

Forest Conservation and Indigenous People:
A Case Study of the Kalimantan Forest Climate Partnership (KFCP), a Reducing Emissions from Deforestation and Degradation (REDD) Project, and the Effects on the Dayak Indonesian in Central Kalimantan, the Kapuas River Region

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Abstract

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Abstract: Incentive-based forest conservation is rapidly being popularized as a means of protecting the global forests from deforestation and degradation. International climate mitigation projects, in the attempt to offset carbon emissions, have targeted forest-dependent people to assist in conservation projects. Issues arise with how such incentive-based forests conservation projects are affecting forest-dependent people. This research examined the Kalimantan Forest Conservation Program (KFCP), a Reducing Emissions from Deforestation and Degradation (REDD+) project taking place in the Kapuas River Region, Indonesia with an in-depth look at how the KFCP project is affecting the Dayak people's lives and livelihoods. Interviews were conducted in Indonesia in January 2012, with indigenous rights groups and government officials; interviews were also conducted in three villages within the KFCP project site.

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Table of

Contents.....	
Abstract.....	2
Acknowledgements	3
Acronyms.....	8
Chapter 1:	
Introduction.....	9
1.1) Research Question.....	11
1.2) Thesis Structure	11
Chapter 2: Literature Review	14
2.1) Development and the Environment	14
2.2) Climate Change and Development.....	18
2.3) Carbon Markets and Incentive-Based Forest Conservation.....	21
2.4) Payment for Environmental Services.....	24
2.5) Reducing Emissions from deforestation and Forest Degradation (REDD)	29
2.5.1) Reducing Emissions from Deforestation and Forest Degradation Plus (REDD+).....	31
2.6) The Development Context of Carbon Reduction Programs.....	32
2.6.1) The Concept of Climate Justice.....	35
2.6.2) Environmental Enclosures.....	37
2.6.3) Forest Dependent Communities.....	39
2.6.4) REDD and Forest Dependent Communities.....	41

Chapter 3: Context and Setting of the Kalimantan Forest Climate Partnership.....	45
3.1) Methodology.....	45
3.2) Indonesia.....	47
3.2.1) Central Kalimantan	49
3.2.2) Peat Swamp Forests	50
3.3) The Ngaju Dayak Indigenous Peoples	51
3.4) Indonesia’s Carbon Reduction Programs.....	54
3.4.1) Indonesia’s Reducing Emission from Deforestation and Degradation (REDD+) Program.....	54
3.4.2) Indonesian-Australian Climate Change Mitigation Partnership: Indonesia-Australia Forest Carbon Partnership (IAFCP).....	56
3.5) Kalimantan Forest and Climate Partnership (KFCP).....	57
3.5.1) KFCP Project Goal’s (as statement in the KFCP design document).....	61
3.5.2) Deforestation and Degradation: Reduction of Forest Fires, Canal Blocking, and the Protection of Peat.....	62
3.5.3) Land Tenure.....	63
3.5.4) Disputes and Conflicts.....	65
3.5.5) Village Engagement.....	65
3.5.6) KFCP, GHG Emissions Estimation and Monitoring Program.....	67
3.5.7) Practical and Effective REDD+ Payment Mechanisms.....	68
Chapter 4: The Kalimantan Forest Climate Partnership.....	71
4.1) Indigenous Peoples Alliance of the (Indonesian) Archipelago: Aliansi Masyarakat Adat Nusantara (AMAN) Interview.....	71

4.2)	Asia Foundation Interview.....	79
4.3)	Interviews with the Dayak People.....	82
4.3.1)	Unrecognized Land Rights.....	84
4.3.2)	Poor Project Communication.....	87
4.3.3)	Neglect of Local Knowledge.....	87
4.3.4)	Misplaced Incentives and Payments.....	89
4.3.5)	Community Participation and Local Ownership.....	90
4.3.6)	Destruction of Livelihoods and a Lack of Employment.....	91
	Chapter 5: Analysis.....	96
5.1)	KFCP Design Document and its Actual Implementation.....	97
5.2)	KFCP Co-Benefits and Land Rights.....	97
5.3)	Livelihood Diversification.....	101
5.4)	Peat Land and Forest Threats.....	102
5.5)	Village Engagement.....	105
5.6)	Local Ownership.....	106
5.7)	Disputes and Conflicts.....	107
5.8)	Peat Swamp Forest Deforestation and Degradation, Reducing Fire Within the Forest, Slash and Burn Practices and Livelihood Alternatives.....	108
5.9)	KFCP GHG Emissions Estimation and Monitoring Program.....	111
5.10)	KFCP`s Payment and Incentive Mechanisms.....	111

Chapter 6: Conclusions and Recommendations.....	116
6.1) Recommendations.....	118
6.2) Conclusion.....	124
6.3) Epilogue.....	125
Appendix.....	128
Bibliography.....	130
Figures.....	
Figure #1 Map of Central Kalimantan.....	49
Figure #2 Map of Central Kalimantan with KFCP site outlined.....	58
Figure #3- Detailed maps of the KFCP Demonstration Site.....	59
Figure #4- KFCP office in the Kalumpang Village.....	94
Figure #5- KFCP sign board in the Kalumpang Village.....	94
Figure #6- Seedlings being grown for the KFCP replanting project in the Kalumpang Village.....	95
Figure #7- Sawmill at the edge of the Kalumpang Village.....	95

Acronyms

AMAN- (Aliansi Masyarakat Adat Nusantara) Indigenous peoples Alliance of the (Indonesian) Archipelago

AusAID- Australian Agency for International Development

DCC-Australian Government Department of Climate Change

ENSO- El Nino Southern Oscillation

EMRP- Ex-Mega Rice Project

GIS- Geographic Information System

IAFCP- Indonesia-Australia Forest Carbon Partnership

IFCI- International Forest Carbon Initiative

FDC- Forest-Dependent Communities

KFCP- Kalimantan Forest Climate Partnership

MGD- Millennium Development Goals

MoF- Ministry of Forestry

MRV- Monitor, Report and Verify

NOK- Norwegian Kroner

NPPM- National Program for People's Empowerment

NTFP- Non-timber forest products

PES- Payment for Environmental Services

PSF-Peat Swamp Forest

REDD-Reducing Emissions from Deforestation and Degradation

REL-Reference Emission Level

UNDRIP-United Nations Declaration of the Rights of Indigenous Peoples

UNFCCC- United Nations Framework Convention on Climate Change

Chapter 1: Introduction

With the growing awareness of climatic change, the global forests, as both a source of natural resources and as a means of carbon storage, have become an important element in the greening of development practices. Globally, forests are being targeted to mitigate the effects of climate change through their natural carbon storage properties. Trees, plants and peat swamps in densely forested countries are essential in converting carbon emissions to clean oxygen for the world to breathe. The global forests are increasingly being conceptualized as the lungs of the earth. Trees in forest-covered countries are deemed a key element in climate mitigation. Deforestation accounts for 20% of the total global emissions of carbon dioxide and is the second largest contributor to carbon emissions behind the combustion of fossil fuels; however, deforestation is considered the number one emitter of greenhouse gasses in the developing world (Ebeling & Mai, 2008). The conservation of forests is vital in reducing the harm associated with climate change and environmental degradation throughout the developing world.

The debate surrounding climate mitigation through forest conservation and the emerging alternative value of the rainforests have produced heightened international forest protection policies, funding for environmental commitments, as well as the introduction of global carbon-trade market projects. Environmental programs and policies which have emerged within this international discussion include the United Nations Forum on Forest, Payment for Ecosystems Services (PES), the World Bank's Forest Carbon Partnership Facility (FCPF), and Reducing Emissions from Deforestation and Forest Degradation (REDD). REDD is seen as an effort to revalue the carbon stored in the global forests by offering incentives for forest conservation in forest rich countries, as a

means to offset carbon emissions from forest degradation and deforestation. As well, REDD is seen as an investment in sustainable development. (United Nations, 2009).

Countries with high tropical rainforest per capita ratios are being targeted for their climate change mitigation potential. Countries worldwide are preparing for an international climate mitigation program, which addresses forest degradation and attempts to reduce emissions attributed to deforestation. Reducing Emissions from Deforestation and Degradation (REDD) is an incentive-based forest conservation program, which targets forest-dependent groups living in densely forested areas. The REDD program has the potential to adopt a pro-poor agenda, as well as help reduce global emissions. The basis for my research was to examine how effective REDD can be at offering benefits to indigenous groups through the project's initiatives and to examine the effects the program has on forest-dependent people's livelihoods.

REDD programs are sponsored by varying corporations and governments agencies and are being implemented in richly forested areas around the world. For the purposes of this analysis, I will be examining the Kalimantan Forest Climate Partnership (KFCP) an Australian-Indonesian government partnership. My research will look at how the REDD program effects forest-dependent people by using KFCP project and their interaction with the Dayak people as a case study.

REDD, has been formulated as an alternative development strategy where pro-poor policies and environmental conservation have been championed. However, it remains to be seen if this is truly a viable means to provide realistic livelihood alternatives for forest-dependent people such as the Dayak Indonesians.

1.1) Research Question

Does the incentive-based Reducing Emissions from Deforestation and Degradation (REDD) program and its derivatives in the Kapuas Region of Kalimantan contribute to the development of the Dayak people's lives and livelihoods? My research's aim is to look at the relationship between the climate change mitigation program, REDD, and its impact on local populations by specifically looking at the socio-economic impacts of the program and its initiatives.

My research analyses the present situation of the KFCP, REDD+ project, the costs and benefits associated with the project, and how the project is effecting the Dayak people's lives and livelihoods. Forest conservation for the purposes of climate mitigation is the primary target of the REDD programs. However, there is concern that the groups living in the forests, such as the Dayak people, are being further marginalized in the process of developing REDD programs. Forced migration, the absence of land rights, destruction of agriculture practices and the creation of protected areas on inhabited lands all threaten the Dayak way of life and endanger their livelihood practices. Resolution of these issues will require improving the planning process combined with a more in-depth involvement and collaboration with the Dayak people.

1.2) Thesis Structure

Chapter One includes an introduction, a thesis statement and my research question. Chapter Two is a review of the environmental debates surrounding incentive-based forest conservation including the Reducing Emission from Deforestation and

Degradation (REDD) program. Chapter Three presents background information and an overview of the KFCP design document. Chapter Four includes my research methodology, as well as my research findings and primary data collected from my field work in Indonesia. Chapter Five is an analysis and discussion of the significance and meaning of my data collected throughout my field research and throughout my documentary reviews. Chapter Six is a summary of my findings; it includes my recommendations to improve the KFCP programs as well as my conclusions and an epilogue.

I will be arguing that the combination of incentive-based conservation policies and increased forest governance has not been beneficial to the rural livelihoods of the Dayak people. Forest-dependent people have in fact been negatively effected by the increase in protected areas for conservation and by new forest management schemes (Springate-Baginski & Wollenberg, 2010). While examining the total social and economic costs to the Dayak people we must also look at community participation, as well as the right to livelihoods in the design and implementation phases of REDD programs in order to prevent any negative effects that could impact the rights of the Dayak people.

Concentrating simply on forest conservation is both shortsighted and ill conceived, and fails to take into account the negative impacts such conservation policies have on local inhabitants who must secure their livelihood from the newly conserved geographic area. Lessons taken from Payment for Environmental Services (PES) approach will assist in my critique. Throughout this research, I will be examining the grievances reported by the Dayak people against the KFCP project, as well as examining

how to improve upon the current situation. These areas of examination will include the issues of land rights and what that means in relation to ownership of the project and its social and economical benefits. I will also be exploring the role of local participation and community engagement throughout the project. I will be analyzing the KFCP program initiatives, the project's design, the payment mechanisms and initiatives involved in the program with a focus on the livelihood implications. These areas will be the basis for my research to examine the effects this project is having on the lives and livelihoods of the Dayak people living in Kapuas River Region.

Chapter 2: Literature Review

2.1) Development and the Environment

This section will analyze both the relationship between development and the environment as well as the disconnect between these two concepts. Why has international development failed to adequately address both climate change and poverty alleviation goals? I will explore the necessity to incorporate environmental planning into development projects if they are to be effective and sustainable. The effects of climate change include increasing air and water temperature, rising sea levels and escalating frequency and severity of storms which is causing extreme damage in the developing world on a disproportionate scale (Wilson, 2010). Climate change has been accused of reversing development projects and is undoing steps towards poverty reduction, through the deprivation of basic needs including: drinkable water and fertile land for food production, the destruction of homes, and the loss of lands and livelihoods. Environmental degradation is increasing poverty, dependency and food and water insecurity. Without the recognition of the costs of environmental degradation and the effects on basic human rights, true growth and development are not conceivable.

Development and the environment have a symbiotic relationship and must interact accordingly in order to improve the lives of those effected by environmental degradation. Not surprisingly, the people who are most effected by environmental degradation are those who rely directly on the environment for their survival. For the purposes of this thesis, I will be using the term forest-dependent peoples. This shall include indigenous groups, such as the Dayak people and non-indigenous groups whose livelihoods depend

on what they can extract from the forest as their primary source for food, shelter, subsistence and economic benefit.

One of many debates surrounding development and the environment is that there exist conflicting agendas, where different actors are working towards separate, disconnected goals. These disconnected goals are poverty alleviation and environmental conservation. It is this very divergence that has resulted in poor success rates in both development and environmental conservation. Development and environmental conservation practices do not have to be at odds with one another and in fact can be mutually beneficial if implemented with both poverty alleviation and environmental conservation goals as primary targets (Sayer & Campell, 2004).

Development, the economy, society and human-induced environmental changes are intimately connected. Human-induced environmental changes are often a product of development. Human activity continually changes the environment whether intentionally through farming practices or, unintentionally through pollution. These changes are seen through depletion (the extraction of natural resources such as oil) and through degradation of air, water and land through pollution. The two are also often connected, with depletion contributing to degradation and vice versa (Wilson, 2010). It is important to make this linkage between development and environmental degradation, as most (if not all) human-induced environmental degradation is done in the name of development, whether explicitly stated or not. Development and environmental degradation does not effect all people equally on a global scale. Development has typically benefited rich (developed) countries more so than poorer (developing) countries. It is the opposite when considering environmental degradation on a global scale, with poorer countries feeling the worst

effects of degradation of air, water and land and having the most severe depletion of natural resources (Wilson, 2010).

Development practices are continuously changing, adapting to environmental challenges in the pursuit of human progress. These adaptations have included new environmental policies and projects aimed at reducing the impacts of development on the environment. However, this ‘greening’ of development and political rhetoric illustrates the shift towards the recognition that the environment and development are intrinsically linked. Sustainable development and green development are two such examples.

Sustainable development is a normative term that has been used widely by politicians, international organizations and NGOs to promote an idea of desirable environmental development. It has become so widely used that it has lost most of its meaning. It can be argued that sustainable development is merely political jargon used to pacify the ever-growing environmental movement. However, sustainable development is a useful concept even if in actual practice it fails to deliver its promises (Adams, 2009). While sustainable development has many definitions the *World Commission on Environment and Development Book: Our Common Future*, see sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987, p. 43). This statement, however vague, marked the commencement of development discourse that connects poverty alleviation goals with environment and biodiversity protection. Today, sustainable development is a mutable concept and has been used to market countless development projects to include business as usual practices under a ‘green’ pretense, to promote equity and to emphasize the social consequences of development. The power of

this rhetorical phrase has shaped the development ‘business’ and continues to evolve as green capitalism¹ and shapes the fluidity of development theory and practice (Hawken & Lovins, 1999; Mason, 2005; Porritt, 2005). For the purpose of this thesis the phrase, sustainable development, will be used to mean, development that supports and fosters environmental growth while simultaneously maintaining the livelihoods of forest users and forest dwelling communities.

The problem remains that development and sustainability have continued to be conceptually and practically opposed. The ‘greening’ of development practice and theory has yet to be truly actualized in part due to the dynamics between rich and poor and North and South (Adams, 2009). It is the people who are dependent on their environment for their livelihoods that are the most effected when their environment changes. Development crises and environmental crises are often correlated in a cause and effect relationship. The disconnect between development and environmental protection has resulted in a failure to adequately address global poverty issues.

Emerging policies surrounding climatic changes on the international stage are attempting to recognize the value of green development² practices. Environmental protectionist programs, carbon cutting policies and environmental development schemes need careful examination in order to prevent the increase of environmental deficits and to ensure that the benefits of development and environmental protection are put in the hands of the global poor, whose poverty is paralleled by environmental degradation.

¹ Green Capitalism refers to the economic drive and monetary incentive to produce ecological desirable outcomes (Adams, 2009)

² Green Development refers to the merger of environmental protectionism with development goals (Adams, 2009)

2.2) Climate Change and Development

Climate change is not new, nor is the notion that human activities have induced this change. The world's changing climate patterns have been noted officially since the late 1970's as the changing frequency and severity of emerging weather patterns could no longer be explained solely by natural causes. In 1985, the United Nations commissioned the Advisory Group on Greenhouse Gases and in 1988, the testimony of NASA scientist James Hansen for the US Senate's Energy Committee proclaimed that global warming was "occurring unequivocally" (Blockstein & Wiedman, 2010, pp. 9-12). The United Nations Intergovernmental Panel on Climate Change (IPCC) assessment reports (IPCC, 1990, 1992, 1995, 2001, 2007) show documented proof that climate change does in fact exist and that human activities have induced a rapid rate of acceleration.

Climate change is increasingly being recognized as a common detriment to development, especially in light of the long-term environmental impacts, which are progressively effecting larger numbers of countries and communities. In order to curb the effects of climate change and the subsequent environmental degradation, a stabilization of GHGs is required. Large emission reductions are desperately needed and can only be achieved if implemented through unified global cooperation (UNFCCC, 2011). Newer global programs such as the Reducing Emissions from Deforestation and Degradation (REDD) are targeting rainforests for their capture and storage of carbon emission capabilities. However, comparatively little is being done to reduce overall global emissions.

The causes of climate change are directly linked to the amount of carbon dioxide and GHGs emitted into the atmosphere through the burning of fossil fuels, energy consumption and deforestation. The largest contributor to the growth in GHGs in the last forty years has been from energy supplied for industries, transport, commercial and residential buildings, and deforestation (UNFCCC, 201; Norcia, 2007; IPCC, 2001; IPCC, 2007).

Climate change mitigation is increasingly being addressed through a growing number of global actions and policies. These include market-oriented environmentalist programs such as carbon markets and carbon offsetting. However, it is argued that some of these global actions are simply a market-based solution to global emissions and they do not sufficiently address the root of the problem (CIFOR, 2005). The commodification of the ecological commons has sparked major debates surrounding the neo-liberal, capitalist green-markets solutions being presented as environmental development. It is also argued that these policies have merely promoted alleged emissions offsets and biofuels rather than attempting to cut emissions, prevent carbon leakages, curb current trajectories and balance unequal global consumption (Bachram, 2004).

The Kyoto Protocol in the United Nations Framework Convention on Climate Change (UNFCCC) advocated for market-driven environmental policies to reduce GHG and global emissions, leading to the development of international carbon trading schemes for carbon credits and atmospheric reductions in GHGs. It is suggested that incorporating elements of a free-market approach will produce equitable and efficient means of GHG stabilization and will promote a reduction in such emissions (Ebeling & Mai, 2008; Niesten, et al. 2002). This will require careful construction of guidelines and binding

policies to ensure that market-based incentives programs promote equality (not aggravate poverty) and do not marginalize minorities. The goal of market-based environmental solutions such as carbon-markets is to strive to obtain simultaneous reductions in carbon emissions and minimize environmental and social impacts (Bolin & Kheshgi, 2001). However, targeting the South as a means to curb the effects of global warming and climate change are simply treating a symptom and not the cause of the problem. Market-based environmentalism has not yet adequately addressed who is most effected by these conservation policies, especially in comparison to who has caused the most damage with GHG emissions into the atmosphere (Bachram, 2004). A market-based means of curbing the effects of climate change has raised many questions, such as how will the “free-market” render fair rewards for those who are often targeted in these schemes? Questions about transparency, monitoring, corruption and equitable distribution of profits must be answered before market-based environmentalism can call itself the next great solution in climate mitigation.

Climate change mitigation projects must consider poverty and how a changing climate is worsening the lives of forest-dependent people. Climate mitigation projects must also implement a strong livelihoods agenda in order for these development projects to be successful. Projects that merely focus on carbon trading and GHG emissions are shortsighted. Addressing the needs of the local people and concentrating on combining poverty alleviation and reducing emission will ultimately create a sustainable pro-poor project (Murdiyarso, 2005).

2.3) Carbon Markets and Incentive-Based Forest Conservation

Carbon credits play an important role in the increasing popularity of global carbon markets and in the development and financing of REDD projects. They also play an essential role in incentive-based forest conservation efforts whereby market-based conservation controls attempt to curb overall pollution and emissions. Carbon markets are based on an exchange of carbon credits and financial incentives and have the potential to play an important role in incentive-based forest conservation projects (Kollmuss, et al. 2010).

It is imperative to examine how carbon markets would fund projects as well as how they would support payments and incentives allocated for REDD participation. There are a multitude of question surrounding carbon markets and incentive-based forest conservation primarily concerning the ability of such programs to address rural poverty and protect indigenous rights. Further concerns surround the potentially large influx of money associated with carbon markets and how it will be distributed equitably.

The initial market-based conservation theory, in the late 1960's, was designed to make polluting expensive. The idea was to lower pollution emissions and drive large polluting countries to search for cleaner innovations and technologies. A pollution tax, as well as marketable permit systems, was implemented so that a desirable level of emissions could be targeted. These permits could be bought, sold or traded, thereby placing a price on pollution. Incentive-based regulations are based on market drivers' designed to reduce global emissions (Goodstein, 2002). Incentive-based forest conservation programs, such as REDD, use similar principles except, the firm or host

country receives market-incentives and financial subsidies to avoid deforestation and forest degradation. The polluting country or firm offsets their pollution emissions by sponsoring the rehabilitation of the host country's forests, ideally promoting the world's forests to offset global pollution through their carbon capture properties (Ebeling & Mai, 2008).

“Firms with obligations to reduce their emissions under an emissions trading scheme, or those wishing to engage in corporate social responsibility activities, may buy credits generated by REDD activities to compensate for continued emissions in their operations. In textbook terms, the right balance of supply and demand for REDD offsets in the carbon market will set a price that acts as an incentive for conservation and a disincentive for production that exploits forest reserves. Incentive-based environmental projects, such as REDD, are designed to provide incentives for forest-dependent people to participate in emissions reducing programs” (Pearse, 2012, p. 183).

The push to increase REDD's marketability is driven by economists and policymakers alike. The conceptualized argument behind the drive for marketization is threefold. REDD programs operating as part of a carbon market have the potential to offer financial incentive for forest conservation. Secondly, REDD can be seen as a cost effective means to promote climate mitigation. Finally, a market driven REDD program can introduce alternative livelihood components to forest-dependent communities (Stern, 2007; Eliasch, 2008; Pearse, 2012). How REDD is regulated in a market-based model and the process of standardized control and legitimacy remains a very large question. Issues of governance within the forestry sector, poor protection, weak law enforcement and lack of land tenure issues individually are considered drivers of deforestation which is further compounded by market-driven, self-regulated programs such incentive-based forest conservation. In the “configuration of these initiatives, there is a self-organized steering of multiple agencies operationally autonomous from one another, yet structurally

interdependent (Jessop, 2000). Carbon market installation as a result is being established in an unruly fashion” (Pearse, 2012, p. 188). With the increasing fragmentation of REDD projects globally, the push to include a component driven solely by the market has proven to be one of the most unstable aspects of REDD. Market-driven forest conservation is fundamentally at odds with itself: it is this very fragmentation that is its major reasons for the crises and failures of REDD (Stern, 2007; Eliasch, 2008).

Carbon-market extensions into REDD projects need a regulated mandate if they are to be successful and avoid potential harm. This mandate should come from an international regulator body such as the UNFCCC. Without such a mandate monitored by the framework already evolving with the UNFCCC, demand for the supply of carbon offsets will dramatically decrease. The “intent is to arrive at an international regulatory apparatus to install and govern REDD measures for emissions abatement” (Pearse, 2012, p. 186).

It is important to examine the potential negative effects of carbon markets, carbon extensions and market-driven forest conservation projects. These types of projects have the potential to do more harm than good to the global forests and consequently negatively affect forest-dependent peoples and their livelihoods. This can be the “case with avoided deforestation, whereby the rules and norms around access to and use of forest resources are often redefined in the presence of the project, limiting and/or blocking individuals from accessing the forest to meet basic livelihood needs. In turn, this process often unfolds in a highly uneven way dependent on local power relations between community members” (Ervine, 2013, p. 667).

REDD as an incentive-based forest conservation program has been

“promoted as a mechanism that could channel tens of billions of dollars per year to those who reduce emissions from deforestation and forest degradation. Although who will and who will not benefit under any UNFCCC endorsed REDD agreement has still not been agreed, it is obvious that many different countries, companies and communities are under the impression they might reap a share of its promised rewards. This has injected a momentum into the REDD process not evident in other UNFCCC deliberations. However, the potential for significant profits has also brought heavyweight players to the scene, potentially to the disadvantage of other participants. These big players have more capital, expertise and influence, and can thus skew REDD development in general, and REDD project design in particular, in their favor. Some projects, such as Rimba Raya in Indonesia, are now being explicitly described by their sponsors as ‘for profit’ projects” (Hall, 2010, p. 15).

Incentive-based forest conservation through carbon markets and financing gives monetary support for a reduction in deforestation and forest degradation projects, as well as charging polluting countries or companies a fee to offset their carbon emission by protecting a portion of the world’s forests. This in effect recognizes the world’s forests as vital to providing the necessary oxygen for our planet, and is a key conceptual foundation of the plan (Ebeling & Mai, 2008). However, participation in such mechanisms can also “entails costs and trade-offs for project participants, resulting in heightened levels of risk for poor and marginalized actors” (Ervine, 2013, p. 665). Payment for Ecosystem/Environmental Services (PES) and carbon offsets programs (such as REDD) are such forms of incentive-based forest conservation.

2.4) Payment for Environmental Services (PES)

Payments for Ecosystem/Environmental Services (PES) programs are economic market-based programs that reward positive environmental outcomes through active demonstrations of environmental protection and rehabilitation of degraded environmental sites (Rosa, et al. 2004). These incentives-based programs have emerged as an attempt to

slow the ever increasing global forest consumption, deforestation and degradation. PES targets forest-dependent people to facilitate conservation of the global forests. Large industrial companies are not included in this type of site specific project. The structure of PES relies solely on the support of people living in and around the forest (or other ecological protected areas) to assist in the general protection of their environment. A project or firm orchestrating a PES project attempts to reward individuals contributing to environmental protection within a given area. The concept is based on incentive-based performance whereby, the individual or community are rewarded for services rendered. These services are based on forest conservation efforts including flood mitigation, forest fire protection, forest rehabilitation, biodiversity protection and reducing deforestation and degradation. There are many challenges associated with PES programs including, the use of enclosures, and what qualifies as appropriate compensation. Specifically, is the compensation enough to equal the loss of livelihoods? Are the payments equal to the loss of fertile lands through PES enclosure where hunting, fishing and gathering are often restricted (Rosa, et al. 2004)? The consequences of environmental enclosures are vast. Some enclosures under a PES program have been accused of worsening poverty, increasing food insecurity and have dramatically contributed to loss of livelihoods.

A further debate surrounding PES and environmental incentive-based programs is whether or not financial payments and incentives can have a positive effect on the sustainability of ecosystems and positively effect the lives and livelihoods of forest-dependent and indigenous people. The compensation schemes are designed to provide incentives to change land-use practices to conserve the global forests. PES compensations have typically revolved around monetary payments and rewards for environmental

services. This raises some ethical issues surrounding corruption, transparency, economic disadvantages and the creation of dependency. Furthermore, PES programs have typically been characterized by low payments for local participants to help keep project costs down (Rosa et al. 2004). This is a seemingly unfair distribution, as often PES programs, such as REDD, have expansive budgets. For example, the KFCP, REDD+ program has an estimated AUD \$30 million budget (KFCP, 2009) with only a fraction being distributed to PES. The uncertainty surrounding PES projects is whether the local people are receiving the appropriate remuneration for their efforts. PES has also been accused of neglecting other environmental impacts while focusing on a single ecosystem.

PES programs can reward environmental protection and rehabilitation activity participation through numerous forms such as monetary gifts, conditional cash transfers, land use, redistribution or re-appropriation of land, and the promise of guaranteed land rights for forest-dependent communities.

The objective of PES is to place a value on environmental services that will promote conservation. However, the lack of a regulatory compensation mechanism and a lack of transparency concerning distribution of incentives, as well as disputes over who is eligible to receive funds, raises serious concerns and conflicting opinions regarding consistency within payment and incentive plans (Jack, Kousky, & Sims, 2007). PES programs that place higher reward values on the services provided by local people are more likely to achieve sustained success and acceptance within communities. For PES to be most successful the cost of environmental services must be high for the beneficiaries and relatively low for the participants, while the rewards must be greater for the participants (Mayrand & Paquin, 2004).

Often targeted in PES programs are forest-dependent people. Forest-dependent people must be given ample opportunity to provide input and give their Free Prior Informed Consent (FPIC) before the program begins. Furthermore, PES should not make people worse off than they were before the project nor should the participants suffer at the end of the project's life (Anderson, 2011).

If this approach is designed with the twin goals of poverty alleviation and ecosystem protection the combination can be quite beneficial to rural livelihoods. However, this approach can also be devastating to forest-dependent communities when PES programs fail to recognize what these communities can offer to ecosystem stewardship and environmental conservation (Rosa et al. 2004). National incentive PES programs that have neglected this stewardship have had little effect on rural poverty and forest-dependent communities' livelihoods. PES policies have been known to further marginalize farmers, indigenous people and rural inhabitants by restricting their production capabilities and by limiting their access to natural resources. Furthermore, PES has limited profit-sharing qualities with marginalized communities paying most of the costs and receiving few of the benefits (Antle & Stoorvogel, 2009). As forest-dependent communities rely heavily on their surrounding natural resources, it is imperative that PES programs address how the forest contributes to the basic needs of its inhabitants.

There are three levels that PES strategies need to address in order to adequately tackle rural poverty issues. Firstly, forest-dependent communities rely heavily on natural resources for food, shelter, firewood and for spiritual well-being. PES strategies can fail to achieve poverty alleviation goals and can be detrimental if they fail to recognize the

importance that the environment plays in subsistence, identity and livelihoods. Secondly, the forest provides a means of income through the harvest and sale of forest products. PES strategies need to explore the relationship between natural resource management and income-earning tactics in order to effectively implement marketing programs and training to increase incomes while protecting the environment (Rosa, et al. 2004). Thirdly, the advancement of new strategies to diversify the livelihoods of these communities through programs such as carbon sequestration, power generation (through wind or water) and biodiversity protection must “find other compensation mechanisms that recognize and reward ecosystem management practices that guarantee environmental services of interest to outside consumers” (Rosa et al. 2004 p.11).

The levels that Rosa et al. describe are crucial to recognize and integrate into PES programs in order to secure equitable benefits from the programs and to foster livelihood rights. Furthermore, inclusive participation from those who rely on the forests for their livelihoods is fundamental to the PES programs’ success and sustainability. In order to ensure this inclusive participation, representatives from forest-dependent communities and indigenous groups must be included at all levels of the decision-making process. Their intimate knowledge of their surroundings is crucial to forest conservation and, ultimately, for PES program successes (Jack, Kousky, & Sims, 2007). Local knowledge must be incorporated at the policy and planning level as well as during the implementation process. However, it remains to be seen if a representational system is actually inclusive and whether or not it can offer an equitable voice of all involved parties’ interests. Nevertheless, a diverse working group would enhance the level of

understanding about the difficulties that forest-dependent people face with PES programs (Rosa et al. 2004).

2.5) Reducing Emissions from Deforestation and Forest Degradation (REDD)

Emissions attributed to deforestation and forest degradation accounts for a significant portion of the global GHG emissions every year. Reducing deforestation and forest degradation has the potential to not only reduce GHG emissions but also to maintain biodiversity, protect both flora and fauna, and promote sustainable development while simultaneously working to help achieve the Millennium Development Goals (MDG). Reducing Emissions from Deforestation and Forest Degradation (REDD) is designed to address deforestation rates, responsible for approximately 13 million hectares of the world's forests being clear-cut every year. REDD is seen as a potential way to reduce poverty and strengthen indigenous rights while concurrently tackling climate change due to global GHG emissions (CIFOR, 2008). REDD was introduced at the Thirteenth Session of the Conference of Parties in Bali in December 2007, where Norway launched its International Climate and Forest Initiative (ICFI). Through the ICFI Norway committed 3 billion Norwegian kroner (NOK) (approximately US\$ 550 million) a year to REDD efforts over the next five years (CIFOR, 2008). The World Bank and the United Nations along with other NGOs and multilateral agreements have committed hundreds of millions of dollars to REDD and REDD readiness programs.

REDD programs offer a new approach to battling climate change by addressing deforestation's contribution to global GHG emissions. The founding principle behind REDD is an attempt to shift the economic value of the rainforest to increase the value of

an intact, healthy forest. In the past, rainforests have been valued solely by the price of commodities such as timber and palm oil. REDD, however, offers a new approach to battling deforestation by offering incentives to conserve forests for their carbon-capture and carbon offsetting properties while avoiding the carbon release associated with clear-cutting (Lawlor & Huberman, 2009). REDD is a form of PES where environmental services and protection are rewarded through an incentive-based program.

REDD is designed with forest conservation and climate mitigation in mind. Projects are primarily directed at forest rehabilitation, increasing forest biodiversity, forest fire prevention, protection of existing forests and the planting of new forests to promote high levels of carbon capture. However, unless overall “demand for agricultural commodities and timber declines, REDD may not work on a project-by-project basis, since deforesting activities may simply shift elsewhere” and negate the initial project (Hall, 2010, p. 4).

REDD is having difficulty being accepted within the UNFCCC and Kyoto Protocol. This is in part due to uncertainty about “measuring and ensuring genuine, lasting emission reductions from REDD” (KFCP, 2009, p. 12). REDD is viewed by many as a cost-effective way to reduce deforestation as well as reducing global emissions in the short-term. However, more research and pilot programs are needed in order to demonstrate the long-term benefits of REDD programs worldwide. REDD also needs to address the growing concerns of indigenous people who are being directly effected by the REDD programs.

2.5.1) Reducing Emissions from Deforestation and Forest Degradation Plus (REDD+)

UNFCCC “negotiations currently focus on a derivative of REDD referred to as “REDD+”. This term is generally taken to include “positive incentives for the conservation of forests, sustainable forest management and the enhancement of forest carbon stocks in developing countries” (UNFCCC, 2007; Hall, 2010). REDD+ is an evolution of the original REDD program. REDD+ is still based on reducing emissions from deforestation and forest degradation but additionally focuses on forest conservation, sustainable forestry management and the development of stronger forest carbon stocks. REDD+ should also reach beyond simply climate change mitigation and include co-benefits by complementing other pro-poor international agendas, conventions and agreements (UNFCCC Decision 1/CP.13, 2008).

The REDD+ programs are designed as incentive-based conservation programs where countries that are able to reduce carbon emissions through avoided deforestation are compensated for their efforts. REDD+’s incentive component could also work to alleviate rural poverty, curb climate changes as well as conserve biodiversity and place a monetary value on ecosystem protection services (Parker, et al. 2008). REDD + has the potential to increase protection for the world’s remaining rainforests as well as reducing deforestation and preventing forest degradation. REDD+ has been promoted as a means to increased awareness within industries of their carbon footprint and to promote cleaner technologies (Lawlor & Huberman, 2009). It has also been championed as a way to protect forests from such damaging industries as palm oil plantations and logging, by revaluing the forests and increasing visible forest management. By paying countries with

a high rainforest density to protect their forests, the REDD/REDD+ programs are hoping to offer an alternative financial solution for the forestry sector.

2.6) The Development Context of Carbon Reduction Programs

There is a debate surrounding the potential outcomes of the REDD programs. Should REDD tackle the issue of global poverty? As the REDD program concept was designed to address climate change and to embark on efforts to reduce global GHG emissions, should its primary concern focus on the environment and not poverty alleviation? By this logic, the program should “do no harm” to the people effected by the programs such as indigenous peoples and forest-dependent peoples. Others would argue that REDD programs cannot be sustainable or be truly effective unless it addresses poverty issues and diligently works to ensure that co-benefits of REDD are delivered to those that need it most (Brown, Seymour, & Peskett, 2008; CIFOR, 2008; Murdiyarso, 2005; Peskett, et al. 2008). This group believes that the REDD programs must include a pro-poor agenda as the programs have the potential to reach some of the poorest, most isolated people on the planet.

Co-benefits of the REDD and REDD+ programs could include pro-poor development and the protection of human rights, including promoting indigenous rights and land tenure security, improvement in forest management and forest governance, and environmental benefits. Biodiversity protection of both flora and fauna species, prevention of forest fires and improvement in water and soil quality are also viewed as positive consequences of a solid REDD+ program (Brown, Seymour, & Peskett, 2008).

The arguments surrounding why REDD+ should be pro-poor are quite diverse and persuasive. These arguments include the moral argument whereby, the international community attempts to address inequalities within the program and aims to improve legitimate forest user's rights and welfare. Practical considerations and risk reduction arguments include, how REDD+ incentives might effect the forest-dependent people living within the project site and how the participation of the local people will contribute to the effectiveness and sustainability of the program. A pro-poor project would address conflicts that arise throughout the project including local rejection, social conflict and inequitable distribution of incentives and payments. Pro-poor projects would include corporate and social responsibility and could therefore attract a more ethical donor base for REDD+. From a procedural stand point, incorporating the UNFCCC recognized importance of social issues, including global poverty issues would make REDD+ projects more attractive within the international community as well (Decision 2/CP.13 UNFCCC, 2008; Brown, Seymour, & Peskett, 2008).

The theory is that REDD+ is a policy where everyone wins. Local communities are paid to maintain and protect the forest, the varying levels of government receive an influx of monetary funds, and polluting countries and companies can continue with a business-as-usual carbon emitting practice. In reality, not everyone wins. Governments receive aid money without the stigma of dependency and carbon emissions are allowed to remain high. Forest-dependent communities however, do not receive the equivalent of what they have lost in terms of land usages, natural resources and livelihoods. Often REDD+ sites fall under a protected forest area classification protecting the project site from clear cutting projects and palm oil plantations however; the environmental enclosure

also prohibits hunting, fishing and any removal of forests products. Although there are many potential benefits to the REDD+ programs they can also be detrimental to the forest-dependent people who live in and around these newly protected areas. For forest-dependent peoples and indigenous peoples, such as the Dayak people, forest enclosures mean a loss of their traditional way of life, food insecurity, and loss of livelihood through denied access to fertile lands.

The REDD+ program will have to properly address the “3E” criteria outlined by the CIFOR which include carbon Effectiveness, cost Efficiency and Equity of co-benefits (CIFOR, 2008) in order to ensure that individual projects are successful, sustainable and equitable. As REDD+ has the potential for carbon leakages,

a REDD+ “framework for incentives must be extended to all rainforest countries in order to prevent the movement of deforestation practices to REDD+ excluded countries. A united international standard for market-based carbon offsetting programs will need to be formalized to avoid carbon leakages across countries and to increase the effectiveness of the conservation programs” (Ebeling & Mai, 2008, p. 1920).

Furthermore, REDD+ programs will need to address industrial emissions as well as deforestation emissions in order to mitigate the total effects of climate change.

Industrial firms cannot simply be allowed to pay carbon taxes or fund REDD+ projects while increasing their carbon footprint. The REDD+ program will also have to address transparency of governance and the distribution of incentives collected through these programs to ensure that the incentives are equitably distributed throughout the system and that the funding makes it to the local level. Furthermore, the capacity for countries to monitor, report and verify (MRV) emissions vary widely and will need further attention as the number of REDD+ participating countries continues to increase.

While implementing REDD+ programs, special attention must be given to those who are most at risk and have the most to lose during this transition to incentive-based forest conservation. Most importantly we must explore how this is effecting rural livelihoods and forest-dependent communities.

2.6.1) The Concept of Climate Justice

According to the US Environmental Protection Agency and the UK's Capacity Global, environmental justice "is the fair treatment for people of all races, cultures and incomes regarding the development of environmental laws and policies, equal access to a clean environment and equal protection from possible environmental harm irrespective of race, income, class or any other differentiating feature of socio-economic status" (Buckingham & Kulcur, 2009, p. 659).

Climate injustice is the theory that the harmful effects of climate change are felt disproportionately around the world, where the marginalized and the disadvantaged are the worst effected. Low-income and minority communities, such as the Dayak people, are most at risk for environmental injustices. They suffer disproportionately due to their dependency on their natural environment and are consequently more vulnerable to environmental degradation (Gauna, 1995).

When discussing climate justice the value of the environment must not simply be defined as what is physically in nature, such as the trees or water, but the intrinsic, economic value of nature must also be considered as well as the livelihood opportunities it presents to its inhabitants. The value of the forest cannot simply be separated from the

lives of the people living in the forest and whose livelihoods are derived from it, as the two aspects are intrinsically linked (Sen, 2009).

This is important to highlight in regards to incentive-based forest conservation programs and carbon offsetting programs because of the potential for these policies to further marginalize those dependent on their environmental surroundings for their livelihoods. In general, market environmentalism has been more concerned with what an acceptable level of pollution is, rather than the “distributional effects of pollution, including the potential for distributional inequities, of environmental protection thereby, imposing a cost on some for the benefit of others” (Lazarus, 1992, p. 795).

Climate impacts have worsened through the implementation of development projects that are designed to protect energy sources, capital flows and military and political security of the North. The ecological footprint of the North (or developed countries) has had considerable consequences worldwide, including a massive carbon debt, whereby the North accounts for 80% of CO₂ released into the atmosphere (McMichael, 2009). An example of this unequal divide is that in just “eleven days, the average UK citizen will generate as much CO₂ as the average person in Bangladesh will during a whole year, and it has been calculated that a single British power station in West Yorkshire emits more CO₂ annually than the 139 million people in Uganda, Kenya, Tanzania, Malawi, Zambia, and Mozambique combined” (McMichael, 2009, p. 248).

As the North continues to pursue development goals that foster and support the North’s ever growing need for energy, capital and general consumption, it is the South that experiences the worst environmental consequences. These environmental

consequences include increasing frequency and severity of storms, prolonged droughts, floods, soil erosion, increasing water and air temperatures, and loss of arable land. The result of the North/South ecological debt has resulted in the displacement of populations, food insecurity, water scarcity and climate refugees in the South and has allowed Northern growth to continue unchecked.

The promise of economic prosperity has allowed development goals and projects to neglect the North's carbon debt at the expense of the environment. Climate justice theory recognizes the unequal relationship between the North and the South and between the polluters and those worst effected by this relationship, namely the poor, the marginalized and forest-dependent communities.

A major source of climate injustice is environmental enclosures whereby people are prevented from accessing their forested lands that have traditionally provided them with food, shelter, medicine and livelihoods.

2.6.2) Environmental Enclosures

Incentive-based forest conservation programs and carbon offsetting programs have the potential to seriously damage local livelihoods by enclosing the land and alienating its resources from the local inhabitants who have traditionally, and successfully, gained their livelihoods from it. Land ownership becomes an issue for the successful implementation of incentive-based forest conservation in respect to traditional land tenure of forest-dependent people. Environmental enclosures and protected areas limit access to land and restrict traditional usages such as hunting, fishing, and agriculture

practices. This further inhibits economic, social and cultural and livelihood activities of the forest-dependent people, such as the Dayak (Bollier, 2002).

Although environmental enclosures are designed to protect the natural resources of the land, in practice it is the forest-dependent people who have the intrinsic knowledge of the forests and who have been protecting the forests for centuries (Maloney, 1998). This innate knowledge of the forests is crucial to incorporate into the development of incentive-based forest conservation projects, such as REDD+, to strengthen and widen the reach and scope of such projects.

It is the rural poor and landless who are the most effected by environmental enclosures, people who have historically depended on the land. These enclosures impact their basic necessities of life including food, fuel and shelter (Prizzia, 2002). Many

“indigenous peoples fear that the implementation of REDD+ projects may have the same impacts on them as the imposition of conservation areas or enclosures related to national parks. This imposition has led to conflicts, physical and economic displacements, food insecurity and loss of income, loss of biodiversity and traditional knowledge due to prohibitions of their traditional livelihoods, resettlement or eviction. On the other hand, independent studies have illustrated that conservation areas in genuine partnerships and under co-management arrangements with indigenous peoples have been more successful and are mutually beneficial. These partnerships are based on the respect of indigenous peoples’ rights, needs and concerns. Likewise, experiences on community forest management and conservation are more sustainable and benefits are more equitable if community land rights/land tenure is recognized over individual land tenure contracts” (AIPP, 2011, p. 6).

Incentive-based forest conservation programs must respect forest-dependent communities in order to avoid climate injustices and to improve the overall effectiveness of the programs (CIFOR, 2005). Environmental enclosures as part of the REDD+ program must address the needs of the forest-dependent people and must explore alternatives to protect and improve local livelihoods.

2.6.3.) Forest-Dependent Communities

The world's rainforests and the lives of forest-dependent communities are intrinsically linked. Forest management is a complex issue with questions surrounding ownership and preservation of the forest's natural resources. Growing rural poverty and food insecurity can be attributed to environmental degradation and vice versa, further depriving local communities of their basic needs (Pierce, 1995). Incentive-based forest conservation programs have the potential to directly effect the lives and livelihoods of forest-dependent people through new protectionist policies which when implemented on customary lands threatens their traditional way of life. Incentive-based forest conservation programs also run the risk of encouraging food insecurity as environmental enclosure often prevents agricultural growth and development, and limits forest uses.

Forest-dependent communities are dependent on the forest for traditional agricultural systems, including shifting cultivation, horticulture and permanent agriculture. The forests are also the primary source of livelihoods as the forest provides food, fodder, wood, and a diverse amount of non-timber forest products (Foppes & Ketphanh, 2004).

Forest-dependent people in the developing world depend on non-cultivated natural resources for survival and are vulnerable to changes in their environment (Vedeld, et al. 2007). Relative deprivation in remote forested areas is amplified by limited access to services and markets (Price, et al. 2011). Incentive-based forest conservation programs such as the REDD+ programs are regarded with high enthusiasm as a means to tackle poverty by the international community. Currently, REDD+ is only one of a few

programs addressing socio-economic development in remote, forested areas (Vedeld et al, 2007).

Poverty and the overuse of forest resources are portrayed as the major driver of deforestation and degradation. However, it must be noted that external forces that promote forest degradation and deforestation increase forest-user's poverty (Sunderlin, et al. 2008). The major causes of deforestation are directly linked to agriculture, industrial farming and clearcutting for logging projects, mining, hydropower development and the production of cash crops such as palm oil. However, often smallholders and their livelihood activities are blamed predominately for forest degradation even though their contribution to global carbon emissions is comparatively small (Thomas, et al. 2009).

According to the World Bank's Forestry Strategy, "more than 1.6 billion people depend to varying degrees on forests for their livelihoods. About 60 million indigenous people are almost wholly dependent on forests. Some 350 million people who live within or adjacent to dense forests depend on them to a high degree for subsistence and income" (Vedeld, et al. 2007, p. 869). Problem arises with "well-intentioned" forest-conservation interventions, which include the privatization of communal lands and the introduction of protected land in fertile, traditional lands. These forest conservation agendas have the potential to deny people their rights to economic stability as well effect food security and increase poverty. Although some of these interventions in forest management, governance and protection of resources, offer new means for economic development for the rural poor, forest-dependent people and the rural poor very rarely see any substantial benefit from the changing forest activities (Scherr, White, & Kaimowitz, 2004). More must be done to ensure that projects and interventions effecting the lives of forest-dependent

communities, such as REDD+, are beneficial to the communities through the support of economic, and livelihood development.

Presently we are seeing indigenous peoples being criminalized for standing up for their rights against incentive-based forest conservation programs such as REDD+. These communities have claimed that for centuries they have taken care of the forests as they are critical to their survival; that the actual problem is with industrial societies and they should therefore not be the target of such forest conservation programs (Hall, 2010). As our global environment is increasingly threatened so are the livelihoods of forest-dependent people; through market environmental conservation efforts they are being targeted as not only the problem but also as the solution. Although targeted as part of the solution, are forest-dependent people being adequately compensated for what is expected of them to surrender? This includes, land rights, livelihood production and increased food insecurity through land use impediments. REDD+ projects are struggling to achieve a balance of forest conservation and livelihood protection for forest-dependent people.

2.6.4) REDD+ and Forest-Dependent Communities

REDD+ programs run the risk of undermining ecosystem services that are essential to forest-dependent people's way of life. The forest provides food, medicine, fuel, and shelter and is the primary source of livelihood production for forest-dependent people. Incentive-based forest conservation programs such as REDD+ pose an increased risk to forest-dependent people due to the lack of government recognized land ownership. REDD+ and other incentive-based forest conservation efforts run the risk of pushing people from their lands.

The “insecurity of land tenure for many indigenous people and other forest-dependent communities may make them especially vulnerable to this risk. Some potential risks to forest dwellers associated with REDD+ are violations of customary land rights and harsh enforcement measures. These could lead to loss of access to forests for subsistence and income generation needs, land use conflicts, or physical displacement from forests” (Lawlor & Huberman, 2009, p. 271).

Also, local food production may be decreased due to increased governance systems, limits placed on outputs and decreased agriculture subsidies, which would increase food insecurity, and deepen poverty.

REDD+ has the potential to help alleviate rural poverty, protect biodiversity, reduce global emissions and curb climate changes. However, it also has the potential, if implemented incorrectly and without a binding framework, to further marginalize the forest-dependent communities. The legal framework emerging from the REDD+ programs also has the potential to highlight the struggle of indigenous people and their rights to customary lands. It will be through my research that I explore the effects of incentive-based forest conservation programs such as REDD+ on indigenous people, namely the Dayak Indonesian. The International Indigenous Peoples’ Forum on Climate Change

“has reiterated its call for the inclusion of strong and explicit references to the rights of indigenous peoples. This includes the resolution of land tenure, carbon rights, and the right to self-determination and free, prior and informed consent. It also includes compliance with United Nations Declaration of the Rights of Indigenous Peoples (UNDRIP) as a precondition for any REDD+ project in indigenous lands” (UNFCCC, 2009, p. 2).

The international framework on REDD+ and the individual project implementations will largely determine the strategy for successful development. A focus on pro-poor projects where incentives are aimed at creating greater equity for forest-

dependent people can enhance the quality and sustainability of the REDD+ projects while diversifying and strengthening the livelihoods of local communities.

REDD+ incentives can target national policy by,

“removing subsidies that encourage deforestation and degradation, taxing land clearance, strategic planning of road systems through improved industrial practices (such as support for timber certification and reduced impact logging), to initiatives that directly involve and effect the livelihoods of the poor (alternative livelihoods programs, fire prevention strategies, agricultural intensification schemes aimed at reducing forest destruction, and improved off-farm employment)” (CIFOR, 2008, p. 112).

Projects that consider both development and environmental conservation will have the greatest impact on rural livelihoods and will be the most likely to ensure an equitable, sustainable program.

Difficulties and very few successes have been reported where both poverty and conservation are equally addressed. This is in part due to insecure property and land rights of the forest-dependent poor. REDD+ needs to coordinate more effectively with national poverty reduction strategies, work to remove dependence on forests through the diversification of livelihoods, through intensification of sustainable agricultural systems and by increasing access to educational and social services (Byron & Arnold, 1999).

In many countries there is significant uncertainty over land tenure and land rights. REDD+ projects must be careful not to increase land security issues. There is a well-founded fear that REDD+ will result in the privatization of the world's forests and all its natural resources. Privatization would take natural resources out of the hands of forest-dependent people and transfer the profits right “into the hands of bankers and carbon traders” (Hall, 2010, p. 4).

If governments and REDD+ projects are to be successful in achieving climate mitigation goals by targeting deforestation they must agree on practical and equitable programs that address and effect deforestation rates. This will

“require reducing demand for agricultural and timber products and addressing other underlying causes of deforestation. Such a mechanism (program) should reward those that have already conserved their forests, it should build on the experiences of indigenous peoples and communities around the world, who already know how to manage and benefit from forests sustainably” (Hall, 2010, p. 4).

In the following sections I will be analyzing the KFCP, REDD+ program and its delivery to examine the effects the project is having on the forest-dependent people of the Kapuas Region. I will also be looking at the development context and what effect it is having on the lives and livelihoods of the Dayak people.

Chapter 3- Context and Setting of the Kalimantan Forest Climate Partnership

3.1) Methodology

For the purposes of this research I used a qualitative methodology approach. Qualitative research, designed to interpret the social fabric and experiences of the researched, as well as to understand social structures and the frameworks that make up households and communities, was well suited for my field research. The qualitative approach combines an interpretive methodology including exploring the way people interpret their own experiences and uses a naturalistic methodology to study how natural surroundings and social phenomenon are explained and adapted to (Neuman, 2006; Berg, 2004; Morse, 1994). My research draws on case studies, personal experiences, interviews, historical accounts, and life stories. I used this approach to get a first-hand account of the effects of the REDD+ program on a forest-dependent people in Indonesia.

I was in Indonesia from the 29th of December 2011 through to February 3rd, 2012 to gather data. I conducted interviews in Jakarta, Central Kalimantan, Palangrarya, Mantangai and the Kapuas River Region.

In the field I conducted in-depth interviews, key informant interviews, individual interviews and participant observations. Most of my interviews were semi-structured and the open-ended questions were directed at REDD+ officials, Dayak community leaders, environmental groups and indigenous rights groups. I also obtained information through informal conversations and made more contacts through snow-ball sampling.

For my field research, I was able to go into the field with the assistance of my partners in Jakarta and Central Kalimantan, who work with the Indigenous Peoples Alliance of the Archipelago, otherwise known by their Indonesia acronym AMAN. With

the support of AMAN, I travelled into the interior of Mantangai province. We travelled by boat to remote villages in the Kapuas River Region, within the KFCP project site. The people at AMAN were able to provide technical support, a travel guide, a translator, resources and contacts that were critical to my research.

While in the Kapuas River Region I met with three village leaders and other influential village members who were fighting against the implementation of REDD+ program in their communities. With the help of my translator I was able to conduct in-depth interviews with those who are dealing with the effects of the KFCP project. I was also able to conduct several interviews with government officials and environmental groups in Jakarta and in Central Kalimantan. My goal was to interview people with different perspectives on the REDD+ programs to provide diverse perspectives on my research question. These groups fell into three categories (all of whom are working with REDD+ or have an in-depth knowledge of the program) including government and policy makers, people at varying levels of government, non-governmental groups such as environmental groups, indigenous rights groups and other NGOs, and the Dayak people and their customary leaders. This research focuses on qualitative research gathered through my interviews but also on an extensive documentary review of both primary and secondary sources including government documents and the KFCP design document.

The design of the KFCP draws on Payment for Environmental Services (PES), conditional cash transfers and social protection activities. For the purposes of this research, the PES approach will be what I use to frame my critique and evaluate the work being done by the KFCP.

3.2) Indonesia

Indonesia is the fourth most populated country in the world with a population of approximately 250 million people. Indonesia's population is widely distributed across an archipelago of 17,508 islands (6,000 inhabited) straddling the equator, spanning from the Indian Ocean to the Pacific Ocean with a total geographical land area of 1,904,569 sq. km (Central Intelligence Agency, 2012). Indonesia has the third largest tropical rainforest in the world, with a total forested area that once covered the majority of the country. This percentage has continually decreased since the 1980s, when forests covered almost three quarters of Indonesia's total land mass. Today, the forests in Indonesia cover an area of more than 90 million ha, which is the equivalent of 46% of Indonesia's total land area, marking a significant decline (Food and Agriculture Organization of the United Nations: Forestry Department, 2007). The majority of Indonesia's GHG emissions are caused by land use changes or land conversion. It is estimated that 85% of GHGs are attributed to deforestation, peat land destruction and forest fires. Deforestation of peat lands and the burning of peat fires release six to ten times more carbon than deforestation on mineral soils. Approximately half of Indonesia's emissions are attributed to forest fires and another 20% of emissions are directly linked to peat land fires. (KFCP, 2009, p. 13).

Between 1990 and 2005, 28 million hectares of forest were lost, and deforestation rates of primary forest continued to rise (Rhett, 2006). Indonesia has some of the most threatened rainforests in the world. Recent estimates based on Indonesia Government satellite images between, 2003-2006 show that deforestation and forest degradation was estimated at 1.17 million ha per year. The destruction of Indonesia's forest through land degradation, land conversion, misappropriation of land, clear cutting and plantation plots

account for approximately 70% of Indonesia's total GHG emissions (United Nations Development Programme Indonesia, 2009). The reduction of emission from deforestation and forest degradation is crucial to Indonesia's environmental protection and it is therefore, an ideal country for the implementation of REDD+ projects.

Indonesia has the largest committed REDD+ funding, comprised of multiple donors, with the largest donor budget consisting of US \$1 billion from the government of Norway. Indonesia also has the largest number of REDD+ activities, demonstration and pilot activities/projects, NGO initiatives, bilateral donors and state agency programs (AIPP, 2011). REDD+ programs are quickly becoming very popular in Indonesia with interest being expressed at national, provincial and district levels of government. There are also private sector projects, voluntary donor projects and international aid collaboration projects already in development and in varying stages of implementation.

Despite eagerness within these sectors and by the actors involved, there is a significant lack of cohesion and clarity between the various sectors and the national government. REDD+ is already influencing forest management throughout Indonesia even though project initiatives, project goals, and project monitoring are not yet clear or standardized.

This lack of coordination is just one of the problems effecting the forest-dependent people in Indonesia. Other problems effecting forest-dependent people include lack of government recognized land rights, relative deprivation, livelihood obstruction, food insecurity and natural resource loss.

3.2.1) Central Kalimantan

Borneo is the third largest island in the world covering an area of 287,000 square miles. Kalimantan refers to the Indonesia portion of the island. The island is divided among Indonesia's Central Kalimantan, East Kalimantan, West Kalimantan and South Kalimantan provinces with Malaysia's claims in the north of the island and Brunei claiming a smaller portion on the central north coast. Indonesia's territory accounts for approximately 75% of the island by area.

Central Kalimantan is the largest province on the island, covering an area of 153,800 square kilometers, consisting of rich, dense, tropical forests; peat land forests, swampy areas, rivers, and a mountainous area in the North. Central Kalimantan's population is estimated at 2.5 million people and is continuing to grow at a rate of 2% annually. The capital of Central Kalimantan is Palangkaraya. The KFCP site is located in Central Kalimantan, Mantangai district, in the Kapuas River Region (see Figure 1).



3.2.2) Peat Swamp Forests

Approximately “thirty percent of global peat stocks are located in the Tropics, of which two-thirds occurs in Indonesia” (KFCP, 2009, p. 13). Peat covers almost 12% of Indonesia’s land mass, which equates to roughly 22.5 million hectares. Indonesia’s largest peat forests are located in Kalimantan, Papua and Sumatra (ibid, p.13). In Central Kalimantan, peat swamp forests have been shrinking in recent years due to land conversion, deforestation, forest degradation, illegal logging, the increasing incidence of fires, and the digging of canals. Peat Swamp Forests (PSF) are well known for their carbon capture properties; in Central Kalimantan the PSF have been storing carbon for centuries. PSFs in Central Kalimantan range in age from several hundred years old to 15,000 years old. The older the peat bog the greater the amount of carbon stored within it.

Wetlands, such as PSF, are highly dependent on waterlogged conditions: the abundance and retention of water is crucial to the stability of the entire ecosystem. The quantity of water is a major contributor in the slower breakdown of plant material. A lack of oxygen further reduces the rate of material decay within the PSF (Wolfson Carbon Capture Laboratory, 2012). Water removal through droughts, warmer conditions and human induced actions can speed decomposition rates and threaten the stability of the ecosystem.

Because plants take in, or assimilate, carbon dioxide from the atmosphere in a process known as carbon sequestration, peat lands are recognized as a major global carbon sink for the amount of capacity of peat to store large amounts of CO₂. Plants in wetlands are able to hold on to the carbon they have stored throughout their lifetime, even

after the plant has died, due to the slow rate of decomposition associated with wetland ecosystems, thus resulting in an accumulation of partially decayed plant material that we call peat.

There are significant amounts of carbon stored within the peat forest especially the older peat. Peat forms in domes with varying depths where the water flows from the watershed into the major rivers. The peat swamp water is extremely acidic with a dark brown or black colour. However, PSF supports aquatic life and a variety of vegetation, which have adapted over the years to coexist with the peat. Trees and other vegetation that grow here have specialized root systems where some of the roots protrude from the water to allow for oxygen capture (Boehm & Siegert, 2001). The PSFs in Central Kalimantan are also home to numerous species of birds and mammals including a large population of orangutans. PSF are a significant ecosystem within the KFCP project site and a major area in need of rehabilitation. Furthermore, the KFCP project's goals and components are based predominantly on issues related to PSF.

3.3) The Ngaju Dayak Indigenous People

Asia has the “greatest number of indigenous peoples, comprising two thirds of the world’s estimated 350-400 million, indigenous populations. An estimated 88 to 100 million indigenous peoples are found in the 10 REDD+ countries in Asia. There are an estimated 50-70 million indigenous people in Indonesia alone” (IWGIA; AIPP, 2011).

Dayak is a general term referring to a large population of indigenous people living on Borneo. There are an estimated 450 ethno linguistic Dayak groups living in Borneo. The Dayak are highly diverse; each group has their own dialect, customs, laws, territories

and culture. Although some similar traits are identifiable, the groups are typically distinct. This is due in part to the violent history between communities. The Dayak do share some similarities in living styles such as longhouses raised on stilts, and customary laws known as Adat. Living within the longhouse is critical to Dayak identity. The longhouse is where identities are initially formed. The longhouse is also the center of ritual, economic and reproductive aspects of the Dayak people's lives. Kinship is "ambilateral but influenced by which longhouse the family resides in at the time of birth. Post marital residence patterns are flexible, without a strong tendency either way" (O'Gorman, 2010, p. 574). When a family member leaves a longhouse to join another in the case of marriage the person must often satisfy a "social debt to the longhouse before departure" (ibid, p. 574).

Most Dayak people are Christians, Kaharingan (an indigenous religion) or Muslim. Dayak people in Indonesia include the Ngaju Dayak, Penan, Murut, Maanyan and Lawangan (Minority Rights Group International, 2012). Principal sources of income include the cultivation of rubber, rice, cassava and off-farm labour.

The Kalimantan Forest Climate Partnership (KFCP) demonstration site contains approximately 9,000 Ngaju Dayak sparsely populated around the Kapuas District throughout the Mantangai and Timpah sub districts. The Ngaju Dayak consist of fourteen villages and small communities inhabiting the banks of the Kapuas River region (KFCP, 2009). The villages are remote and difficult to access, as there is limited infrastructure. There are mostly unpaved roads and the majority of travel from the outskirts of Kapuas City must be done by boat. The Ngaju Dayak uses the river for washing, fishing and for transport; they depend on the surrounding lands for food crops and for their primary

means of livelihood production. Livelihoods are obtained through the use of forest products specifically, through the cultivation of rubber, growing rattan gardens, harvesting timber and other non-timber forest products (NTFPs). There are also fish within the interior during certain months of the year (KFCP, 2009).

The Dayak's relative isolation prevents wage employment with the exception of the production and harvests of their surrounding environment. Furthermore, there is little access to higher education and quality health care.

The Dayak people have no legal rights to their lands; however, they do have customary laws where land claims are well explained. The Indonesia governments claims the lands as state property, which makes the Dayak's role within the policies of incentive-based forest conservation programs, such as REDD+, problematic and an important focus of research. Indonesia as

“most Asian countries do not recognize indigenous peoples or their collective rights, especially to their land, territories and resources. State policies and regulations have prevented or restricted the access or use of natural resources including forest resources. In fact, most of the REDD+ countries in Asia have policies of restriction or prohibition on the practice of shifting cultivation or rotational agriculture. These policies have caused food insecurity, loss of biodiversity and traditional knowledge. With these conditions, the implementation of REDD+ has very strategic and serious impacts on Indigenous peoples in these countries” (AIPP, 2011, p. 4).

The right to livelihoods must be considered when designing and implementing forest conservation programs, as forest dwelling indigenous people are inseparably connected to their environment for food, shelter and medicine, and also for economic, spiritual and cultural support. Indigenous people should be seen not just as stakeholders but should be considered in all levels of forestry debates, policy-making and decision-taking (Ooft, 2008). The expansion of forest management schemes to mitigate the effects

of climate change needs further examination to explore the effects on indigenous livelihoods.

3.4) Indonesia's Carbon Reduction Programs

3.4.1) Indonesia's Reducing Emission from Deforestation and Degradation (REDD+) Programs

Indonesia is the “world’s third-largest emitter of greenhouse gases, largely caused by the rapid felling or burning of its natural rainforests and carbon-rich peat-swamp forests” (PEACE, 2007) and is therefore, an ideal candidate for the implementation of the REDD+ programs (Edwards, Koh, & Laurance, 2012; Johnstone, 2010). In 2006, fires from Indonesia’s peat land released approximately 900 million metric tons of CO₂ into the atmosphere. This total was estimated to represent 16% of the emissions associated with deforestation worldwide that year.

There are “approximately 79 REDD projects being undertaken by a variety of project developers in the Asia-Pacific, 35 of which are funded in total or partially by development aid. Twenty of the aid funded projects are hosted in Indonesia, with an additional 18 from projects developed by corporate actors and NGOs alone. Total commitments from bilateral donors to Indonesia are between US\$2 billion and US\$2.7 billion” (Pearse, 2012 p.188. See also Wood, 2010).

Indonesia’s Kalimantan has a peat dome up to 20 meters thick and has a huge capacity for carbon storage. The estimated amount of carbon locked in Indonesia’s peat lands is thought to be more than 50 gigatons (Ludwig-Maximilians, 2009). Protection of

Indonesia's peat lands is a vital component for global carbon emission reductions as well as for the REDD+ projects in Kalimantan.

In May 2009, Indonesia was the first country to ratify REDD+ national regulations. Indonesia has also been targeted by the World Bank's REDD program known as the Forest Carbon Partnership Facility, a US\$1 billion REDD deal between Indonesia and Norway, the UN REDD Programme, voluntary carbon credit investments, and several independent REDD+ projects with multinational donors and intergovernmental partnerships (Johnstone, 2010). REDD+ programs are becoming increasingly widespread throughout Indonesia with diverse donor interests.

Australia has secured multiple bilateral agreements with Indonesia concerning REDD+ programs. On the 13th of June, 2008, the Indonesia-Australia Forest Carbon Partnership (IAFCP) was signed by the President of the Republic of Indonesia and the Prime Minister of Australia. The agreement includes a \$AUD 40 million support package for forest protection and climate change mitigation within Indonesia. This includes \$AUD 10 million designated for the protection of forests and climate change and \$AUD 30 million for Kalimantan Forests and Climate Partnership (KFCP). Australia has targeted Kalimantan for the first, large scale REDD+ demonstration activity and project site within Indonesia (Johnstone, 2010; KFCP, 2009).

3.4.2) Indonesian-Australian Climate Change Mitigation Partnership: Indonesia-Australia Forest Carbon Partnership (IAFCP)

The Indonesia-Australia Forest Carbon Partnership (IAFCP) is funded by Australia's \$200 million International Forest Carbon Initiative (IFCI). A central component of the IFCI agenda is to take practical action on REDD+ through the IAFCP.

The Kalimantan Forests and Climate Partnership (KFCP) design document states the IFCI works in three key areas: increasing international forest carbon monitoring and accounting capacity, undertaking practical demonstration activities to show how REDD+ can be included in a post-2012 global climate change agreement, and supporting international efforts to develop market-based approaches to REDD+ (KFCP, 2009).

The IAFCP objectives are designed to enhance the cooperation between Indonesia and Australia on REDD+. The IAFCP is used as the vehicle through which government-to-government REDD+ projects and activities throughout Indonesia will be implemented. Currently, the Government of Indonesia (GoI) and the Government of Australia (GoA) are active partners in the IAFCP, entitling them, to direct, and to benefit from all activities of the IAFCP. The KFCP is a major financial and technical aspect of the IAFCP. The overarching goal of the IAFCP, as stated in the KFCP design document, is to “demonstrate that REDD can be part of an equitable and effective post-2012 global outcome on climate change” (KFCP, 2009, p. 9).

3.5) Kalimantan Forest and Climate Partnership (KFCP)

Central Kalimantan contains approximately 3 million hectares of peat land, which is regarded as one of the largest areas of peat in the world. Peat swamp forests are an extremely fragile ecosystem, one, which has extreme carbon capture, and storage properties. The KFCP recognizes the climate mitigation properties of peat due to its huge potential for carbon capture. Furthermore, the program is design to protect the highly carbonic plant material from forest fires, which could release centuries of stored carbon into the atmosphere. The site for the KFCP operation is based on an extremely vulnerable peat dome where the risks of forest fires are extremely high.

The KFCP field operation site is located in Central Kalimantan in the northern part of the failed Mega-Rice Project³ (MRP) otherwise known as the Ex-Mega Rice Project (EMRP). The project site is located in the Kapuas District and the sub districts of Mantangai and Timpah. The demonstration activities are taking place across a single peat dome that spans approximately 120,000 hectares² (KFCP, 2009). (see Figures 2 and 3)

³ Mega Rice Project: In 1996, a peat swamp conversion project was implemented in Central Kalimantan with the overarching goal of converting one million hectares of peat swamp into agricultural rice plots. Between 1996 and 1998, 400 hectares of peat swamp were converted into drainage canals and irrigation canals. This opened passageways into the previously impassable interior of Kalimantan thereby, allowing an increase of timber exploitation. Further damage was initiated when fire was used as an affordable means of clearing the plot. Due to extreme dry conditions promoted by an El Nino Southern Oscillation (ENSO) year, the fire used for land clearing purposes spread to the neighboring pristine forests. The forest and the peat itself were set ablaze causing noxious gas to spread over 15 million km² across South East Asia for several weeks. It is estimated that 20% of Central Kalimantan's PSF were destroyed in the fire. The fire was exacerbated by the drainage canals which changed the hydrology of the swamps thus making them extremely vulnerable to forest fires (Boehm & Siegert, 2001).

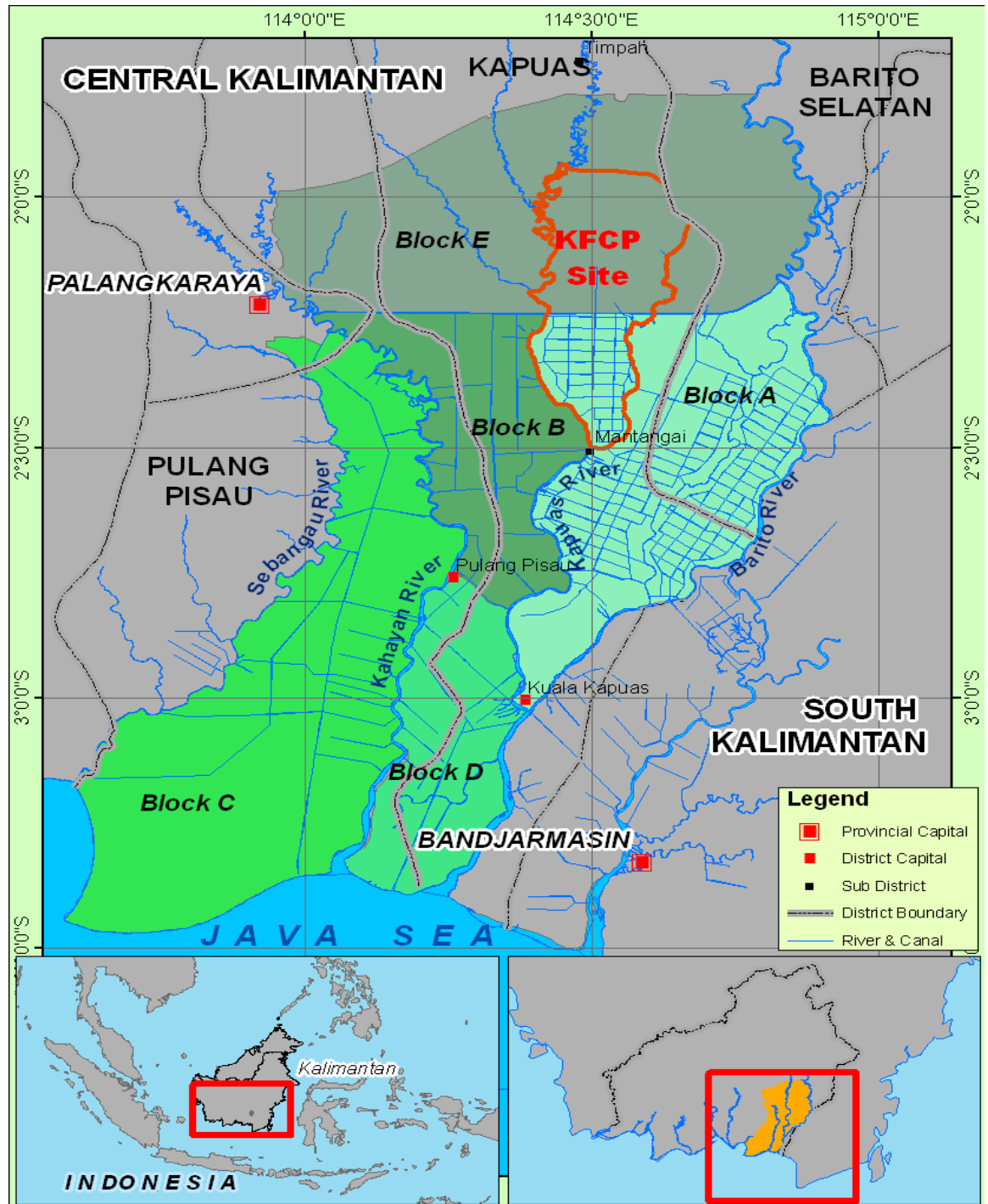


Figure 2. Map of Central Kalimantan with KFCP site outlined (Taken from the KFCP Design Document Final 2009)

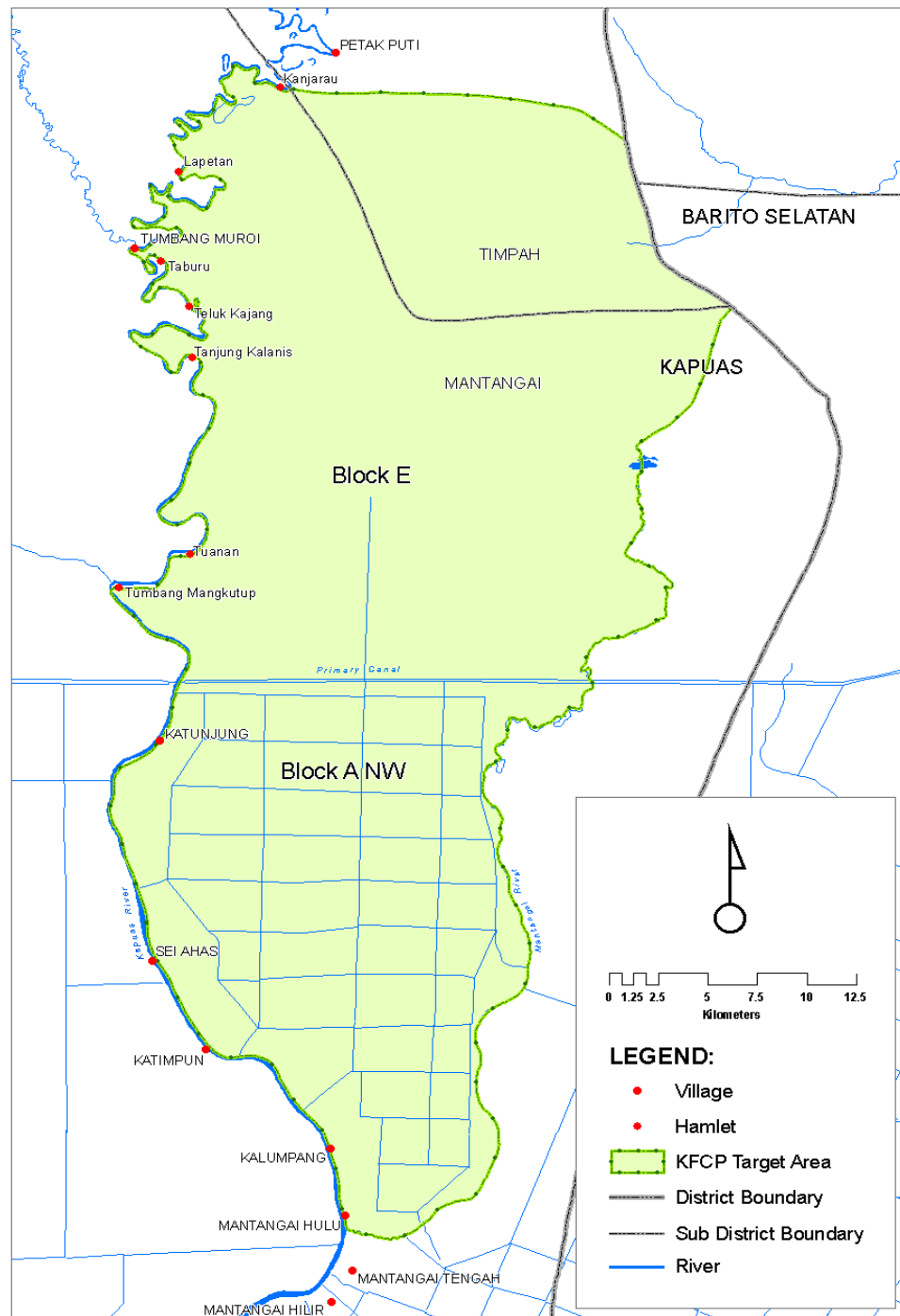


Figure 3. Detailed map of the KFCP demonstration site (ibid)

The project site is bordered by the Kapuas River region and by the Mantangai River. The KFCP site is technically part of Indonesia's National Forest Estate, which is under the Ministry of Forestry's (MoF) authority and protection. However, the Dayak people in the area also claim parts of the project site as customary lands.

Indonesia's forests are classified into a number of categories including:

- Protection Forests: designated to specific forested areas with particular physical characteristics, such as water catchment, control functions and climate mitigation
- Production Forests: designated for the production of wood, rattan, resin, rubber collection and other non-timber forest products. Production Forests are subdivided into Limited Production Forest and Permanent Production.
- Natural Conservation Forest and Parks: designated for the conservation of biodiversity, species diversity and the protection of both flora and fauna. This designation also includes the support and development of conservation education and ecotourism. Natural Conservation Forests and Parks are further subdivided into Nature Reserve, Wildlife Sanctuaries/Reserves, National Park, Grand Forest Park, Nature Recreational Park and Hunting Park (Food and Agriculture Organization of the United Nations: Forestry Department, 2007).

The formal classification of forest is significant to the Dayak people as their livelihoods and food security are based on the collection of forest products. The KFCP site is currently classified as a production forest however, the KFCP wish to have it changed to protected forest or wildlife reserve status. This would dramatically effect the Dayak's livelihoods as most of their income is derived from the harvesting of latex from

rubber trees, rattan farms and the collection of other non-timber products within and around the project site.

These classifications of forests are difficult for the MoF to monitor due to Indonesia's geography, lack of visible authority and the powerful influence of timber and palm oil companies (Elliot, 2000). The classification of forests correlates with the permits required for particular operations within Indonesia's forests. These permits are ambiguous at best. Forest permits are designed to support the classification of forest as a means to manage forest operations. The difficulty with this permit system stems from overlapping areas of forest classification, disputes over classification areas, unrecognized land rights and customary lands of the Dayak people. Further complicating the issues of permits are poor and outdated regulatory maps of Indonesia's forests. The disconnect between agencies throughout Indonesia's decentralized government has led to multiple permits being granted in a single area. Corruption is extremely widespread within Indonesia's forestry sector where permits are required but can also be purchased from several different offices of authority at varying levels of government. It is not uncommon for one specific area to be permitted for contradictory operations. This is just one of the major problems Indonesia faces in forest management, and a critical factor in the protection of Indonesia's forest. These problems are amplified by the discrepancy in mapping areas, disputed land ownership, classification designations and through the sale of permits for forest activities by multiple actors.

3.5.1) KCFP Project's Goals (as stated in the KFCP design document)

It is important to have a complete overview of the aims and goals of the KFCP project so we can compare the actual outcomes of the project and to have a baseline to compare the complaints against the project. Here, I provide the ideals outlined in the

KFCP design document; the analysis of the discrepancies between the design and the implementation will be discussed in Chapter Five.

KFCP's goal is to "demonstrate a credible, equitable, and effective approach to reducing greenhouse gas emissions from deforestation and forest degradation, including from the degradation of peat lands that can inform a post-2012 global climate change agreement and enable Indonesia's meaningful participation in future international carbon markets" (KFCP, 2009, p. 14). The primary goals within this objective are to reduce deforestation and forest degradation, and to prevent and reduce the risk of fires in the peat swamp forests. Specifically, the KFCP is attempting to mitigate these effects through the blocking of canals, through re-establishing tree cover and through the introduction of livelihood interventions and incentive-based payment mechanisms.

3.5.2) Deforestation and Degradation: Reduction of Forest Fires, Canal Blocking, and the Protection of Peat

Forest fires are especially common during the dry season throughout Central Kalimantan, in particular where the hydrology of the peat bog has been changed especially where the EMRP and KFCP area overlap. The KFCP is blocking canals that were dug during the MRP project. By blocking strategic canals the KFCP hopes to re-flood the surrounding peat. The project is also attempting to re-establish tree cover to increase the protection of the peat through a greater canopy allowing for greater retention of moisture and humidity. Lastly, the KFCP is introducing livelihood interventions whereby, forest-dependent people are provided with incentives to change agricultural techniques that involve using fire and to provide alternatives livelihoods to clear cutting and illegal logging.

Objectives that have been outlined by the KFCP to protect the PSFs and peat domes to achieve significant GHG emissions include, the elimination of fire used for land clearances (which has been shown to be uncontrollable and has often spread beyond the designated areas, particularly in dry seasons), the effective blockage of canals, prevention of new canal construction (including hand dug canals used to transport or float the logs to rivers and roadways), control of illegal logging, and lastly to promote “plantation crops into cleared peat swamp forest areas that rely on low water table levels for growth (e.g. acacia and palm oil) either by small holders or through concession agreements” (KFCP, 2009, p. 25).

The KFCP design document recognizes that land users may be adversely effected by canal blockage and the loss of land due to flooding. Land users who are effected by canal blockages may be entitled to compensation for losing access to that land.

For maintaining and rehabilitating the peat the KFCP will use a ‘whole-dome’ approach to prevent leakages within the forests. It is therefore, important to take into account what is happening upstream and downstream from the project site. Water levels must be retained and raised in order to prevent further degradation and reduce the risk of forest fires. To prevent runoff, specific trees will be planted along the canals. Different types of species of trees and plants will be tested in a demonstration area, which will effectually be scaled up to the funds available to include a rehabilitation site of 3,000 ha (KFCP, 2009, p. 29). Tree cover will be re-establish in deforested areas in order to keep the PSF wet, not only by damming canals but also to promote peat dampness through the extension of tree roots. The use of dams will ensure the site’s dome will have a high water table. People will be blocked from accessing the land through the canals and raised water level; this, according the KFCP, will also reduce the risk of fire.

3.5.3) Land Tenure

According to the KFCP, the majority of the project site is within Indonesia's Forestry Estate under the MoF's authority. Dayak communities located within the site have claimed land surrounding their villages up to five kilometers as their customary right, recognized by the Dutch prior to Indonesia's independence. During the MRP, the Indonesian government recognized land rights as extending 1.5 kilometers back from the river bank (KFCP, 2009). Currently, local district governments are working with local NGOs and villages to designate specific pieces of land to individual families, marking a significant change from communal land usages within village communities.

Land tenure and natural resource rights are a major issue for the KFCP project and for the livelihood protection of the Dayak people. Without land rights the Dayak people are extremely vulnerable to losing their land to changes in forest classifications. For example, the KFCP would like its project site changed from Production Forest to Protection Forest, having severe implications for the Dayak people. The participatory mapping of the KFCP with community groups is being used to investigate the historical and legal claims to the forest and to inform the discussion surrounding land rights and tenure. Rights being granted to the Dayak people could seriously effect the KCPF project.

The KFCP states that it

“cannot directly intervene in the political and administrative processes related to land tenure but can provide all parties to the discussion with information about current land use, the types of land use changes required to make REDD+ effective, and the characteristics of tenure arrangements needed to support these changes” (KFCP, 2009, p. 25).

3.5.4) Disputes and Conflicts

The KFCP design document states that the partnership will help communities and government resolve land disputes. The project recognizes that KFCP interventions may cause disputes within and between communities over efforts to clarify and document land use and customary ownership. The KFCP interventions may awaken dormant land disputes, creating conflict with local government and with the MoF. Livelihood interventions also have the potential to be perceived as favoring a specific group or household, leading to disputes over incentives. REDD+ incentives payments can cause unrest within communities if the money is not perceived as equitably distributed. Problems may also arise if outsiders attempt to grab land in efforts to obtain the KFCP-REDD+ benefits.

Identifying conflicts will fall under the KFCP's Village Engagement process. Implementation partners will spend time within the communities to help defuse the possibilities for conflict. The KFCP intends to avoid conflicts through objectivity and transparency in negotiations over land and incentive payments (KFCP, 2009). The KFCP livelihood intervention design will attempt to incorporate conflict-related selection criteria.

3.5.5) Village Engagement

The KFCP hopes to gain the trust and support of all the village people within the project site as a precondition for emission reduction activity. Due to the past negative experience of the MRP the village communities are extremely suspicious and cautious about development projects. Gaining the entire community's trust will be extremely difficult.

The design document states that the village engagement process must follow these principles: the project must be participatory to ensure local ownership, be sensitive to gender biases and disparities, and ensure equality in the planning and implementation process, as well as during incentives portion allowing equal access. The project should allow opportunity for Free Prior Informed Consent (FPIC), should be flexible and adaptive, should follow sound development principles and should ensure that livelihood alternatives are financially and socially possible. The project will target the worst offenders of emissions, offer real income alternatives, and ensure that any intervention does no harm or make the people worse off if REDD+ is not accepted (KFCP, 2009, p. 26). According to the KFCP design document, village engagement and activities to reduce deforestation and degradation must adhere to and be “harmonized with REDD+-related socialization, behavior change, culturally induced gender practices, peat restoration activities, reforestation, GHG monitoring and payment mechanisms” (KFCP, 2009, p. 24). This component of the KFCP framework possesses a high level of social and political risks. The KFCP hopes to create a management system which coordinates with the field team, government agencies and outside stakeholders to promote communication and transparency; however, there is no specific mention of including the Dayak people in the coordination and communication at the management level. There is mention of village engagement and training for participatory village planning as well as plans for a Musrenbang (community development planning meeting) as a means to manage the social risks associated with this program. Activities for the forest-dependent communities include: rehabilitation of the PSF by assisting with the damming of canals to re-flood the peat, promoting natural regeneration in degraded forests (through the nursing of saplings),

managing and monitoring forest fires prevention efforts, and re-establishing trees and canopy cover.

3.5.6) KFCP, GHG Emissions Estimation and Monitoring Program

This component focuses on GHG monitoring and emission evaluation. This includes developing and testing a system in which the KFCP can estimate changes in emission levels, and contributing to international knowledge designed to develop methodologies for monitoring and incorporating emission reductions throughout REDD+ programs. A site specific base line or reference emission level (REL) will be determined through “pre-intervention measurements of peat depth, deforestation rates, forest cover, socio-economic conditions, policies and practices” (KFCP, 2009, p. 32).

The KFCP interventions are designed to reduce emissions, which will be monitored to estimate CO₂ emissions, as well as non-CO₂ GHGs. Other non- CO₂ GHGs emitted from peat must be taken into account for this specific type of site. The peat fires contain an enormous amount of aerosols and toxic gases, as well as carbon dioxide, all of which contribute to global warming (Ludwig-Maximilians, 2009). The KFCP recognizes the need to address permanence, additionality and leakages as part of the REDD+ projects. A national approach would produce the best results for these problems. At the district, project-site level, these issues are extremely relevant. The KFCP states that Indonesia’s national systems of monitoring and accounting emissions are underdeveloped and international policies lack standards and guidelines to address these issues. Therefore, the KFCP will be testing small-scale approaches to gather information and to inform an international REDD+ discussion on how to deal with these very real threats to the credibility of the REDD+ programs (KFCP, 2009, p. 32).

3.5.7) Practical and Effective REDD+ Payment Mechanisms

The KFCP will be experimenting with different approaches to realize a fair, equitable and effective payment mechanism for environmental services under REDD+. To be increasingly effective the payment mechanism must target the actors in deforestation, while addressing economic and policy drivers to overall forest degradation. Incentives should be clear and target actors in deforestation as well as decision-makers and policy advisors. Payments must be equitable and should not “disenfranchise legitimate forest users, marginalize women, or cater to privileged groups” (KFCP, 2009, p. 35). Furthermore, a workable payment mechanism will have to be tested using socially inclusive methods including transparency and a fair consultation of all stakeholders, necessary to ensure acceptance of the program within villages. Incentives are distributed according to the different community’s ecological situation as well as being a performance-based payment mechanism. Precise incentives are said to be adaptable to include economic, social and political incentives and will vary between different communities (KFCP, 2009, p. 4). Incentives to promote sustainable practices outlined in the KFCP will take on three different forms.

- Input-Based, where immediate compensation and direct benefits will occur when forest-dependent people assist in building dams, planting trees and avoid using fires on peat lands.
- Performance Based, where the Dayak people’s behavior is monitored and a yearly incentive is given to maintain dams, prevent encroachment and reduce the use and incidences of fires.

- Outcome Based, payments linked with GHG emission reductions and tradable credits in a real carbon market (KFCP, 2009, p. 36).

Initially, the payment mechanism will target reductions in deforestation and degradation, as well as interventions strategies and REDD+ readiness programs. Later, payments will be tied to actual reductions in measurable carbon emissions. Payment trials will also include emission reduction incentives. The funding payment mechanism will eventually need to connect with other components for funding, institutional arrangements with the IAFCP, and with other donors who might join a trust fund. The expansion of global carbon markets will also play a role in the maintenance and the long-term success of the KFCP. The KFCP will work to develop components at the village, district, and provincial levels guided by emerging international policies. (KFCP, 2009, p. 35).

The components of the KFCP project design will be developed with multiple actors and at varying levels to include development criteria with the local level, the district level and provincial levels. Throughout the project, the KFCP will also work with traditional institutions as well as more formalized ones. The payment mechanism, linked to GHG emissions and socio-economical impacts will also have to function throughout these levels.

At the village level and sub-districts, the National Program for People's Empowerment (PNPM) is currently distributing funds for locally driven initiatives. REDD+ payments could possibly be distributed through this type of organization. Payments "may be distributed through more than one channel or differently at different levels of governance" (KFCP, 2009, p. 36). Local and customary institutions may also be called on for the distributions of funds. At the district level, public service agencies may provide institutions for REDD+ incentive distribution. The KFCP is also looking at

district government environmental institutions and forest management units who already provide licensing and permits for environmental services and forest usages (KFCP, 2009, p. 36).

Incentives designed to modify land usages throughout the forests should be aimed at local individuals as well as larger groups. Incentives aimed at policy-makers will target specific agencies and institutions to promote change of land use and development plans that support the REDD+ ideals. Incentives aimed at addressing economic drivers for deforestation and degradation will be focused on government and the private sector, through such interventions as tax policy or incentives given for investment in sustainable agriculture in the EMRP area to help stabilize the area (KFCP, 2009).

Through the analysis of the KFCP design document we can see where the KFCP has allotted space for livelihood improvements, incentives, payments for environmental services and co-benefits. Through my field research, I explore whether or not the KFCP project is delivering these co-benefits and if the project is positively effecting the lives and livelihoods of the Dayak people. Analyzing the KFCP design document was important in constructing the nature of my field research and in providing empirical evidence to base an evaluation of the successes and failures of the project at the local level.

Chapter 4: The Kalimantan Forest Climate Partnership

In order to evaluate the KFCP's impact, I will contrast the KFCP design documents goals with the experiences of the Dayak people. I interviewed people most effected by REDD+, such as the Dayak people, in an attempt to determine how the project is impacting their lives. I also interviewed people who are working within the REDD+ perimeters, either as government officials, environmental advocates or indigenous rights activists. I asked them to share their experiences with the REDD+ program while directly relating it to the effects on the Dayak people's lives and livelihoods⁴. The data collected throughout this next section has been derived from my field research in Indonesia in January, 2012.

4.1) Indigenous peoples Alliance of the (Indonesian) Archipelago: Aliansi Masyarakat

Adat Nusantara (AMAN) group

My first interviews took place at the Indigenous Peoples Alliance of the (Indonesian) Archipelago office in Jakarta, otherwise known by the Indonesian acronym AMAN- (Aliansi Masyarakat Adat Nusantara). I met officially with Annas Radin Syarif, in charge of Staff Information and Communications, and with Raya Reinhardt Sirait who is heavily involved with the ethics of REDD+ throughout the AMAN organizations. Unofficially, I met with several other employees who worked at this particular office where I was able to gain further insight regarding their attitudes towards the REDD+ programs in Indonesia. The following is a summary of the key points of my interview with Mr. Syarif and Mr. Sirait.

⁴ For a full list of interviews, see the Appendix.

One of Mr. Syarif major concerns about the REDD+ program in Central Kalimantan was the location of the KFCP project site. The KFCP site is partially located on the Ex-Mega Rice Project (EMRP). The EMRP area is undeniably ideal for rehabilitation. However, any project implemented in the wake of the destruction of the one million hectares of peat swamp is viewed by the local people with extreme suspicion. The Dayak people being effected by the REDD+ project are overwhelmed by the number of projects taking place within this particular area. Furthermore, undefined land rights have led to conflict with government authorities and with project planners. During the MRP, the Dayak people lost a huge piece of their claimed territory. Despite efforts by the KFCP to rehabilitate the peat and to prevent forest fires in the area, the people remain largely skeptical of the project's motives and its actions. The REDD+ programs are being met with confusion and anger throughout Indonesia's interior and the project's goals and components are not being thoroughly explained to the indigenous people. In the case of the KFCP program many people are still associating this new REDD+ project with the old EMRP.

A major concern is for the rights of the indigenous people within the context of REDD+. The loss of territory, the loss of livelihoods, the increasing need for migration and neglect of traditional practices due to the implementation of REDD+ have severe implications for the people living within the project site. The only way for REDD+ to be successful is to establish land rights for the indigenous people first. AMAN's position on REDD+ is clear and concise; "No Rights, No REDD".

REDD+ has the potential to act as the vehicle to promote indigenous land rights. Hypothetically, REDD+ could lead to the legalization of customary land claims as a

means to ensure a fair and equitable REDD+ program and to guarantee that proper Free, Prior, Informed Consent (FPIC) is achieved at every project site. By using REDD+ to highlight the indigenous peoples struggles related to their lack of land rights, Mr. Syarif and Mr. Sirait hope to reach a middle ground where both parties would benefit. With defined land rights, REDD+ programs could operate more equitably thus, creating a stronger, more sustainable program. Furthermore, land rights would help with the inclusion of the local people at all levels of management and field operations within the project's structure thereby, allowing the people the ability to contribute to the development and implementation of the REDD projects.

Issues related to how REDD+ programs are obtaining informed consent are a keystone to the failures of the projects. The concern lies within the inclusiveness of the claimed consent and with the clarity of information distributed. Mr. Sirait asked some very poignant questions: "Are the people informed that they will lose access to parts of their land? Are they told that they will have restricted access to other key fertile lands where fishing, hunting and gathering will be forbidden? Without lands rights do the project directors feel it is necessary to explain this component of REDD+? There must be lands rights for any REDD+ project in order for it to be inclusive and successful". According to those interview these questions have not been adequately addressed or explained under the KFCP project.

The laws at the national level include a Presidential Decree concerning REDD+ which includes a task force, responsible for REDD readiness and preparation who reports directly to the President of Indonesia. The regulations surrounding REDD are often diluted by the time they have reached the provincial government level and are further

blurred at the district level. When it comes to the implementation at the local level the KFCP has ineffectively explained what the REDD+ project entails and what its goals, mechanism, and incentives will mean to the local people. The trouble lies in the way information is distributed, and the economic nature of REDD+. Information is distributed to the village leaders as well as at public community meetings. REDD+ information is presented to the local people through the use of Power Point slides and other visual aids. According to the KFCP, the goal is “socialization” or education of the village surrounding REDD+ projects. There is very little exchange between the two groups. The local people are not directly involved with the decision making, the planning stages, or during the implementation phase. Mr. Syarif and Mr. Sirait doubt that the people leave these meeting with a comprehensive understanding of what is really going to take place in the REDD+ site.

The actual mechanisms of the KFCP, REDD+ program are not going as planned. There is confusion among the varying projects and aspects of the KFCP project are failing. Furthermore, the project is creating a divide and conflict among those who are in support of the REDD+ projects and those who are against the REDD+ projects. The push towards a cash-driven economy is further marginalizing the Dayak people.

Improvements to the REDD+ projects across Indonesia must include the recognition and protection of indigenous rights. The REDD+ program is not targeting the right groups for forest conservation, as the Dayak are not the major culprits or the main drivers of deforestation. The Dayak people are the ones fighting to preserve their forests and the lands that they have lived on for generations. They are not responsible for large logging and palm oil concessions that still continue to be approved within Central

Kalimantan. REDD+ programs have the potential to increase forestry law by using this opportunity to make the forests safer and to push the State to recognize indigenous land claims. There is hope that REDD+ might increase the opportunity for the indigenous people of Indonesia to be heard; for their complaints to be voiced on an international stage. REDD+, if implemented correctly, with the support of the local people, might be able to grant indigenous people rights to land, which has been previously denied. REDD+ projects should be put on logging sites where there is actual degradation and not just simply on indigenous lands. REDD+ should be trying to buy back land from logging companies to be able to truly rehabilitate Indonesia's forests.

According to Mr. Syarif and Mr. Sirait, REDD+ is like a varying form of colonial rule where emitters elsewhere push for carbon sequestration locally. The indigenous people are not the major drivers of global emissions. Currently, the Dayak are not involved with carbon trading. Mr. Syarif wonders how a program such as REDD+ is supposed to benefit the local people? Globally, emissions still remain high, yet the Dayak, under the KFCP, REDD+ program, are expected to sacrifice their lands and their livelihoods.

Currently, REDD+ regulations adhere to Indonesian government forestry laws. However, the AMAN group would like the forestry law changed, in particular the abolition of Law Number 41. Law Number 41 (a law created in 1999, but has been restated within the more recent REDD+ context) states that all forests in Indonesia belong to the government. This law does not address indigenous land claims but actually denies and extinguishes them. This law is viewed with the potential to not only revoke land rights but to short circuit the indigenous land rights movement all together. Currently, the

Indonesian government is still selling forested lands to companies and claiming that they are adhering to conservation agreements. This is happening despite a national REDD+ policy and current bilateral moratorium agreements designed to protect Indonesia's forest. Are the REDD+ programs enough to save the rainforests? If governments actively seek loopholes to buy and sell land to large deforesters, how is targeting the indigenous people through performance-based incentives supposed to prevent money from changing hands on a much larger scale?

The Dayak people living within the project site are primarily subsistence farmers. The incentives given out through the KFCP project are predominantly cash driven. People in the villages historically have not used a cash system. The program is not building schools, improving livelihoods or doing anything concrete; it is just simply handing out money. This process is pushing people to participate in a cash economy, which fundamentally they are at a disadvantage to compete in. People are paid to participate in the REDD+ projects and they are also paid to attend the meeting held by the KFCP, which is a major poisoning aspect of the REDD+ project. The project is creating cash dependency within the villages. Furthermore, the traditional Adat⁵ laws are not being respected in the informed consent portion of the implementation of the KFCP projects. The consent process is being manipulated through bribery of the customary leaders with money and government positions. This process is causing conflicts within the communities and among neighboring communities.

⁵ Adat is the customary law of the Indigenous people in Indonesia and in Malaysia. It is an unwritten code that dictates moral behavior and supports the traditional way of the people. It governs traditions and ceremonies from birth, marriage and death. It is a law based on community and group responsibility. Adat covers both law and tradition.

The KFCP project site is completely surrounded by palm oil plantations, logging companies, mining operations, environmental programs and orangutan conservation areas. There are several projects occupying one specific area resulting in confusion as to what is permitted and what is not in these newly designated areas of the forest. It is extremely difficult to understand where one project starts and another one ends. Furthermore, each project site has its own classification, which means that in some places the Dayak cannot hunt, while in others they cannot cut down trees, and still other areas where they can't plant certain crops or plants.

The KFCP are trying to replant and rehabilitate the EMRP site after the project's disastrous results with seedlings of 'native peat swamp forest species'. The seedlings under the KFCP project are started in village nurseries and later transplanted to the degraded areas. However, the trees that the KFCP are planting in that area are not surviving. According to the villagers interviewed, this is happening because the KFCP does not recognize the local knowledge that the Dayak people have. The Dayak people have attempted to tell the KFCP project implementers that these specific trees won't survive in this changing climate but they were ignored as the project referred to its own experts. Mr. Sirait told me that less than 20% of the trees planted are surviving.

Mr. Sirait: "This is our land; this is our mother; our soul. Once you take it away you kill us". The people still living in the villages are so closely related to the land, completely attached, that they will fight to protect their land. Conflicts are arising over land within the forests; land that the Dayak people have lived on for hundreds of years. REDD+ is not really about protecting the forests but it is about business. The deforestation and degradation aspect of REDD+ are designed with the best of intentions

however, it is the emissions aspect that makes it about business. Carbon markets and carbon trading is a complicated process. What safeguards will be put in place to protect the indigenous groups and forest-dependent people? Rights must be assured before the REDD+ “business” really commences so that communities can benefit from all aspect of the project. There is concern about how carbon markets will operate while including the local people. Who will benefit most from the influx of money? REDD+ is a business and like any good business you must have a good environment for your investment otherwise, the project will not be sustainable. Investment within the region can cause conflict if not implemented properly.

The State is another issue, identified by those interviewed, that is also causing problems within the context of REDD+. People’s rights are denied on a complexity of levels and with the support of inequitable laws. Corruption also plays a major role within the forestry sector in Indonesia. Businesses are the worst for injudiciousness against the people, causing an increase of violence within the forests. The violence is attributed to conflicts between the police, the military and the companies and the people fighting for their land and their rights to livelihood protection. Mr. Sirait is afraid that in the extreme case the Dayak people will simply be cleared out of the area so that REDD+ can proceed. If the Dayak are not physically removed, then sanctions and restrictions on land will force them to leave so that they can survive.

REDD+ is creating a large amount of revenue for REDD+ countries. It is different than international aid according to Mr. Sirait. It is not really aid but simply a handout. He believes that we must stop emitting as well as work to conserve global forests. He says REDD+ is not truly about climate change but about the money that is

associated with it. That's why every developing country wants to be part of REDD+ he said, the motivation at the government level is about the money, not about climate change or conservation.

4.2) Asia Foundation Interview

Mr. Palmer is the Director of Environmental Programs for the Asia Foundation in Indonesia. Mr. Palmer focuses on governance of the forest, while working with the Indonesian government to improve land usages, forest mapping and overarching environmental protection. The following is a paraphrased summary of our discussion on January 9th, 2012.

Mr. Palmer: The Dayak are primarily subsistence farmers, however, their livelihoods are also dependent on rattan farms and the collection of rubber from the resin of the rubber tree. Rattan, grown by the Dayak people is used to make furniture and other accessories; unfortunately, the price of rattan is very low (at the moment) due to changing preference towards plastic furniture thus slowing demand for this forest product.

Rubber forestry is a common community-based agro-forestry in Indonesia and a vital portion of village livelihoods. Latex is collected from the resin of the rubber trees. This is done by tapping the tree and collecting the sap. The raw material is then sold for manufacturing. In both rattan and rubber collection the raw materials are sold and the financial value that is added happens in the manufactory process.

There are issues of representation surrounding consent for REDD+ projects that Mr. Palmer has noted. For example, Free, Prior, Informed Consent (FPIC) should be obtained from the entire community and not just the village leader. There are issues

involving corruption where village leaders are bribed in order to express their support for REDD+. Consent and village participation must be implemented in a consultative manner. Village leaders are being elected in order to support REDD+ and it is pushing out the people who oppose REDD+. FPIC is not yet part of Indonesian law. If Indonesia were to adopt this as a law it might empower the people as well as improve the context of development delivery.

REDD+ is very complex and the product is not clear. Even program implementers are unclear on how the REDD+ program will be monitored or how it is supposed to work long term.

Further, uncertainty surrounds the issue of forest permits. There are several environmental and social impact assessments being done within Indonesia when converting forests. The program attempts to promote community involvement and there are spaces cut out for local people to participate however, in reality this is a very weak aspect of Indonesia's forest management. The Asia Foundation is hoping to strengthen these assessments. Currently, there is a lack of good governance, corruption is widespread and deeply ingrained, and there are poor capacity and monitoring systems. For example, true community participation is very difficult. If you hold a meeting and no one attends, does it still count as the obligatory community participation, asks Mr. Palmer? This is too often the case, he concludes. Real community participation takes real effort. It is only successful when you are able to gather genuine feedback and when the project is committed to making adjustments suggested by the communities. FPIC is crucial in formulating real feedback that can effect change. He promotes the need for there to be ongoing measurements of participation to determine how effective it really is. This would

require people to monitor what happens after the feedback is given, to see if community participation is really making an impact on the projects design and implementation.

Forestry permits are needed for projects and activities within Indonesia's forests, including REDD+ projects according to Mr. Palmer. However, permits come from different levels of government and from different departments; there is often a mismatch between sectors. Furthermore, there is often more than one official governmental level distributing permits. The National, Provincial and District Governments are all able to grant forestry permits but the varying levels of government don't always agree with each other. One might give out a permit that overlaps with an existing permit. For example, he states, you might have timber and mining permits on the same land, which further complicates any forestry conservation efforts.

Additionally muddling the matter is that there is not a universal map of Indonesian forests. Not all people and governments officials agree on district borders within the forest; everyone has their own map that suits their own land claim. Communities such as the Dayak in Central Kalimantan live on what is technically "forested lands". Forested lands are owned by the national government. Subsequently the ministry of forestry is able to give out permits on customary Dayak lands. Communities are neglected in the granting of permits. Forested lands owned by the State consist of about 70% of the total forestry sector. The forestry zones are not even all forested anymore as deforestation and development have greatly reduced forested areas within Indonesia. State forests belong to the national government and non-state forests are dominated by the local governments. There is often conflict between the two groups, who act as rivals to gain profits associated with permits and incentives, Mr. Palmer concludes.

4.3) Interviews with the Dayak People

The following is a summary of the combined data collected through out my interviews with the Dayak people, as well as a collection of my research observations. These interviews took place in the Kapuas River Region with the Dayak people in communities being directly effected by the KFCP REDD+ pilot program.

Kantunjung Village:

Kantunjung Village is in close proximity to the KFCP project site. The people of this village have had firsthand experience with the pilot project and have been approached to participate in the KFCP, REDD+ activities. I met with several community members throughout my visit, the men were the ones who predominantly participated in the group interview setting. I also spoke directly with the community leader who is considered a village elder, Mr. Berkat.

Kalumpang Village:

The Village of Kalumpang in not far from Katunjung Village, located in the heart of Central Kalimantan's forest where I interviewed the village leader, Mr. Karnadi I Karabu. Mr. Karabu and I spoke in an informal interview setting with the assistance of my translator Danar. The majority of the village was present for our discussion, both men and women of all ages. There is a KFCP office in this village, which we went to visit (See Figure 4). There was visible tension between the employees at the office and the local people. After a short visit it was clear that this was not an office working with the community, as there was a significant amount of hostility between the two groups.

Meeting of the Four Villages:

The meeting was held in Kaladan Village with the surrounding communities in attendance. The villages represented in this meeting were: Kaladan Village, Sei Ahas Village, Kalumpang Village and Katimpun Village.

There were approximately twenty men, ranging in age from young adults to village elders at the meeting, all of who had traveled from the neighboring villages. There were women present as well however, they did not participate in the discussion. When we first arrived, I was not received well by our hosts. I was told it was because they thought that I was working for the KFCP. The level of hostility directed at the KFCP workers and overall program was extreme. There is widespread suspicion and distrust of the KFCP project within these villages. The people are clearly unhappy with the project and the project implementers. Once they were sure I was not a KFCP employee but rather a student researcher there was a significant shift in attitude. Only then was I well received.

The topic of this particular regional meeting was the organization of a non-violent action for the Dayak people to reclaim their land. April Perlindungan, an activist for the Kapuas district, was one of the primary speakers at the meeting as well as Mr. Tanduk, the head of neighboring Pulau Kaladan village and Mr. Berkat, the head of Katunjung village as well as several elders representing their villages. The people were primarily concerned with protecting their land from the KFCP and from other mining and palm oil projects in the area. Non-violence was stressed throughout this meeting as violence was seen to only irritate the situation.

Throughout the various interviews with the Dayak people several main areas of concern were raised also concerning the KFCP project including unrecognized land rights, poor communication between project implementers and villages, neglect of local knowledge, misplaced incentives and payments, non-existent community participation and a lack of ownership. The consequences of these problems have caused a loss of livelihoods for the Dayak people. The following sections act as a summary of the collective key issues raised by those interviewed.

4.3.1) Unrecognized Land Rights

With no officially recognized rights to their lands the Dayak people have very little empowerment within the REDD+ context. Mr. Berkat and the members of the surrounding communities are fighting to have their rights recognized to ensure the protection of their customary land claims and for the protection of their livelihoods. In order to protect their livelihoods, the local people, would like to manage and protect their forests using their own customary mechanisms.

Land permits are required for every project that takes place with the forest. The government issues permits for palm oil companies and other parties; the Kantunjung Village, despite attempts has not been granted any permits, which they would use to protect their lands. As the government issued permits don't recognize customary lands claims, Mr. Berkat is afraid that the State's forest projects will eventually take over all their customary forests and severely damage the lives of the people depending on the natural resources within the area.

The community members interviewed spoke adamantly about the need to establish indigenous land rights before the REDD+ programs could ever be equitable. Land rights are seen by the local people and community leaders as a crucial step to amending the major offenses of the REDD+ programs. “No REDD+ without Rights.” The existence of Law number 41 is a major concern for the indigenous people as it grants government control over State forests. The indigenous people in Kalimantan are actively working to establish land rights so that they can be incorporated into forest management plans and environmental protection projects and so that they must be consulted before any permit is issued or any project can go ahead on their land. The people whom I interviewed spoke about protecting the forest as a primary concern for the need to establish land rights. Protecting against logging companies, palm oil plantations and other destructive forces are integral for the Dayak people’s survival. Without the natural resources of the forest the people go hungry and their primary means of livelihoods is lost. The problem with the KFCP, REDD+ program is the lack of recognition that the people want the same environmental protection against clear cutting and forest fires as the KFCP project goals. The KFCP and other REDD+ programs focus primarily on climate change mitigation whereas the primary goal of the Dayak people is survival and livelihood protection in the face of climate change. This came up repeatedly in community interviews. As land, water and air temperatures continue to change; the life of a forest-dependent person becomes increasingly difficult. The first step to success of the KFCP, REDD+ project, as stated by the leader of the Kantunjung Village, Mr. Berkat, is to award the local people rights to their customary lands. Land rights are a critical step for the Dayak people to be able to protect their means of survival. REDD+ programs are neglecting this problem. Mr. Berkat believes that REDD+ could potentially be beneficial if the KFCP would hand the project

implementation over to the local people, which could only realistically happen with recognized land rights. Mr. Berkat and others in his village believe that the customary ways of the village would be able to protect both the community and the forest and furthermore, would be able to properly administer the KFCP program. He says that currently, it is difficult to participate in the REDD+ mechanisms but if local people were in charge they would be able to make it more accessible to the community. The community would like to manage their forests themselves and for them not be managed by an outside project such as the KFCP. Currently, there are no regulations that protect the customary forests. Mr. Karabu believes that mapping of the area is a key step in obtaining land rights for his people. His village has designed a map of its territory and its customary village. Most villages in this area have recently produced maps of their claimed lands or they are in the process of doing so. He says after living in this village his whole life he is sure that the people can protect the surrounding forests. Granting indigenous land rights throughout Indonesia's forests would protect the forest from ill begotten forestry permits and promote reliable mapping within the forest.

An interesting reoccurring point is that many believe that the REDD+ programs such as the KFCP program could actually bring awareness to the indigenous people's fight for land rights. Mr. Berkat said, he believes, that without rights they can have no empowerment. Throughout my interviews the people consistently believed that the KFCP had the potential to help the Dayak people to diversify livelihoods and to reduce poverty but up to this point they have not seen this potential become a reality, which is due in part to a lack of ownership over the project.

4.3.2) Poor Project Communication

A major area of concern throughout these villages was a lack of communication and information sharing between the KFCP and the local people. Information is presented through a village meeting or with a notice that goes on a sign board. Every village within the KFCP project has a message board where notices are written. Information on the project is posted here as well as meeting notices (See Figure 5). Mr. Karabu expressed that these sign boards are not an effective way to involve the community; that the people don't read these notices in his village. The KFCP, REDD+ information meetings started in the villages with a meeting every week, and then it changed to two to three times a month. The number of attendees has significantly declined. Sometimes nobody goes. This is due to an overall disappointment with the project. Poor information sharing and a lack of participatory communication are producing negative results. The Dayak people are growing disinterested in the project and the KFCP project is becoming less involved at the local level.

4.3.3) Neglect of Local Knowledge

Mr. Berkat spoke about the several activities taking place in the KFCP (EMRP) site. The KFCP is replanting trees in the badly degraded areas. According to Mr. Berkat, the KFCP is not using local knowledge. In fact they are "disobeying local knowledge" and only listening to what their experts have to say. The trees planted to rehabilitate the badly degraded peat are not surviving. The acknowledgement of local knowledge is also a key area to improve the KFCP project while simultaneously incorporating the local people's socioeconomic needs. Mr. Berkat spoke about the KFCP disrespecting local

knowledge by planting trees that the people of his village said were not suitable for growth in the area designated by the KFCP. According to Mr. Berkat, only 20% of the trees planted are surviving. The local people have requested that trees be planted to support both carbon capture as well as foster their means of livelihoods.

The people in the Mantangai area would like the KFCP project to plant rubber trees and rattan trees as a means to increase the value derived from the forest for the local people. By planting rubber trees, the local people could harvest the latex for many years. The rubber trees would also capture carbon and would increase the local people's livelihoods. Increasing the quantity and quality of rubber trees in the forest would promote strong livelihood support. The Dayak people have also asked that certain trees be planted for the growth of rattan. Rattan must have a canopy and certain trees to climb as it grows. The KFCP is cutting down the existing trees that support rattan growth and not considering that these trees are one of the primary sources of livelihoods within the forest.

In order to help re-flood the peat while simultaneously supporting livelihood production, Mr. Berkat tells me: you should plant banana trees near the water's edge, as the tree grows its roots will take in water from the canal. The deep roots of the banana trees will help to rewet the peat and prevent forest fires. The rubber trees could then grow underneath the canopy of the banana trees. The rubber tree can be tapped and its latex removed without harming the tree for many years. With a thick tree canopy rattan could also grow. These trees are crucial to the support of livelihoods and the survival of many communities in this area.

Throughout my interviews, people continually called for the use of local knowledge and encouraging community participation as to not only support climate

mitigation goals but also to actually help the Dayak people obtain financial and food security.

4.3.4) Misplaced Incentives and Payments

As part of the KFCP mechanisms the surrounding communities were told if they help protect the forest, then they will be given a cash incentive. However, the people of the Kantunjung village have seen very little money as of yet. Mr. Berkat speaks of an agreement made in 2009, with his village, for payments under the KFCP program. Mr. Berkat insisted that KFCP changed the agreement after the meeting and that the people of his village feel deceived and cheated as the money promised has not been delivered.

People within these villages have also been offered cash incentives to grow saplings for the KFCP rehabilitation component. Only a few people within the Kantunjung village were participating with this component and there was palpable tension between those participating and those who were not. A small cash payment was given for each tree that grew to be a certain size. (See Figure 6). Cash incentives and payments have not been delivered equitably or with any consistency.

The issue of carbon markets and the potential windfall of money associated with it have created uncertainty over payments and incentives under the KFCP project. Mr. Berkat believes that the market mechanism components such as carbon trading are what will lead to corruption throughout the REDD+ programs. At first he believed that the REDD+ program would be beneficial to his people but once he learned that he and his people have no place in the carbon trading aspect he has changed his mind. The carbon

trading is where the money is and his people are not included in this component. He does not believe that carbon trading will directly influence the Dayak people's lives or livelihoods. He believes that it is the KFCP objective that his people have no place in carbon trading, that the people are to solely be the manual labour of the program to be "like the slaves".

4.3.5) Community Participation and Local Ownership

Those interviewed expressed that community-based forest management and community participation throughout the KFCP project is an area of extreme discontent and a major weakness of the overall project. Despite community participation being stated as a goal in the KFCP design document, in the field this component is extremely neglected. Many of the villagers interviewed spoke about community meetings held by the KFCP. They spoke about being paid to attend information sessions concerning KFCP, REDD+ projects. They were not asked what they thought about the program nor were they ask to help design the site specific project goals. Furthermore, their issues and concerns were not taken into consideration once the project began its early phases of implementation. Consultation with indigenous peoples at the grassroots level is not taking place.

In order to make REDD+ better, projects such as the KFCP, must come to an agreement with the customary leaders. Mr. Berkat and Mr. Karabu do not wish a third party to be the broker between the village and the project; they would like to be included and to be able to participate at the decision making, the planning and the implementation levels. They think that REDD+ could potentially be beneficial if the KFCP would entrust the project implementation to the local people. The customary way of the village can

protect the community and properly administer the program. In order to increase the level of participants in the REDD+ mechanisms the local people must be involved throughout all levels of the decision-making process.

4.3.6) Destruction of Livelihoods and a Lack of Employment

The KFCP project has not done enough to ensure the rights of indigenous people are protected. The results have meant a loss of livelihood for the Dayak despite livelihood improvement, support and diversification being outlined in the KFCP goals. There is a limited amount of employment opportunities within the KFCP program for the Dayak people. Participation is only expected at a manual labour level. There are no real options for the people, Mr. Berak says. The people will work for the KFCP project because they have no other employment options. Their support should not be read as consent, they do not work for the KFCP due to support for their project but for a small sum of money. The people don't feel attached to the program or any real pride of ownership; it is not part of their life, it is just a way to make a little bit of money. The people have such limited income and so few options. The program is going ahead without the KFCP taking into consideration the lack of employment within the village.

Under the KFCP project, sections of the forests are now classified as protected. People are allowed to pass through the KFCP site, however: the restrictions on hunting, fishing and gathering being implemented here drastically effect the Dayak daily lives. If fully enforced, the restrictions will prevent them from planting and growing crops and from growing rattan and tapping latex. Protected enclosures effect their food security and their primary means of livelihood production. Mr. Berkat told me that his people are not

even a hundred percent certain where the KFCP project territory is. He is not entirely sure where the KFCP site begins and where it ends, as no one has told him or shown him. He is quite sure that there are overlapping, conflicting projects within the same area.

When asked about the livelihoods of the people in his village Mr. Karnadi spoke about diversification and distribution as being the major problems. The local people derive their livelihoods from what produce, latex, rattan and other forest products they can harvest and sell. The local people could grow lots of bananas, pineapples, cassava and other fruits and vegetables but only a certain amount can be shipped to markets. Large amounts would simply spoil on route to markets. He spoke about drying goods to be able to ship more produce to markets. For example, he thought about drying cassava to make chips. However, it is very difficult with a lack of equipment, storage and packaging to make this a feasible option.

The most lucrative means of livelihood production in the Kapuas area for the villagers is the tapping of rubber trees. According to Mr. Karabu, one kilogram of resin from the rubber tree will fetch approximately 80,000 to 120,000 Rupiah, which works out to be approximately eight to twelve Canadian dollars. The rubber trees can be tapped every day (except on rainy days) and the tree is not effected and remains healthy. Unfortunately, he said, they cannot add more value to the resin due to a lack of equipment and chemicals needed for processing.

Livelihood destruction is also taking place due to a lack of participatory communication within the project. KFCP canal blocking has negatively effected subsistence farmers, as well as several communities, which have been greatly effected by

this component of the KFCP's project. The canals dug by the MRP act as roadways for the people to travel by boat to their otherwise inaccessible fields, hunting and fishing grounds. The canals are directly tied to the livelihood productions of these small scale farmers and community members. By blocking certain canals the KFCP has inadvertently cut people off from their rice fields and from their livelihoods. Furthermore, livelihoods are being disrupted throughout the KFCP project through the insertion of environmental enclosures, the push towards a cash driven economy, the destruction of livelihood supportive agriculture and the increase of food insecurity.

Despite the KFCP efforts there is still wide spread logging and clear cutting in this area. When we arrived at the end of the Kalumpang village we ran right into an active saw mill (See Figure 7). The general impression was that REDD+ wasn't doing enough to prevent industrial widespread clear cutting within Indonesia's forests and that the KFCP have been targeting the wrong group of people through their environmental enclosures and payment mechanisms directed at the local indigenous people.

Throughout my time spent in these villages unrecognized land rights, poor communication between project implementers and villages, neglect of local knowledge, misplaced incentives and payments, non-existent community participation and ownership were continuously repeated as the major issues of concern surrounding the KFCP project. More must be done to insure the rights of the Dayak people are secured and protected.



Figure #4. KFCP office in the Kalumpang Village (Photos were taken in Jan. 2012)



Figure # 5. KFCP signboard in the Kalumpang Village



Figure #6. Seedlings being grown for the KFCP replanting project in the Kalumpang Village.



Figure #7. Sawmill at the edge of the Kalumpang village.

Chapter 5: Analysis

This chapter will analyze the KFCP project with an in-depth look at how the REDD+ project is effecting the local Dayak people lives and livelihoods. This chapter will analyze the KFCP design document with an evaluation of the project's practical implementation with a specialized look at the Dayak people's concerns surrounding the project. I have found there to be several discrepancies between the project's design document and the implementation of the project. What the local Dayak people have witnessed surrounding the pilot project does not adhere to the project's plan as outlined in the design document. It is imperative to examine the KFCP's project design and implementation methods as to be able to recognize, pinpoint and recommend adaptations to the project to include a genuinely participatory aspect. Lack of recognized land rights, the issues of permits, inadequate mapping and the continued growth of palm oil and logging concessions in the area are having negative impacts on the KFCP project's credibility and sustainability and moreover, are harming the Dayak's livelihood. Community participation and inclusion at the decision-making level are not being actualized in the field, which has further isolated the local people from the project. Local knowledge is not being credited or considered throughout the KFCP project. The issues of incentives and the lack of clarity and consistency within the project are causing division among the communities and amidst its people. Lastly, corruption within Indonesia's forestry sector is impeding the success of the project and is damaging the Dayak people's way of life. The project has so far failed to deliver its objectives outlined in the design document.

5.1) KFCP Design Document and the Project Implementation

If the KFCP project was intended to be a learning activity what lessons can be drawn from the design document, the implementation process and the direct influence it has had on the Dayak people?

Major concerns surrounding REDD+ projects include Additionality, Leakages and Permanence.⁶ How is this being monitored throughout the KFCP project? It is extremely difficult to say with any certainty or to confirm that the KFCP activities are happening additionally to other conservation projects in Indonesia's forests. The KFCP project is in fact occurring alongside business as usual practices within the forest. It is not promoting substantial changes within the forest. Palm oil plantation and clear cutting projects are still taking place even along the border of the KFCP project site. There are real issues surrounding the permanence and sustainability of the KFCP project, especially with the growing discontent of the local people with the project. Permanence has yet to be proven. Permanence unfortunately, is tied directly to funding and financing from carbon markets. Carbon markets are still in the initial phases of development and have yet to be proven permanently reliable. Leakages are one of the hardest aspects for a REDD+ project to monitor and will have to be scrutinized rigorously throughout the project's life.

5.2) The KFCP CO-Benefits and Land Rights

Despite some good intentions, the co-benefits of the REDD+ program listed in the KFCP design document are raising some serious questions surrounding the expected

⁶ "Additionality: ensuring that emission reductions from REDD+ activities are additional to those that would have otherwise occurred; Leakage: ensuring that emission reductions in one area are not offset by increases in another area; and Permanence: ensuring that emission reductions are long term or permanent" (KFCP Design Document p 12).

outputs of the project. The expected outputs and resulting co-benefits of the project are not adequately addressing the most basic needs of the local people. The issues most concerning for the Dayak people are centered on land tenure, land rights and livelihood expansion and the subsequent protection of these rights within the forest.

The KFCP project lists of one its co-benefits as the “clarification of land tenure and property rights of communities” (KFCP, 2009, p. 14). However, having spoken to the people living within the proximity of the KFCP site, it is difficult to see any land rights being clarified as a result of this project. The KFCP must actively address how they can make the lives of legitimate forest users easier in the wake of climate change while simultaneously addressing climate mitigation goals. The KFCP project includes poverty reduction goal however, throughout my interviews, the people spoke about misdirected incentives and payment plans; that the project is in many ways aggravating poverty issues through its limiting forest classification sanctions. The project has also increased food insecurity, changed agricultural habits and has pushed the Dayak towards a cash-driven economy. The Dayak spoke about how they were not consulted about the project goals or implementation process and they were not asked for permission to start a project on their claimed land. Recognized land rights would hopefully promote the inclusion of local people at a higher level of decision-making and facilitate more cohesive and mutually beneficial projects. Currently, without land rights the local people are easily ignored as they are considered illegitimate forest dwellers. Although a REDD+ project could conceivably clarify land rights, it is simply not happening in the case of the KFCP project. The project’s expected outputs include the development of community mapping and the assessment of property rights, yet the people are still fighting to have their rights acknowledged. The Indonesian Government would have to amend its laws to grant the

indigenous people of Central Kalimantan rights to their lands. Although it is a tall order to redistribute land rights and amend national policy, without land rights there can be no direct (let alone accidental or co- benefits) REDD+ benefits to the people. By describing land rights as a co-benefit and not as a primary objective, the KFCP can continue with its interventions without truly addressing the root of the problem. The Dayak people want the rights to their land so that they can participate fully in the projects taking place within their community. Land rights would encourage program mechanisms and incentives to be properly administered thereby, allowing the Dayak people to benefit from the KFCP, REDD+ program and to improve their livelihoods. The KFCP design document goes further to state that “land tenure and property rights will thereby provide a basis for economic security while reducing the threat of conflict” (KFCP, 2009, p. 14). While that is ultimately true, land rights and property rights have not been granted to the Dayak. The people do not enjoy economic security and the villages are seeing an increasing number of conflicts happening within their communities.

“Resource tenure– the systems of rights, rules, institutions and processes regulating resource access and use – is key to shaping the distribution of risks, costs and benefits. Secure tenure gives local people more leverage in relations with government and the private sector. Insecure tenure, on the other hand, makes them vulnerable to dispossession – which could be a major concern if REDD+ increases land values and outside interest. Insecure or contested resource rights may also increase risk for investors, for example through heightening concerns about reputational risk in relation to possible tensions with local groups. Of perhaps greater importance may be the risk of uncertainty in delivering REDD+ commitments with unresolved tenure issues or local hostility – and the lack of legal protection against such non-delivery. Both of these types of risk might limit private sector involvement in REDD+” (Cotula & Mayers, 2009, p. 3).

Land tenure is certainly one of the biggest issues surround REDD+ projects where indigenous rights and livelihood security are concerned. The KFCP project is no exception. In Indonesia, in particular, it is unclear what (if any) indigenous lands are

recognized by the Indonesian government. The KFCP would have the project site converted from a production forest to a protected forest. This classification change would allow the KFCP to inhibit activities (such as hunting, fishing, farming and cultivation) within the site marking a significant decline in the ability for the Dayak people to depend on their surrounding natural resources. Limited access to the forest will promote food insecurity and the loss of livelihoods. With unclear land rights and undetermined natural resource property rights the KFCP is in danger of committing serious climate justice infractions. Secure community land rights are not only about

“justice, (although that is reason enough). It is also the most effective way of reducing deforestation, improving forest management, and increasing rural incomes. The recognition of such land rights enables governments to secure the ecological functions of rural landscapes, achieve social and political stability, and attract sound investment” (Rights and Resources Initiative, 2012, p. 2).

Despite claims that the KFCP is working with the Dayak people to produce a participatory program there is a strong lack of evidence supported by the fact that the project has prevented the Dayak people from accessing valuable areas of the forest through the implementation of environmental enclosures and protected forest classifications. Secure, legal land tenure would make a significant difference in the project’s implementation plans. Land rights would effect the planning and managing processes and force a momentous redistribution of funds obtained through GHG emission reductions. However, according to the KFCP design document, the KFCP will not intervene in any political or administrative process associated with land tenure. It will inform discussions on current land uses and what changes will be needed to make REDD+ effective, as well as informing what changes in land rights must be modified in order to support their project (KFCP, 2009, p. 25).

With secured land rights, the Dayak would be more likely to be included within the decision-making process of REDD+ projects and others like it. Funding could be awarded to communities (rightful owners) thus promoting a greater dialogue between project implementations and the local people. The success and sustainability of the overall project is greatly increased through secure land rights. Dayak land rights would certainly complicate the KFCP, REDD+ project but as equal participants the Dayak might finally be heard and better yet they might have their concerns adequately addressed.

5.3) Livelihood Diversification

A second co-benefit according to the KFCP design document is, “providing livelihood options (for the Dayak people) and cash payments for REDD+ services to target villages” (KFCP, 2009, p. 12), as well as “improved livelihoods through increased availability of fruits, non-forest timber products and timber” (KFCP, 2009, p. 16). The primary means of livelihood production within the Kapuas River region among the Dayak people is the harvest of rattan and the collection of latex from rubber trees. More attention to the Dayak’s primary livelihood needs must be addressed throughout the Rehabilitation and Replanting Interventions stages of the KFCP project. Rubber trees planted among a group of selected trees would assist in forest fire prevention by promoting the prevention of slash and burn agriculture practices used by some farmers in the area. A diverse mixture of rubber trees grown alongside other food crops provides income as well as food security for the people of these communities. Rubber gardens are environmentally stable and offer protection against soil erosion while promoting soil fertility and biodiversity (Potter & Justin, 1998). If the KFCP project’s aim is to rehabilitate the forest while offering livelihood support, then the KFCP must provide a well rounded program that increases human capital, financial capital and livelihood

capital. The program must include support for subsistence farmers including skills training and crop diversification. It must diversify crops and trees enough to protect the people from declines in markets prices and fluctuations (Nath, Inoue, & Zoysa, 2009).

The KFCP, REDD+ project must consider improvements in livelihoods by directly addressing the common problems faced by these communities, which among others, includes a lack of employment, increasing poverty and diminishing natural resources. As a result, traditional means of livelihoods must not only be protected and fostered but also diversified and strengthened. A cash incentive, as offered throughout the KFCP project, is not a sustainable means of livelihood nor is it an empowering means of self-reliant employment.

5.4) Peat Land and Forest Threats

The technical goal of this component is to address peat land and forest threats, which include the use of fire for land clearing purposes, failure to block canals and failure to control illegal logging. Village activities will be “harmonized with REDD+ related socialization; including behavior changes, peat restoration activities, reforestation, GHG monitoring, and payment mechanisms” (KFCP, 2009, p. 24). The KFCP has recognized that this component of the project presents operational challenges and presents social, political and technical risks (ibid) which pose significant challenges to the Dayak people livelihoods and their way of life and yet little has been done to rectify the situation.

Furthermore, what has been stated in the KFCP strategy does not correspond with the actual implementation process. For example, the KFCP strategy for “Reducing Use of Fire” states that fire management would be incorporated throughout the project using village engagement, and active communication with communities. This is also said to be done through the incorporation of livelihoods options and alternatives, through land

tenure and land right security and through payments and incentives (ibid). However, there is no evidence to support the KFCP's claim that the use of fire within the forests will be deterred by offering the local people livelihood options or land tenure security as there has been a significant lack of livelihood intervention introduced and no land rights have been granted. These are empty promises, which on paper sound optimal and appealing for both parties but are in fact being severely neglected in the field. Furthermore, it is difficult, if not impossible for the KFCP to offer land tenure security as the Indonesian system does not allow for third parties to grant rights to National Lands and besides, the KFCP has said they will not directly intervene with any political or administrative process associated with land tenure (KFCP, 2009, p. 25).

Concerning livelihood options, the Dayak people with whom I spoke with were keen to have alternative livelihood strategies introduced. Relative poverty, lack of opportunities and unemployment within the villages are extremely high. Livelihood options would be welcomed. One of the major complaints surrounding the KFCP project is that there is no sustainable, viable means of employment within the project. There are some opportunities but the employment is not consistent nor is it considered regular or even steady part-time work. The payments being used as incentives are unlikely to be financially sustainable and are therefore, unlikely to effect any real change.

When addressing agriculture, the design document states that there would be agriculture livelihood options (including planting of high quality rubber trees) for the Dayak people built into the project, yet in my interviews with the Dayak people there was no evidence of such livelihood options. In fact, there was substantial discontent concerning this subject. The people wanted rubber trees and rattan to be planted as part of the KFCP project to support a mutually beneficial project. This would support Dayak

livelihoods and protect the forest from annual plantations, which are considered high risk for the use of fires. However, despite the KFCP stating that agricultural livelihood options would be included in the project, that they would provide incentives to grow crop trees and that the project would work to improve market linkages for locally grown crops and non-timber forest products (KFCP, 2009, p. 25), little has been demonstrated to this effect within the KFCP project site. This implementation flaw is of particular importance as it is highly relevant to the livelihood of the Dayak people. This component is perceived by the local people as an area of the project that could potentially benefit their livelihoods. It is therefore, an important area, to involve and engage the Dayak.

“If REDD+ were solely concerned with emissions reduction, the KFCP could stop at blocking canals and re-establishing tree cover in Kalimantan’s degraded areas. The key to longevity, however, is the introduction of livelihood strategies that incentivize farmers and communities to adopt more sustainable techniques. Improving the quality and productivity of smallholder rubber is one way the KFCP should attempted to bolster community livelihoods. Climate change and carbon offsets are distant concepts to smallholder farmers, compared with the daily challenge of providing for their families. But a high-performance rubber value chain, Farmer Field Schools that freely distribute technical expertise, enhanced land tenure security, and the expectation of remuneration for good practices give farmers very good reasons to take up a more sustainable livelihood away from fragile, deep-peat areas” (Peterson, 2013).

An increase in market linkages within this component would increase the diversity of products the Dayak people could bring to market. The villages in the Kapuas River Region are quite remote: selling fresh fruits, vegetables and other NTFP’s can be problematic as often these products rot before they can reach the market. Greater emphasis and follow through at this juncture would greatly increase the popularity of the project within the villages as this component is seen to be a way to increase livelihoods and financial independence without being manipulated by an outside force. To avoid clear cutting and illegal logging and fires within the forests, the KFCP must also address the

large companies who are active within Kalimantan and the greater problem of widespread poverty and unemployment in the area.

5.5) Village Engagement

In order to properly address indigenous lives and livelihoods, REDD+ programs must include a strong village engagement program. The KFCP principles regarding village engagement attempt to be inclusive and participatory however, despite these attempts the KFCP project is far from reaching these goals. Firstly, the design document states that the project would like to be participatory to ensure local ownership, yet the actual participation is negligible with no direct involvement within the decision-making processes. For example, the Dayak people were asked to attend information meetings, help with mapping, grow saplings, and dig and block canals. They were not however, asked to participate in the planning stages, the decision-making processes nor was their feedback taken into consideration during the implementation of the REDD+ project. The Dayak's participation throughout the Early Implementation Phase, the Implementation Phase and throughout the Preparatory Activities has been minimal or non-existent. The Dayak are actively resisting aspects of the project as they believe that without increased participation at a higher level there is no community ownership. Without community ownership and direction the benefits of the program are being misplaced. The Dayak people would like the opportunity to administer the project themselves, to be the principle project operators with assistance from the KFCP program officers and not the other way around. The people are despondent with the lack of community ownership and are becoming increasingly disenfranchised with the overall program.

Community participation is difficult to achieve but is essential in formulating feedback that can effect change. Community participation can only truly happen when the

local people are fully informed about the project. Furthermore, the local people should be brought into the decision- making process. As of yet, representation of indigenous peoples, including the Dayak, has not been established in REDD+ related bodies and mechanisms. There continues to be

“no representative of ethnic minorities even at the local level of the pilot areas where ethnic minorities account for a significant number, if not the majority. This lack of representation demonstrates the continuing low regard by states of indigenous peoples” (AIPP, 2011, p. 5).

Community participation is critical to promoting reductions in poverty, improvements in livelihoods as well as ensuring projects’ success and sustainability. Feedback must be collected, monitored and implemented in order to improve the project’s overall success with the local people.

5.6) Local Ownership

The integration of the KFCP and REDD+ into all levels of government must include the concerns of the Dayak people. However, despite the KFCP goal of facilitating good governance, transparency and accountability to ensure local engagement, participation and local ownership (KFCP, 2009, p. 40) there remains significant room for improvement throughout this component. Local ownership has not been observed at the village, sub district or district level nor has the people’s concerns been effectively addressed.

“In all of the forest carbon initiatives (such as REDD+) studied in this case, the presence of partners who know the local terrain and can quickly establish credibility and trust with local stakeholders has greatly facilitated project development. Another factor that has helped sustain most of the partnerships is the fact that most of the forest carbon partners are motivated not only by the potential climate mitigation benefits, but also by the possibility of achieving social or environmental benefits” (Harvey, Zerbock, Papageorgiou, & Parra, 2010, p. 32).

The KFCP has not cultivated local ownership over the project throughout its implementation processes and as a result they have witnessed a growing level of disenfranchisement with the project throughout the villages. The local leaders whom I interviewed noted this as a major concern for the project. Without ownership they feel that their concerns are not being properly addressed. They feel they have no power to influence change within the structure of the project. A lack of local ownership, feedback and consultations with the Dayak has resulted in the failure of the KFCP project's goals to reduce poverty and offer any substantial co-benefits.

“Consultations with indigenous peoples at all levels (grassroots- national-international) are needed to ensure that their views and concerns are taken into account, especially in pilot areas and in the formulation of National REDD+ Strategies. The formulation of REDD+ strategies should undertake a bottom-up and not a top-down approach. Otherwise, REDD+ implementation will not only fail but will also lead to more conflicts, marginalization and discrimination of indigenous peoples and forest-dependent communities who are already suffering adversely from the impacts of climate change” (AIPP, 2011, p. 5).

5.7) Disputes and Conflicts

Although anticipated as a potential problematic area (KFCP, 2009, p. 25) little has been done to prevent the foreseeable conflicts associated with the KFCP interventions. Mitigation of conflicts has been extremely weak at the village level despite forecasting these conflicts. The design document predicts conflicts over clarification of land rights, land use and customary ownership (ibid). The conflicts were expected to be experienced by village members, with neighboring communities, local authorities, with the MoF and local governments, all of which have materialized. Livelihood interventions, payment mechanisms and incentive payments were also outlined as a potential area of conflict and have created divisions within the communities. The conflicts and disputes surrounding the project are just what the KFCP expected yet the intensity is much greater than anyone

could have predicted. The question remains, if these problems were foreseen why were they not prevented or at least alleviated? REDD+ projects around the world are encountering the same resistance from the local people. A structural change within the program is needed to address these universal conflicts and complaints. REDD+ projects cannot succeed without the support of the people living within the project sites. It is one thing to identify conflicts and it is another to properly address them.

5.8) Peat Swamp Forest Deforestation and Degradation, Reducing Fire Within the Forest, Slash and Burn Practices and Livelihood Alternatives

A major activity designed as part of the KFCP project, is to preserve peat by blocking canals. This intervention is intended to re-flood the peat and to keep moisture levels high throughout the area. These canals dug during the MRP, now act as roadways (waterways) for the Dayak people to access the interior of the forests otherwise inaccessible by foot. The KFCP design document lists canal blocking as an additional benefit to the project however, by blocking the canals used by the Dayak to access their rice fields, the KFCP is hindering livelihood production and dangerously effecting food security in the villages.

Throughout the KFCP project the Dayak are being targeted as culprits of mass deforestation through their traditional agriculture practices, this despite continued wide spread logging and palm oil plantations in the area.

“Over the past few decades tropical and subtropical forests have been destroyed on a massive scale. Even though it is now generally recognized that the main causes of forest destruction and degradation are unsustainable logging, the conversion of forests to large plantations, small farms by migrant settlers, or cattle ranches, it is often shifting cultivators and thus indigenous peoples who are blamed to destroy forests. Not only shifting cultivation, but also other forms of

land use practiced by indigenous peoples controlled burning of forests to improve habitat diversity for game or pastures for livestock, the collection of fuel wood, cutting trees for house construction and other purposes, even the gathering of non-timber forest products are now considered a form of forest degradation under REDD programs. And since REDD aims at reducing deforestation and forest degradation, indigenous communities are and will increasingly be targeted in such programs. This will have a severe impact on the way of life and the livelihood security of the affected communities” (AIPP, 2009, p. 2).

When discussing means to avoid slash and burn agriculture practices, it is not productive to simply distribute cash to avoid forest clearing. The Dayak people want to produce their own food and to be in charge of their own livelihoods. There needs to be a stronger agricultural alternative; otherwise if the project fails, or runs out of money, the people will again have no alternative but to use fire to clear agricultural areas, as it is the most economical method available to the Dayak people. The KFCP project does not offer a viable solution to this problem.

It is notable that until 1998, when the government renewed a ban on using fires as tool for large-scale land clearing, palm oil, logging companies and industrial plantation were primarily using fire as a tool for land preparation. Many companies now claim manual or mechanical clearing of land plots however, most companies still use fire to clear rows of debris to assist in the planting process. Part of the reason is the substantially higher cost of using mechanical means of clearing than the cost of using fire (Suyanto, et al. 2004). Because many companies are still using fire to cost effectively clear land, they thereby increase the carbon emitted into the atmosphere comparatively on a much larger scale than the Dayak people. The KFCP project must also address this reality and also target the larger groups who are still using fire with the forests.

The KFCP, REDD+ program needs to examine alternatives to slash and burn agriculture. The alternative practice must also support local people’s livelihoods. A total

ban on fire is not a viable solution in the protection of Dayak's livelihoods while simultaneously reducing emissions. A total ban on fire during dry seasons and El Niño years are an exception and special attention and alternatives must be stressed during these times to reduce the incidence and extent of fire. Removing wood and other forest products after the slashing process and before the burning process, "Slash-Sell-and Burn", would reduce emissions while increasing potential livelihoods for the Dayak people (Ketteringsa, et al. 1999). However, this process is labour intensive and does not completely address the environmental perspective of slash and burn habits. The solution must address the environmental aspect as well compensation for the cost benefits of slash and burn farming practices for people to accept it. One of the primary reasons for slash and burn practices is to increase the quality of soil in a cost efficient and timely manner. An alternative cannot simply equate to a decrease in crop yields while increasing labour and capital investment. Land clearing management practices must combine environmental, social, and economic practices in order to truly effect lasting change and for the KFCP program to be successful in this area (Ketteringsa, et al. 1999).

The KFCP must encourage programs that reduce the need to burn by increasing the soil's integrity without burning through irrigation and plant/crop sequencing. When burning is done programs should be designed to help lower the amount of biomass burned during slash and burn practices. This can be achieved in part by developing policies that facilitate the sale of excess timber from logging operations to mills to assist in promoting timber residue marketing, also by promoting the sale of rubber wood within local markets, and assist in planting higher yielding rubber trees as to prevent the need to rejuvenate old rubber gardens through slash and burn practices (Ketteringsa, et al. 1999; Suyanto, et al. 2004).

5.9) KFCP GHG Emissions Estimation and Monitoring Program

The future of this component is the most uncertain within the REDD+ programs and as such offers little insight on how the program will benefit the lives of the Dayak people. Baseline reference emission levels (REL) and current GHG emissions are monitored to assess the progress of the KFCP project in its goals of reducing emissions. This component does not include the local people nor does it include an educational aspect to help inform the people and involve them at a higher level. This component is still in its infancy and more knowledge is required in order to properly assess emission reduction within the peat swamp project site. The KFCP hopes to develop and implement methodologies for estimating and monitoring GHG from peat swamp forest. Where the local people will fit into this component is still unclear. It is presumable that local people should be trained in data collection to help monitor emission levels as to transfer ownership of the program to the Dayak people and hopefully to track the success of the program. As of the time of my research the people with whom I spoke with were not involved at this level of the project. However, increased meaningful participation at this and all levels would greatly increase the likelihood of success of the program. As my primary data collected through my interviews show, the Dayak people want a greater voice within the project, increased community involvement, and space for local contributions to projects on their lands. Without the incorporation of these aspects the KFCP project is not likely to succeed in the area.

5.10) KFCP's Payment and Incentive Mechanisms

The implementation of this component has several areas, which need reexamination. The project is introducing payment and incentives throughout the villages,

which are having negative social and economic impacts on the livelihoods of the people living within the Kapuas River Region.

The payment mechanisms and incentives for environmental services at its very core are problematic and disruptive to the local people's way of life. The payment and cash incentives imbedded within the KFCP project are negatively affecting the Dayak people both socially and economically. My research shows this area of the KFCP project as a major source of disappointment for the Dayak people.

Socially, the payments and incentives are causing conflicts within communities and among neighboring communities. This unrest is being caused by unclear payment methods, seemingly unfair distribution and perceived favoritism. The local people with whom I spoke are noticing a growing divide between those participating with the KFCP and those who oppose it. The community leaders also spoke about how the people who are participating with the KFCP programs are doing so out of financial desperation and not out of support for the project.

My research has shown that the local leaders do not believe this component to be economically sustainable and believe it to be destructive to the community as a whole. The structure of the payments within the project is causing dependency on cash handouts for menial unreliable work, which the village leaders fear is also unsustainable in the long-term. There is no real participation at the decision-making levels within the project for the Dayak people and as such there are no real employment opportunities or livelihoods improvements. Incentives aimed at changing land use are a perfect example of the destructive powers of cash-hand outs. People are paid to change their behaviours without offering them new solutions to the environmental problems associated with climate change and environmental degradation. This component is clearly untenable as it

creates dependency on a limited cash supply. Behaviours cannot be permanently changed without offering real livelihood alternatives. Building dams, planting trees, and eliminating fire use of peat soils are rewarded with payments and incentives but there is no long term employment, educational component or agricultural alternative realized within the program. This is a serious design flaw and a source of severe discontent with the Dayak people. The payment component of the project has been an overall failure as it lacks inclusiveness, sustainability and is widely misdirected.

Payments and incentives are expected to be directed at the local, provincial and national levels. At the local and provincial levels of government there have been accusations of bribery to support the KFCP agenda. The KFCP is accused by villages of buying officials and community member's support.

At the local level, the Dayak people were paid to attend the KFCP information meetings. At the beginning of the project's inception many people attended the meeting. Due to growing disappointment and disenchantment with the overall program, a decreasing number of people now attend these meetings. Taking this into consideration we may ask how valid is the community participation within the villages? How can the KFCP claim any genuine community participation when people had to be paid to attend these meetings? The village leaders who I interviewed, and the members of the AMAN, stated that the payment mechanisms are creating division, mistrust and discontentment throughout the villages and that the payments are actually doing more harm than good. Furthermore, the village leaders are confused about carbon markets and credits and how exactly they are supposed to play a role in this aspect of the REDD+ program, which is arguably the most lucrative component of the REDD+ program.

Payment mechanisms were designed to “provide sufficient incentive for forest users, managers, and policy-makers to reduce emissions and to maintain emission reductions in the longer term” (KFCP, 2009, p. 37) but as my data shows there has been inadequate consideration as to what would qualify as “sufficient” incentives. The local people don’t just want cash hand outs, they want the ability to actively participate within the project, to reach equitable mechanisms and to improve their lives as forest users. The design document states

“payments must be equitably and transparently distributed to those who have contributed to emissions reductions but ensure that within household benefiting women have access and a significant degree of control of these funds. Affected communities must be directly engaged in the design and testing of the mechanisms, ensuring that the needs of women and vulnerable groups are adequately addressed” (KFCP, 2009, p. 37).

Yet this has been shown to be an exceptionally weak component of the KFCP program.

Payment for Environmental Services as outlined in the KFCP design is to offer equitable payment mechanisms, stating that payments should not disenfranchise legitimate forest users, marginalize women or provide disproportionate benefits to the varying groups participating within the program (KFCP, 2009, p. 35). However, in its very nature the KFCP, REDD+ program is disenfranchising legitimate forest users through the conversion of production forests to protected forests. The issue of enclosures comes into effect here as the Dayak’s way of life is hampered through this designation. Incentives aimed to change the way the land is used must offer sustainable means of livelihood production for it to be practical.

Questions still unanswered surrounding the project’s payment and incentives include: Where will the influx of money from carbon market mechanisms be directed? Will the Dayak people be included in this component so they can benefit from carbon market funds? Will people still only be paid under the KFCP mechanisms or will they

also be paid for the cost of changing their lives and for being prevented from accessing fertile lands? Will the framework for carbon markets and the distribution of money derived from them focus on poverty alleviation within the villages of the Kapuas River Region? Most importantly, we need to ask why are local indigenous groups continuing to be ignored in the decision-making and implementation process of this and other REDD+ projects. These are just some of the questions that need appropriate consideration as the project moves forward to ensure that the rights and livelihoods of the Dayak people are protected.

Chapter 6: Conclusions and Recommendations

Throughout my interviews there were several common, reoccurring grievances and issues with the KFCP project. These issues include unrecognized land rights, a lack of local ownership over the project, insufficient community participation, a lack of inclusion at the decision-making level, issues of incentives, and a lack of clarity and consistency. These issues are calling into question the KFCP's project credibility and sustainability and worse the project is negatively effecting the lives of the Dayak people. The project does not adequately administer co-benefits needed to support a pro-poor REDD+ project aimed at improving the local people`s livelihoods.

The Dayak people and their livelihoods are intrinsically linked to their natural surrounding and resources found within these forests. The local people of the Kapuas River Region are highly resource-dependent and have very few reliable economic sustainable alternatives (Okello, Ole Seno, & Nthiga, 2009). The KFCP program has the potential to support pro-poor development and to reduce Indonesia GHG emissions. However, despite an impressive KFCP budget, poverty remains high within the project site. The Dayak people live in some of the richest forested areas with a huge potential to rehabilitate forest growth and promote a maximum amount of carbon capture. The KFCP, REDD+ project has inadequately addressed poverty by not offering any genuine livelihood alternatives. Forest change and poverty are often intertwined as people are heavily dependent on their surrounding natural resources (Vedeld, et al. 2007). Disruption in people`s environments caused by projects without clear parameters nor clear delivery methods have the most potential to due harm. REDD+ projects, have the potential to diversify incomes, improve agricultural potentials, and develop market access as a reward for participating in the projects mechanisms. Conversely, the KFCP project has created

new risks for the Dayak people and has aggravated poverty through the loss of access to natural resource-rich forests and through the project's initiatives (Peskest, et al. 2008).

Throughout my interviews the people have stated that the KFCP program is not implementing a pro-poor, livelihood-protected program. This has been demonstrated through the attempt to convert the forest from a production status to a protected status and furthermore through poor livelihood diversification mechanisms. There has been no expansion in agriculture alternatives or in access to markets for the Dayak people.

Reports of neglect for the Dayak's drive to grow rubber and rattan farms are widespread in the region. Mr. Karabu spoke about creating the ability to dry fruit to be able to diversify products going to market and about being able to change the rubber latex from a primary product to a secondary or tertiary product to fetch a higher price at market. Yet the KFCP program has done the opposite: it has actually prevented local people from accessing their rice fields and the interior of the forest by blocking canals and flooding fields to protect the forest from fires. The reasons why the project has failed to deliver its objectives outlined in the initial project design is that it has failed to include a genuine participatory portion in which the project would be allowed to evolve as the needs of the Dayak people were realized. Without this fluidity within the project it has been allowed to plough through its mechanisms blindly, despite roadblocks and objections from the local people. Furthermore, this rigidity with including participatory components has influenced the lives of the forest-dependent people in the area and has been the major reason for its failure.

This is a perfect example of this disconnect between carbon emissions reductions goals and pro-poor development. Do they have to be fundamentally opposed practices? A balance must be found between deteriorating resources due to climate change,

environmental protection, biodiversity amelioration, carbon sequestration, livelihood support and pro-poor development. Is there an intersection where these proverbial costs and benefits meet? The KFCP must incorporate environmental protection while simultaneously fostering livelihood growth in order to implement a project that strives to do better than 'do no harm' and actually makes a positive difference in both the global environment and with the forest-dependent people living in this remote area. The Dayak people should be given the right to protect their lands and prosper while simultaneously protecting their environment. The KFCP has the potential to be the mechanism to marry the two concepts but as of yet has fallen quite short of a pro-poor, environmentally sound mark.

6.1) Recommendations

The KFCP project has failed to deliver a REDD+ program that supports carbon emissions reductions and promotes a pro-poor development agenda. The Dayak people who have limited resources and livelihood options are intrinsically dependent on the forest for their survival. The KFCP project has neglected the needs of these people in their drive for success. The KFCP has overlooked the Dayak's people's complaints and accusations of injustice surrounding the project. They have ignored suggestions made by the Dayak people to improve the project and have rejected their requests, which support their livelihoods. The KFCP has not been inclusive at the decision-making levels and even at the local level community participation has been extremely weak. There has also been a lack of advocacy and support for the Dayak's land rights and furthermore, harm has been inflicted through the introduction of forest enclosures and changes in forest classifications.

A clearer mechanism for communication is needed including an outlined strategy for coordination among all stakeholders and project implementers. A more dependable method of communication is required to ensure greater participation within the project. Consistent village meetings, site visits and regular feedback from the field will help facilitate the problems arising within the KFCP project. A continual presence within the field will help provide training and acceptance of the program and can offer some valuable insight into the Dayak people's concerns surrounding the project (Harvey, et al. 2010). Local people must be engaged within the project in order to ensure equitable benefits of the KFCP project. Stakeholder's engagement, outreach and training are crucial to the success of this and all REDD+ projects.

Recommendations to increase local engagement of local stakeholders should include a number of features. The creation of a detailed stakeholder's engagement plan would ensure equitable participation within the program. This plan should include a means to provide outreach, open communication and training activities to ensure local ownership over the program. The KFCP program should promote a detailed understanding of all activities and components of the project's initiatives including awareness surrounding potential risks and benefits. This must be done through an informed consent process. Participatory methods must be designed to ensure clear, sustainable benefits to local communities. This aspect of REDD+ programs must be carried forward to include expected future carbon offset financing. Non-carbon benefits must be at the forefront to engage the local people and for the project to have a pro-poor agenda. These non-carbon benefits include

“training on improved farming techniques, development of diversified agro forestry systems, grants for community projects, microcredit systems for small landowners and working with the government to clarify or formalize land tenure. It is important that these non-carbon benefits are visible early on, so that local stakeholders are encouraged to continue their participation and do not get frustrated with waiting for the promised future carbon revenues” (Harvey, et al. 2010, p. 93).

Monitoring processes must include the local people whereby regular feedback is taken into consideration and is capable of making changes within the programs structure. Ideally, local community members should be trained to lead monitoring activities themselves (Harvey, et al. 2010).

Conflicts have arisen through poor management and implementation of incentives and project inputs. The Dayak people, their rights and their livelihoods, have been negatively effected by the KFCP project`s implementation. In order to improve the situation and gather support for the KFCP project, the local people must be better included throughout the project. They must be present at all initial meetings, throughout the planning stages and through the implementation process. Clear and defined land rights must be included with REDD+ programs to ensure equity throughout the planning and implementation processes. Community participation must be clear, coherent and actually effect change. The KFCP must strive to “develop an inclusive, participatory consultation and outreach program to educate stakeholders at both national and local levels on REDD+, and enable a regular feedback process on the design of the national REDD+ strategy to ensure that concerns of relevant stakeholders are properly addressed” (Harvey et al. 2010, p. 93). All members of the community must be addressed and not just the customary leaders or those people within communities more willing than others. Furthermore, all of their concerns must be addressed and effect real changes within the project`s design. A

better understanding of the project is needed in the villages, which could be obtained, in part, through real interactive community participation.

- Incentives and payment mechanisms should be redirected to help entire communities and not distributed as small cash hand outs for individual people.
- Incentives should be based on livelihood improvements and diversification. The KFCP projects must “promote alternative, sustainable livelihood activities for local communities, such as sustainable agriculture, sustainable forest management and community land management, to ensure that they have sufficient employment and income-generating opportunities” (Harvey et al. 2010, p. 96).
- Food security and agricultural production must be ingrained in the KFCP’s initiatives and adjusted accordingly.
- Forest fire prevention should offer alternatives that are both cost and labour effective.
- Diversifications of livelihoods, new skills and tools, as well as greater access to markets could greatly decrease poverty within the villages.
- When re-flooding the peat (through the blocking of canals) the people must be brought into the planning process to reduce the negative effects of flooding agricultural lands and blocking major canals used for transport.

Support for the primary method of current livelihood production should be fostered through the planting of high quality rubber trees. Introduction of sequenced

planting on the same area to enrich soil without having to use slash and burn techniques would prevent forest burning and carbon release as well as introduce new means of livelihood production. The introduction of newer tools and methods could be used to prevent the use of fire and slash and burn agriculture, as well as providing education and knowledge fostering of replanting techniques. This could also be effectively used to maximize biodiversity and carbon capture while increasing livelihood production throughout Indonesia's forests. Community participation must be better incorporated into the project's design in order to prevent the use of fire. Viable, practical and sustainable alternatives must be introduced in order to have success in this area. Furthermore, increased livelihoods and a reduction in poverty could be made available through increased access to markets and through the diversification of what the Dayak people might harvest and sell in that market. Incentives might be targeted here to improve a village's means of value adding to a primary product. Payment mechanism should be directed so that the Dayak people can support themselves through their own determination.

Community led forest management under the KFCP project would allow for the local people to have input into the program, to create ownership over the program and to help improve their means of livelihood production while simultaneously supporting the KFCP agenda to reduce carbon release. In order to achieve a pro-poor KFCP, REDD+ project the people must first be given rights to their lands and they must also be included at a greater level within all aspects of the project itself.

General recommendations for the improvement of REDD+ projects must include complete and effective participation of the indigenous people effected by the programs objectives. Inclusion should provide room for feedback that helps shape the design and

implementation of the project. Furthermore, indigenous people must be brought into all levels of the decision-making process and must be part of the primary implementation team. Community participation needs to be improved as a means to increase the acceptance of the project and to place ownership within the communities. Pro-poor agendas including the development and diversifications of livelihoods must be considered as the primary solution to amending the conflicts with the local people. Environmental conservation cannot, and should not, deepen forest-dependent people's poverty. An intersection of carbon emitting reduction projects must also consider indigenous peoples livelihoods, agriculture needs and food security.

Specific recommendations for the KFCP, REDD+ project in Indonesia include a significant change in the Indonesian law where indigenous rights are concerned. Recognized land rights are needed to ensure the basis for an equitable KFCP program. Furthermore, a more inclusive program, which includes the indigenous people, is essential to formulate feedback and effect change. The Dayak people's grievances need to be taken into consideration and the program adjusted accordingly. Working more closely with community members and village leaders will promote greater unity and equity within the program, as well as increasing the popularity of the project.

Incentives must be aimed at entire communities and not individuals. Furthermore, incentives should be directed at developing and diversifying livelihoods, improving agricultural practices and increasing access to markets.

A National Indonesian REDD+ Strategy should include recognition and legal protection for indigenous peoples' right to land and natural resources. The National Strategy should allow for local management of the programs and well as recognize local knowledge. The Strategy should ensure social and cultural safeguards to protect the

Dayak people and all local stakeholders. This might include an effective conflict resolution and complaints mechanism that is accessible to indigenous communities.

Furthermore, the National Strategy should work to improve indigenous people capacity to effectively participate at all levels of REDD+ (AIPP, 2011).

6.2) Conclusion

Increasing detrimental changes in climate and environment are disproportionately effecting the world's forest-dependent people. More specifically, environmental degradation, deforestation and increasing global temperatures are negatively influencing the lives and livelihoods of the people who depend on the surrounding natural resources for their survival. Climate change mitigation programs, such as Reducing Emissions from Deforestation and Degradation (REDD+) are targeting forest-dependent people to help conserve the global forests and to prevent carbon release back into the atmosphere. REDD+ programs have the potential to address rural poverty in forest-rich countries while simultaneously reducing carbon emissions and protecting the world's forest. However, the debate surrounds whether or not REDD+ programs are being implemented equitably, with a pro-poor agenda and with an emphasis on livelihood diversification and poverty alleviation or if the project's goals and objectives are being misdirected.

This research focused on the Kalimantan Forest Climate Partnership (KFCP) project in the Kapuas River Region, Central Kalimantan, Indonesia with a focus on how the project was effecting the Dayak people lives and livelihoods. It was determined that the KFCP is not addressing the needs of the Dayak people and that the project is not positively influencing rural, forest-dependent life. Despite being targeted to participate within the project the expected benefits and co-benefits are not effecting change; neither real climate change mitigation nor livelihood improvement has been demonstrated

throughout this project. Indonesia's forests have not been saved by the numerous REDD+ projects taking place nor has rural poverty been adequately addressed.

There is a real need for improvements throughout the KFCP project. The problems were identified as a lack of community inclusion and participation at all levels of the project and an outright rejection of local feedback. Furthermore, the KFCP neglected to address poverty in the villages with misplaced payment-mechanisms and incentives. Incentives must be directed at livelihood diversification and expansion, capacity building to promote a greater, more efficient agricultural system and increased access to markets. All of these practices should be incorporated into the KFCP objectives as they will improve the quality of life for the Dayak people, as well as help achieve greater acceptance of the project thereby, creating a more sustainable and equitable program. The major failures of the project were outlined as poor delivery of the project's initiatives as well as a rigid design of the overall project, which did not allow for any genuine participatory feedback. Above all, refusing to recognize Dayak rights have doomed this project from the very start.

6.3) Epilogue

Since the completion of my research, the Kalimantan Forest Climate Partnership has been 'quietly shelved' by the Australian Government. In July 2013, the KFCP project was officially closed with its funding canceled due to unachieved goals, unmet targets and a lack of community support. The failures of the KFCP project have been officially recognized by the larger international community. The lack of transparency since the inception of the project has failed to deliver a REDD+ program that effectively addresses climate change, forest conservation and the rights of forest-dependent people in the area. The KFCP has not effectively offered a pro-poor development project where land rights

and livelihood protection are addressed. The reasons for canceling the project are numerous. A lack of community involvement, consent derived under false pretenses from the Dayak people, nonexistent livelihoods support, absent agricultural alternatives, and misplaced payment mechanisms are just some of the reasons the KFCP project has been canceled. Increased conflicts and missed opportunities to improve environmental degradation and address key drivers of poverty have also played a role in the project failures.

According to Deddy Ratih, of WALHI (Indonesian Friends of the Earth, Indonesia),

“AusAID and the KFCP staff have failed to support conservation programs that are environmentally effective and sensitive to the rights of indigenous people in rural Indonesia. The KFCP is a missed opportunity to empower local communities to develop their sustainable livelihood practices and address the drivers of land conversion in Kalimantan. A key aspect of deforestation and land degradation is the lack of formal rights held by indigenous and rural people in Indonesia. The KFCP did nothing to assist local communities to assert their customary rights and develop capacity for sustainable land management. Over five years the project has produced no significant environmental outcomes, it created conflict in local communities and confusion about the status of their land” (Friends of the Earth, 2013, p. 1).

It is fair to say that the KFCP project is in need of a radical reformation. The problems outlined here have marginalized the Dayak people, created food insecurity and have worsened poverty issues through the loss of livelihoods. The payment and incentive mechanisms throughout this project have failed to achieve any positive results and have created conflicts within communities. Furthermore, no substantial environmental conservation has taken place as palm oil and coal production is rapidly expanding in Kalimantan. The KFCP project has in fact done more harm than good.

The KFCP goals have missed their targets. A major failing of the project has been a lack of community ownership and participation. The communities effected by the KFCP

knew what was needed from a REDD+ project; they have answers to address the failings of the KFCP project: unfortunately, no one bothered to ask. Local ownership and community participation is needed to ensure REDD+ projects succeed. Livelihood protection and diversification, agricultural support and local feedback are all critical to alleviate relative poverty in the area. In the case of the KFCP, a lack of participatory inclusion within the project has created mistrust for the project and has ultimately led to a missed opportunity to offer support for the Dayak people with a pro-poor REDD+ project.

Appendix

Interviews- Jakarta

January 6th, 2012

- 1.) Rheinhardt Sirait, AMAN Group
Aliansi Masyarakat Adat Nusantara (AMAN)
Indigenous Peoples' Alliance of the Archipelago
Jalan Tebet Utara IIC no. 22
Jakarta Selatan
- 2.) Annas Radin Syarifl, AMAN Group
Aliansi Masyarakat Adat Nusantara (AMAN)
Indigenous Peoples' Alliance of the Archipelago
Jalan Tebet Utara IIC no. 22
Jakarta Selatan

Monday January 9th, 2012

- 1.) Blair Palmer- Director for Environmental Governance,
Asia Foundation Indonesia
PO BOX 6793 JKSRB
Jakarta 12067
Indonesia
- 2.) Jeffery Elzinga and Hari M Basuki
Development Cooperation | Coopération pour le développement
Embassy of Canada | Ambassade du Canada
Government of Canada | Gouvernement du Canada
Jl. Jendral Sudirman Kav. 29-31
Jakarta 12920, Indonesia

January 12th 2012

- 1.) Centre for International Forestry Research (CIFOR)
Jl. CIFOR
Situgede, Sindangbarang
Bogor
- 2.) Patrick Anderson (phone interview)
Policy Advisor with the Forest Peoples Programme

Interviews in Palangka Raya

January 14th, 2012

- 1.) Nindita Nareswari
AMAN-Kalteng, Palangka Raya

- 2.) Simpun Sapurna (Dadut)
Chairman, AMAN-Kalteng, Palangka Raya
- 3.) Paulus Alfons Yance Danarto (Danar)
Translator, professor, REDD activist

Interviews in the Kapuas River Region

January 16th, 2012

- 1.) Mr. Berkat,
Customary Leader
Katunjung Village

January 17th, 2012

- 1.) Mr. Karnadi I Karabu
Customary Leader
Kalumpang Village
- 2.) Visit, KFCP office in the village

January, 18th, 2012

Meeting of the Four Villages

1. Kaladan Village
2. Sei ahas Village
3. Kalumpang Village
4. Katimpun Village

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