari, the first programme that I consider to be integral to the PES-ecotourism project. I conducted two sets of interviews in Ban Sonkhoua to gather as much information as possible.

My decision had been to initially conduct a set of six interviews in the village, followed by a review of the content with my interpreter, before setting back out to ask follow-up questions. After returning from the village visit to transfer the successful day of recordings, I suddenly noticed that my audio files were all damaged. I planned for an immediate return to the village the very next day to re-interview village members. Upon returning the next day, my interpreter pressed me to ask additional questions in a different way, in part because he had grown tired of asking the same questions again, but also because he was concerned about having to return to these villages. This incident may have been a blessing in disguise, since village members were more open and

discussed more with my interpreter and I after we previously established a relationship the day prior. The interviews were longer, and the quality of the content contained in these interviews were richer as well.

### 2.4.3 *Southern Laos*

My last research site for my fieldwork was the ASEAN Ecotourism Forum in Pakse, Champasak. This forum took me down into the southern part of the country, where conference guests and speakers alike were given a complimentary ‘ecotour’ to the famous *Si Phan Don* (4000 Islands) that are located nearby. This conference was from 22-25 June 2016, in Pakse City, Champasak province. It was organized by the Ministry of Information, Culture and Tourism of Lao PDR (MICT) in collaboration with the ASEAN Secretariat and the World Tourism Organisation (UNWTO) (MICT 2016). I was invited and contracted to help design and construct an informational booth for the German development company, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), at the forum. This allowed access into the forum, and gave me an unique chance to rub shoulders with country directors of GIZ and sit in on keynote presentations given by ecotourism ‘experts,’ a member of the World Bank, various ministers to the Lao PDR, and other notable speakers. The main theme of the conference was, “ASEAN Without Borders: Roadmap for Strategic Development of Ecotourism Clusters and Tourism Corridors,” which led to the signing of the Pakse Declaration in the same building as the conference was held (MICT 2016).

My main purpose in attending the conference, however, was to understand what ‘ecotourism’ is and how the Lao PDR plans to develop this growing niche sector, as their economy heavily relies on tourism for its revenue. Moreover, the booth for GIZ that I was associated with

also held a speech given by a manager of WCS discussing sustainable, conservation-focused tourism in the NEPL-NPA. Taken together, the entire trip to the south provided an opportunity to gather research on ecotourism and discussions of sustainable forms of tourism at a national and regional level.

## **2.5 Participants**

When I first entered the field, I conducted a series of preliminary structured documentary-style interviews with ecotour guides, a WCS employee, and a park ranger. The information that I gathered during this initial period, including observational notes that I made while experiencing these tours as a participant, helped me to refine the scope of my project and devise a stronger set of interview questions moving forward. After reviewing the material on film, working in collaboration with a Hmong film editor, I decided to focus on how the programme was interpreted by community members. My aim was to parse out potential negative impacts and points of departure for conservation-based tourism, namely the effects ecotourism and payments generated by sightings of wildlife species. This is further examined in [Chapter 03](#) and [Chapter 04](#).

Ultimately, after analyzing information gathered from my preliminary research, I began interviewing the following participants: local and foreign employees for WCS, former and current; community members in villages associated with the PES-ecotourism project; a manager at the textile shop, Ock Pop Tok, in Luang Prabang; members of the German development organization — GIZ; and I recorded a few keynote addresses made at the ASEAN Ecotourism Forum held in Pakse, Champassak Laos. Based on requests, I do not reveal certain names of my research participants out of safety and courtesy for their time. Likewise, some of the views they had

expressed were made in full confidence of their confidentiality, and could put some individuals into an ethically risky situation.

### 2.5.1 WCS Employees

By design, most my research participants were WCS employees. As WCS is the main organization working closely with the implementation and development of ecotours that enter the NEPL-NPA, I chose to interview a wide variety of current and former employees of the organization. I interviewed two former employees in different positions at WCS to gather a historical understanding of the evolution of PES-ecotourism project. One participant that I conducted several interviews with had been closely involved in the initial development of the Nam Ner Night Safari tour. Another participant had worked previously as an ecotour guide and actively helped in the early development of the two latest ecotour programmes.

Generally, I focused my interviews on current employees at WCS in order to afford greater insight into the current operations of the project, including the recent development of two additional ecotour programmes that officially opened in the fourth quarter of 2016. I thus interviewed the following staff members employed at the visitor center in Vieng Thong: directors, a manager, ecotour guides, ecotour officers, an accountant, a land-use planning analyst, and a technical advisor (see [Table 1](#)). The inclusion of these participants afforded a diverse range of spatial data and general information about the project that I have accumulated during my fieldwork.

<i>Position</i>	<i>n (sample size)</i>	<i>Gender</i>	<i>Nationality</i>
<i>Tour Guide</i>	1	Male (1)	Lao
<i>Ecotourism Sales</i>	1	Female (1)	Lao
<i>Ecotourism Officer</i>	2	Male (2)	Lao
<i>Programme Manager</i>	1	Male (1)	Lao

<i>Programme Director</i>	2	Male (2)	Foreign
<i>GIS/LUP/Database</i>	1	Male (1)	Lao
<i>Technical Advisor</i>	1	Male (1)	Foreign

*Table 1: Interviewees associated with project*

Additionally, I conducted interviews with both foreign and local employees. It is important to note that, apart from an intern, foreign employees<sup>6</sup> generally held managerial or directorial positions in WCS, overseeing the development and implementation of conservation and wildlife protection programmes in the area. Interviews were generally longer with foreign-based employees compared with Lao employees. However, the quality of information was comparable, and the English-speaking ability of Lao-national employees was at a comfortable level to conduct the interviews.

### *2.5.2 Community Members*

Equally as important to my project was the inclusion of community members of three key villages associated with the PES-ecotourism project. I decided to interview roughly five people in each village that are involved at different stages in the ecotourism programme. Moreover, I also chose to interview a person from each village who was not actively involved in the project to gain insight into how other members understand and react to the project's development in their village over time. While interviewing a large pool of community members would have been beneficial for this project, it was beyond the scope of what I could have accomplished in the period constrained by summer fieldwork. I thus interviewed the following participants from villages: chiefs, boat

---

<sup>6</sup> By 'foreign,' I am referring to people from Western countries, predominately North America and Western Europe.

drivers, an elder, women involved in handicrafts, ecotour guides, former hunters, a park ranger, and a general member of the village (see [Table 2](#)).

<i>Occupation</i>	<i>n (sample size)</i>	<i>Ethnicity</i>	<i>Gender</i>
<i>Village Chief</i>	3	Khmu (3)	Male (3)
<i>Elder</i>	1	Lao (1)	Male (1)
<i>Handicraft</i>	3	Tai Daeng (1), Lao (2)	Female (3)
<i>Tour Guide</i>	2	Khmu (2)	Male (2)
<i>Ex-Hunter</i>	5	Khmu (5)	Male (5)
<i>Village Member (non-employed)</i>	1	Khmu (1)	Male (1)
<i>Park Ranger</i>	1	Tai Daeng (1)	Male (1)

*Table 2: Village interviewees*

In all interviews conducted throughout Laos, I spoke with and interviewed more men than women. Participants were chosen based on their employment in the programme. In other words, the PES-ecotourism project overwhelmingly employs males for various roles. Important to note, however, is that while many of the more *visible* jobs were given to men, women usually held jobs that were *invisible* — cleaning and cooking staff — with the exception of those involved in the official sale of handicrafts. I delve into a deeper discussion of such village dynamics and power asymmetries in [Chapter 04](#).

## **2.6 Positionality**

As I set out to the field, my positionality was greatly influenced by the time spent with a Lao family near my hometown in rural Illinois, and my employment for a travel company in Luang Prabang, Lao PDR. These two significant parts of my life helped shape who I am today, and are instructive for understanding how I situate myself in my fieldwork research.

Due to the relationship that I had with my former partner, I was invited and introduced to her family for a period of three years that spanned part of my undergraduate career. During this

time, I was introduced to Lao food, language, traditions, religion, and witnessed both marriages and deaths in the family. This interest in Laos carried over into my current job working in the tourism industry in the Lao PDR. After graduating with my bachelor of arts degree, I applied to a handful of jobs located in various countries, eventually landing a marketing intern position for a tourism company in Luang Prabang. I spent eight months working in the Lao PDR before relocating to Toronto to begin my master's degree in Geography.

Taken together, this experience impacted and informed how I approached conducting fieldwork research in the Lao PDR and at the NEPL-NPA. For instance, I was more comfortable with cultural norms, local practices, and communicating in the national language. This allowed me to understand nuances in the reactions of my interviewees, interpreting the answers I received, and ultimately the conclusions I draw. Furthermore, my time spent working for a tourism company in Luang Prabang, one that resells tours to the NEPL-NPA, impacted how I was able to gain access and ultimately my understanding of tourism marketing and what tourists look for when visiting the country.

## **2.7 Assumptions and Limitations**

### *2.7.1 Assumptions*

When gathering information during my fieldwork, I was initially concerned with whether my research participants were responding 'truthfully' to questions posed in semi-structured interviews. This notion of answers being given 'truthfully' raises some questions as to how I can adequately define what would be *true* or not. By acknowledging that my research is co-produced, however, I instead seek to contextualize the responses given in interviews as part of a larger narrative and as a story. In other words, I do not focus on whether specific information given to

me is truthful or not, but I instead chart larger narratives and themes that run throughout my interviews. There is a possibility that community members have either altered or left out pieces of information based on the circumstance in which I conducted the interviews, or due to their fear of revealing sensitive information to me. Nonetheless, I want to stress that the answers which I had received are instructive in gaining an overall picture of the project and its effects on local populations.

### *2.7.2 Limitations*

One overarching limitation faced during this research endeavor was the scope of my project. This was in part due to both time restraints and budgetary restrictions, which forced me to strategically interview only in villages that were involved with the ecotourism project. In other words, a limitation in the design of this research was the lack of data on villages that are not part of the project. Additionally, I interviewed only WCS employees working in the protected area office and both current and former directors of the Lao PDR programme. Thus, I did not conduct interviews with any provincial tourism authorities, nor any government officials employed in the province. That said, I contend that the information that I have gathered from my interviews are more than sufficient to answer my guiding questions I have outlined in the following section. While arranging interviews with government officials or provincial tourism authorities might have been beneficial in producing added information that can help supplement my research, it would have ultimately detracted from my focus on the villages associated with the PES-ecotourism project given my limited time constraint. Moreover, I gathered more than enough information on the design of the project from my interviews with WCS employees due to their role in the development of these ecotourism programmes.

Regarding operations in the field, one limitation faced was the discrepancy between my questions and the interpreter's questions. This discrepancy may be because the interpreter I had hired was actively working for WCS at the time. When transcribing interview transcripts, my translator made frequent note that what I had asked and what my interpreter had asked village members were not always the same. Furthermore, he noted that it seemed like my interpreter was feeding possible answers to interviewees instead of letting them speak for themselves. This could be, as he assumed, an attempt to be helpful to have villagers better elaborate on their responses. However, it could also be an attempt to influence responses from village interviews.

I did not visit nor conduct any interviews with members from Ban Navaen, the fourth village that is part of the conservation project. I had been informed by a WCS employee that this village is the destination for ecotourists participating in the 4/5-day Cloud Forest Climb trek, with the departure village being Ban Sakok. I was therefore informed that this village would have produced similar data that I had already gathered from Ban Sakok.

Likewise, I did not interview any villages that were not directly involved with the project. While this might have been beneficial for acting as a type of 'control group' in my study to compare to the four villages part of the PES-ecotourism project, I did not think at the time that it would have contributed much to the goal and overall purpose of my research. Looking back, interviewing such a village might have been useful for gathering information on why villages may *want* to become part of the project. Nevertheless, I believe that any information gathered would not have altered the core argument that I put forward in this thesis.

Another limitation, not based on the scope of the project, was due to the departure dates of my fieldwork. I originally set out to conduct my fieldwork research on two new ecotourism treks that were set to open in January of 2016. These treks, Cloud Forest Climb and The Nests, had

included three additional villages in areas of the NEPL-NPA that were previously inaccessible by ecotourists. Unfortunately, these treks were delayed twice, and did not open to the public until October 2016. While I had conducted research from May until late August 2016, I unfortunately could not gather information on the effects of these new programmes on communities as they did not yet receive any tourists during the time I was in the country. However, I did end up participating in a test run of The Nests ecotour with other tourism companies, and therefore gathered some preliminary research on the overall trajectory of WCS and the PES-ecotourism project overall. The villages that I interviewed, Ban Sakok and Ban Nampung, both provided valuable information on how they were chosen for the project and aspirations that they have for being involved with the project, despite only seeing a handful of people participating in the programme at the time.

Another limitation was the lack of data on ecotourists' reflections and motivations for participating in these programmes. However, I have gathered data from reviews posted online, discussions with domestic tour companies, and personal observations from my participation in two ecotours. While these data sources afforded some insight into understanding some of the desires of ecotourists, delving into the perspective of ecotourists would be beyond the scope of this research project. Instead, I aimed to understand the project's mechanisms, in addition to its impact on local communities, instead of drawing attention to assumptions and reflections made by travelers that are participating in the programme.

Finally, another limitation faced by this project was the lack of data on the effects of WCS deploying camera traps as part of the overall ecotourism experience. Camera traps are certainly a very new and exciting part of what some in the literature have called 'Nature 2.0' (see Büscher 2014). Researching the effects and usage of camera traps in this area, especially as an instrument for ecotourists to 'experience' or 'view' wildlife was one of my key interests driving my fieldwork

from the onset. However, the use of camera traps is unfortunately a new experience as previously mentioned, and so the effects on the community are difficult to accurately judge at this point.

I do also want to make a special note of drones in this ‘Nature 2.0’ literature (see Koh and Wich 2012; Sandbrook 2015), that describes new technologies for conservation. While this was not involved with ‘conservation’ per se, I was responsible for bringing over a DJI Phantom 4 Camera Drone from Canada to the Lao PDR. This drone specifically captures aerial footage in high quality, and it was used during my participation in two ecotourism programmes to film the forests and landscape of the NEPL-NPA from the sky. However, drones are *not* currently being used at any capacity for conservation in the NEPL-NPA, and I am not aware of any plans for them in the future.

### **CHAPTER THREE: THE CONSERVATION PROJECT IN NEPL**

My objective in this chapter is to broadly describe the conservation project's rationale, its goals, and its underlying mechanisms to conserve biodiversity, wildlife species, and to improve the livelihoods of residents living near the NEPL-NPA in Northeast Lao PDR. This discussion is framed from the perspective of WCS staff members, project documentation, and official reports. In addition to explaining the project, I will demonstrate how Nature has been repurposed into a tourist spectacle to support the conservation of wildlife. This follows the current 'Green' trend of 'Eco Capitalism' (Kleinod 2017) or Nature™ Inc. (Fletcher et al. 2015), where it is assumed that market forces can be retooled to help conserve Nature — and in this case — protect wildlife species.

I begin by describing the wildlife and biodiversity value of the Lao PDR, highlighting narratives of wildlife loss and environmental degradation as told by various international actors. These actors frame the NEPL-NPA as a 'solution' for not only the decline in wildlife species, but as a way to reconcile development and poverty in the uplands of the country. I then elaborate on the rationale behind the WCS's entrance into northern Lao PDR, particularly into the NEPL-NPA area. This was initially justified on the basis of 'solving' human-tiger conflict; at the same time, WCS privileged the 'tiger' as a charismatic megafauna that required the subsequent regulation of prey species within the protected area. This suggests that the WCS was becoming actively involved in the management of wildlife itself, a strategy soon followed by the creation of a PES-ecotourism project that sought to support the conservation of these species.

Finally, I outline the development of the ecotourism department and ecotourism programmes in the NEPL-NPA. The WCS's strategy began with the creation of the first ecotourism programme, the Nam Nern River Trip in 2009, which was later renamed as''; the Nam

Nern Night Safari. This conservation project consisted of the following major components: (i) the creation of the contract, (ii) the creation of the village development fund (VDF), (iii) the hiring of village members for five ecotourism service groups, and (iv) the creation of the tourist ‘experience’ through pre-planned routes and points of interest. Following the NNNS, I follow the development of two new ecotourism programmes in 2016: The Nests and Cloud Forest Hike. Aside from the creation of a new VDF, which includes new villages located in another area of NEPL-NPA, I describe its main difference from the previous tour: the inclusion camera-traps. The WCS’s development of this conservation project, a PES-ecotourism programme, is an alternative livelihood strategy based on direct sightings of wildlife for villagers restricted by hunting regulations and the territorialisation of the NEPL-NPA.

### **3.1 Creating the NEPL-NPA**

#### *3.1.1 International support and WCS’s entrance*

The boundaries and zones of the NEPL-NPA were created through substantial international assistance for the conservation of ‘biodiversity’ and the protection of wildlife species. According to Berkmüller et al., the main management strategy for protected areas in the Lao PDR was to “reduce and eventually eliminate extractive uses in core areas that are critical for *biodiversity* conservation and the survival of *key species*, while maintaining or increasing the productivity of the remaining area as a subsistence resource” (1995, 257) [emphasis added]. Arlyne Johnson, an environmental scientist for WCS, noted that, “maintaining tigers in Laos’s extensive protected area system will be partly depend[ent] on the successful spatial separation of large carnivores and humans by modifying livestock husbandry practices and enforcing zoning” (Johnson 2006). While protected area development in the Lao PDR hinges on biodiversity, it also aims at specifically

creating the spatial separation of wildlife from human interaction in an effort to regenerate charismatic and rare species.

The protected area system in the Lao PDR is often touted as one of best in the world (Robichaud et al. 2001, 8). The zoning of a massive protected area system did not entirely originate at the national level, but was established with substantial international support (ICEM 2014, 7). It was not until 1988, when travel restrictions were relaxed, that highly focused surveys were permitted to be carried out by international researchers (Berkmüller et al. 1995, 258). A significant portion of this support came directly from the WCS, who began working in Lao PDR in early 1990s both surveying wildlife through camera traps and assisting the Lao State in developing the national protected area system (Berkmüller et al. 1995, 255; Wildlife Conservation Society n.d.). At this time, the Lao PDR had no formally protected areas, parks, or park-related legislation. This changed when the GoL zoned more than three million hectares of land for the ostensible protection of biodiversity. On October 29, 1993, Prime Minister Khamtai Siphandon of the Lao PDR issued decree 164 (PM164), officially declaring that eighteen areas were to become National Biodiversity Conservation Areas (NBCAS), over half of which are located along borders and were prone to anti-government insurgency during the 1970s, 1980s and into the 1990s (Dwyer et al. 2016, 210; Berkmüller et al. 1995, 255; Robichaud et al. 2001, 22). Under this decree, the NEPL-NPA was formed initially as two contiguous areas, Nam Et and Phou Louey, which were managed as one landscape by the Ministry of Natural Resources and Environment (MoNRE). Prior to PM164, the Lao military had a significant role in the administration of these protected areas in terms of national security, increasingly coming into conflict with transnational governance efforts through REDD+ projects in the country (see Dwyer et al. 2016).

With an area of 4,229 km<sup>2</sup>, the NEPL-NPA is considered the largest protected area in the country, sharing a contiguous area and a common boundary that stretches 30km long with over 60% percent of the land being hilly or mountainous (WCS and MoNRE n.d.; Philavong et al. 2002, 44). Due to its varied topography, the WCS noted that the park is the source of many major rivers including the Nam Nern, Nam Khan, Nam Et, Nam Seuang, and Nam Seng, all of which contribute to the livelihoods of local people. Conservationists have considered this land as one of the most biologically diverse areas in the northern region of the Lao PDR, harbouring vulnerable and endangered species, and rare flora and fauna (Emerton 2005, 3). Endangered wildlife species include the tiger, gaur, Sambar deer, and white-cheeked gibbon. However, there are approximately 91,500 people living in and around the park, with roughly 23,000 villagers inside park boundaries, who rely on these vital resources for their livelihoods (WCS and MoNRE n.d.). According to Schlemmer (2002), there were 98 villages bordering the NPA core zone. In addition to rice cultivation on upland slopes, residents in these villages subsisted on meat and vegetables derived from the forest — a forest now considered part of the protected area (cited in Johnson et al. 2010, 11).

Officially, the Ministry of Natural Resources and Environment (MoNRE) in Lao PDR oversees the NPA system, including the NEPL-NPA. However, critics consider these areas to be merely “paper parks” since the Lao government recognized conservation problems on paper, but failed to follow through in practice (Corbett 2008, 9–10; Castella et al. 2013, 7). An informant associated with WCS in the country explained:

...I think a lot of protected areas in Lao don't have any management really. They might have on paper, but quite often there might be an office with one or two people in it — but there's no ranger patrol teams. Back in the past, my understanding is when [WCS] first went [to the NEPL-NPA] in 2003, there probably wasn't much there (Interview, June 28, 2016).

Similarly, in an early project document, Santi Saypanya noted that since the creation of the park in 1993 “no action has been taken until 1998; it was because of a lack of political will, human resources and financial assistance” (Saypanya 2009, 9).

Beginning in 1998, WCS and the Centre for Protected Areas and Watershed Management (CPAWM) began field training for protected area staff in NEPL-NPA. During this time, the IUCN actively managed the landscape through technical and financial support (Robichaud et al. 2001, 47; Johnson et al. 2010, 14). WCS took a more active role in the management of NEPL-NPA in 2001, when protected area staff officially invited the WCS to help solve tiger predation issues. This included reports of tigers attacking village livestock in addition to the trade of tigers and its prey (Johnson 2006, 233). For instance, the chief of Nampoung explained that, “four or five years ago, [tigers] used to come to my rice field and eat my pigs” (Interview, July 26, 2016). WCS soon took over management activities (e.g. firearm confiscation, patrolling to prevent intrusions and poaching, and community outreach activities) from the IUCN in 2003, and continuing to the present (Castella et al. 2013, 7; Johnson 2013, 79). WCS has maintained that “protecting Nam Et-Phou Louey’s rich biodiversity is a full-time task.” To fulfill this goal, the WCS and the GoL formed five departments dedicated to the conservation of wildlife in NEPL: enforcement, conservation outreach, monitoring and research, land-use management, and ecotourism (WCS, n.d.).

According to the WCS staff, “the project that WCS started there in 2002 or 2003 doing wildlife surveys found evidence of a significant tiger population...about 7 or 8. I’m not sure actually, but it wasn’t huge” (Interview, May 17, 2016). The urgency of protecting the tiger stems from the notion that the NEPL harbours the only breeding population of tigers in the entire country and the “most important known Tiger population remaining in Indochina” (Vongkhamheng and

Johnson 2010, 2). According to signage in the ecotourism office near the NEPL-NPA, the tiger (*panthera tigris*) “consumes approximately one large animal such as deer, wild pig, guar, or serow per week.” Moreover, they “require a large area of habitat and are, therefore, considered a key indicator of an ecosystem’s health.” In a 2014 presentation for the Center for International Forestry Research (CIFOR), the WCS showcased a conceptual model for tiger conservation in the NEPL, outlining key interventions to combat threats to the survival of this species (see [Figure 4](#))<sup>7</sup>. Its main threat, according to the description of the tiger in the NEPL office, is the *wildlife trade* — the active killing and selling of tigers. Other threats include the loss and fragmentation of its ‘habitat’ (the NEPL-NPA), and the over-harvesting of its prey (Department of Forestry 2010, 190). Aside from the threat of continued hunting and trade within the NEPL-NPA, the sign in the office further notes, “without good management, the forest cover and wildlife habitat in NEPL-NPA will be lost.” This therefore implicitly re-inscribes the notion that the landscape of NEPL-NPA, faced with ‘threats,’ was not properly managed prior to the introduction of expert managers like the WCS.

---

<sup>7</sup> Tiger Conceptual Model taken from a 2014 presentation given by a WCS member for CIFOR in Hanoi, Vietnam.

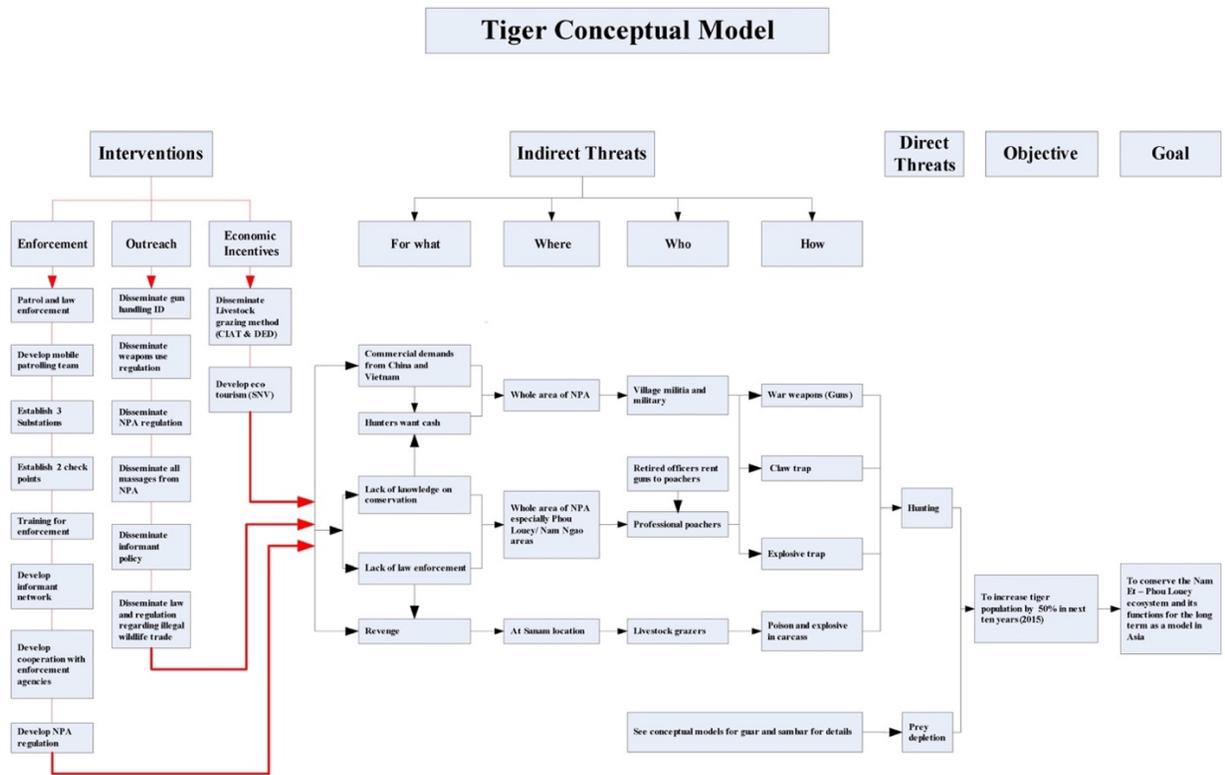


Figure 4: Tiger conceptual model designed by WCS

### 3.1.2 Territorialization and zoning in NEPL-NPA

According to a comprehensive review of wildlife in the Lao PDR, compiled by the IUCN, WCS, and CPAWN, wildlife species in the country were threatened directly by both local and international hunting and consumption (Duckworth et al. 1999, 23). Ultimately, report recommended that there should be a “minimum legal code” for wildlife enforcement in the country (1999, 25). Thus, to stymie the loss of wildlife ‘biodiversity’ in NPAs, the MAF passed Regulation No. 0524 in 2001. Article 17 of MAF 0524 states that it is illegal to sell wildlife. For hunting, however, this regulation split species into two categories: restricted and controlled. Restricted species are prohibited from being hunted. Managed species, on the other hand, come with a series of stipulations: they may be hunted only outside of restrictive zones or corridors; hunting is

permitted only during November 30-April 30; and they must be hunted at a sustainable rate and without the use of “explosives, poisons, electricity, warfare weapons and rifles” (MAF 2001).

After the passage of MAF 0524, the WCS researchers conducted the country’s first systematic camera-trap monitoring of wildlife in the NEPL-NPA, sampling across 500km<sup>2</sup> from 543 to 2,288m altitude for 8,499 camera-trap days during 2003-2006 (Johnson et al. 2009). They concluded that the results have important implications for the management of wildlife, particularly noting how ‘unmanaged hunting’ has continued in the areas (Johnson et al. 2009, 630-631). In addition to images of wildlife, camera traps frequently capture images of hunters. Johnson noted an increase in humans in the areas that had been surveyed for the first four years of the NEPL-NPA. She claimed there was a “six-fold increase in the overall relative abundance index (RAI) of humans” in Year 3 (2005-2006) compared to Year 1 (2003-2004) of the conservation project (Johnson et al. 2012, 25). When the WCS presented these findings in the second meeting of the Tiger Conservation Project in 2006, members expressed concerns about the increased “human disturbance” inside the core zone dedicated to Tiger conservation efforts. In 2006, the WCS and Panthera launched *Tigers Forever*, a campaign to increase the number of tigers by 50 percent at eight WCS tiger landscapes across Asia over 10 years – including the NEPL (WCS 2017).

This international effort, spearheaded by camera trap surveys and tiger conservation efforts, lead directly to the establishment of three distinct zones within the NEPL-NPA: a Totally Protected Zone<sup>8</sup> (3,000 km<sup>2</sup>), where no activity is allowed except tourism in certain pre-designated areas; a Controlled-Use Zone (1,200 km<sup>2</sup>), where local people, using traditional methods, are allowed to practice ‘sustainable’ agriculture and hunting of non-protected species for consumption

---

<sup>8</sup> Totally Protected Zone (TPZ) and Controlled-Use Zone (CUZ) are official terminology that is displayed on signage and official documents of the protected area. TPZ and CUZ are used interchangeably with ‘core zone’ and ‘managed zone’ in other documents.

only, using traditional methods; and Corridor Zones, where long tracts of land connect larger sections of the park, allowing wildlife to move between these larger sections. According to Johnson et al. 2012, the establishment of core zones, or totally protected zones (TPZs) is “the most widely used mechanism worldwide for protecting species from over exploitation,” and is “an essential component of maintaining biodiversity in landscapes where hunting is present” (Johnson et al. 2012, 8). The rationale behind creating core zones is that surplus animals will scatter from the zone and become available for harvest, and that by linking core zones via corridors, the viability and genetic diversity of wild populations can be maintained (Krahn and Johnson 2007, 26).

While the idea of a corridor for wildlife species, understood as ‘habitat fragmentation’ within conservation exists largely in review and policy journals (see Saunders and Hobbs 1991; Fahrig 2003), it is not often understood by local Lao staff for conservation areas and villagers alike. A Lao employee for the WCS reluctantly admitted that “some of our staff even don’t understand the meaning of the corridor. So [therefore] the villagers don’t understand the corridor...” (Interview, June 7, 2016). Furthermore, a LUP employee for the NEPL-NPA stated that while the boundary of the PA was approved by the government in 1993, only a few signs were posted in the park after its creation (Interview, June 7, 2016). This follows what one informant in charge of demarcating the NPA stated: “the boundary for the core zone (the TPZ) ... is, [well] most of them are on paper. Most protected areas in Lao, all of them, they weren’t agreed to in a participatory manner with local communities” (Interview, May 17, 2016). This stems from the notion that these parks, for an extended period of time, merely existed on ‘paper.’

### *3.1.3 Wildlife Enforcement and Awareness*

After both demarcation and zonation of the protected area, the WCS and park authorities set out to devise a series of awareness campaigns and educational efforts to teach residents how to

conserve and protect wildlife instead of continuing their hunting practices. This was driven by the perception that conserving tigers would not be well understood by local populations. According to Paul Eshoo, the former WCS manager of NEPL:

Traditionally, Laos has had tigers all over the country. I think that Lao people know that, and they're definitely fearful of tigers. So, protecting tigers is something *new* in the country. Unfortunately, due to all the threats in the area, and the demand for them in the region, it's quite difficult to protect them (Paul Eshoo, Podcast, November 2, 2015) [emphasis added].

Thus, tiger conservation needs to be taught by wildlife experts and by awareness campaigns targeting villages near the protected area. One informant broadly characterized Lao people vis-à-vis scientists as not correctly understanding wildlife:

People are a bit, and Lao people in general, are a bit *unscientific* about that kind of stuff too. So, like, they'll say it's this reason, or that reason, when no one has actually studied that. I mean there is something with the moon and all that but at the same time the best nights that I've for seeing wildlife has been where there is a full moon. Lao people always say that it is when there is no full moon you are going to see the most wildlife (Interview, May 17, 2016) [emphasis added].

The outreach programme is aimed at 98 villages scattered around and inside the NEPL-NPA, where teams make regular visits to villages to inform them of the “status and principles of wildlife and protected area management,” along with a discussion of land-use zoning for “sustainable” hunting, fishing and gathering. Moreover, this programme aims to disseminate information about the globally important ecosystem of NEPL through the communication of rules and regulations via “participatory methodologies” (WCS 2016). The notion that the outreach efforts are participatory is doubtful, described by one village chief:

The village people had no knowledge about the conservation project, that's why the government didn't ask for their opinion about which area around their village should be kept as a conservation area, the government just selected the areas by themselves (Interview, July 26, 2016).

Awareness and outreach is less of an inclusive participatory practice than a one-way, multi-scalar tool for propagating NPA rules, regulations, boundaries, and for promoting specific conservation practices. The awareness arm of the conservation project aims to try and turn villagers into conservation stewards of the protected area. Moreover, these PR-like campaigns have many international agencies and organizations backing them. They attempt to ‘solve’ the issue of wildlife loss and forest degradation primarily through the exclusion of local people from their former land. It relies on an understanding of a Nature that is devoid of people — a protected area in which only wildlife exists and regenerates.

Coupled with awareness, enforcement is an equally significant component to conservation of biodiversity and wildlife species within park boundaries. Due to the regulations against wildlife hunting, enforcement measures also included the confiscation of weapons such as guns and snares. The GoL carried out gun collection efforts from 2001-2006 (Johnson et al. 2010, 14); however, these collection efforts are still both routine and ongoing. During my fieldwork in 2016, I witnessed the WCS staff set fire to a pile of snares and guns confiscated from villages located near the protected area (see [Photograph 1](#))<sup>9</sup>.

---

<sup>9</sup> These photographs, unless otherwise stated, are taken by myself while conducting fieldwork.



*Photograph 1: Guns and snares collected and set on fire outside the NEPL office*

The enforcement arm of the conservation project in NEPL-NPA currently consists of a substation unit, a mobile unit, and an informant network. There are eight substation units, each comprised of six members, that cover over 2,000 km<sup>2</sup> on foot in the core zone. The mobile team consists of two teams with four people each, who are responsible for answering hotline calls or tips on any person suspected of breaking the laws of the protected area. These mobile teams also check markets, roads, and restaurants for the sale and consumption of certain protected wildlife species. Additionally, the team disseminates hunting and land use zoning regulations, and demarcates the boundaries of the NPA's core zones and controlled-use zones (Vongkhamheng and Johnson 2010, 3).

According to unpublished data by NEPL, in 2005 enforcement teams began apprehending individuals connected to the sale of tiger, bear species, East Asian porcupine, pangolin, impressed tortoise, big-headed turtle and orchid species (Johnson et al. 2012, 12). However, it was not until 2007, as noted by the chief of Sonekhoua, that the enforcement team reached his village: “in 2007, the project started to set up the security unit to protect the area. They started to recruit people to be boat drivers” (Interview, July 27, 2016). As it will be explained in the following section, boat drivers are key employees for ecotourism programmes. A former WCS staff member, who is a Lao national, explained the ways in which villagers were expected to participate in enforcing conservation by reporting other village members who break the rules.

So, in Lao country, if the Lao government should be proud because our Nam Et-Phou Louey still has the tiger in the area and they have to support the WCS to make the [local] community around the NPA understand how to protect the wildlife, how to join the group to protect—to become the ‘eye’ of the project. Why do I say to become the ‘eye’? Because they have to help the project look [around] the area [to make sure] that people from other places [do not] come to the area for hunting [sic] (Interview, June 17, 2016).

They are trying to explain how villagers are enrolled as the ‘eyes’ of the project, helping to patrol the area for potential hunters on behalf of WCS and park authorities.

The explicit goal set by the PES-ecotourism was to increase the tiger population by 50% by 2015 as part of WCS and Panthera’s collaborative effort. During my interview with a WCS member in 2016, I was informed that this goal was not achieved: “No one gets thrown in jail. That’s the problem...It’s partly because officials don’t want to catch them; they don’t want to put them in jail” (Interview, May 17, 2016). Another WCS staff member stated that during his time working in the NEPL-NPA, only one villager was caught killing a tiger. This person was fined 40 million Lao Kip and jailed for five years (Interview, June 17, 2016).

Much of the enforcement falls on the shoulders of rangers, many of whom are employed by the government. When pressed on the faithfulness of rangers in fulfilling their duties to catch hunters, a Lao staff person with the WCS explained that rangers are only working for their family and not the WCS. According to him, villagers claim that these rangers make waypoints on their GPS units and report wildlife sightings back to their families so that they can go hunting and sell the wildlife themselves (Interview, June 17, 2016). In other words, he illustrates one of the core problems with enforcement. One way to presumably help reconcile this issue is through the creation of the PES-ecotourism project. An essential component to this project, which will be explained shortly, is the village development fund (VDF) that serves as a way to enforce *communal* pressure onto entire villages to stop hunting and to begin conserving wildlife species for ecotourism.

Nonetheless, international conservationists and resource managers maintain that enforcement and awareness alone are not enough to stop village members from continuing their hunting practices. Ecotourism is one of the main methods that aims to ‘solve’ the issue of wildlife loss and forest degradation. According to the WCS staff, “[eco]tourism ... [is] one method to make all of that stuff more effective. So, enforcement is probably dollar for dollar more effective at least in the short term. But also, enforcement is not enough...so the idea is to try and give those communities that live around there that still go hunting some incentive to reduce that hunting” (Interview, May 17, 2016). Efforts made by the WCS and park authorities to stymie wildlife hunting in the core zone, through outreach and enforcement efforts, rely on the spatial separation of humans from Nature. For that reason, villagers are faced with restricted forest access and strict regulations over wildlife hunting that is enforced by the GoL and implemented on the ground by the WCS. These restrictions greatly impact the livelihoods of those reliant on these areas for

subsistence and income. As I elucidate in the following section, the WCS devised a way to compensate villagers through new income-generating activities that simultaneously help reinforce conservation in the NEPL-NPA. This is where the development of ecotourism and PES begins.

### **3.2 Developing the PES-Ecotourism Project**

According to WCS's tiger conceptual model (see [Figure 4](#)), ecotourism was one of the three main interventions, alongside awareness and enforcement, for wildlife conservation. While the tiger was privileged as the key indicator species of the entire ecosystem in NEPL-NPA, its role as a charismatic megafauna also helped give it marketability in the tourism industry. In the Global Tiger Recovery Programme 2010-2022, the tiger as a charismatic species is “highly attractive to tourists, creating economic opportunities for local people in the ecotourism industry; ecotourism is the fastest growing and most profitable segment of the tourism industry” (Global Tiger Initiative Secretariat 2011, 2). According to a report put out by US Embassy to the Lao PDR in 2011, Ambassador Karen B. Stewart noted that the tiger population is “an *irreplaceable* resource for biodiversity and ecotourism” (Rare 2011) [emphasis added]. Hence, the WCS and park authorities have claimed, through marketing campaigns and signage in the province that the NEPL-NPA is the “last remaining home for tigers in Indochina” (WCS 2016). Tigers are viewed by protected area managers and ecologists as economic development tools that can help bring in income for conservation efforts through the promotion of ecotourism.

#### *3.2.1 Ecotourism and PES*

Economists have pointed to biodiversity as crucial to the development of the tourism industry (Che 2006, 213; Emerton 2005, 8). In the Lao PDR, the DoF aims to promote biodiversity and ecotourism for national development (Department of Forestry 2010, 212). Links between

development and ecotourism began in 1999 through the launch of the Nam Ha Ecotourism Project (NHEP) in Luang Namtha province by the Office of the UNESCO Regional Advisor for Culture in Asia and the Pacific, with implementation by the MAF and the Ministry of Information, Culture and Tourism (MICT) (Schipani and Marris 2002). According to Paul Eshoo, speaking at the ASEAN Ecotourism Forum in 2016, this model was successful “for showing that tourism can generate a lot of income for local people, for rural people, and that the money can be distributed very equally within village” (Ecotourism Forum, Pakse, 2016). The project’s originality is underscored through its co-management model that provided alternative employment and income generating opportunities to compensate for the reduced forest access for communities around the NPA (UNDP 2012, 3-4). The promotion of ecotourism is closely associated with sustainable rural development to combat poverty. The WCS and the GoL point to how three main districts out of the seven districts that overlap with the NEPL-NPA fall into the second highest poverty bracket — with 90% of villages meeting this criterion (WCS 2016). The National Growth and Poverty Eradication Strategy in 2004 reported that villages and households in Houaphan Province, where most of the NEPL-NPA is located, are among those with the lowest per capita income (USD ~\$490) in the country (GoL 2004 cited in Johnson et al. 2012, 8). Moreover, five of the seven districts where the NEPL-NPA is located are listed among the poorest districts in the Lao PDR: Houamuang (6th), Phonexay (12th), Viengkham (13th), Viengthong (14th), and Xiengkhor (29th). While poverty is relative and related more to participating in the formal market economy, this nonetheless highlights the rationale behind the push for ecotourism: it is a way for the Lao PDR to reconcile poverty and development through investing in nature-based ecotourism activities.

At the same time, there is a growing interest in pursuing market-based conservation schemes, specifically a PES strategy, for wildlife protection. According to the 2016 report

published by *The Royal Society*, nearly all mammals threatened by hunting occur in developing countries, partly because of a lack of resources, weak governance, and regulatory systems. Developed countries, including international non-governmental organizations and international financial institutions, have provided financial support in the form of market-oriented management schemes like PES (see [Table 3](#)).

Biodiversity PES	Community-based ecotourism in NEPL-NPA
Payee	VDF (sightings), Individual Villagers (wages)
Lead Implementer	WCS
Payer	Ecotourists, WCS
Target ES	Protection of tigers and select tiger prey species

*Table 3: A breakdown of the PES-Ecotourism project in NEPL-NPA*

In 2003, the WCS and the Smithsonian National Zoo’s Conservation and Research Center developed one of the first PES schemes in the Lao PDR for the purpose of conserving key wildlife species. The overall aim of the project, based in Savannakhet, was to reduce the hunting of Eld’s deer and increase the size of its population. Villagers were told to reduce or stop hunting, maintain the habitat, and to participate in the active conservation of the deer (Svadlenak-Gomez et al. 2007). The point here is that the WCS-led PES project for the conservation of Eld’s deer strongly reflects the programme created in the NEPL-NPA. In all these examples of PES schemes, the WCS has been closely involved in both the surveying and planning of financial mechanisms for conservation. My inquiry thus focuses on this convergence of both PES and ecotourism and the PES-ecotourism project, as it unfolds within the NEPL-NPA.

### 3.2.2 *Promoting Ecotourism in Houaphan*

The NEPL-NPA lies primarily in the Northeastern province of Houaphan, a province that is part of the Northern Heritage Route. This route connects the Vieng Xay caves near Sam Neua, to the Plain of Jars in Phonsavan province, to Luang Prabang in Luang Prabang Province (Bhula et al. 2009, 12). This is promoted by the GoL to help to promote tourism in this area of the country, as Houaphan is far removed from the typical tourist trail. Importantly, the NEPL-NPA was selected as one of the priority sites for ecotourism in Houaphan's 2007-2020 tourism strategy (Saypanya 2009, 33; WCS 2016).

In the *2015 Statistical Report on Tourism in Laos*, the number of tourist arrivals in the country has continued to grow gradually, with an average growth rate of 13.9% from 1990 to 2015 (Tourism Development Department 2015, 6). Tourism remains the second highest contributor to GDP growth in the Lao PDR (2015, 28). Consisting of both regional and international tourists, the combined revenue generated from tourism amounted to over USD \$725 million (2015, 5). Despite this, Houaphan received only 3.5% of all international visitors to the country (Tourism Development Department 2015, 24). It is therefore one of the least visited provinces. This makes it difficult for villagers to fully derive a livelihood from ecotourism activities.

Despite this problem, the GoL aimed to market the province through the NEPL-NPA and its association with the Northern Heritage Route. In marketing the province, the WCS and MoNRE described the province in brochures as a pristine Nature waiting to be discovered: “a forgotten world studded with hot springs, gushing waterfalls, traditional craft villages and mysterious ancient standing stones.” Similarly, this Heritage Route that winds through Houaphan is considered to run through “some of Laos’ most pristine mountainous landscapes.” This type of

language not only re-inscribes the boundary between Nature and people, but it also actively sets the stage for the development and promotion of ecotourism activities.

### 3.2.3 *The Nam Nern Night Safari*

*The sun quickly dips behind the mountains. Crickets in the deep bush begin to sound more like a backdrop of white noise. Our tour guide and boat drivers prepare us a cooked meal to enjoy by the campfire. We share a few words with the local staff, practicing the only Lao words we know despite their ethnic Khmu background. We grow more eager as night falls, wondering what wildlife we will see during our journey back. We all begin asking our English-speaking tour guide to discuss the chances of seeing a tiger, and what normally people see during this programme. As we finish our meals, our guide hands us each a headlamp and a sheet of all wildlife species in the protected area. The first group departs on a long boat down the river in silence. No lights. The boat driver, a former hunter in his past time, kinks his neck back and forth searching all parts of the river banks and up into the high mountains for wildlife along the Nern River. We drift slowly down the river with a full moon guiding our way toward our bungalows. We pass around another bend in the river, eagerly awaiting any sign of wildlife. Finally, the boat driver whips his head around, signaling that he has spotted an animal. We flip on our headlamps into the distance to see the glowing eyes of an animal. We are told it is a civet, which will generate 20,000 Lao kip to the village development fund. After staring it for a few minutes, we continue downstream, waiting to see more wildlife before reaching our campsite.*

This vignette, as described in my personal journal the night I participated on the NNNS, succinctly illustrates the importance of boat drivers in guiding the ecotourists to view wildlife on each scheduled tour as part of the ecotourism experience.

Shortly after taking over the management of the NEPL-NPA landscape from the IUCN, the WCS teamed up with the Netherlands Development Organization (SNV) to explore ecotourism potential with two product surveys. These surveys, one in 2004 and one in 2005, investigated the potential trekking routes for wildlife viewing that would benefit both wildlife conservation in the NEPL and its residents (Johnson 2013, 86; Bhula et al. 2009, 8; Saypanya 2009, 33; WCS 2006,

11). Moreover, these surveys constructed the area as a vast wilderness, stating that wildlife enthusiasts would be drawn to a location, “that has seen so little human utilisation, and no tourism activities whatsoever” (Johnson and Gujadhur 2005, 10). The WCS staff met with NPA officials, SNV, and provincial tourism authorities to prepare briefs for national and international tour operators for potential investment opportunities in a wilderness-based wildlife tourism product. These tour operators would have to be willing to pay for park entry and conservation fund fees that support conservation activities in NEPL-NPA (WCS 2006, 11).

One of the first field surveys took place in March 2005 with support from the WCS, the Lao-American Project in Luang Prabang, the NPA management unit, SNV, and the provincial tourism offices of both Luang Prabang and Houaphan. The main goal was to develop potential trekking routes through the protected area that will “benefit tiger conservation and protected area management, and contribute to livelihood development for target villages” (Johnson and Gujadhur 2005, 2). The recommended tour product for development, based entirely on first- and second-hand experiences during their field survey in NEPL-NPA, was a 5-day/6-night trek through the core tiger conservation area. This trek would depart from Ban Pongthao, a Lao Loum village in the Luang Prabang province chosen for being the “cultural” part of the tour. After departing from Pongthao village, ecotourists would hike up the Phou Louey mountain, the highest summit of the entire protected area. The tour featured the opportunity to catch a glimpse of certain wildlife species before descending the mountain and ending in Sakok<sup>10</sup>, a predominately ethnic Khmu village in Houaphan (Johnson and Gujadhur 2005, 5-8).

During these early surveys, the WCS proposed a “conservation-oriented tourism” programme in the NEPL-NPA area that would set a standard across the rest of the country (Johnson

---

<sup>10</sup> The village of Sakok is currently included in the latest 4 or 5 day Cloud Forest Climb ecotour developed by WCS. This ecotour began operating in October 2016.

and Gujadhur 2005, 10). This programme was initially a 6-day hike up Phou Louey Mountain with the ability to spot wildlife. In the 2005 report, Johnson and Gujadhur stated that tour companies would be required to obtain a permit from the provincial tourism office, paying \$20-\$40 per person, per day, to operate inside the protected area. They noted that funds generated by this fee would be jointly managed by WCS and NEPL authorities for tiger conservation, including patrolling, education outreach, and research and documentation through camera traps (Johnson and Gujadhur 2005, 10). Due to the remote location of the proposed tour and its length, it was eventually scrapped in favor of developing a wildlife viewing product based around the Nern River.

Following these two surveys in 2008, the WCS hosted an undergraduate internship for a Lao student studying in Australia to conduct another survey for ecotourism within the NEPL-NPA (Saypanya 2009, 33). That same year, the ABD granted USD \$10 million dollars to Laos for the development of tourism in the country as part of a broader effort of developing the Greater Mekong Subregion (GMS). Of the USD \$10 million, \$400,000 dollars was granted to Houaphan for the development of “pro-poor tourism” (Bhula et al. 2009, 12). After receiving this amount, WCS and the national protected area staff worked together with a consultant team from the Haas School of Business at University of California, Berkeley to develop an ecotourism business plan in 2009. The team strongly recommended that the Nam Nern River could enhance conservation efforts by providing an educational experience that combines learning about biodiversity in NEPL NBCA, while providing “a unique experience to tourists to try to see wildlife” (Bhula et al. 2009, 21 [emphasis added]). The UC Berkeley team expected that attracting “backpacker plus” ecotourists from abroad to learn about wildlife would help to both incentivize residents to hunt fewer protected species and push the local government to support more conservation efforts and additional

enforcement of wildlife protection (Bhula et al. 2009, 20). The Berkeley-led business plan led to the eventual establishment of the Nam Nern Night Safari, a 24-hour boat-based ecotour into the protected area (Johnson 2013, 86). The Nam Nern Night Safari, originally called “The Nam Nern River Trip,” opened in December of 2009 (WCS 2016). According to Johnson, “[this model] is a potential tool for conservation that provides benefits to local people in direct proportion to both the numbers of rare wildlife actually seen by visitors and the amount of support for protection offered by local people” (Johnson 2013, 86).

In 2013 and 2014, NEPL won the World Responsible Tourism award for the Nern Night Safari ecotourism activity. It is currently the only place in Lao PDR earning such an award (WCS 2016). Upon winning the award, the London judge described the project as

...designed to support the conservation of tigers and their prey, as well as other wildlife, by placing a monetary value on tigers and other wildlife for local people. Each reported sighting of wildlife by a tourist results in a financial reward for the villagers, [including] people who might otherwise poach... (WCS and MoNRE n.d.).

The success of the NNNS project is to incentivize residents to protect wildlife and to subsequently disincentivize the hunting of wildlife by placing a monetary value on select species that are spotted by ecotourists.

Selling the promises of the NNNS (part of the PES-ecotourism project) to villagers was not easy at first, as a few members close to the WCS admitted. As one staff member explained, “at the beginning, yes. They thought that ecotourism, or wildlife conservation, could not lead them to get the money from tourists. They thought it was impossible. They thought [there were] too many hunters” (Interview, July 6, 2016). When asked whether people may not agree to become a part of the project initially, another informant chuckled, saying, “so the first time they will say, ‘no.’ I’m certain that they will say, ‘no,’ because I have been working there and then I have joined the outreach team to survey the villages. Most of the communities there have said, ‘no’ (Interview,

June 18, 2016). When I asked why, he responded, “because they say that WCS has not provided any sustenance or sustainable job for them. So why do they say that? Because the WCS’s mission is *only to protect the wildlife*, they are not a development [organization]. The villagers, they need the development to go with the protection” (Interview, June 18, 2016) [emphasis added]. In other words, residents targeted for this project are both aware of the restrictions imposed onto them and how this immediately affects their livelihoods. Thus, they will only agree if they are provided a means to earn an income and are able to continue having food for their families. As I will show in Chapter 04, this had a varied impact on local communities, who are now encouraged to rely on tourists visiting this remote area of the country, and have become reliant on the global tourism market.

#### 3.2.4 *Village Development Fund*

In addition to the business plan, the development of the first ecotourism programme in NEPL-NPA required multiple discussions and negotiations by the WCS representatives over time. A significant component of the project, in early discussions, was the village development fund (VDF). This fund is the focus of two objectives in the *National Tiger Action Plan for Lao PDR 2010-2020* that aim to increase the tiger population in the NEPL-NPA. In Objective 5, WCS and the DoF propose that

NPAs need to work cooperatively with other relevant agencies to develop ‘Village Development Fund’ that may come from sale of NTFPs, park services, *ecotourism*, and other national/international supports for livelihood improvement. This may demonstrate villagers how tiger conservation is significant to local livelihood and their involvement in conservation (Department of Forestry 2010, 221-222).

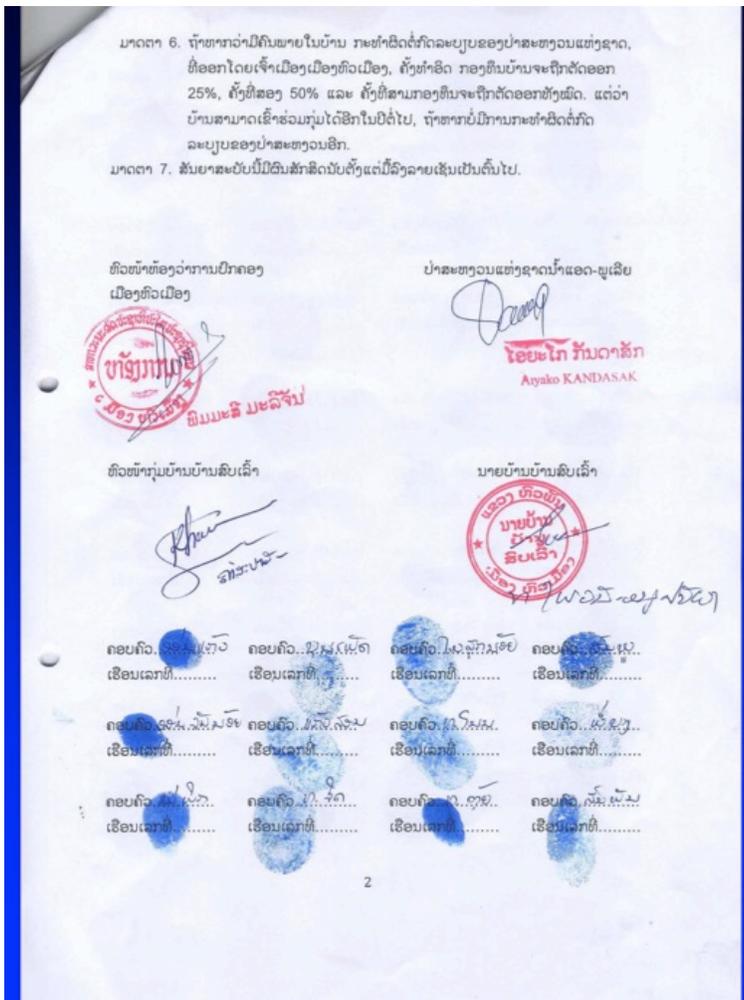
Similarly, as recommended in Objective 7, the 'NPA Management Fund,' "which generate[s] revenue from ecotourism, fines, research fees, and gifts...may be an option for a long-term sustainable financing mechanism for each priority site or landscape" (2010, 222).

Simply put, the VDF mechanism aims to incentivize residents to protect wildlife and promote conservation-friendly behaviours through the non-hunting of key ecosystem species. This component was one of the first moves of the PES-ecotourism project at the village level. According to an informant of the project:

[We] had a lot of meetings with villages, [and] came up with the concept of benefit sharing. Had more discussions at the district level, and the village level. Had meetings in every village with representatives from every family at the meetings, and discussed the benefit sharing, *the contract*, and made changes to it based on their input. Then [we] got every family to sign it (Interview, May 17, 2016).

According to WCS and MoNRE, the VDF consists of funds generated from each tour and is distributed annually among the 14 villages that have signed the contract and are located near the NEPL-NPA (see [Figure 5](#)). Money deposited into the VDF is derived from two sources: a flat fee that is included in the price of the tour for each visitor (foreign or national), and a variable amount of money determined solely by the number of wildlife seen and recorded by ecotourists. From 2009 until September 2016, as noted by the WCS, the entire project amassed approximately USD \$52,000. This includes the total amount of all funds that have been either held in the village development fund or have been distributed to villagers as wages. Most recently, from 2015-2016, the VDF for the NNNS generated USD \$4,169. This means that the bonus given to each village was only \$298 for the full-year, as it is shared among the fourteen participating villages (WCS 2016). According to the WCS staff, the reason for the VDF, rather than direct payments, is that dividing up the fund into payments made out to each individual person would be insignificant.

Instead, money is collectively held in a fund to ensure strict adherence to conservation goals and protected area regulations enforced by WCS and the Lao government.



The village development fund, according to the WCS, is primarily used to make purchases for communal items instead of a disbursement of these monetary benefits to all members of the village. This is done as a means to demonstrate quite visibly the link between the non-hunting of select wildlife species and improvements in each village. Items and services paid for by each village include the replenishing of medicine, repairing a primary school’s roof, the purchase of new toilets for the primary school, new benches for the village meeting room, radio speakers

Figure 5: The contract

for village announcements in the morning, and the fixing of potholes along roads (E-mail correspondence, November 14, 2016). One staff member from the WCS explained that, “these funds are held on behalf of the villages by the WCS and NEPL under a contract agreement, and distributed yearly. Villagers choose what to spend the money on at a meeting that is held once yearly, in which all villagers are invited to attend” (E-mail correspondence, November 14, 2016). Any village member can attend the annual meeting where they may vote on four options for how

the funds are spent. These options, as WCS staff stated, are not identified by the WCS, but rather by the villagers themselves. However, an informant argued that sometimes government officials suggest things that the village should spend the funds on, despite WCS advising the government not to. “Sometimes the government counterparts suggest things, even when [the WCS] agreed not to suggest.” Furthermore, the programme does encourage women and elderly people to suggest items, and they strive to make voting participation accessible for illiterate individuals. In the end, as I was told by one informant, it is the village chief who ends up with most of the funds (E-mail correspondence, November 20, 2016). When asking a local villager about his influence in determining how the funds in the VDF should be used, he replied, “the village chief is the one who makes the decisions about this. But what we have received in the past is tables, plates and bowls and the village speakers.” When pressed on what he would buy if the fund was his, he said “I’d buy some animals to raise or plant some vegetables, etc.” (Interview, July 27, 2016). There is a wide disparity in what the village chief, the GoL and WCS viewed as constituting development and improvements for the village versus what villagers thought or felt would improve their livelihoods.

WCS and MoNRE claim that the funds deposited into the VDF is used to support “small-scale village development activities chosen by each village, *rather than cash payments*” (WCS 2016). As stated by one informant, these items are meant to benefit the entire village, as “the alternative is just trying to divide all the money among all the villagers, and then it’s just like you’re giving a couple pennies to each person...” (Interview, July 16, 2016). Yet, there *are* cash payments made out to the service groups: money generated from wildlife sightings goes into both the VDF for the 14 participating villages, and a *separate bonus* is paid to service groups (boat drivers, guides, cleaners, and cooks) employed by the project (see [Table 4](#)). According to an

associate of the WCS, who spoke about the ecotourism programme at an Asian Development Bank (ADB) conference in 2013, the problem of service groups related primarily to wages, work availability, and food costs. Many villagers were unavailable to work when they were doing “something more important.” From this, the WCS hoped that a 25% wage bonus based on surveys filled out by ecotourists would help increase tour guide performance (WCS 2013). This bonus is calculated by the monitoring forms filled out by ecotourists immediately following the ecotour. As the WCS staff member mentioned, “the main aim for paying the tour service groups [and ecotour guides] directly, and immediately after the tour, is so that it creates a very close link between seeing the wildlife, and the villages receiving a bonus” (Sean, e-mail, April 17th, 2017). These service groups are paid set rates for their services, and are paid right after the tour with funds from the fee collected from ecotourists by the NEPL-NPA guide at the beginning of the ecotour (E-mail correspondence, April 17, 2017). According to the NEPL website<sup>11</sup>, every visitor must pay in local currency to WCS upon arriving to Vieng Thong for the tour. This is because, as it is written on the programme’s website, “most of the money is paid directly to the villagers immediately after the tour” (WCS and MoNRE 2016).

<i>Service</i>	<i>Wages (USD)</i>	<i>Wildlife Bonus (Sightings per boat)</i>	<i>Service Bonus (Survey feedback)</i>
<i>Boat Driver</i>	\$12.50 /night	\$0.25	\$0 - \$1.25
<i>Guides</i>	\$12.50 /night	\$0.25	\$0 - \$1.25
<i>Cooking</i>	\$6.25 /group	\$0.25	-
<i>Cleaning</i>	\$5.00 /group	\$0.25	-
<i>Handicrafts</i>	\$4.38 /product	\$0.25	-

*Table 4: Wages and additional bonuses distributed on NNNS*

Importantly, this VDF fund can easily be reduced in half or removed completely if a person in the village is caught breaking any rule or regulation within the NPA, which is enforced via the

<sup>11</sup> [www.namet.org](http://www.namet.org)

benefit-sharing system through the contract (WCS and MoNRE 2016). If anyone from the ecotourism villages is caught violating the NEPL NPA regulations, the yearly VDF of the individual's village is reduced. For the first infraction, the annual VDF would be reduced by 25%, by 50% for the second, and by 100% for three or more infractions. The amount of money levied from the law-breaking villages is shared equally between other villages (E-mail correspondence, April 18, 2017). Most infractions are the hunting of Class II or Class III species, while a Class I infraction is the most egregious: the killing of a tiger<sup>12</sup>.

The village of Sonkhoua has been cited for many infractions since the inception of the ecotourism project. A representative from the WCS noted that Sonkhoua had six infractions per year from 2008-2010, but only two infractions per year from 2010-2012. Despite these infractions, however, the benefits were not subsequently reduced (WCS 2013). Sonkhoua eventually lost 100% of its funds during the 5th year of the project from 2013-2014 due to a Class I infraction from the killing of a tiger (see [Table 5](#)). It should be noted that only one village during the 2013-2014 year committed a Class I infraction on top of four other infractions. Sonkhoua is the *only* village part of the NNNS VDF that is directly involved and employed in the ecotourism programme.

<i>Village</i>	<i>Families</i>	<i>Infractions</i>	<i>Class I Infractions</i>	<i>Fee Reduction</i>	<i>Funds Received (LAK)</i>
<i>Na Phieng</i>	54	0	0	0%	829,578
<i>Homephan</i>	84	1	0	25%	967,841
<i>Homethiong</i>	87	0	0	0%	1,336,543
<i>Sob Lap</i>	107	0	0	0%	1,643,794
<i>Mo</i>	54	0	0	0%	829,578
<i>Phieng Dee</i>	95	0	0	0%	1,459,444
<i>Sonkhoua</i>	176	4	1	100%	0
<i>Ho King</i>	122	0	0	0%	1,874,233
<i>Sob Lao</i>	159	1	0	25%	1,831,986
<i>Muang Au</i>	37	0	0	0%	568,415

<sup>12</sup> Species classification and categorizations are explained in [Chapter 04](#).

<i>Pak Nya</i>	38	0	0	0%	583,777
<i>Phieng Xai</i>	38	0	0	0%	583,777
<i>Hong Oy</i>	41	2	0	50%	314,933
<i>Houay Hoo</i>	94	1	0	25%	1,083,061

Table 5: Village Ecotourism Benefit Calculation for Year 5: 2013-2014

According to discussions with WCS staff, if someone was caught breaking any rules of the NEPL-NPA, they would be slapped with a one-year ban and would have to go through a re-application process to join the project again. However, one Lao staff member of the WCS revealed that a yearlong ban was scrapped in favor of a *lifetime ban* that he initially proposed. He explained that because there are more than 100 families in Sonkhoua village, and only fifty families employed by the project, he would rather allow other families an opportunity by banning members who break the rules for life (Interview, June 16, 2016). Thus, the inability to employ all families in each village by the project is deployed as a threat to adhere to the project’s goals and regulations as an extension of enforcement. It shifts the burden away from the individual hunter onto the entire village, where the cost of being caught is much higher with the possibility of intense communal pressure. As it will be explained, the lack of employment in the villages is not only used for enforcement, but it also creates inequality and further contradicts the conservation effort that this project seeks to reconcile.

### 3.2.5 *Spotlighting Wildlife, Generating Benefits*

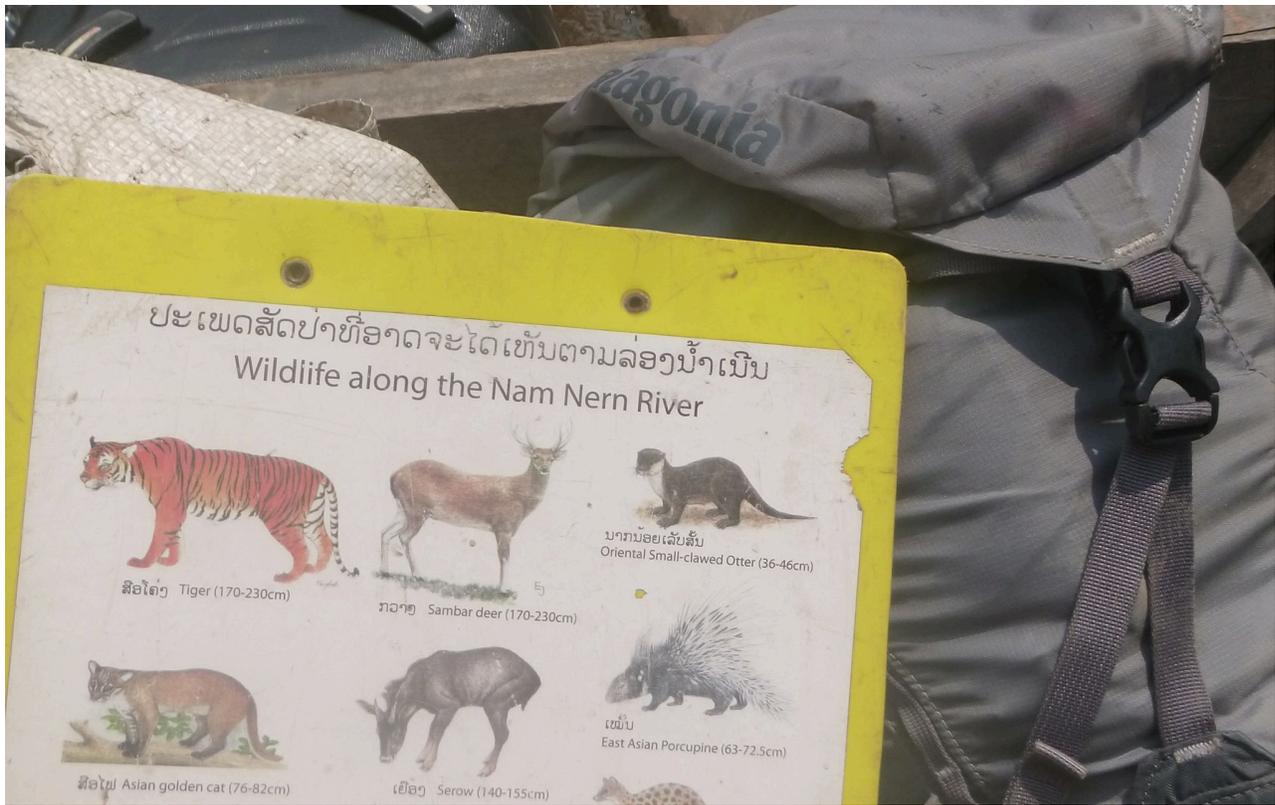
The main mechanism to generate payments into the VDF on the NNNS revolves around the act of spotting wildlife on the tour. As night falls during the tour, each participant is given a headlamp that is used for ‘spotlighting’ wildlife along the river banks, including a wildlife board

that displays photos of commonly seen species in the area (see [Photograph 2](#))<sup>13</sup>. Ecotourists depart from a location far up the Nern River, and float down the river back to the campsite in the middle of the night. Former hunters are employed as boat drivers during this part of the tour, where they use their skillsets to identify wildlife hidden deep along the banks of the river. Their former skills in tracking and hunting wildlife are now repurposed in the form of guiding ecotourists to wildlife hidden in bushes and along tree branches during each tour as a means to generate income. Ecotourists do not spot wildlife without the aid of the boat driver, who quickly scans all sides of the river with his flashlight to find any signs of wildlife. The driver explains how he can decipher between certain species hidden in the banks of the river:

To spot animals, we go to where we've seen their tracks [previously] and to identify what animals they are, we can tell by the light and how they reflect it from their eyes. For big animals, they have wide gaps between their eyes and small animals have a narrow gap between their eyes...we know where the animals are from our survey or the animals will be somewhere around fruit trees (Interview, July 27, 2016).

---

<sup>13</sup> This photograph was taken by a staff member of Laos Mood Travel.



*Photograph 2: Wildlife board given to ecotourists on the NNNS*

Upon arriving back at the campsite in the middle of the night, both guests and guides gather around a campfire to discuss the wildlife they have just spotted. At this point, the WCS guide distributes wildlife monitoring forms, where ecotourists are required to fill out exactly what species they spotted, the quantity, and to calculate the correct amount of monetary benefits the villages will receive from this tour. This wildlife monitoring form is one of the primary mechanisms that aims to promote conservation among residents through the linkage of wildlife sightings to payments distributed to the VDF and through wages to villagers employed by the project. I will further explain the importance of the wildlife guide and the wildlife monitoring forms that list the monetary value of each species in Chapter 04.

Ecotourists are in a privileged position for spotting wildlife on the tour with the aid of local guides. Importantly, they are the only actor ever able to contribute monetary benefits to the VDF.

If a local villager happens to spot a tiger or rare wildlife species within the protected area, it has no value. Simply put, ecotourists wield the power to give money; to render wildlife valuable. Villagers are not directly receiving payment transfers by refusing to participate in hunting practices, instead they are conditionally given money by joining the ecotourism project. Thus, the distribution of monetary benefits associated with wildlife in forests is partly dependent on the tourism industry and the variability of wildlife spotted during the predetermined route on the NNNS.

Despite its heavy promotion as the mascot of the NEPL, and since the PES-ecotourism project was launched, tigers have never been seen on the tour. Some residents have never spotted a tiger in their life. One handicraft woman employed by the project explained that it would be hard to explain tigers to tourists, adding that she has only seen a deer because one had come to her rice field. A hunter in Sakok village admitted that the only time he had seen a tiger is on a *sign* — presumably the billboard that WCS and the GoL places in each village highlighting the presence of tigers within the protected area nearby (Interview, July 26, 2016).

It may seem as though these tiger conservation efforts by WCS have paid off, according to a published report by WWF that states, “for the first time after decades of constant decline, tiger numbers are on the rise” (WWF 2016). However, within the NEPL-NPA, this question of a rise in tiger populations remains less optimistic. According to the most recent report by the IUCN Red List of Threatened Species, only two tigers were estimated to be living in the NEPL-NPA during the last five years from 2009 to 2014, compared to the official government estimate of 17 tigers (Goodrich et al. 2015, 5). Based on this figure, the IUCN Red List has declared that the Lao PDR has lost its only source of a breeding population of tigers in Indochina (Goodrich et al. 2015, 4). However, the WCS has neglected to acknowledge this figure or the recent studies demonstrating

this. I have spoken to a few WCS staff members during my time in the country about the actual count of tigers in the area, and they requested that the conversation must be off record. The loss of NEPL-NPA as a designated breeding site for tiger population may negatively affect the stability of the entire PES-ecotourism project, which relies on the presence — or rather — idea of tigers existing within the area to draw ecotourists from abroad. The official slogan of the protected area, *the last remaining home for tigers in Indochina*, may be brought into question if tigers in these areas cease to exist — or if it is acknowledged that they have ceased to live in this area.

### 3.2.6 *The Nests & Cloud Forest Climb: Camera Traps for Conservation*

Building on the success of the Nam Nern Night Safari, WCS announced in January of 2016 two new opportunities for visitor access into the protected area: ‘The Nests’ and ‘Cloud Forest Climb.’ WCS helped develop these tours in collaboration with the Ministry of Natural Resources and Environment (MoNRE), receiving support from both the French Development Agency (AFD) and the Global Environment Facility (GEF) (WCS n.d.). The Nests ecotour is a 2-3 day ‘family-friendly’ hike with an overnight stay in spherical baskets that hang from trees in the dense forest. Ecotourists will be able to view wildlife from an observation tower nearby a salt lick, with the infrastructure designed by Building Trust International. The Cloud Forest Climb ecotour is a 4-5 day intensive trek up to the summit of Phou Louey (Forever Mountain) with a homestay in a local Khmu village. These ecotours were not officially opened to the public until October 2016. However, what sets these treks apart from the NNNS is the introduction of automated camera traps. While camera traps have been typically used by protected area managers in the past to monitor changes in the wildlife abundance, they are now deployed to both ‘spot’ wildlife *and* determine payments to villages.

Like the NNNS, ecotourists will be able to view wildlife on both The Nests and Cloud Forest Climb. Since wildlife can be wildly unpredictable, sightings are never guaranteed. WCS's new solution provides the opportunity to see 'the' tiger, or other rare wildlife, *through* camera traps. According to an informant of the project,

...in all areas of this park you can't see wildlife like in [the NNNS]. You can only see wildlife like that along the river at nighttime, because it's so heavily hunted...so instead of having tourists try to see wildlife, the project has put up camera traps along the trail, and when tourists walk that trail, they help change the memory cards. Then when they are at their campsite at nighttime, they look through pictures of wildlife. And if they find photos of rare species of wildlife, then the villages get more money (Paul Eshoo, ASEAN Ecotourism Forum, June 22, 2016).

Along the trekking paths of The Nests and Cloud Forest Climb, tourists are expected to maintain camera traps placed near trails by changing the camera's memory cards each day (WCS and

MoNRE 2015). The thrill of being able to spot rare species in the protected area is now a wholly transformed, passive experience through the LCD screen of a camera (see [Photograph 3](#)).



*Photograph 3: Viewing wildlife on a digital camera with SD card from camera trap*

These camera traps are the latest method by which WCS links conservation enforcement together with ecotourism. Using a similar mechanism to the NNNS, the amount of money received by villages will now depend entirely on the number of photos of rare wildlife that are taken by the camera traps set up along trails (WCS and MoNRE n.d.). This new technological mechanism is

deployed in hopes of further encouraging residents to not consume or hunt the wildlife, and instead protect wildlife species for ecotourists to view through photographs taken by the traps.

### **3.3 Conclusion**

In this chapter, I outlined wildlife conservation in the NEPL-NPA, including the development of the PES-ecotourism project that is spearheaded by the WCS. In doing so, the goals, mechanisms, and rationale for conserving biodiversity, protecting key wildlife species, and to improve the livelihoods of residents living in the uplands of Northeast Lao PDR are illustrated. In general, I framed this chapter from the perspective of WCS staff members alongside official documentation of the project. Aside from giving an explanation of the project, including a timeline of its development, I argued that Nature in the NEPL-NPA is transformed into a tourist spectacle to support the conservation of select wildlife species. This is coupled with the introduction of *new* market forces by the WCS, namely ecotourism, that aim to support conservation through incentivisation.

Following popular narratives in literature and in policy, I began describing how the development of the NEPL-NPA was promoted as a way to address environmental degradation and wildlife loss. I then described how the WCS's entrance into the Lao PDR was primarily justified on the basis of 'solving' human-tiger conflict — paving the way for the creation of the PES-ecotourism project to further support the conservation of the tiger and its prey.

I then outlined the development of the ecotourism department and ecotourism programmes within the NEPL-NPA. This began with the creation of the NNS in 2009, for which I described the major components, including the latest development of new ecotourism programmes in 2016 that utilized camera-traps as both the method to view wildlife and as the mechanisms to determine

payments. Most importantly, I detailed the creation of the VDF, which both receives funding from ecotourists and relies on communal pressure to enforce adherence to the project goals. Ultimately, I argued that the WCS's development of an ecotourism department in the NEPL-NPA repurposed 'Nature' into a tourist spectacle, and deployed these programs as a method reconcile development and conservation in the uplands of Lao PDR. As I explain in the following chapter, this transformation of Nature that generates income for villagers employed by the project has unintentionally exacerbated tensions and created inequalities among communities nearby the NEPL-NPA.

## CHAPTER FOUR: COMMODIFICATION/DECOMMODIFICATION OF 'NATURE'

*"People will protect what they receive value from" (Honey 2008,14)*

In this chapter, I investigate how the PES-Ecotourism project in the NEPL-NPA produces, transforms, and ascribes value. This brings attention to the politics of determining what is valued and devalued, and the process of allocating value via the project. I analyze the commodification of Nature through the monetization of ecosystem services, and the deployment of ecotourism as a market mechanism for biodiversity conservation and wildlife protection. In doing so, I put forth two overlapping and related arguments that address the implications of this new development in environmental conservation.

I begin by asserting that the PES-ecotourism project imposes a regulated market to replace a pre-existing market in wildlife trade. In other words, this project does not necessarily introduce market mechanisms so much as it implements a new, regulated market. I illustrate this market creation process by describing what I call the 'hunting value' and 'conservation value' of wildlife species. My aim, here, is to provide a contribution to the PES literature. This literature implicitly assumes that commodity production was non-existent prior to the introduction of PES schemes, and that benefits derived from Nature were either not valued in markets or that such markets hardly existed in the Global South (Constanza et al. 1997; Wunder 2005, 5; TEEB 2010, 29; To et al. 2012, 239; Hahn et al. 2015, 76).

Building on this body of literature, I assert that the creation of a commodity through PES (*commodification*) simultaneously involves the simultaneous devaluation of other commodities (*decommodification*). In other words, the valuing of wildlife conservation through payments to villages based on sightings by ecotourists requires the subsequent devaluation of other commodities produced from the wildlife. This new value is both non-negotiable for local villagers

and intended to disincentive wildlife hunting in place of an alternative livelihood that is based on ecotourism. At the same time, this new market, one that is based largely on ecotourism, is not actually market-based, but administratively and often arbitrarily decided. I analyze this twin process of commodification and decommodification by tracing both use values and exchange values associated with this conservation project. I point out that the new conservation value of species does not outweigh the former hunting value that was lost due to the restrictions imposed by wildlife regulation and the creation of the territorial NEPL-NPA. In other words, the value now received by the new market may not fully incentivize hunters to stop hunting wildlife. Finally, I explore the implications of the valuation and subsequent devaluation process of wildlife species through the PES-ecotourism project.

#### **4.1 Imposing Market-based Conservation**

The purpose here is to detail how livelihoods have changed with the creation of the protected area, under the guidance of international organizations and implementation by the GoL. I specifically focus on the subsequent valuation of conservation and wildlife protection with the introduction of the PES-ecotourism scheme in the NEPL-NPA.

I begin by describing the hunting of wildlife within park boundaries as a livelihood practice, one that has and continues to operate within a market. The WCS's entrance into the NEPL-NPA revalued wildlife species in accordance to their stated goal of protecting the tiger for biodiversity. Tigers and their prey, including specific wildlife, were thus revalued based on their visibility within forests through the creation of the PES-ecotourism project.

I determine that the PES-ecotourism project imposes a regulated market to replace a pre-existing market in wildlife trade. Simply put, a former 'hunting value' of wildlife is restricted via

regulation and laws in tandem with the creation of a new ‘conservation value’ through the WCS-lead conservation project.

#### 4.1.1 *Former Hunting Value*

Across the Lao PDR there exist many stories of wildlife abundance in the past. Before the protected area was created, villages reported weekly commerce in wildlife products with Vietnamese traders (Davidson 1998), with gaur gall bladders and sambar deer antlers among the products most commonly sold (Vongkhamheng 2002) (cited in Johnson et al. 2010, 12). The chief of Nampoung village remembered his interaction with wildlife before his village was relocated to a new district and alongside a major provincial road:

There were lots of wild animals in that village. Some people would just sit at their house and the animal would come to the house and they’d shoot them. Lots of deer would come and play with our cows and buffalo. Sometimes they didn’t know if it was a cow or a deer (Interview, July 26, 2016).

Before the arrival of the WCS, and prior to the large-scale delimitation and conversion of land into national protected areas, key megafauna species had been primarily valued through trade in the market. Put another way, the ‘ecosystem’ harboring a variety of wildlife species had provided a ‘service’ — *hunting value* — that was facilitated through both the hunting and selling of fauna to traders. Species had been sold locally, regionally, and internationally, with prices largely determined by the market.

However, not all hunters seek to hunt wildlife species in order to sell them on the market for their monetary value. This value is also a nutritional value for the many people living in and around the protected area. As expressed by Kamsone, a former hunter himself:

[I wanted to go hunting] because *in the past our food supply relied on nature, there was no market*. So, we hunted every animal that we could find. If we caught a big animal, we

would tell the village people to come and help us to carry it and we would divide the meat between the families to eat (Interview, July 27, 2016).

The ‘market’ Khamstone refers to is one where traders buy and sell domesticated livestock meat, poultry, and other sources of sustenance. Wildlife had also been caught purely for its value in sustenance for entire villages, many of which relied entirely on this source of protein. While wildlife species are also consumed in villages or in the home for protein or medicinal purposes, I focus on the monetary value of wildlife species within markets.

*Table 6: Average market prices in 2001 for wildlife species in Southeast Asia (Nooren et al. 2001)*

This particular value facilitated through hunting and trade is considered to be a *threat* to the very survival of vast ecosystems and biodiversity. In both the region, and in the NEPL-NPA, the Indochinese tiger is one of the most highly valued species in these markets (see [Table 6](#))<sup>14</sup>. In the Lao PDR, according to a former hunter, people would go out into the forest to hunt any and all

<i>Species</i>	<i>Price (USD) per kg</i>
<i>Tiger</i>	60 - 90
<i>Pangolin</i>	21 - 52
<i>Golden Turtle</i>	100 - 150
<i>Muntjac</i>	3

types of wildlife species that they could find: “there were no tigers at that time because tigers were also in high demand in the market, so lots of people hunted them” (Interview, July 27, 2016).

Furthermore, a village chief noted that a decline in wildlife populations in the protected area was largely attributed to the overhunting of fauna for the market: “People hunted them as a job and they sold the animals when they caught them” (Interview, July 26, 2016). This is consistent to what a foreign WCS staff member stated in an e-mail:

<sup>14</sup> Source: Nooren, Hanneke, and Gordon Claridge. *Wildlife trade in Laos: the end of the game*. IUCN-The World Conservation Union, 2001.

I cannot give you exact information in relation to NEPL but I believe that more of the hunting is for profit than consumption. Selling wildlife to government officials, Chinese/Vietnamese tourists and to the increasing number of wealthy Lao who see bush food as a treat or status symbol give better returns than eating it themselves. This of course would depend on the location. Isolated villages would be more likely to consume it but people within easy access of highways, markets and borders would be more likely to sell it...anything is killed and traded with practically nil enforcement” [sic] (E-mail correspondence, March 30, 2017).

This so-called ‘illicit’ wildlife trade is one of the largest issues facing the protection of wildlife in the country; the proximity of the Lao PDR to markets in Vietnam and China provides an opportunity for local hunters to target these species that are highly valued in this type of trade. Based on informal discussions with village members near the protected area, a WCS staff member of Lao nationality stated that the current price for a tiger could be anywhere between \$20,000-30,000, a Sambar deer between \$500-800, and a muntjac between \$100-500 per animal (Interview, March 28, 2017).

Displayed on the *Tigers Forever* information board posted up in the NPA office at NEPL was the following statement: “illegal wildlife trade is the major threat to tigers, with a dead tiger being sold for tens of thousands of dollars for use in Chinese medicine.” According the Ministry of Agriculture and Forestry (MAF), the major threat to wildlife is “market hunting” (MAF 2001 cited in Hedemark et al. 2005, 8). A WCS staff member noted that feline wildlife species, “can really bring incredible amounts of money to somebody who can kill it and sell it to a trader who’s passing through and smuggle it over the border to Vietnam” (Interview, July 21, 2016).

Sonkhua is located alongside one of the only roads that runs through the entire province into Vietnam, making it a particularly useful junction for trade. According to a discussion with a Khmu villager from Sonkhua village, Lao traders often pass by asking for wildlife. Not only have they done this in the past, but he explained that these individuals come from either Xam Nuea or

Xieng Kouang to try and buy wildlife from their village in the present (Interview, July 25, 2016). The village chief from Sakok explained that some of the traders also come from neighbouring Luang Prabang Province, stating that “there used to be a lot of people, but after the project started, there are hardly any” (Interview, July 25, 2016).

According to a village chief involved in ecotourism activities, “there are still some groups of [Lao] people who ask if we have caught specific kinds of animals. But they are not really demanding them...they want to purchase them to eat...[for example] in this village, a kilo of wild pig meat or deer is 30,000 kip per kilo” (Interview, July 26, 2016). Not all hunters go for big ticketed fauna either, as an elder Khmu villager in Nampoung explained, “I don’t think [hunters in this village] would ever catch a valuable animal, like a tiger or something. The most valuable animals they would catch would be deer” (Interview, July 26, 2016).

Before proceeding, I do want to make one caveat. I am not suggesting that *all* former village members actively hunted and traded wildlife species, were connected to illicit markets, or were primarily extracting wildlife value from the protected area to export. Such a mischaracterization may arguably be reasserted through the PES-ecotourism project. Rather, I attempt to point out that such commodity relations, however common, were present prior to PES and ecotourism development in the NEPL-NPA.

My intention is not to locate the exact value of wildlife traded in this ‘illicit’ market, but to rather point to the fact that such value had been already created by a particular market that was operating in this area. In describing ecosystem services and valuation, Gretchen C. Daily notes that goods and services from ecosystems are “greatly undervalued by society,” adding that “for the most part, the benefits those ecosystem services provide are *not traded in formal markets*” (Daily 1997, 2). More recently, in a synthesis prepared by The Economics and Ecosystems of Biodiversity

(TEEB), the authors claimed that their goals are, “making nature economically visible” (TEEB 2010, 29). In other words, it implicitly assumes that Nature, ‘Natural Capital,’ or ecosystem services were not entirely visible both prior to PES and prior to them being commodified in this process. Thus, I want to present a case study of a PES scheme that produces a new commodity by using a similar resource that already had been commodified and traded in a market. I complicate the implicit assumption in PES literature that benefits derived from Nature were not valued or given a price in a market prior to the development of a PES scheme (Constanza et al. 1997; Wunder 2005, 5; TEEB 2010, 29; To et al. 2012, 239; Hahn et al. 2015, 76).

This argument can be aptly illustrated in a discussion of ongoing hunting in the NEPL-NPA by a Lao WCS employee working for the protected area. According to the employee, “[Villagers] are going there to *take benefits from natural resources* in that area. So, we consider [the villagers] very important to help with these illegal activities” (Interview, July 6, 2017). As it will be discussed below, the PES-ecotourism programme developed by WCS provides monetary ‘benefits’ to select villages in order to incentivize conservation-friendly behaviours. This helped offset restrictions, regulations, and laws that have rendered the livelihood of hunters as “illegal”.

The creation of a PES scheme in NEPL-NPA through the development of an ecotourism programme not only ‘fixes’ value creation for *in-situ* conservation, but also is a replacement of a previous, and arguably less restrictive, wildlife market. I argue that the PES-ecotourism project constitutes a forcible creation of a new market in order to supplant a prior existing market, one which sustained hunters’ livelihoods until being rendered illegal through rule-making authority that was granted to both state and non-state actors. Thus, it should be made clear that the arrival of the PES-ecotourism project, enforced by WCS, was a concerted effort to create a new market

with new values. This began with WCS's entrance into the Lao PDR for the purpose of conserving the tiger through the creation of a benefits scheme tied to the development of ecotourism activities.

#### 4.1.2 *Protecting Tigers and Tiger prey*

In the NEPL-NPA, the tiger is a top predator, making it an umbrella species since it needs a wide and healthy food web in order to survive. According to Ducarme et al., “they can act as an indicator for the health of the entire ecosystem — which is why many proponents of conservation argue that they are the best way to legitimize protection over an entire ecosystem and their habitat” (2012, 3). Therefore, the act of conserving an umbrella species, the *tiger*, is an ideal entry point for investigating value formation. Specifically, it speaks to the way in which the WCS aims to revalue wildlife according to their conservation goals. While WCS had originally entered the Lao PDR for conserving the tiger by attempting to resolve conflict between humans, they also revalued wildlife to better protect key prey species of the tiger. I maintain that before monetary value was assigned to wildlife and biodiversity through the deployment of the PES-ecotourism project in NEPL-NPA, wildlife had to first be categorized and valued in relationship to the goals of conservation that WCS initially set out to achieve. In other words, wildlife had been revalued in accordance to the conservation of the charismatic species *panthers tigris*. The tiger is no longer the wildlife species that disturbs livestock, but it is conserved for ecotourism, attracting conservation funds and ecotourists abroad through its promotion as a mascot of the entire park.

Tigers are a symbol throughout Southeast Asia. In Laos, tigers are the subject of countless folktales by a variety of ethnic groups. Figures of tigers are molded from UXO remnants from the Vietnam War in Xieng Kouang province. Moreover, tigers are used in advertisements for selling commercial products such as Beerlao, Tiger beer and bottled water. At the Viengxay Caves,

located in the Northeastern part of Houaphan province, tigers were once considered to be abundant during the war period. “In the past, this area was a mixture of many pine trees, and tall grasses grew here. There were also many tigers — so many that sometimes you only knew they were there when you stepped on one” (Viengxay Caves audio tour, July 4, 2016). At the NEPL-NPA, situated on the western part of the province, tigers are symbolically linked with conservation; an emblem of the promises of protected areas in the promotion of biodiversity protection.

This overt symbolism is demonstrated by the presence of pro-conservation signage, created by WCS, that displays the tiger in every village that is part of the conservation project. Tigers are, primarily, only visible through these signs, as noted by community members. According to a former hunter in Sakok village, “I’ve only seen [the tiger] on signs; I’ve never seen one in real life. I have seen some tiger paw prints when I went on the survey with the camera team” (Interview, July 26, 2016). In Sonkhua village, the site of the first ecotourism project, the sign reads, “help to conserve tigers for ecotourism.” In other words, tigers should be conserved for the value that they will ostensibly generate for villages via ecotourism (see [Photograph 4](#)).



*Photograph 4: Tiger conservation sign in Sonkhoua placed near the start of the NNNS*

One of the other issues facing perceptions of the tiger was its claimed predation on domesticated livestock. WCS entered the Lao PDR in 2003 to originally help solve this ‘issue’ of human-tiger conflict as a result of livestock depredation. This caused tension between villagers and this charismatic species as many community members viewed the hunting of tigers less as a money-making endeavor than as a preventative measure for saving their livestock and crops (Goodrich et al. 2015, 9). According to an ecotour guide in a village near the protected area, “about five years ago, there was a tiger that attacked our livestock. The tiger ate about five cows in one year. Now we still see the tracks of tigers in this area, but no more attacks” (Interview, May 8, 2016). The chief of Nampoung village made a similar observation, stating “four or five years ago,

[tigers] used to come to my rice field and eat my pigs. We used to go gold panning along the river and we have heard tiger's roar before" (Interview, June 26, 2016). While ungulates, tiger prey, are largely responsible for the destruction of agricultural crops, tigers might act as a preventative measure against this. As one elder member of Nampoung village asserted, "if there are no animals destroying our crops, we would have enough to eat. But if there are, then we will not have enough. We would have to sell all of our corn and we would still not have enough to buy a rice supply to last for one year" (Interview, July 26, 2016). Prior to the arrival of WCS in the Lao PDR, there were different and conflicting perceptions of tigers within certain villages. Therefore, one of the key objectives of WCS was to help situate the tiger as the mascot for protected area conservation, a symbol to act as the key indicator for biodiversity and conservation.

The purpose for WCS's entrance into the Lao PDR was to both protect and conserve the tiger. The staff at WCS informed me that, "the project was established in NEPL in 2003 to help protect wildlife, especially the tiger population, because tigers are nearly extinct in Laos" (Interview, May 9, 2016). WCS, however, initially found evidence of such wildlife by way of surveys conducted by camera traps within the confines of the protected area. These surveys initially determined that a sizable tiger population existed within the borders of the NEPL-NPA. According to WCS staff, "...[WCS] found evidence of a significant tiger population, significant enough that they could breed. They had evidence at that point of about seven or eight [tigers], I am not sure actually, but it wasn't huge" (Interview, May 17, 2016).

Part of the overall strategy for protecting the tiger in the NEPL-NPA is also the protection of smaller species that the tiger may prey on. This is noted by one Lao staff member, stating that "[WCS's] first objective was to protect the tiger. Their next objective was to help protect all of the rare wildlife such as guars, wild cows, bears, and many other species that are rare in this protected

area” (Interview, May 9, 2016). According to an information board in the NEPL-NPA office in Vieng Thong, the NEPL-NPA “is an important habitat for many wild species [native] to Indochina. There are 5 key species [tigers, gaurs, white-cheeked crested gibbons, sambar deer, and otters] *that represent the health of NEPL’s diverse ecosystem and wild inhabitants.*” Moreover, in the section outlining WCS’s partnership with Panthera since 2006, tigers are further used as the indicator of the entire NEPL ecosystem. “These solitary animals require a large area of habitat and are, therefore, considered a *key indicator of an ecosystem’s health.*” Furthermore, the Global Tiger Recovery Programme 2010–2022 maintains that “these magnificent big cats sit at the top of the ecological pyramid in vast Asian forest landscapes. The presence of viable populations of wild tigers is an indicator of the integrity, sustainability, and health of larger ecosystems” (Global Tiger Secretariat 2011, ix). In a 2013 *Vientiane Times* article, Keoxomphou Sakdavong noted that Nam Et-Phou Louey should be held up as a model for conservation in the Lao PDR. “Tigers are sending a message to the concerned ministries; more than 20 protected areas in Laos are not rich enough in natural resources, and their ecosystems are not doing as well as Nam Et-Phou Louey” (Sakdavong 2013). In other words, Sakdavong asserted that the only indication that NEPL-NPA can be considered a healthy ecosystem is the presence of tigers. The objective here is to not engage in a critique of ecology, but to rather point out the way in which the tiger is privileged above of all other wildlife species, including local populations that derive their livelihoods from both forest and wildlife species. Moreover, this species is privileged despite its elusiveness within the forests that the WCS has aimed to protect through the project. Their aim of conserving the tiger was coupled with the related goal of valuing wildlife *alive in the forests*. This brings me to my second point, concerning the creation of a new market and a new monetary value for wildlife species alive in forests over wildlife that is dead, traded and consumed. To put it simply, this is a revaluation of

wildlife for being *visible* over its value for hunting and trading in the market, or hunted and consumed for its value in providing protein to entire villages.

#### 4.1.3 *Creating Conservation Value*

According to scientists at the *The Royal Society*, one of the consequences of overhunting, largely due to the hunting of species for the international wildlife trade, is that it can “alter the structure and function of the environments in which they occur and the *services* they provide” (Ripple et al. 2016, 6) [emphasis added]. The key objectives of both the GoL and the PES-ecotourism project in NEPL-NPA is to halt the pressure of overhunting key tiger prey species supporting the health of the tiger, and ostensibly the entire protected area ecosystem due to its status as a key indicator for ecosystem health. However, the very act of placing wildlife under protection, or the idea of conserving particular species, is a relatively recent notion for many people in Laos. A former Hmong employee of WCS from 2013–2014 described the project’s rationale for helping villagers understand the need to stop hunting for trade:

[The PES-ecotourism project] says, ‘hunt for family, do not hunt for trade,’ and they make the local people understand. Like for example, when I work there we say, ‘you can hunt for your family. Want to go to the national protected area for hunting for one year? You can come back home with enough [if you go] for one month.’ So that means you stop hunting [after] one month. So, if you just go there for hunting to sell, if you carry a hundred deer, it is never enough because you sell to not only the people in the market, but all the people around the country. So, it is not enough. So, if you hunt only for your family for one year, one month or two months, that’s enough [sic] (Interview, June 17, 2016).

However, as previously indicated, not all villagers actively engage in hunting practices for trade. This is a mischaracterization on the part of the government and NGO entity operating in NEPL-NPA, since it lumps any “hunter” in with illegal hunting for the sale of rare wildlife species to traders with cross-border linkages. Nonetheless, one of the methods used to better fulfill the

objective of stopping hunting for trade is by revaluing wildlife based on its presence in the forested areas of the park. This process of revaluation begins with the government, and subsequently a non-governmental organization, WCS, valuing the presence of wildlife in forests. It is a shifting of value away from dead wildlife in trade or in terms of its protein content, toward one of visibility to conservationists and tourists. Thus, the scientists at The Royal Society maintain that “large mammal communities offer potential to generate human food security with their income-generating capacity through *tourism*. Such potential is increasingly forgone as wildlife populations are over-hunted for a *much lower value product: meat*” (Ripple et al. 2016, 8) [emphasis added]. In other words, large mammal populations are thought to harbor a new type of value, through tourism, that conservationists believe is worth more than their value in meat.

At the same time, the act of protecting wildlife for its use in tourism is only realized based on its visibility. As one former WCS employee explained:

So, compare one dead wildlife with one still alive wildlife. So, if they get one wildlife, they will get big money just one time. If they leave the wildlife to see for tourists, they will get smaller money but it will take a longer time to get the money. So, this is the best thing for them to get money like that. If they kill the wildlife, they just get money one time. It's big money, but it's finished...so we have to show them, for example, if they do not kill the wildlife, more tourists will come and they will bring more money, and then they will get the benefits [sic] (Interview, June 17, 2016).

This is more commonly what is told to villagers that are part of the conservation project — that wildlife is more valuable if it is living than if it is hunted and sold on the markets.

This is a shift in wildlife being valued *alive* rather than hunted for its value in meat. One former hunter explained the rationale behind the management of wildlife for the project as the reason that he no longer can hunt, stressing that it is “because of the project and also the government has told us not to go hunting because *they want more animals in the forests*. That was why we stopped hunting. If the government didn't do so I'm sure that there'd still be lots of people

hunting nowadays” (Interview, July 26, 2016). Thus, the sustained presence of wild animals in the forests is one of the goals of the conservation project, but it tells only half the story. The wildlife that is forgone, or not hunted, is now valued in an entirely new way — *sight value*. This is aptly described by a former hunter in the main ecotourism village of Sonkhoua. He explained that he no longer hunted in the protected area because of the project and the hunting laws enforced by the government: “If you got caught hunting, you’d have to go to jail. [So] *I wanted to save the wild animals so that they would attract more tourists to come and see them...* if there was no project, there would definitely be many people hunting” (Interview, July 27, 2016) [emphasis added].

The PES scheme in NEPL-NPA, which operates within the community-based ecotourism programme managed by WCS, primarily values the existence of live wildlife species as the service provided. This is a privileging of the wildlife’s *living* value over its value in terms of protein, its absence for village livestock predation, or as a traded commodity. However, the particular value generated for conserving wildlife, keeping it alive in the confines of NEPL-NPA, can *only* be realized through its sighting on an ecotourism tour. In fact, ecotourists are the only actor capable of directly giving wildlife value because they are paying for the programme, bringing monetary value in the form of money into the protected area. Yet, this only occurs once the arrangements set out by the project are put in place by WCS and the MoNRE. This forms the basis for my inquiry into the production of value as a service through the PES-ecotourism project, focusing primarily on its ecotourism aspect.

Wildlife species are kept alive not simply as a spectacle for ecotourists to see, but they are also valued for the potential for future generations to experience. It is frequently discussed that the need to conserve wildlife is so that the younger generation can grow up seeing these special

species. An ecotour guide in Nampoung village explained the rationale for keeping wildlife alive both for his grandchildren and for tourists abroad:

[The] project was established to protect the wildlife and create a programme for tourists. It also helps conserve wildlife so that *our grandchildren can have a chance to see animals here in the future*...but we also want to have wildlife species here so that people from other countries can come to Laos and *see* them (Interview, May 8, 2016).

The village chief of Sakok noted the reason why his village only hunts for family, making sure that wildlife is kept alive in the protected area for future generations and tourism:

Conservation is very good because the project protects animals for the next generation to see. If there was no conservation project, then all the wild animals would be extinct and *the next generation would not see them*. And if we caught the wildlife just for feeding our family, not for selling like in the past (Interview, July 26, 2016).

All of these discussions thus point to a production of ‘sight’ value or value for wildlife *living* rather than wildlife that is dead. Moreover, I use the word ‘sight’ since the value is only realized — the payments are only transferred — after wildlife is actively viewed on an ecotourism tour. The ability, then, to view wildlife occurs either in person *or* via camera traps. Thus, this specific type of value can be thought of more broadly as producing *ecotourism value*. Taken together, the PES-ecotourism project, led by WCS with the help of the GoL, imposes a regulated market over a geographical space in a top-down fashion with the purpose of displacing the wild meat market. The very creation of this conservation value, this new market, which requires a twin process of commodification and decommodification.

#### **4.2 Wildlife Commodification/Decommodification**

What I have discussed so far in the PES-ecotourism project is the top-down introduction of a new type of value — one in which privileges wildlife alive in forests rather than as hunted species to be either traded or consumed. I then charted how the PES-ecotourism project attempts

to revalue wildlife that previously held value through hunting, within a regulated ecotourism market that determines the value of wildlife based on sightings by ecotourists participating in the programme.

All of this entails a commodification of ‘Nature,’ following the presumption that wildlife species are transformed into a commodity via the service of ecotourism. In a well-cited journal article, Costanza et al. begin laying down their argument for the need to value the world’s natural capital, “because ecosystem services are not fully ‘captured’ in commercial markets or adequately quantified in terms comparable with economic services and manufactured capital, they are often given too little weight in policy decisions” (1997, 253). On creating markets for PES schemes, Sven Wunder states that “in developing countries [PES markets] seem remote” (2005, 5). More recently, as outlined in a synthesis prepared by The Economics and Ecosystems of Biodiversity (TEEB), the authors<sup>15</sup> claim that their vision is “making nature economically visible” (TEEB 2010, 29). In other words, these authors implicitly assume that Nature, ‘Natural Capital,’ or ecosystem services were not entirely visible or given value in a market prior to the development of PES schemes.

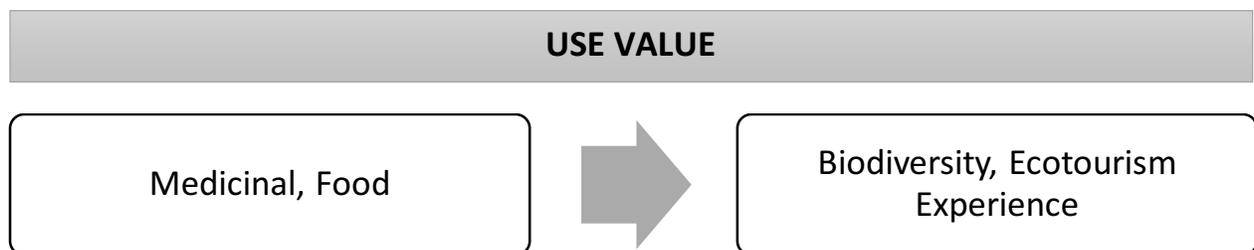
As I have previously demonstrated, there already existed commodity relations for wildlife species prior to the introduction of the PES-ecotourism project. In other words, wildlife in the Lao PDR has long been traded through some market, before a new market was created. This then presents a case whereby a market is instrumentalized for the purpose of solving a problem initially caused by a market. However, both markets are not equal as one is determined by complex negotiations and routes of traders, and the other is arbitrarily assigned values in order to induce behavioral change in villagers that would normally consider the former market more enticing.

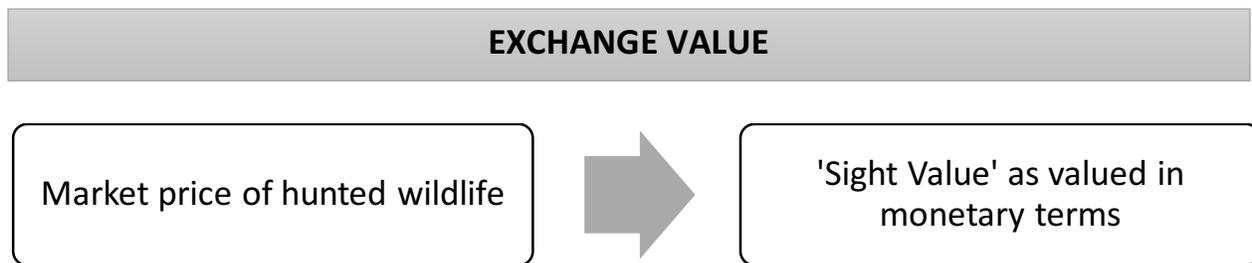
---

<sup>15</sup> Pavan Sukhdev, Heidi Wittmer, Christoph Schröter-Schlaack, Carsten Nesshöver, Joshua Bishop, Patrick ten Brink, Haripriya Gundimeda, Pushpam Kumar and Ben Simmons.

I argue that the creation of a commodity — or more accurately — the valuing of wildlife conservation through both sightings by ecotourists and payments made out to villages involved in the project — is based in part on a simultaneous devaluation — a decommodification. One way in which I employ this argument is by tracing the shifting values in the PES-ecotourism project as a result of this twin process of commodification/decommodification. It is fruitful to highlight the transformation in both use value and exchange value, tracing how they change through the process of commodification under the PES-ecotourism project.

What is important to note here is that wildlife as a commodity is not merely a thing. As I have previously articulated, property entails a political relationship between people (MacPherson 1978, 4; Vandergeest 1997, 4). In other words, wildlife species in the protected area are not objects; they represent property that consists of a set of relationships over access and control. Thus, wildlife represents a relationship between villagers, ecotourists and resource managers. These set of relationships have changed as a result of the PES-ecotourism project development (see [Figure 6](#)). Analyzing the shift in use values provides greater clarity for how the project involves a simultaneous process of decommodification. For instance, the use value of wildlife to be hunted for medicine or food has been repressed by rules and regulations enforced by WCS and the GoL. In other words, wildlife as meat or as medicine has been *decommodified* as a result of the PES-ecotourism project. What has been commodified, however, is the ecotourist experience of spotting wildlife and generating payments to villagers.





*Figure 6: The transformation of value as a result of the PES-ecotourism project*

As the previous sections have shown, both use values and exchange values have changed as a result of the PES-ecotourism project. Prior to the project, wildlife had use values in terms of its perceived medicinal value or food for villages. After the beginning of the NNNs, wildlife was useful for the ecotourism experience of foreign tourists and the biodiversity of the entire protected area. It is important to note that use values were originally for local villagers, yet this use value has since become ‘useful’ to foreign tourists and international conservationists alike. Use values are thus appropriated from local villages by international tourists, conservation biologists, ecosystem managers, and government counterparts. It is repurposed as ‘experiencing’ Nature for local villagers.

Before moving forward, I want to make one caveat on my usage of both ‘use value’ and ‘exchange value.’ I recognize that exchange value is not quite as simple as I am explaining it here. For instance, Karl Marx pointed out that exchange value is also based on labour value and labour time (Marx and Fowkes 1990, 130). Hence, the valuation of wildlife through the creation of a regulated market obscures the labour value of local villagers’ involvement in the creation of a ‘Nature as commodity.’ This value is not static either, as the NEPL-NPA is a productive unit in itself, producing wildlife and ‘biodiversity’ value that is compounded through *time*. This value can rest on the labour involved to produce wildlife, and also the duration it takes to create this value.

However, in the interest of brevity, I operationalize these types of values in my thesis simply as payments and price.

#### 4.2.1 *Wildlife as Ecosystem Service*

Robert Fletcher and Bram Büscher focus on a discussion of whether PES is neoliberal, and to what extent that it is neoliberal. In essence, they critique the tendency for researchers to focus on the “particularities and outcomes” of PES implementation rather than on *how* and *why* the mechanism first emerged. Their argument is more fundamental, however, shifting the focus away from the ‘payments’ portion of PES toward the ‘services’ that are provisioned. According to Fletcher and Büscher,

the ‘basic functionality’ of PES is *not* whether it works through payments or compensation, through the market or the state, but *whether nature* is allowed to ‘deliver the service’. If this ‘functionality’ is compromised, PES conservation will ostensibly not work and the poor will not benefit (Fletcher and Büscher 2017, 229) [emphasis in original].

Thus, PES primarily functions as a way to provision an ecological aspect of Nature as a *service*. In other words, Nature is instrumentalized; it is transformed into a service through a process of *recapitalization*. However, this assumes that prior to the advent of PES, Nature was *not* serviceable. To put it another way, the idea that Nature must be rendered an ‘environmental service’ so that conservation makes sense in a neoliberal world implicitly assumes that, prior to the onslaught of neoliberalism and its ostensible hegemony, the environment may have not been entirely *serviceable*. In contrast, I problematize the very notion that Nature has *become* a ‘service’ through the development of the PES scheme. Rather, it has been a service prior to the influx of capital as payments (or compensation) for conserving, or the non-use of Nature. This is thereby enforced through a restriction in resource access by both state and non-state actors that claim a rule-making authority over a particular area of land for the purpose of conservation or protection.

Thus, I posit that ‘Nature’ has been, and always will be, a ‘service’ in the way that it provides a use value for the world. Therefore, the concern should not fall on whether it is made serviceable, but rather on *what* kind of service, *how* ‘Nature’ is made into a ‘service’ for PES, under *what* circumstances, and *for whom* is ‘Nature’ made serviceable. Moreover, it is important to understand which ecological aspects of ‘Nature’ are made non-serviceable, particularly the way in which this process bans the exchange value of wildlife species. PES is not a wholesale of the entire environment, but targets specific ecologies for a particular reason. This requires, or rather necessitates, the separation of nature from society — the Cartesian dualism.

The PES scheme in NEPL-NPA primarily values the living presence of wildlife species as the service provided. Danièle Perrot-Maître, a resource-environmental economist, gave a seminar on valuing ecosystem services for the financing, protection, and sustainable use of ecosystems for the IUCN. In his seminar, Perrot-Maître discussed the valuation of non-timber forest products (NTFPs) for villages located within the Vieng Thong District of the NEPL-NPA. He calculated the value of plants, *wild meat*, fuel, housing materials, and crops consumption in terms of “people’s actual willingness to pay” (Perrot-Maître 2005). While NTFPs are not central to the conservation project, wildlife meat is fundamental to this unique case of an ecotourism programme utilizing aspects of a PES framework. In other words, the living presence of wildlife *must* be thought of as an ecosystem service. If the non-hunting of wildlife species can be considered as a PES activity, the opposite can also be true. Accordingly, hunting wildlife can be a PES activity in that wildlife as a service generates income for community members. This is directly related to the fact that this PES-ecotourism project attempts to replace a former market — a former livelihood turned-illicit. If one were to invert the PES idea, hunting could be easily described as a PES activity since it

involves receiving payments for using Nature, namely wildlife, for its benefits. Yet this is an activity that conservation biologists and resource managers do not like.

#### 4.2.2 *Monetizing Ecosystem Services*

The general consensus is that PES schemes requires the valuation of ecosystem services. This revaluation is what I describe as the change in exchange values from the now illicit wildlife trade to ecotourism sightings as a result of the project's creation. More importantly, I assert that the monetary value of wildlife has been both suppressed and appropriated as a result of the PES-ecotourism development. It is suppressed because wildlife is revalued for less than what it had sold for before, and the value is appropriated away from villagers and into the hands of non-governmental organizations and, in the near future, private tour companies aiming to profit off the non-hunting of wildlife. This value is not determined by the community members in the project. Rather, WCS, with the partnership and sponsorship of international organizations and external donors, have the ability to assign a specific economic value to wildlife species through the PES-ecotourism project. My purpose here is to avoid giving an evaluative judgement for how the exchange value of biodiversity in the country *should* be calculated, but to rather demonstrate how ecologies within the Lao PDR are monetized, and to understand the *need* for researchers to give wildlife and biodiversity the Lao PDR a 'value' in the first place.

#### Pricing the Programme

This particular PES scheme in the protected area of Houaphan was first proposed in the ecotour plan that was devised by the Haas School of Business at the University of California, Berkeley. According to a presentation given by WCS, they advocated for the implementation of a

fee structure for NEPL-NPA that would be broken into four components: a permit fee, including a domestic and international pricing; a fee for the Village Development Fund (VDF); a tax for the provincial tourism department; and a fee for the sale of handicrafts (Bhula et al. 2009, 55–56).

<i>Tour Price</i>	<i>Village Fund</i>	<i>NPA</i>	<i>District</i>
\$150.00	\$22.50	\$10.00	\$2.50

*Table 7: Allocation of funds generated by the sale of the original ‘Nam Nern River Trip’*

The permit fee for international tourists that was initially proposed by the UC Berkeley team (USD \$10) is consistent with the fee currently included in the pricing of tours operated by WCS. However, this fee includes the specific market mechanism that relies on the valuation of wildlife species residing in the protected area. According to the project’s ecotourism model, as outlined on the NEPL website, “every visitor must pay a [visitor fee], which is included in the total tour price, to the village development fund before entering the area. The amount of money received by the villages depends on the numbers of wildlife seen by the tourists...” (WCS 2016). In other words, the fee paid to the shared Village Development Fund (VDF), which is taken from the USD \$10 permit fee, is determined by the number of wildlife sightings by ecotourists (see [Table 7](#)). As I described in Chapter 03, each ecotourist is handed a “Wildlife Monitoring Form” at the conclusion of their tour in order to mark down the number of wildlife species seen, determining the benefits that will be distributed to the VDF. If a ecotourist spots a monkey, leopard tracks, a monitor lizard, a civet, a slow loris, a porcupine, or a muntjac, the bonus for the VDF, split between 14 villages, amounts to 20,000 LAK (~USD \$2.50) per species. Only otters, sambar deer, and a set of tiger tracks are valued at 40,000 LAK (~USD \$5) per sighting, with a tiger valued at 2,000,000 LAK

(~USD \$250). The baseline fee given to the VDF is 90,000 LAK (~USD \$10), which is aptly categorized alongside other wildlife species as “human (tourists)” (see [Table 8](#))<sup>16</sup>.

<i>Wildlife Species</i>	<i>Payment Classification</i>	<i>Conservation Status (Wildlife Law)</i>	<i>LAK</i>	<i>USD</i>
<i>Tiger</i>	Class I	Category I	2,000,000	245
<i>Tiger track (1 set)</i>	Class II	Category I	40,000	5
<i>Sambar deer</i>	Class II	Category I	40,000	5
<i>Otter</i>	Class II	Category I	40,000	5
<i>Muntjac</i>	Class III	Category I & II	20,000	2.5
<i>Porcupine</i>	Class III	Category I & II	20,000	2.5
<i>Slow loris</i>	Class III	Category I	20,000	2.5
<i>Civet</i>	Class III	Category I & II	20,000	2.5
<i>Monitor lizard</i>	Class III	Category II	20,000	2.5
<i>Leopard track (1 set)</i>	Class III	Category I	20,000	2.5
<i>Monkey</i>	Class III	Category I	20,000	2.5
<i>Human (tourists)</i>	-	-	90,000	11

*Table 8: Wildlife monitoring form in 2016*

However, when asked about the valuation of wildlife species for sightings made by ecotourists participating in the programme, a key informant noted,

Business students [at UC Berkeley] proposed a fee of \$10 per person total. We then figured that half (\$5) should be guaranteed (i.e. not based on wildlife sightings) and the other \$5 should depend on wildlife sightings. We used baseline [camera trap] data to estimate how much wildlife would be seen on average per boat per trip. Based on that information we calculated what the Class II species (sambar, otters, tiger tracks) and Class III species (other rare wildlife) should be if Class II is 2 times the prices of Class III (see [Table 9](#))<sup>17</sup>. For tigers, we just came up with a number of \$20 per village, which is [\$280 or ~2,200,000 LAK] total. That really wasn’t based on anything other than a round number that seemed

<sup>16</sup> Wildlife monitoring form obtained from participating in the NNNS program during my fieldwork.

<sup>17</sup> Wildlife monitoring form obtained from an older presentation given on the NNNS tour during my fieldwork.

very significant in comparison to the other fees (E-mail correspondence, November 20, 2016).

<i>Wildlife Species</i>	<i>Payment Classification</i>	<i>Conservation Status (Wildlife Law)</i>	<i>LAK</i>	<i>USD</i>
<i>Tiger</i>	Class I	Category I	1,800,000	220
<i>Tiger track (1 set)</i>	Class II	Category I	18,000	2.25
<i>Sambar deer</i>	Class II	Category I	18,000	2.25
<i>Otter</i>	Class II	Category I	18,000	2.25
<i>Muntjac</i>	Class III	Category I & II	9,000	1.1
<i>Porcupine</i>	Class III	Category I & II	9,000	1.1
<i>Slow loris</i>	Class III	Category I	9,000	1.1
<i>Civet</i>	Class III	Category I & II	9,000	1.1
<i>Monitor lizard</i>	Class III	Category II	9,000	1.1
<i>Leopard track (1 set)</i>	Class III	Category I	9,000	1.1
<i>Monkey</i>	Class III	Category I	9,000	1.1
<i>Human (tourists)</i>	-	-	50,000	6

*Table 9: Wildlife monitoring form in 2010*

In other words, the Class II species were valued at 40,000 LAK, Class III species were valued at 20,000 LAK. The tiger is the only Class I wildlife species in the protected area, and its fee was chosen solely based on producing a nice “round number.” The rationale behind putting a specific price on wildlife within NEPL-NPA largely relies on arbitrary decisions determined by WCS when constructing the ecotourism project.

The exchange value of wildlife species, in terms of its meat or medicinal use, relied upon various market forces, both supply and demand. The illegality of hunting can also lead to an increase in its price. Yet importantly the price in the new market, one determined by sightings, is administratively set. It only involves a market insofar as it relies entirely upon the tourist market

— how much an ecotourist would pay for this experience over competing tourist sites and enterprises. It's not a market for the villagers, who simply must accept the price, despite the discrepancy in value for forest access forgone in place of the PES-ecotourism project (Johnson and Gujadhur 2005, 10). In fact, all prices are administratively determined and non-negotiable, even for the sale of handicrafts within villages visited by ecotourists on tour.

The Haas Business School further proposed that these benefits distributed to villages should have a strong established link to conservation outcomes. According to the business plan, “this reward system will be effective at changing behavior to the extent that villagers value the benefits distributed to them. Thus, *it is critical that the NEPL-NPA understand villagers' priorities and customize benefits to address these priorities in order to maximize behavior change*” (Bhula et al. 2009, 58). While the discussion of behavioral change has previously been argued to be exemplary of a neoliberal governmentality, the important point here is the focus on the needs of villagers. When asked whether the valuation of wildlife was determined based on villagers' priorities, the same key informant replied that “the project is *not based on needs of the villagers*. It's based on what the tourists can pay and then some relative values based on the estimated number of sightings per trip” (E-mail correspondence, November 20, 2016) [emphasis added].

Thus, ecosystem monetization, in the case of the ecotourism project at NEPL-NPA, is operating within a ‘make-believe market’ insofar that the price placed upon various species is both arbitrary and caters to the demand of the tourism industry instead of the needs of villagers that are part of the programme.

## Pricing and Categorizing Wildlife

In the first Wildlife Law passed in 2007, the GoL classified hundreds of wildlife species overnight into three categories ranging from most protected to least protected. This Wildlife Law makes explicit that the classification of wildlife is for economic value and rarity while prohibiting trade (Department of Forestry 2010, 221). I maintain that the classification of wildlife species in the NEPL-NPA, according to the 2007 Wildlife Law, attempts to revalue wildlife based on its income-generating potential for financing conservation. It is further instrumentalized for the development of ecotourism activities in the protected area, where their charismatic fauna characteristics are valued for ecotourist sightings.

However, there is a disparity for classifying wildlife according to the conservation classification put out by the GoL and payment classification that WCS uses in the project. This points to some of the arbitrary decisions for determining exchange values for wildlife via ecotourism sightings that have been imposed onto villages by WCS and park management. The explicit differences in the wildlife classification, which exist under Wildlife Law and are enforced by the GoL, compared to the categories for payments based on wildlife sightings as defined by WCS for the PES-ecotourism programme, requires further analysis. Investigating the overlap here is particularly fruitful for learning how exchange value is imposed via a new market, as the two categories do not evenly line up.

According to the *National Tiger Action Plan for Lao PDR 2010-2020*, prepared by the Ministry of Agriculture and Forestry (MAF) and in collaboration with WCS, ‘category 1’ species are considered to be rare, highly threatened to extinction, *high economic value*, significant to socioeconomic development, environmental protection, [and] scientific research. Hunting is totally prohibited (Department of Forestry 2010, 184).

Moreover, ‘category 2’ species

are significant to socio-economic development, environmental protection, local livelihoods and scientific research. *Hunting outside the TPZ for subsistence is occasionally allowed, but not for trade* (Department of Forestry 2010, 184).

Lastly, ‘category 3’ species

are common in nature and have a high reproductive rate. They are also highly significant to socioeconomic development, environmental protection, and scientific research. *Hunting for subsistence is occasionally allowed, but not for trade* (Department of Forestry 2010, 184).

What is important and consistent throughout these categorizations is the outlawing of any hunting activity for the purposes of *trade*. Moreover, these three categories are similarly used in NEPL-NPA brochures, website, and in discussions with key staff members. According to the NEPL-NPA website, protected species (category 1) cannot be harvested anywhere or at any time of the year, while managed species (category 2) can be harvested outside of core zone and corridor for a six-month period from November 1st to April 30th (WCS 2016). Species not included in Category 1 or 2 can be harvested outside of the core zone and corridor at any time of the year (WCS 2016). Such an exhaustive list strategically categorizes all wildlife within the NEPL-NPA, even including birds, reptiles and amphibians. Yet this categorization becomes problematic when certain subspecies are listed in different categories. For example, muntjacs are both category 1 (*muntiacus rooseveltorum*, *truongsonensis*) or category 2 (*muntiacus muntjac*) depending on the specific species type (WCS 2016). This raises significant issues of whether local villagers would understand, not only the specific law, but differences in wildlife when hunting in the forest. The wildlife monitoring form, however, does not differentiate between the two categories, and instead just generally lists ‘muntjac.’ This may unintentionally discourage local villagers from hunting *managed species*, which are allowed to be harvested for a six-month period outside the core zone, if similar species would generate payments based on its sighting.

More importantly, these categorizations do not match with the ways in which wildlife is classified on the wildlife monitoring form, which sequentially lists wildlife based on price (see [Table 8](#) and [Table 9](#)). When I asked a staff member of WCS why there would be a discrepancy in this ‘price classification’ versus the wildlife categorization, they argued that “the terms, ‘Class’ and ‘Category’, are interchangeable... these categories are made by Lao law, not WCS, if any NGO was involved it was more likely IUCN but I don’t know for certain” (E-mail correspondence, December 13, 2016). Despite this, in past presentations given by WCS staff, there exists a discrepancy between both classification and categorizations. Whereas the latter was decided by official law enforced by the GoL, the former was determined by WCS. According to Krahn and Johnson, the rationale behind grouping wild animals into categories is that protected species are those that are *naturally rare* or reproduce slowly (e.g. gibbon, guar, sera) and will not persist if hunted. On the other hand, managed species are animals with naturally higher rates of reproduction that can sustain some degree of hunting (e.g. red muntjac, wild pig, porcupines) (Krahn and Johnson 2007, 26). However, this disparity between the ecotourism value based on sightings and categorization of wildlife species within the NEPL-NPA demonstrates that this is, in fact, *not* a market that is determined by supply (e.g. ‘rarity’) and demand. What this is the pre-calculated decision on the part of WCS management to create and enforce a regulated market in order to supplant the former wildlife market. Essentially, this discrepancy reveals the overall transformation of exchange values through the PES-ecotourism project.

### **4.3 Tensions and Inequalities**

A fundamental underlying assumption in an early report on the exploration of the PES-ecotourism project was that if Lao people can receive payments from wildlife in a non-exploitative

way, that they will in turn conserve and sustainably manage these species (Johnson and Gujadhur 2005, 3). This entailed the creation of an incentive-based system, the PES-ecotourism project, to change the behaviour of former hunters and community members living around the protected area to actively protect species in place of hunting and trade. It also required the active creation of a regulated market and the transformation of exchange values from trade into exchange value from ecotourism sightings. Here I aim to highlight the perspectives of village members as they understand the project, revealing some of the ways in which these goals can become problematic and unintentionally create new problems within such communities.

Not all villages benefit equally from the project, especially those villages that are too remote to directly participate in ecotourism activities that could further derive benefits and education about conservation and the protection of wildlife species. Even within villages there is inequality in benefits from tourism based on location. As one woman stated, “if there are lots of tourists that come to the village, people will be very happy because we live near the entrance, so if tourists come then we will be the first people to benefit from it” (Interview, July 26, 2016). This interview was held in the village of Nampoung, which had not officially been open to tourists at the time of this interview. Yet the handicraft woman already understood that she would benefit the most based on proximity to their entrance, aware of the inequality that is present within the community for villagers who wish to weave and sell handicrafts in other parts of the village that is not visited by ecotourists.

When asking a former hunter turned ecotour guide why he is interested in preserving the wildlife in NEPL-NPA, he replied, “firstly, for money. Secondly, because I want to preserve the wild animals” (Interview, July 27, 2016). In this case, monetary income is more important for former hunters who act as ecotour guides. When pressed further why he aims to preserve wildlife

as his second reason, he responded, “if there are more animals, there will be more tourists” (Interview, July 27, 2016). The preservation of wildlife, with the assumed result of an influx of ecotourists, is driven by the payout of monetary benefits. A WCS staff member of Lao nationality described the project as a way to make money on conservation. He believed that the villagers must realize that conservation can benefit them monetarily, and that wildlife seen on tour by ecotourists can provide them with significant income (Interview, July 6, 2016).

Earning an income is one of the driving factors for people joining the project, often taking precedent over the conservation or protection of wildlife itself. Sone, an ecotour guide from Sonkhoua, similarly noted that earning an income for his family from the project is more important than protecting certain wildlife species for the sake of conservation (Interview, July 27, 2016). Sone earns roughly 200,000 LAK (approx. \$25 USD) per trip. According to him, the most he has received per trip is 250,000 LAK (approx. \$30 USD) per trip, the same for any member of his village employed by the project. However, he explained that he only does about two trips per month, thus earning about 400,000-500,000 LAK monthly (approx. \$50-60 USD). While additional income is supposed to be distributed depending on the number of wildlife seen by ecotourists, Sone argued that despite wildlife increasing—he sees more when he goes on tours—his income has stagnated (Interview, July 27, 2016). He maintained that the benefits are not enough, and that he is frustrated with people continuing to hunt: “there are some people who have been fired from the project and now they are jealous so they go and hunt. I want the office and everyone to be ‘the eyes’ and to stop these people” (Interview, July 27, 2016). The reason why many people discuss having to be the ‘eyes’ of the project is due to the contractual agreement for the VDF. When asked why people continue to hunt, Sone stated

Because at first, when [the WCS employee] came to the village for recruiting, he said he would involve many families in the project. But in the end, there are only a few families

who are involved. And the people who are left out, are not happy with that. That's why they still go hunting (Interview, July 27, 2016).

He further described the jealousy that occurred within villages after the creation of the project, and noted that there are inequalities that have become visible among neighbours living close to people employed in the project:

Some people who live next to the service unit member's houses see that the people who are with the project get to do more work and earn more income. And they think that they are poor and they went for the interview so they think they should have been allowed to be part of the project too (Interview, July 27, 2016).

Income inequality is often a reason for continued hunting. According to the village chief of Sonkhoua, "there are still some people who go into the conservation area illegally to hunt...because they don't have enough money to support their families" (Interview, July 27, 2016). This lack of income is driven by a lack of employment generated by the project. Similarly, the village chief of Sonkhoua, Khampaeng, agreed that inequalities and lack of employment for some families drives hunting:

The people who are working with the service unit are getting the same amount of money and they are happy. The people who are not working with the service unit are not happy. This is the reason why people still go hunting in the protection area, because people who are not working with the service unit are a bit jealous of those working with the service unit (Interview, July 27, 2016).

He further requested that the project involve more people or create more programmes as a way to employ more people in his village. He explained that this would create less conflict in Sonkhoua between people who work for the project and those who do not (Interview, July 27, 2016). Some members in WCS are fully aware of village-level inequalities and lack of employment among all the families in the village as being potential factors for hunters continuing to hunt wildlife. According to a WCS staff member,

They have proposed us with a letter to provide for [them] a job to become employees. But we have a ceiling; we have a limit, a certain amount for that. We...don't know. We can increase the number of services; the number of employees, depending on the tourists and the wildlife in that place [sic] (Interview, July 6, 2016).

According to WCS staff the idea is that this project could be capable of employing more people, but this will only occur if the project can generate more income from tourists joining the programmes due to their budgetary restrictions. With the NEPL-NPA located far outside of the common tourist trail within the country, this may present an issue. Since the creation of the PES-ecotourism project, tourism numbers have been rising each season (see [Table 10](#)). The ecotourism programme began with hosting only 56 ecotourists in its initial year, but has since steadily increased to hosting 298 ecotourists in the 2015-2016 season. The top five markets for this programme are the United States of America (15%), Australia (14%), United Kingdom (10%), Germany (9%) and France (7%). Despite the slow increase of tourists to the program, the monetary benefits distributed to the VDF and employment income to villagers are still not enough as hunting has continued into the present.

<i>Season</i>	<i>Years</i>	<i>Visitors</i>
<i>Year 1</i>	2009/2010	56
<i>Year 2</i>	2010/2011	90
<i>Year 3</i>	2011/2012	111
<i>Year 4</i>	2012/2013	116
<i>Year 5</i>	2013/2014	175
<i>Year 6</i>	2014/2015	218
<i>Year 7</i>	2015/2016	298
<i>Year 8</i>	2016/2017	-

*Table 10: Number of tourists participating in the NNNS by season*

A former hunter in Sonkhoua reluctantly made note of the restriction that he faces in being able to earn more income from the project if more tourists do not join in on the tour: “My technique is to inform the office that there are more animals in the area so that the office can advertise it to the

public. That's the only *technique* that I have" (Interview, July 27, 2016) [emphasis added]. In this case, the word 'technique' should be thought of as 'power.' The only power he has to help attract more tourists is to inform WCS and the NEPL office in the town of Vieng Thong, located an hour away. This was a common issue that I heard during my fieldwork in Sonkhoua. Before the end of my fieldwork in one village, I was asked by villagers to help them increase the number of tourists that come to their village, thinking that I would be able to do so as a foreigner from abroad.

According to the village chief of Sonkhoua for the NNNS, the single-most important thing that he would like tourists to see when visiting his village is handicrafts (Interview, July 27, 2016). This represents a change in how villagers see tourists — a shift toward selling items to generate income. A handicraft woman in Sakok village, who was chosen to be part of the project, illustrated why she and others began to see the value in selling handicrafts instead of hunting or continuing shifting cultivation:

How did people change from practicing slash and burn to making handicrafts? Because their *thinking has changed*. In the past, they worked very hard but they didn't get much for it. We just destroyed everything. But now since the project started, we are able to earn a better income from working with handicrafts (Interview July 26, 2016) [emphasis added].

Many villagers do recognize the benefits of joining the project, and earning income through the VDF by practicing the non-hunting of wildlife. According to a former hunter in Nampoung village, "I don't [hunt] because it doesn't help me in any way. For example, compared to the ones who practice hunting to the ones who are not nowadays, I think people who don't practice hunting have more money" (Interview July 26, 2016).

People employed, or in the position to be employed in the PES-ecotourism project, have often expressed that they are better off earning an income via conservation than through the hunting, valuing the new market in which species are valued through sightings. Yet one former

hunter, who is now employed in the project as an ecotour guide, explained how other village members find it frustrating that their former livelihood activities are now restricted and prohibited:

For myself...I'm very happy with this myself because there will be more tigers and deer in the forest. But there are some people who are not in the service unit who are not happy because they have to change their regular routine from what they used to do. And they don't understand the project. And most of the forest vegetation that we can sell at the market is in the protection area. But now they cannot go into the area so they are not happy because they can't earn an income (Interview, July 27, 2016).

Building on this, it is important to address power asymmetries that are formed through the ongoing development of the PES-ecotourism project in NEPL-NPA. Asymmetrical power relations can arise through unequal price formation mechanisms, a result of the project's market-based approach. I argue that these asymmetries, a by-product of commodification and decommodification through a revaluation of wildlife species, both creates and exacerbates existing power structures within communities. Drawing together PES with ecotourism brings attention to the inability of villagers to 'voluntarily' join the project, complicating notions of an existing 'free market.' Moreover, the synthezation of both bodies of literature raises the issue of trade-offs — community members are not in the position to reject the scheme in favour of continued wildlife hunting and unrestricted forest access for agricultural practices.

One of the largest power asymmetries in the PES-ecotourism project is the reliance on the ecotourism market and the inability of villagers to attract more tourists. It's important to note, as the sole operator of the NNNS, that visitors are only able to gain access to the NPA through WCS. This a situation where WCS monopolizes access, only allowing visitors to gain entry through the purchase of ecotourism products. While WCS would like to increase the number of villagers employed in the project, they would need an increase in tourists or to raise the prices of the tour overall to offset the payments made to villagers.

The inability to voluntarily join the project was expressed by the village chief of Nampoung. When asked why his village decided to join the project, he answered, “because this village is next to the conservation area. If we didn’t cooperate with the project, then it would be difficult for people to spend their life in this village” (Interview, July 26, 2016). In the same village, a Khmu elder described the inequalities of tourism — how he himself can benefit due to the location of his home within the village. This is similar to how the handicraft woman in Sonkhoua described how she benefits greatly due to her house being located right where tourists are dropped off. According to the Khmu elder, “if there are lots of tourists that come to the village, people will be very happy because we live near the entrance, so if tourists come then we will be the first people to benefit from it” (Interview July 26, 2016).

Because both Nampoung and Sakok are relatively new villages, joining the project as of 2016, there is not a large history of what effect the project has brought to these villages yet. The village of Sonkhoua, on the other hand, has faced issues of inequality as a result of the project. According to a story from one individual who was in contact with upper management at WCS when the NNNS was created, many people in Sonkhoua village pocketed the funds received from the ecotourism programme, enriching themselves at the expense of others. After visiting Sonkhoua, they began to realize a family in the far end of the village was severely malnourished due to, according to their interpretation and discussion with the Lao mother, a lack of money from the programme. Devastated by what they had witnessed, they decided to take action and look after the child themselves. This was interpreted by local authorities as “kidnapping,” and they were immediately jailed. According to their account of the events, a former director of the programme had to bail them out of jail. Nonetheless, this points to a village, one of the longstanding villages directly benefitting from the ecotour, facing serious issues of equity and an imbalance in benefits.

Despite the promises of income through the PES-ecotourism project, the elder Khmu man cautioned his village against fully relying on the tourism market as a livelihood without alternative income generating opportunities. In other words, he understands the unequal opportunities that people in his village face in that they have limited options for generating income.

The life of people in this village does not depend on the tourists. People need to have other techniques to support themselves. If we just rely on tourism, what if there are no tourists for the whole year? We need to find another way to make money. Maybe asking for a new project (Interview, July 26, 2016).

Thus, as I have previously argued, this demonstrates the asymmetrical power relation of the PES-ecotourism project and its limitations not only for people to become involved in it, but to also sustain a steady income. Relying on the tourism market, as this elder hesitantly cautioned myself and my interpreter, is risky without other opportunities. In all the interviews, village members hoped that there would be other projects that they could be involved in to have a better source of income.

Lastly, there is a power asymmetry with respect to camera traps deployed for ecotourism activities within the NEPL-NPA. While ex-hunters often are boat drivers and tour guides for the NNNS, two ex-hunters of Nampung village are employed on the wildlife survey team for WCS. These villagers are responsible for entering into the protected area boundaries to set up camera traps. According to one former hunter describing his job, “we go into the forest according to the map and place the cameras on the trail where we think animals might come past. We have never [photographed] any big tigers, only small cubs, some deer, wild pigs and some monkeys. [We’ve seen] no adult tigers for the last 2–3 years.”. Yet as I pressed on with questions regarding wildlife and camera traps, my interpreter informed me that villagers employed by the project are not allowed to look at the images captured by the camera traps as it would encourage the hunting of more wildlife. A former hunter employed as part of the camera trap enforcement team in

Nampoung village stated “...I know how to set up the camera and remove the memory card, but I do not know how to look at the pictures on the memory card” (Interview, July 26, 2016). Similarly, another former hunter in Sakok village noted, “when I collect the camera I just give [WCS] the camera memory card. I have never checked the pictures” (Interview, July 26, 2016). According to my interpreter, only the director of the programme can look at the images. However, I witnessed many staff members in the NEPL-NPA office gather around whenever someone presented a new SD card of wildlife taken by the camera traps. This is an issue with trust, and illustrates the asymmetrical power relation that the WCS holds over residents near the NEPL-NPA. WCS views former hunters responsible for checking camera traps as being too high of a risk for knowing what wildlife may roam on the outskirts of their village.

#### **4.4 Conclusion**

In this chapter I set out to investigate value formation in relation to the PES-ecotourism project in the NEPL-NPA. I specifically explored the monetization of ecosystem services, or the commodification of Nature, by analyzing the development of ecotourism and PES as market mechanisms for wildlife conservation. I subsequently put forth two overlapping arguments that address this new development in environmental conservation in the NEPL-NPA.

I first argued that the PES-ecotourism project created and imposed a regulated market in order to suppress a pre-existing illicit market in the wildlife trade. As I have stressed, this project does not necessarily introduce a market where one did not previously exist. Rather, it creates a market of new exchange values based on wildlife sightings with the intention to incentivize their protection while simultaneously disincentivizing the hunting of certain species. I analyzed two types of values, hunting and conservation, in order to illustrate this point. The purpose of this

argument was to provide a contribution to the PES literature, that implicitly assumes that such ecosystem services were either not valued in markets or that such markets hardly existed in the Global South (Costanza et al. 1997; Wunder 2005, 5; TEEB 2010, 29; To et al. 2012, 239; Hahn et al. 2015, 76).

I then argued that the creation of a commodity (commodification) also involves the simultaneous devaluation of another commodity (decommodification). To put this differently, the valuing of wildlife conservation through payments to villages based on sightings by ecotourists requires a simultaneous devaluation of such wildlife as meat. I analyzed this twin process of commodification and decommodification by tracing use values and exchange values in the conservation project. I demonstrated that these new exchange values, based largely on ecotourism, are not market-based, but administratively and often arbitrarily decided. Many villagers reported that the impact of the project on their livelihood and income were not adequately compensated through new income from the project. Therefore, these exchange values often do not outweigh the value lost due to restrictions imposed by wildlife regulation and the territorial creation of the NEPL-NPA. Overall, this complicates efforts to ensure wildlife protection by incentivizing its protection, and I argue that it may undermine the entire project's *raison d'être*.

## CHAPTER FIVE: DISCUSSION AND CONCLUSION

My broad purpose of writing this thesis was to critically investigate the widespread adoption of market-based conservation approaches in natural resource management schemes as a possible new direction in environmental governance. This inquiry was based on my fieldwork in the Lao PDR that I conducted in order to investigate how an ecotourism programme, one that is set up as a PES scheme, works in practice, as well as documenting its effects on resident people. This PES-ecotourism programme is both managed and devised by the WCS within a protected area for the purpose of incentivizing the protection of wildlife species through payments based on sightings. By highlighting this specific conservation project in the NEPL-NPA in Northeast Lao PDR, I have contributed to debates on market-based conservation approaches, where proponents and critics alike have made implicit assumptions about the creation of markets through commodifying Nature and in PES schemes. These assumptions do not hold up in my case study, and they have the potential to not hold up in other sites as well.

PES or market-based approaches largely driven by the assumption that conservation, including the protection of wildlife species, can be incentivized through monetary benefits. The monetization of wildlife within the NEPL-NPA presents itself as a simple solution to a complex problem; the enrollment of villagers into the NEPL-NPA PES scheme is presented as a win-win solution under the implicit assumption that such a free-market mechanism will equally benefit everyone, including the surrounding environment, without significant social and ecological costs (Igoe and Brockington 2007, 446). Both proponents of PES (Constanza et al. 1997; Wunder 2005; Hahn et al. 2015) and market-based conservation approaches (Bishop and Pagiola 2002; Scherr et al. 2003; Heilmayr and Lambin 2016), and the critics of such approaches (To et al. 2012; Büscher 2012; Dressler et al. 2015; Silvertown 2015; Fletcher and Büscher 2017), have made assumptions

that these markets and the monetary values are formed out of a non-commodified Nature. Despite this, there are instances when PES schemes can produce positive outcomes for resident people given the particular conditions in which they operate, according to Chusak Wittayapak and Peter Vandergeest (personal communication). My study supports many of the critiques about the problems of these schemes, specifically, the loss of access for livelihood purposes and producing inequality (To et al. 2012, 247; Roth and Dressler 2012, 365; Dressler et al. 2015, 8). At the same time, there is a danger of falling into a trap of not carefully investigating not just the relationship between access and equity, but also the existence of markets and commodity relations prior to the development of these schemes. As I have argued, much of this literature assumes that commodification of Nature had not always occurred prior to the introduction of PES schemes, and that monetary benefits derived from Nature were either not valued in markets or that these markets were virtually non-existent in the Global South (Constanza et al. 1997; Wunder 2005, 5; TEEB 2010, 29; To et al. 2012, 239; Hahn et al. 2015, 76). While this critique adds to the debates surrounding market-based methods for addressing conservation, it is significant as it reveals how the process of devaluation through a decommodification of Nature can negatively impact resident people these approaches aim to help.

I began my initial inquiry into this project with a focus on the operations of WCS in Northeast Lao PDR, analyzing their recent development of nature-based tourism activities as a market-mechanism for species conservation in the NEPL-NPA. What first caught my attention was the novelty of WCS in deploying camera-traps for new ecotourism programmes as a method of promoting the conservation of wildlife species through photos captured on ecotours. My scope later expanded to understand how biodiversity, particularly wildlife species, are given value and revalued through the historical and ongoing implementation of the PES-ecotourism project. Within

this framing, I revealed the various justifications, processes, and implications of this project and its development over both time and space. Moreover, I focused on how wildlife species are services, providing both use values and exchange values. On one hand, the hunting of wildlife species provides both medicinal and protein value, while on the other hand, they provide biodiversity and ecotourism pleasure. This is an important distinction as much of the literature has failed to recognize a multiplicity of ways in which an aspect of Nature can be utilised as an ecosystem service. I then critically analyzed the commodification of Nature through the monetization of wildlife species, and the deployment of ecotourism with a PES-like scheme as a market mechanism to incentivize local villagers to protect wildlife. Overall, I raised concerns about natural resource managers and policymakers embracing market mechanisms, such as PES and ecotourism, to ensure wildlife conservation.

In this thesis, by using the case study of the conservation project in the NEPL-NPA, I have shown that the very process of *commodification* inherently includes a simultaneous process of *decommodification*. To put it a different way, by analyzing the relationship between ecotourism and PES as it operates within the protected area, I argued that monetizing wildlife for its protection requires a simultaneous devaluation of wildlife as food or as a source of cash income from the sale of meat. This allows me to critique assumptions in the literature on PES schemes, ‘Neoliberal Natures,’ and potentially the commodification of Nature more broadly. Moreover, I cast doubt on the adoption of MBIs as a win-win solution for species protection and biodiversity conservation. There are, as I have shown, vast and far-reaching implications of an increasing tendency of resource managers to incorporate market-based instruments, which are informed by a neoliberal rationality, for reconciling development and conservation.

## 5.1 Chapter Review

In Chapter 2, I documented how I began my fieldwork journey by developing a set of research questions aimed at understanding the project, its mechanisms, its inner logic and how it is understood and contested by local villagers. After spending time in the field and reviewing my research, I shifted my focus toward understanding value as I describe it through highlighting commodification/decommodification in market-oriented conservation methods. Ultimately, my personal experience working for a tourism company in the Lao PDR shaped the research I co-produced in this thesis. This experience impacted and informed how I approached conducting fieldwork research, including the way in which I conducted interviews, connected with people, travelled the country, and gained access into my field site through my association with a tour company.

In Chapter 03, I provided a broad overview of the entire conservation project. I charted the development and territorialization of the NEPL-NPA, including its justifications on the basis of international support, the spatial separation of people from Nature via the process of zonation, and the enforcement of wildlife protection and education within park boundaries. I then described the development of the project itself, noting the relationship between PES schemes and the promotion of ecotourism both nationally and provincially that laid the foundation for the WCS-lead programme to be launched in 2009. Moving forward, I illustrated the overarching rationale for the WCS conservation project (the PES-ecotourism project), its specific conservation goals, and its underlying mechanisms that aim to conserve biodiversity, protect key wildlife species, and improve the livelihoods of residents living in the uplands of Northeast Lao PDR. In this chapter, my intention was to frame this discussion primarily from the perspective of WCS staff members, project documentation, and official reports. In addition to providing the rationale behind the

project, my purpose was to demonstrate that Nature is repurposed into a tourist spectacle to support the conservation of wildlife. The purpose of this PES-ecotourism project led by WCS was to disincentivize villagers from consuming or selling select wildlife species through a market. Instead, these wildlife species were to be kept alive in forests to be viewed by ecotourists on tour, generating payments to local villages for each sighting.

In Chapter 04, I explained the PES-ecotourism project from the perspective of local community members that are enrolled into the programme. My interest was to better understand how these community members interact with and negotiate its mechanisms and rules. I began by addressing the project's shortcomings that were expressed by local villagers, programme managers, and from personal observations made during my fieldwork. My purpose is to reveal contradictions and tensions that arise out of the project, while questioning its efficacy for protecting wildlife species from continued hunting pressure. These tensions, as I argue, are a by-product of the power asymmetries and village-level inequality that have been exacerbated by the protected area creation and the recent development of the PES-ecotourism project. Simply put, I argue that the issue of growing village inequality and jealousy expressed by community members complicates the goals of wildlife protection by WCS, presenting a contradiction for the very rationale of developing the PES-ecotourism project. I illustrated this point by describing the lack of income generated by the programme for some families within the village, and a mounting jealousy that may threaten the very protection of key species and may instead contribute to further hunting.

Finally, in Chapter 05, I explored how the PES-ecotourism project produces value through the monetization of Nature for an assumed (non)consumptive use. I put forth two related arguments that address the outcomes of the development of the PES-ecotourism project and its attempt to

incentivize wildlife protection and conservation via market-based mechanisms. First, I argue that the PES-ecotourism project creates and imposes a regulated market in order to supplant a pre-existing market in the wildlife trade of protected species. The value of these ecosystem services through the process of monetization is a re-valuation not based on a neo-classical free market, but are rather determined administratively and arbitrarily. Second, as a project premised upon neoliberal rationality, I argued that the creation of a commodity through commodification — or more accurately — the valuing of wildlife conservation through sightings by ecotourists and payments made out to villages who are part of the project — is based in part on a simultaneous devaluation — a decommodification. In other words, the valuing of wildlife conservation through payments to villages based on sightings by ecotourists requires a simultaneous devaluation of the wildlife species as food sold in wild meat markets. This new value is non-negotiable, determined and calculated administratively, and deployed with the intent of disincentivizing wildlife as food, replaced by a wildlife as biodiversity and ecotourist attraction. I traced this commodification/decommodification process through both use values and exchange values in the project, noting the contradictory and problematic outcomes of this concerted effort on the behalf of WCS and the GoL. Throughout this chapter, I drew attention to how power is formed, projected, reconstituted, and contested through new modes of environmental governance in the PES-ecotourism project. Similar to the previous chapter, I argued that asymmetries of power that are a product of value creation and the use of market-based incentives contributes to a growing tension within local communities that are part of the PES-ecotourism project. This has a profound impact on the protection of wildlife species.

## 5.2 Potential Improvements to Market-based Conservation Schemes

In this thesis, I have highlighted the contradictory ways in which a market-based conservation approach — a community-based ecotourism programme that incorporates a PES scheme — hinders the effort to protect key wildlife species and produces new inequality within villages part of the programme. While this analysis also provides a small critique to the literature on markets and the commodification of Nature for environmental governance schemes, I provide some recommendations for how this programme may be improved in order to better serve the resident people with which the project has targeted. I do not reject the project in its entirety, nor do I advocate for the continued hunting of wildlife species. Instead, I propose ways in which this programme can be improved for both the WCS and local people.

In their major critique of literature on PES schemes, Fletcher and Büscher have argued that researchers should move away from MBIs and instead pursue forms of environmental management that “promote cooperation,” are guided “by the logic of gift, reciprocity and affect,” and that celebrate “the joyful and life-affirming aspects of conservation care labor” (Fletcher and Büscher 2017, 230). However, such a suggestion wrongly assumes that cooperation, gift-giving or joyfulness that have been derived from laborious acts of ‘conservation’ have never existed in neoliberal spaces where PES has been implemented. Instead, this proposed solution necessitates the continued management of local communities, that were the subject of failed market-based conservation schemes, to instill idealized, non-market behaviors.

Despite this shortcoming, Fletcher et al. provide a more pragmatic approach in their joint article on REDD+ and market-based conservation. They insist that there should be a move away from market mechanisms toward a more fundamental redistribution of control, putting land back into the hands of locals to manage it (Fletcher et al. 2015, 675). This helps to circumvent the

problematic aforementioned assumptions and instead reframes the situation as a fundamental issue over land control. One of the foundational issues with PES schemes are that they reward rent-seeking behavior, disproportionately affecting individuals without clear property rights and contributing to an increase in wealth inequalities (McAfee 2012; Kronenberg and Hubacek 2013). Thus, one solution is not to have societies adopt some 'gift-giving' practices, or begin celebrating steward-like acts of 'conservation,' but to rather address the long-standing practice of land-induced displacement and resource control by state and non-state actors alike.

As I have discussed, the process of commodifying of an aspect of Nature also involves a coinciding decommodification of that same aspect. By highlighting this decommodification, or its devaluation, I have drawn attention to the discrepancies in values that are forgone through this process — from protein or medicinal use to biodiversity and ecotourist attraction. This has continued to impact local communities that are part of the project. To put differently, wildlife species are devalued through the project, and their revaluation through the ecotourism market provides less monetary value for families in these communities than before. Thus, not all community members receive an adequate amount of benefits from wildlife sightings, the VDF fund, and ecotourism employment. This has created an issue where some villagers may welcome the PES-ecotourism project as complementary, rather than as a substitution for former hunting activities (Ferraro and Kiss 2002 cited in Svadlenak-Gomez et al. 2007, 2). If the benefits are not marginally greater than income derived from hunting livelihood activities, then there is little incentive for community members to fully comply with the project's rules. Instead, there should be an increase to the prices for wildlife sighted on ecotour programmes, much of which are administratively decided, in order to better benefit the VDF and residents alike. This may increase

the rate of compliance, and the chance that residents view the project as a substitution to their former livelihoods.

Part of my thesis investigated how authority and power are reconstituted in a market-based conservation approach by both state and non-state actors. The deployment of a market mechanism in the PES-ecotourism project legitimized the rule-making authority of WCS and the Lao government counterparts over villagers, creating an asymmetrical power relation. This power asymmetry, a by-product of the twin commodification and de-commodification process, had exacerbated existing tensions and contributed to a growing inequality within communities. However, I do not want to make a sweeping generalization about villages, as if there had been an even playing field in terms of power and wealth before the arrival of the PES-ecotourism or the NEPL-NPA. Rather, I suggest that villagers should be able to participate in determining the value of payments that are based on sightings of wildlife. With input from community members, the price sheet for sightings could vary from village to village. On top of that, prices for wildlife species seen on tour could fluctuate depending on the time of year and in accordance to agricultural seasons.

One final issue that should be addressed is the potential for competing knowledges, both local and scientific, for conserving wildlife in the Lao PDR. As I have argued, the GoL and the WCS staff have applied a Western approach to managing the environment in the NEPL-NPA and through the PES-ecotourism project. This has caused confusion for local communities, particularly the way in which some decisions have been made for wildlife pricing and protection. Therefore, in addition to determining value of species, villagers should be able to better participate in setting rules for hunting that are based on bringing together scientific knowledge with their local knowledge about the status of different species. These recommendations that I have proposed

should help local communities in addition to joint effort by the WCS and the GoL to conserve wildlife and biodiversity in Northeast Lao PDR.

### **5.3 A New Direction for Environmental Governance?**

Related to the title of this section and the research project which I am associated with, I think it is important to consider whether this project which I have described signals a *new* direction for governance of any type over the socio-natural environments in which we live. As I have maintained and argued throughout this thesis, this case study provides a critique to some of the PES literature that typically frames ecosystem services as a part of Nature that have not being fully valued, given a price, or commodified prior to the advent of PES schemes worldwide. Therefore, it is important to note that the very commodification of an aspect of Nature also involves a simultaneous process of decommodification. Building on this, my case study indicates a new direction or environmental governance. I demonstrated that wildlife species, as an aspect of nature and used as an ecosystem service in multiple ways, are revalued through the simultaneous commodification and decommodification process. Simply put, this process both devalues and revalues wildlife — from protein or medicinal use to biodiversity and ecotourist attraction. While there has been some attention in literature on to the loss of access to resources and the impact of restrictions on livelihoods for resident peoples, the devaluing process as a process of decommodification has been neglected in the literature.

Lastly, another novelty of this project, that I hope to further describe in future research, was the WCS's deployment of camera traps as another method to view wildlife and determine payments to incentivize conservation of select species. Under what some have called 'Nature 2.0' in the literature (see Büscher 2014; Fletcher 2016), camera traps are becoming an emerging site of

techno-conservation. Thus, I believe that this development within the NEPL-NPA, particularly with the aim of protecting wildlife species through photos captured by the camera to determine payments to villagers, can signal another direction within environmental governance. However, as I have mentioned previously, the use of camera traps is too new to adequately investigate the impact it would have on local communities and for the protection of wildlife in the NEPL-NPA more broadly. Nonetheless, I am fascinated by further research and continued engagement with this technology for the conservation project in Northeast Lao PDR.

## REFERNCE LIST

- Agrawal, A., and K. Redford. 2006. Poverty, development, and biodiversity conservation: Shooting in the dark? *Ann Arbor MI* 48109 (734):647–5948.
- Appadurai, A. ed. 1986. *The social life of things: commodities in cultural perspective*. print. Cambridge: Bakker, K. 2010. The limits of “neoliberal natures”: Debating green neoliberalism. *Progress in Human Geography* 34 (6):715–735.
- Barney, K. 2016. Environmental Neoliberalism. In *Routledge Handbook of the Environment in Southeast Asia.*, ed. P. Hirsch. Routledge.
- Berkmüller, K., T. Evans, R. Timmins, and V. Vongphet. 1995. Recent advances in nature conservation in the Lao PDR. *Oryx* 29 (4):253–260.
- Bhula, R., N. Makhani, R. Sinn, and L. Stark. 2009. Business Plan for Ecotourism in Nam Et-Phou Louey National Protected Area, Lao PDR.
- Björk, P. 2007. Definition paradoxes: from concept to definition. In *Critical issues in ecotourism: understanding a complex tourism phenomenon*, ed. J. Higham, 23–45. Amsterdam: Elsevier Butterworth-Heinemann.
- Blamey, R. K. 1997. Ecotourism: The search for an operational definition. *Journal of sustainable tourism* 5 (2):109–130.
- Braatz, S. M. 1992. *Conserving biological diversity: a strategy for protected areas in the Asia-Pacific region*. Washington, D.C: World Bank.
- Brenner, N., and N. Theodore. 2002. Cities and the Geographies of “Actually Existing Neoliberalism.” *Antipode* 34 (3):349–379.
- Brockington, D. 2002. *Fortress conservation: the preservation of the Mkomazi Game Reserve, Tanzania*. Oxford: Bloomington: International African Institute in association with James Currey; Indiana University Press.
- Bruner, A. G., R. E. Gullison, and A. Balmford. 2004. Financial Costs and Shortfalls of Managing and Expanding Protected-Area Systems in Developing Countries. *BioScience* 54 (12):1119.
- Büscher, B. 2012. Payments for ecosystem services as neoliberal conservation: (Reinterpreting) evidence from the Maloti-Drakensberg, South Africa. *Conservation and Society* 10 (1):29.
- . 2014. Nature 2.0: Exploring and theorizing the links between new media and nature conservation. *New Media & Society* :1461444814545841.
- . 2016. Reassessing Fortress Conservation? New Media and the Politics of Distinction in Kruger National Park. *Annals of the American Association of Geographers* 106 (1):114–129.
- Castella, J.-C., G. Lestrelin, C. Hett, J. Bourgoïn, Y. R. Fitriana, A. Heinimann, and J.-L. Pfund. 2013. Effects of Landscape Segregation on Livelihood Vulnerability: Moving from

- Extensive Shifting Cultivation to Rotational Agriculture and Natural Forests in Northern Laos. *Human Ecology* 41 (1):63–76.
- Castree, N. 2003. Commodifying what nature? *Progress in Human Geography* 27 (3):273–297.
- CBD. n.d. Article 2. Use of Terms. *Convention on Biological Diversity*.  
<https://www.cbd.int/convention/articles/default.shtml?a=cbd-02>.
- . 2004. *National Biodiversity Strategy to 2020 and Action Plan to 2010*.  
<http://doewrea.site40.net/document/Lao%20PDR%20NBSAP%20-%20Eng.pdf> (last accessed 18 November 2015).
- . 2010. *Fourth National Report to the Convention on Biological Diversity*.  
<http://69.90.183.227/doc/world/la/la-nr-04-en.pdf> (last accessed 18 November 2015).
- Che, D. 2006. Developing ecotourism in First World, resource-dependent areas. *Geoforum* 37 (2):212–226.
- Cheia, G. 2013. Ecotourism: Definition and Concepts. *Revista de turism-studii si cercetari in turism* (15):56–60.
- Chok, S., J. Macbeth, and C. Warren. 2007. Tourism as a Tool for Poverty Alleviation: A Critical Analysis of “Pro-Poor Tourism” and Implications for Sustainability. *Current Issues in Tourism* 10 (2):144–165.
- CIA. n.d. The World Factbook. *Central Intelligence Agency*.  
<https://www.cia.gov/library/publications/resources/the-world-factbook/geos/la.html>.
- Cohen, E. 1978. The impact of tourism on the physical environment. *Annals of Tourism Research* 5 (2):215–237.
- Collard, R.-C. 2014. Putting Animals Back Together, Taking Commodities Apart. *Annals of the Association of American Geographers* 104 (1):151–165.
- Collard, R.-C., and J. Dempsey. 2013. Life for Sale? The Politics of Lively Commodities. *Environment and Planning A* 45 (11):2682–2699.
- Corbett, J. 2008. Paper parks and paper partnerships: Lessons for protected areas and biodiversity corridors in the Greater Mekong Sub-region. *International Union for Conservation of Nature, APFW PAEL*. <http://lad.nafri.org/la/fulltext/2142-0.pdf> (last accessed 24 November 2015).
- Corson, C., and K. I. MacDonald. 2012. Enclosing the global commons: the convention on biological diversity and green grabbing. *Journal of Peasant Studies* 39 (2):263–283.
- Costanza, R., R. d’Arge, R. De Groot, S. Farber, M. Grasso, B. Hannon, K. Limburg, S. Naeem, R. V. O’neill, J. Paruelo, and others. 1997. The Value of the World’s Ecosystem Services and Natural Capital. *The Globalization and Environment Reader* :117.
- Costanza, R., R. de Groot, P. Sutton, S. van der Ploeg, S. J. Anderson, I. Kubiszewski, S. Farber, and R. K. Turner. 2014. Changes in the global value of ecosystem services. *Global Environmental Change* 26:152–158.

- Costello, C., S. Gaines, and L. R. Gerber. 2012. Conservation science: A market approach to saving the whales. *Nature* 481 (7380):139–140.
- Daily, G. C. ed. 1997. *Nature's services: societal dependence on natural ecosystems*. Washington, DC: Island Press.
- Danièle Perrot-Maître. 2005. Valuing ecosystem services - advantages and disadvantages of existing methodologies and application to PES.
- DeLyser, D., S. Herbert, S. Aitken, M. Crang, and L. McDowell eds. 2010. *The SAGE handbook of qualitative geography*. Los Angeles; London: SAGE.  
<http://public.eblib.com/choice/publicfullrecord.aspx?p=743488> (last accessed 12 March 2016).
- Department of Forestry. 2010. National Tiger Action Plan for Lao PDR 2010-2020.
- Donohoe, H. M., and R. D. Needham. 2006. Ecotourism: The Evolving Contemporary Definition. *Journal of Ecotourism* 5 (3):192–210.
- Dressler, W. H., S. Mahanty, J. Clendenning, and P. X. To. 2015. Rearticulating governance through carbon in the Lao PDR? *Environment and Planning C: Government and Policy* 0 (0):0–0.
- Dressler, W., and R. Roth. 2011. The Good, the Bad, and the Contradictory: Neoliberal Conservation Governance in Rural Southeast Asia. *World Development* 39 (5):851–862.
- Duckworth, W., R. E. Salter, K. Khounbolin, IUCN Lao PDR, Wildlife Conservation Society (Viangchan, Laos), and Center for Protected Areas and Watershed Management (Laos) eds. 1999. *Wildlife in Lao PDR: 1999 status report*. Vientiane: World Conservation Union: Wildlife Conservation Society: Centre for Protected Areas and Watershed Management.
- Duffy, R., F. A. V. St John, B. Büscher, and D. Brockington. 2016. Toward a new understanding of the links between poverty and illegal wildlife hunting: Poverty and Illegal Wildlife Hunting. *Conservation Biology* 30 (1):14–22.
- Dwyer, M. B., M. L. Ingalls, and I. G. Baird. 2016. The security exception: Development and militarization in Laos's protected areas. *Geoforum* 69:207–217.
- Emerton, L. 2005. Making the Economic Links Between Biodiversity and Poverty Reduction: The Case of Lao PDR. *IUCN Ecosystems and Livelihoods Group*.
- . 2009. Making the Case for Investing in Natural Ecosystems as Development Infrastructure: The Economic Value of Biodiversity in Lao PDR. In *Conserving and valuing ecosystem services and biodiversity economic, institutional and social challenges*, ed. K. N. Ninan. London; Sterling, VA: Earthscan  
<http://public.eblib.com/choice/publicfullrecord.aspx?p=430150> (last accessed 7 February 2016).
- Fairhead, J., M. Leach, and I. Scoones. 2012. Green Grabbing: a new appropriation of nature? *Journal of Peasant Studies* 39 (2):237–261.

- Fennell, D. A. 2001. A content analysis of ecotourism definitions. *Current Issues in Tourism* 4 (5):403–421.
- Fennell, D. A. 2003. *Ecotourism an introduction*. London; New York: Routledge.  
<http://site.ebrary.com/id/10402281> (last accessed 17 November 2015).
- Fennell, D. A. 2015a. *Ecotourism* Fourth edition. London; New York: Routledge.
- . 2015b. The Ecotourist. In *Ecotourism*, 21–35. London; New York: Routledge.
- Fletcher, R. 2010. Neoliberal environmentalism: Towards a poststructuralist political ecology of the conservation debate. *Conservation and Society* 8 (3):171.
- . 2012. Using the Master’s Tools? Neoliberal Conservation and the Evasion of Inequality. *Development and Change* 43 (1):295–317.
- . 2013. Bodies Do Matter: The Peculiar Persistence of Neoliberalism in Environmental Governance. *Human Geography* 6 (1):29–45.
- . 2015. Nature is a nice place to save but I wouldn’t want to live there: environmental education and the ecotourist gaze. *Environmental Education Research* 21 (3):338–350.
- . 2016. Gaming conservation: Nature 2.0 confronts nature-deficit disorder. *Geoforum*.  
<http://linkinghub.elsevier.com/retrieve/pii/S0016718516300628> (last accessed 7 April 2016).
- Fletcher, R., and B. Büscher. 2017. The PES Conceit: Revisiting the Relationship between Payments for Environmental Services and Neoliberal Conservation. *Ecological Economics* 132:224–231.
- Fletcher, R., W. Dressler, and B. Büscher. 2015. Nature™ Inc.: Nature as Neoliberal Capitalist Imaginary. In *The international handbook of political ecology*, ed. R. L. Bryant. Cheltenham, UK; Northampton, MA, USA: Edward Elgar Publishing.
- Gainsborough, M. 2010. Present but not Powerful: Neoliberalism, the State, and Development in Vietnam. *Globalizations* 7 (4):475–488.
- Global Tiger Initiative Secretariat. 2011. Global Tiger Recovery Programme 2010-2022.
- Guyer, J., and P. Richards. 1996. The Invention of Biodiversity: Social Perspectives on the Management of Biological Variety in Africa. *Africa: Journal of the International African Institute* 66 (1):1.
- Green, W.N. and Baird, I.G., 2016. Capitalizing on Compensation: Hydropower Resettlement and the Commodification and De-commodification of Nature–Society Relations in Southern Laos. *Annals of the American Association of Geographers*, 106(4), pp.853-873.
- Hahn, T., C. McDermott, C. Ituarte-Lima, M. Schultz, T. Green, and M. Tuvendal. 2015. Purposes and degrees of commodification: Economic instruments for biodiversity and ecosystem services need not rely on markets or monetary valuation. *Ecosystem Services* 16:74–82.

- Hall, D. 2013. Primitive Accumulation, Accumulation by Dispossession and the Global Land Grab. *Third World Quarterly* 34 (9):1582–1604.
- Hall, D., P. Hirsch, and T. M. Li. 2011. *Powers of exclusion: land dilemmas in Southeast Asia*. Honolulu, Hawaii: Univ. of Hawai'i Press.
- Harrison, R. D., R. Sreekar, J. F. Brodie, S. Brook, M. Luskin, H. O'Kelly, M. Rao, B. Scheffers, and N. Velho. 2016. Impacts of hunting on tropical forests in Southeast Asia: Hunting in Tropical Forests. *Conservation Biology* 30 (5):972–981.
- Hartter, J., and A. Goldman. 2011. Local responses to a forest park in western Uganda: alternate narratives on fortress conservation. *Oryx* 45 (1):60–68.
- Hartwick, E., and R. Peet. 2003. Neoliberalism and Nature: The Case of the WTO. *The Annals of the American Academy of Political and Social Science* 590 (1):188–211.
- Hedemark, M., T. Gujadhur, and M. Newport. 2005. *The Second Survey for Potential Ecotourism Products*. Lao PDR: WCS Lao PDR.
- Heilmayr, R., and E. F. Lambin. 2016. Impacts of non-state, market-driven governance on Chilean forests. *Proceedings of the National Academy of Sciences* 113 (11):2910–2915.
- Henderson, George. "‘Free’ food, the local production of worth, and the circuit of decommodification: A value theory of the surplus." *Environment and Planning D: Society and Space* 22, no. 4 (2004): 485-512.
- Hetzer, N. D. 1965. Environment, tourism, culture. *Links* 1 (3).
- Higham, J. ed. 2007. *Critical issues in ecotourism: understanding a complex tourism phenomenon*. Amsterdam: Elsevier Butterworth-Heinemann.
- Hirsch, P. 2017. *Routledge handbook of the environment in Southeast Asia*. London; New York, NY: Routledge.
- Igoe, J. and Brockington, D., 2007. Neoliberal conservation: a brief introduction. *Conservation and society*, 5(4), p.432.
- ICEM. 2003. *Lao PDR National Report on Protected Areas and Development*. Indooroopilly, Queensland, Australia.
- . 2014. USAID Mekong ARCC Climate Change Impact and Adaptation Study on Protected Areas.
- IUCN. n.d. Congress History. *IUCN World Parks Congress*. [http://www.worldparkscongress.org/iucn\\_congress\\_history.html](http://www.worldparkscongress.org/iucn_congress_history.html) (last accessed 22 November 2015a).
- . n.d. What are Protected Areas? *IUCN World Parks Congress*. [http://www.worldparkscongress.org/about/what\\_are\\_protected\\_areas.html](http://www.worldparkscongress.org/about/what_are_protected_areas.html) (last accessed 22 November 2015b).
- . 2011. *NBSAP Assessment: An assessment of Lao PDR's National Biodiversity Strategy to 2020 and Action Plan to 2010*. Gland, Switzerland: IUCN.

- James, A. N., M. J. B. Green, and J. R. Paine. 1999. *The global review of protected area budgets and staff*. Cambridge: World Conservation Press.
- Jasanoff, S. ed. 2004. *States of knowledge: the co-production of science and social order*. London; New York: Routledge.
- Johnson, A. 2013. Nam Et-Phou Louey National Protected Area. In *Evidence-based conservation: lessons from the lower Mekong*, 73–90. London; New York: Routledge.
- Johnson, A., and T. Gujadhur. 2005. *Proposed Tourism Opportunity in the Tiger Conservation Area of the Nam Et-Phou Louey National Protected Area, Lao PDR*. Lao PDR.
- Johnson, A., J. Krahn, S. Seateau, S. Phoumkhamouane, C. Inthavixay, K. Phanmathong, and D. Wijerathna. 2012. *Linking Sustainable Harvest of Managed Wildlife and Household Food Consumption in the Nam Et-Phou Louey National Protected Area*. The Agro-Biodiversity Initiative (TABI).
- Johnson, A., C. Vongkhamheng, M. Hedemark, and T. Saythongdum. 2004. The status of tiger, prey and human-tiger conflict in the Nam Et-Phou Louey National Protected Area. *Wildlife Conservation Society*.
- Johnson, A., C. Vongkhamheng, and T. Saithongdam. 2009. The diversity, status and conservation of small carnivores in a montane tropical forest in northern Laos. *Oryx* 43 (4):626.
- Koh, L., and S. Wich. 2012. Dawn of drone ecology: low-cost autonomous aerial vehicles for conservation. *Tropical Conservation Science* 5 (2):121–132.
- Kronenberg, J., and K. Hubacek. 2013. Could Payments for Ecosystem Services Create an “Ecosystem Service Curse”? *Ecology and Society* 18 (1). <http://www.ecologyandsociety.org/vol18/iss1/art10/> (last accessed 2 May 2017).
- Lunstrum, E. 2013. Articulated sovereignty: Extending Mozambican state power through the Great Limpopo Transfrontier Park. *Political Geography* 36:1–11.
- . 2014. Green Militarization: Anti-Poaching Efforts and the Spatial Contours of Kruger National Park. *Annals of the Association of American Geographers* 104 (4):816–832.
- Lyttleton, C., and A. Allcock. 2002. Tourism as a Tool for Development. *UNESCO–Lao National Tourism Authority (NTAL)/Nam Ha Ecotourism Project* 71. [http://ecotourism-laos.org/directory/publications/nam\\_ha\\_ecotourism\\_project\\_phase\\_i\\_external\\_review\\_2002.pdf](http://ecotourism-laos.org/directory/publications/nam_ha_ecotourism_project_phase_i_external_review_2002.pdf) (last accessed 17 November 2015).
- Machura, L. 1954. Nature Protection and Tourism: With particular reference to Austria. *Oryx* 2 (5):307–311.
- MacKinnon, J. R. 1997. *Protected Areas Systems Review of the Indo-Malayan Realm*. Canterbury, England: World Bank.
- MacKinnon, J. R., and K. MacKinnon. 1986. *Review of the Protected Areas System in the Indo-Malayan Realm*. Gland, Switzerland; Cambridge: International Union for Conservation of Nature and Natural Resources.

- Macpherson, Crawford Brough, ed. *Property, mainstream and critical positions*. Vol. 214. University of Toronto Press, 1978.
- MAF, and IUCN. 1998. Project Document: Integrated Biodiversity Conservation and Community Development in Nam Et-Phou Loei National Biodiversity Conservation Areas, Lao PDR.
- Marx, K., and B. Fowkes. 1990. *Capital: a critique of political economy*. Vol. 1. London; New York: Penguin Classics.
- McAfee, K. 1998. Selling nature to save it? Biodiversity and green developmentalism. *Environment and Planning* 17:133–154.
- McCann, G. 2014. Camera-trap Ecotourism: the next big thing in conservation? *Mongabay*. <http://blog.mongabay.com/2014/03/06/camera-trap-ecotourism-the-next-big-thing-in-conservation/>.
- McCarthy, J., and S. Prudham. 2004. Neoliberal nature and the nature of neoliberalism. *Geoforum* 35 (3):275–283.
- MICT. 2016. ASEAN Ecotourism Forum. *ASEAN Ecotourism Forum*. <http://aef2016laos.com>.
- Miles, L., and V. Kapos. 2008. Reducing Greenhouse Gas Emissions from Deforestation and Forest Degradation: Global Land-Use Implications. *Science* 320 (5882):1454–1455.
- Mowforth, M., and I. Munt. 1998. *Tourism and sustainability: new tourism in the third world*. London; New York: Routledge.
- Nam Et Phou Louey. 2015. *Nam Nern Night Safari in Laos*. <https://www.youtube.com/watch?v=nqH-ODryVTU>.
- Neumann, R. P. 1998. *Imposing Wilderness: Struggles over livelihood and nature preservation in Africa*. Berkeley: University of California Press.
- Neumann, R. P. 2005. *Making political ecology*. New York, NY: Oxford University Press.
- Nooren, Hanneke, and Gordon Claridge. *Wildlife trade in Laos: the end of the game*. IUCN-The World Conservation Union, 2001.
- Pagiola, S., J. Bishop, and N. Landell-Mills eds. 2002. *Selling forest environmental services: market-based mechanisms for conservation and development*. London: Sterling, VA: Earthscan Publications.
- Peck, J., N. Brenner, and N. Theodore. 2017. Actually Existing Neoliberalism. In *The Sage Handbook of Neoliberalism*, ed. Damien Cahill.
- Peck, J., and A. Tickell. 2002. Neoliberalizing space. *Antipode* 34 (3):380–404.
- Perreault, Tom, Gavin Bridge, and James McCarthy, eds. *The Routledge handbook of political ecology*. Routledge, 2015.
- Philavong, O., K. Thanthatap, C. Savanh, C. Flint, E. Hicks, and L. Emerton. 2002. *Nam Et-Phou Loei National Biodiversity Conservation Area, Lao PDR: A Case Study of Economic and Development Linkages*. Brisbane: ICEM.

- Polanyi, K. 1944. *The Great Transformation*. Boston, Beacon Press. <http://wphna.org/wp-content/uploads/2015/03/2001-GreatTransformation-2001-Intro-Stiglitz.pdf> (last accessed 8 March 2016).
- Project Anoulak. n.d. Conservation Education. *Conservation Laos*. <http://conservationlaos.com/education.html> (last accessed 12 April 2015).
- Rare. 2011. U.S. Embassy Supports Wildlife Conservation in Laos. *Rare*. <https://www.rare.org/campaign/nam-et-phou-louey-lao-pdr-species-conservation/blog/us-embassy-supports-wildlife#.WQbPLIKZNP0>.
- Redford, K. H., and E. Fearn. 2006. *Protected areas and human displacement: a conservation perspective*. Wildlife Conservation Society.
- . 2007b. *Protected areas and human livelihoods*. Wildlife Conservation Society.
- Robichaud, W., C. W. Marsh, S. Southammakoth, and S. Khounthikoummane. 2001. Review of the National Protected Area System of Lao PDR.
- Roth, R. J., and W. Dressler. 2010. Market-oriented conservation governance: The particularities of place. *Geoforum* 43 (3):363–366.
- Sakdavong, K. 2013. Plenty of forests but no species to call them home. *WCS Lao PDR*. <https://programs.wcs.org/laos/About-Us/Latest-News/articleType/ArticleView/articleId/1100/Plenty-of-forests-but-no-species-to-call-them-home.aspx>.
- Sandbrook, C. 2015. The social implications of using drones for biodiversity conservation. *Ambio* 44 (S4):636–647.
- Sayer, Andrew. "(De) commodification, consumer culture, and moral economy." *Environment and Planning D: Society and Space* 21, no. 3 (2003): 341-357.
- Saypanya, S., A. Johnson, and M. Duangdala. 2009. Evaluation of tiger conservation education activities in the Nam Et-Phou Louei National Protected Area. [http://old.naaee.org/conference-history/conference-history/2006-conference-proceedings/naaee06\\_proceeding\\_124620.pdf](http://old.naaee.org/conference-history/conference-history/2006-conference-proceedings/naaee06_proceeding_124620.pdf) (last accessed 5 December 2015).
- Scherr, S. J., A. White, and D. Kaimowitz. 2003. Making markets work for forest communities. *The International Forestry Review* 5 (1):67–73.
- Schipani, S. 2007. Ecotourism as an alternative to upland rubber cultivation in the Nam Ha National Protected Area, Luang Namtha. *Juth Pakai* 8:5–17.
- Schipani, S., and G. Marris. 2002. Linking Conservation and Ecotourism Development: Lessons from the UNESCO-National Tourism Authority of Lao PDR NAM Ha Ecotourism Project. *IUCN*. [http://insmai.com/hostservice/ecotourismlaos/directory/publications/linking\\_conservation\\_and\\_ecotourism\\_development.pdf](http://insmai.com/hostservice/ecotourismlaos/directory/publications/linking_conservation_and_ecotourism_development.pdf) (last accessed 2 December 2015).
- Silvertown, J. 2015. Have Ecosystem Services Been Oversold? *Trends in Ecology & Evolution* 30 (11):641–648.

- Smith, N. 2008. *Uneven development: nature, capital, and the production of space* 3rd ed. Athens: University of Georgia Press.
- Sodhi, N. S., L. P. Koh, B. W. Brook, and P. K. L. Ng. 2004. Southeast Asian biodiversity: an impending disaster. *Trends in Ecology & Evolution* 19 (12):654–660.
- Spence, M. D. 1999. *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks*. New York: Oxford University Press.
- Svadlenak-Gomez, K., T. Clements, C. Foley, N. Kazakov, D. Lewis, D. Miquelle, and R. Stenhouse. 2016. *Paying for results: WCS experience with direct incentives for conservation*. New York, NY: WCS. <https://vtechworks.lib.vt.edu/handle/10919/67606> (last accessed 2 May 2017).
- Takacs, D. 1996. *The idea of biodiversity: philosophies of paradise*. Baltimore: Johns Hopkins University Press.
- To, P. X., W. H. Dressler, S. Mahanty, T. T. Pham, and C. Zingerli. 2012. The Prospects for Payment for Ecosystem Services (PES) in Vietnam: A Look at Three Payment Schemes. *Human Ecology* 40 (2):237–249.
- UNDP. 2012. *Nam Ha Ecotourism Project: Lao PDR*. New York, NY. [http://www.la.undp.org/content/laopdr/en/home/library/environment\\_energy/nam-ha-ecotourism-project-lao-pdr.html](http://www.la.undp.org/content/laopdr/en/home/library/environment_energy/nam-ha-ecotourism-project-lao-pdr.html).
- UNEP. 2012. *Global environment outlook GEO 5: environment for the future we want*. Nairobi, Kenya: United Nations Environment Programme.
- Van Wilgen, B. W., D. C. Le Maitre, and R. M. Cowling. 1998. Ecosystem services, efficiency, sustainability and equity: South Africa's Working for Water programme. *Trends in Ecology & Evolution* 13 (9):378.
- Vandergest, Peter. "Rethinking property." *Common Property Resource Digest* 41 (1997): 4-6.
- Vandergest, P., and N. L. Peluso. 1995. Territorialization and state power in Thailand. *Theory and society* 24 (3):385–426.
- WCS. 2017. Tiger. *WCS*. <https://global.wcs.org/Wildlife/Global-Priority-Species/Tiger.aspx>.
- WCS, and Lux-Development. 2008a. Camera trapping and wildlife trade. *An Eye In The Forest: The Fragile Existence of Lao Wildlife*. <http://programs.wcs.org/laoswildlifephotograph/exhibition/en/00Camera.html>.
- . 2008b. Humans. *An Eye in The Forest: The Fragile Existence of Lao Wildlife*. <http://programs.wcs.org/laoswildlifephotograph/exhibition/en/11Humans.html>.
- WCS, and MoNRE. n.d. About. *Nam Et-Phou Louey*. <http://www.namet.org>.
- . n.d. About Us. *WCS Lao PDR*. <http://laos.wcs.org/About-Us.aspx>.
- . n.d. Climate & Vegetation. *Nam Et-Phou Louey*. <http://www.namet.org/about/climate-vegetation/>.

- . n.d. Nam Et-Phou Louey NPA. *WCS Lao PDR*. <http://laos.wcs.org/Saving-Wild-Places/Nam-Et-Phou-Louey-NPA.aspx>.
- . n.d. Our Eco-tourism Model. *Nam Et-Phou Louey*. <http://www.namet.org/wp/namnern/eco-tourism-model/>.
- . n.d. Our partners & sponsors. *Nam Et-Phou Louey*. <http://www.namet.org/wp/about/partners-sponsors/>.
- . n.d. WCS Lao PDR. *WCS Singapore*. <http://programs.wcs.org/singapore/Wild-Places/Lao-PDR.aspx>.
- . 2015. Opening in January 2016 - “The Nests” & “The Cloud Forest” hike. *Nam Et-Phou Louey*. <http://www.namet.org/opening-in-january-2016-the-nests-the-cloud-forest-hike/>.
- . 2016. What wildlife can I see on Nam Nern Night Safari tour? *Nam Et-Phou Louey*. <http://www.namet.org/wp/what-wildlife-can-i-see-on-nam-ner-night-safari-tour/>.
- Wheeller, D. B. 1997. Here we go, here we go, here we go eco. In *Tourism and sustainability: principles to practice*, ed. M. Stabler. Wallingford, OX, UK; New York: CAB International.
- Weaver, D. B. 2007. Towards sustainable mass tourism: Paradigm shift or paradigm nudge? *Tourism Recreation Research* 32 (3):65–69.
- . 2007. Sustainable Mass Tourism: More Smudge than Nudge: The Canard Continues. *Tourism Recreation Research* 32 (3):73–75.
- World Wildlife Fund. n.d. What is Biodiversity. *WWF*. [http://wwf.panda.org/about\\_our\\_earth/biodiversity/what\\_is\\_biodiversity/](http://wwf.panda.org/about_our_earth/biodiversity/what_is_biodiversity/).
- WWF. 2013. *Ecosystems in the Greater Mekong: Past trends, current status, possible futures*.
- . 2016. Global wild tiger population increases, bust still a long way to go. *World Wildlife Fund*. [http://wwf.panda.org/wwf\\_news/?uNewsID=265197](http://wwf.panda.org/wwf_news/?uNewsID=265197).
- Youdelis, M. 2013. The competitive (dis)advantages of ecotourism in Northern Thailand. *Geoforum* 50:161–171.

## APPENDICES

### Appendix A: Permission Letter

Kyle David Wagner

July 22, 2016

Mr. Hueng Sy  
Program Director  
WCS, Lao PDR

Dear Mr. Hueng Sy,

I am writing this letter to you to ask permission to visit three villages associated with the Nam Et-Phou Louey National Protected Area from the 25th of July until the 27th of July. I wish to visit Ban San Khua, Ban Nam Pong, and Ban Sa Kok. In these villages, I will conduct small interviews with four to five different people. I will have Mr. Touy, from the local WCS office in Hiem District, to help translate my interview questions for these three days. My interview questions are attached to this letter.

Thank you,

Kyle David Wagner

#### Interview Questions

1. What is your name and role in the village?
2. What is the history of your village?
3. In the past before the ecotourism program, what did you do?
4. After the ecotourism program, what are you now doing for your livelihood?
5. How do you benefit from ecotourism?
6. What do you do with these benefits?
7. What wildlife exists around your village?
8. What wildlife is your favorite? Why?
9. Why do you think people go hunting?
10. Why should wildlife be conserved and not hunted?
11. Has anybody come to your village asking to buy wildlife from you?
12. Have you ever seen a tiger?

## Appendix B: Fieldwork Questionnaire

Main Question	Who's Involved	Specific Details
What actors are actively involved with the establishment and creation of this ecotourism project, how is their authority legitimized, and what are the specific mechanisms that ensure the conservation of biodiversity and protection of wildlife species in the NEPL NBCA?	Proponents of ecotourism project	<ul style="list-style-type: none"> <li>• Historical narrative of resource and wildlife usage</li> <li>• Reasons for conserving nature</li> <li>• Motivations for ecotourism project</li> <li>• Methods used to enforce conservation and wildlife protection</li> <li>• Ability to enforce code of conduct, laws, or other rules governing the protected area</li> <li>• Perception of ecotourism project</li> <li>• Perception of ecotourists</li> <li>• Perception of residents' use of resources</li> </ul>
	Residents involved in ecotourism project	<ul style="list-style-type: none"> <li>• Goals of ecotourism project</li> <li>• Causes of biodiversity loss, environmental degradation, etc.</li> <li>• Reasons for conserving and protecting the environment</li> <li>• Benefits from ecotourism</li> <li>• Problems with ecotourism</li> <li>• Perception of ecotourism project</li> <li>• Perception of ecotourists</li> <li>• Perception of WCS Staff</li> </ul>
How has this ecotourism project changed local interactions with their environment (such as wildlife hunting and agricultural practices), and more broadly altered their livelihoods?	Proponents of ecotourism project	<ul style="list-style-type: none"> <li>• Historical narrative of residents and the environment</li> <li>• What behavior(s) go against the rules or the code of conduct?</li> <li>• Why are these behaviours good or bad?</li> <li>• What alternative livelihood practices are promoted and why?</li> <li>• What campaigns/educational outreach programmes are promoted to change local interactions?</li> </ul>
	Residents involved in ecotourism project	<ul style="list-style-type: none"> <li>• Historical narrative of resource usage before and after establishment of protected area</li> <li>• Historical narrative of resource usage before and after introduction of ecotourism</li> <li>• Reasons for why particular behavior is good or bad</li> <li>• Reasons for changing specific resource usage and practices</li> <li>• Perception of alternative livelihoods</li> </ul>

## Appendix C: Preliminary Fieldwork Questions

1. Why is the Lao Ministry of Natural Resources and Environment (MoNRE) and Wildlife Conservation Society (WCS) actively promoting ecotourism as a viable method of enforcing conservation and alleviating poverty within the Nam Et-Phou Louey (NEPL) National Biodiversity Conservation Area (NBCA) in the Lao PDR?
  - a. How does this ecotourism model work to ensure a strict adherence to the goals of conservation for residents?
  - b. How effective is the enforcement of conservation through ecotourism when comparing previous or alternative enforcement strategies?
  - c. How are the funds generated from ecotourism activities in NEPL distributed to residents? Who receives the funds? What other sources of income are residents turning toward?
  - d. Pedagogically speaking, how do WCS and MoNRE show residents the link between conservation and (eco)tourism?
  - e. How do different actors, governing bodies, and residents describe the project and its benefits for conservation?
  
2. How are particular residents, those belonging to a variety of different ethnic groups and relying on sustenance from the NEPL protected area choose to engage with (or choose not to engage with) conservation policies that directly affect their livelihoods?
  - a. How do the residents interact with this approach to conservation?
  - b. What are some of the changes of residents' livelihood that can be attributed to this project? What are the benefits and/or detriments?
  - c. What is the history of residents engaging in activities such as hunting, buying and selling wildlife, cutting trees, collecting non-timber forest products (NTFP)? How has land-use and natural resource-use change overtime for residents?
  - d. How does WCS and the MoNRE view activities that are practiced by residents? How do the residents view their activities?
  - e. How might religious beliefs, whether Buddhism or animism, guide villagers to behave and view the forests and natural resources in a certain way
  
3. How do the arrival of eco-tourists, traveling internationally from various countries around of the globe, shape conservation practices and the governance over the environment in these protected areas?
  - a. What are the demographic of ecotourists that participate in the new treks within the NEPL? How do they view conservation, wildlife, and the biodiversity? How do they view residents?
  - b. How effective is this method of enforcing conservation through the participation of ecotourists?
  - c. How do different actors account for the wildlife sightings within the NEPL?
  - d. How are the funds distributed to various village communities living together within the NEPL?
  - e. What wildlife is determined to be of value to result in the transfer of funds from WCS to residents?