Renewable Natural Resources:

Practical Lessons for Conflict-Sensitive Development

Sandra Ruckstuhl

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Abbreviations

AP	Andhra Pradesh
APCFM	Andhra Pradesh Community Forest Management Project
AREU	Afghanistan Research and Evaluation Unit
CBM	Community-based mechanism
CBO	Community-based organization
CDD	Community-driven development
CIG	Common Interest Group
CMM	Conflict Mitigation and Management Team (USAID)
CR	Conflict resolution
CSO	Civil society organization
DCHA/CMM	Bureau for Democracy and Humanitarian Assistance Office of Conflict Management and Mitigation (USAID)
DRC	Democratic Republic of Congo
EIA	Environmental impact assessment
FAO	Food and Agriculture Organization
FCA	Fadama community associations
FD	Forest Department (Andhra Pradesh)
FUG	Fadama user group
GCS	Government court system
GTZ	German Technical Cooperation
IAGP	Independent Advisory Group
ICCN	Institut Congolais pour la Conservation de la Nature (Congolese Parks Authority)
IDP	Internally displaced person
ILAC	Integrated legal aid centre
JFM	Joint Forest Management Project (Andhra Pradesh)
LDP	Local development plan
LFDC	Local fadama development committee
LTPR	Land tenure and property rights
M&E	Monitoring and evaluation
MAIL	Ministry of Agriculture, Irrigation and Livestock (Afghanistan)
NGO	Nongovernmental organization
NFDP1	National Fadama Development Project
NFDP2	Second National Fadama Development Project
NRC	Norwegian Refugee Council
NRM	Natural resource management
NSP	National Solidarity Program
PCIA	Peace and conflict impact assessment
PIU	Project Implementation Unit
PMU	Project management unit
PNVi	Parc National Virunga (Virunga National Park)
PSIA	Poverty social impact analysis
PWP	Palestine Water Program (GTZ)

RAP	Resettlement Action Plan
RNR	Renewable natural resource
RNRM	Renewable natural resource management
SEA	Strategic environmental assessment
SEIA	Social and Environmental Impact Assessment
TTL	Task team leader
USAID	U.S. Agency for International Development
VSS	Vana Samrakshana Samiti
WCS	World Conservation Society
WSP	water service provider

Abstract

This paper explores how a "conflict and violence-sensitive" framework in project assessment, design and implementation facilitates early identification and mitigation of negative consequences of competition and dispute, and promotes sustainable development over the longer term. It discusses the role of renewable resources in perpetuating conflict and violence, and distills lessons from selected development programming experiences in managing conflict risks associated with these dynamics. The study emphasizes that building capacity to productively address conflict and to improve community resilience to ecological change decreases vulnerability to violence, and improves livelihoods—particularly for the world's poorest communities. The study draws on a range of development experience and specifically examines six case studies: three from the World Bank portfolio and three external to the Bank. Of the World Bank projects, the paper considers Andhra Pradesh Community Forest Management Project (India), Land Conflict and Vulnerability Pilot Project (Afghanistan), and Second Fadama Development Project (Nigeria). The paper also studies three external cases: Conservation of Managed Indigenous Areas (Ecuador) and Building the Capacity of ICCN to Resolve and Manage Environmental Conflicts in Virunga National Park (DRC), both financed by USAID; and the Community Development Component of GTZ's Palestinian Water Program (West Bank). The concluding chapter outlines good practice and lessons learned from experience, emphasizing principals for building institutional and organizational capacity that support constructive conflict management.

1. Introduction

Renewable natural resources (RNR), such as land, forests and water, are universally important to poverty reduction and development, and are facing increasing pressure in many parts of the world. Global economic and environmental problems, along with increasing social disparities, serve as risk multipliers in the context of increasing resource competition. At present, the majority of extant literature concerned with natural resources and conflict focuses on non-renewables—such as oil, diamonds and other minerals—and their role in conflict manifestation and maintenance. Unlike non-renewables, "scarcity" is more greatly impacted by environmental quality, which is linked to a myriad of human activities. Risks associated with changes in renewable natural resources are of general importance to development, but the need to *understand* these dynamics and act *preventatively* comes into sharp focus when considering the potential impacts of global trends, such as climate change, population growth, urbanization and the food crisis. The poor are most vulnerable to these conditions, and face particular challenges protecting themselves, their families, and their livelihoods against environmental and economic risks. This means they are, in turn, more vulnerable to risks of conflict and violence. Current discussion on the social impacts of climate change, for example, emphasizes the risk of a negative trajectory toward social conflict in poor countries as a consequence of trends toward renewable resource shortages, increased population movements, and thus greater competition over renewable natural resources. Conflict-affected and fragile states face particular challenges in managing the negative social impacts of environmental change and climatic variability, as environmental and social stress can exacerbate existing grievances and social divisions in these already complex environments where societies face distinct challenges in breaking out of the "poverty-conflict trap" (Collier et al. 2003). RNR management and improvement are immediately relevant to post-conflict recovery as well, as water supply, food, and agriculture are frequently identified as priority areas for improving livelihoods and building stability.

Despite the focus on resources and *conflict*, experience suggests that societies can be resilient to these risks. Communities facing fragility and violence are still capable of constructively managing localized conflicts. Furthermore, renewable resources present special opportunities for cooperation in managing integrated ecosystems, enabling peacebuilding across a spectrum of stakeholders and socioeconomic groups. A holistic approach to conflict and violence prevention, which is an integral part of sustainable development programming, considers the catalytic role that renewable natural resources play in fostering social cohesion at one end of the social spectrum, and violence at the other. And while many practitioners recognize the potential risks of dispute over renewable resources, there exists a minimal amount of documented practical experience and technical guidance to demonstrate modalities for addressing these risks preemptively through conflict-sensitive development approaches.[1]

1.1 Objectives of the Study

The lessons presented in this paper aim to inform a more holistic conflict-sensitive approach to renewable natural resource (RNR) project design and implementation. Focusing on institutional and organizational capacity and

[1] This study is also relevant to climate-sensitive development programming. Climate-sensitive programming brings added nuance to socially and environmentally sustainable development, with the intention of reducing vulnerability and improving sustainability. Climate-sensitive development projects must consider social sensitivities, too. Thus, within this framework, attention should be given to managing social conflict and preventing violence.

drawing on operational experience, this study contributes to a broad conceptual paradigm of renewable natural resource conflict prevention and management.[2]

The objectives of this paper are:

1. To raise awareness of and provide a primer for concepts of conflict, conflict-sensitivity, and peacebuilding as they relate to renewable natural resources; and
2. To demonstrate select analytical methods and distill operational lessons for natural resource-related conflict management and violence prevention.

This report is based on the premise that conflict over natural resources involves the interaction of *social* and *environmental* factors. It discusses micro- and macro-level issues and project-related entry points for addressing these conflicts. The lessons described below are "social" rather than "technical/scientific" in nature, which can be refined and applied in project design, and implemented in consultation with an interdisciplinary project team. The recommendations are concerned with building capacity both at the macro level (organizations, institutions and norms) and at the micro level (behaviors).

This report is also relevant to climate-sensitive development programming. Climate-sensitive programming brings added nuance to socially and environmentally sustainable development, with the intention of reducing vulnerability and improving sustainability. Climate-sensitive development projects must consider social sensitivities, too. Thus, within this framework, attention should be given to managing social conflict and preventing violence.

1.2. Structure of the Report

The report includes the following chapters:

Chapter 2: Understanding Natural Resources, Conflict, and Violence outlines the concepts this study takes into account: contestation, conflict, violence, and mitigating mechanisms. The section further presents relevant theory on the causes, issues, and dynamics of natural resource conflict.

Chapter 3: Cases from the Field analyzes the project experience of six case studies. The case studies examine project design and operations, with particular emphasis on social, institutional, and organizational capacity to manage competition over natural resources.[3]

Chapter 4: Improving Conflict Sensitivity: Lessons from Experience synthesizes lessons from the case study analysis, presenting principles of practice and an interventions "tool box."

Chapter 5: Next Steps highlights areas where further inquiry could be useful for improving operations.

[2] The concept of "land, forest, and water resources" used in this paper assumes the inclusion of fish, wildlife, timber, and plant products as related renewable resources. While the paper does not specifically discuss all renewable resources that are covered in the literature—such as coral and air—the synthesis in Chapter 4 will still have some utility for practitioners working on those resource issues.

[3] It is important to define the difference between "institutions" and "organizations" as conceived in this study. Institutions are the "rules of the game" (i.e., they can be legislative, political, unwritten, formal or informal). Organizations are "the way societies organize within the institutional context to achieve their goals" (e.g., political parties, conservation organizations, and regulatory agencies). Institutions provide the context in which organizations work. The study is concerned with *what produces positive outcomes*, i.e., how the institutional environment and the way groups organize within that context can come together to confront challenges of collective action associated with environmental management, variability, and change.

2. Understanding Renewable Natural Resources, Conflict, and Violence

This section has the following objectives:

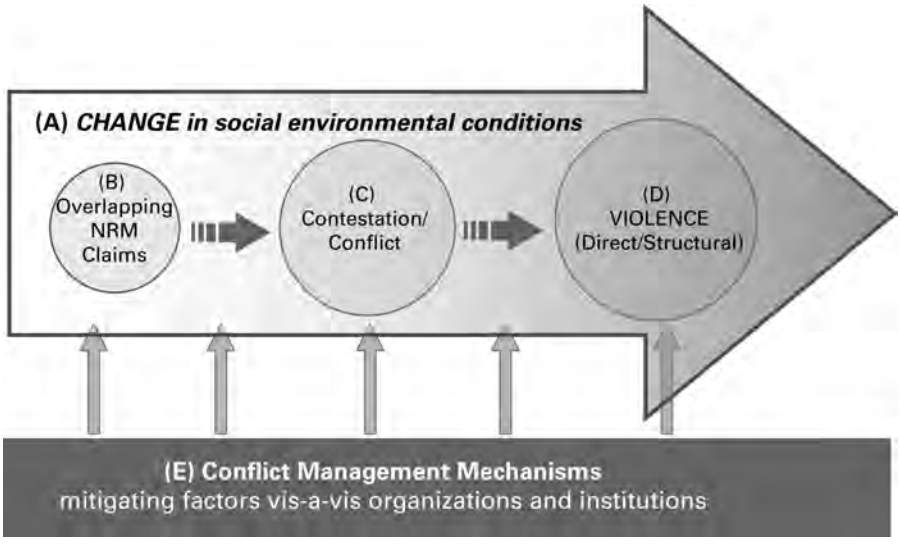
1. To provide an overview of renewable natural resources conflict structure and dynamics, and the factors at play in these contexts; and
2. To facilitate a broad framework of understanding, which practitioners can apply in their own work.

Below, figure 2.1 describes the basic components of renewable natural resource-based conflict and its mitigation. Overlapping claims on resources (B) can escalate to contestation and conflict (C). These are quite normal social phenomena, and with certain mechanisms in place these conditions can be managed constructively and nonviolently. Unmitigated, however, this trajectory can manifest violence (D).

The conflict trajectory (B-D) is the product of certain social and environmental conditions that change over time (A). Social and environmental changes can manifest a *perception of relative scarcity*, which is associated both with real resource changes and with relational disparities in access, and in turn contributes to conflict escalation. These changes can include: natural resources, other physical, relational and eco-economic changes (see table 2.1). As in all conflicts, the context impacts this trajectory. As contentious social interactions escalate into violence, and as natural resources become scarcer due to quantity and quality issues, further differentiation in access and social cleavages between user groups can deepen. Examples of these "second-order impacts" are outlined below. Insecurity associated with variability and changes in access to the resource and associated economic benefits can intensify competing claims. If unchecked, this can perpetuate a downward spiral of violence.

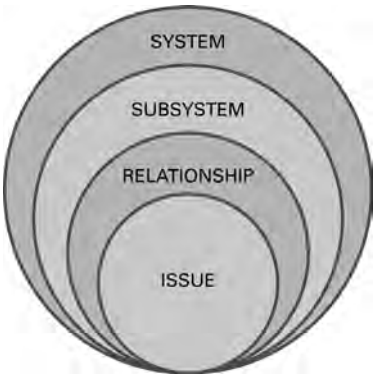
With certain mitigating factors in place, conflict situations can be managed constructively and nonviolently. Conflict management mechanisms (E) can mitigate the conflict trajectory by addressing social and economic conditions and by fostering organizational and institutional capacity to manage conflict risks over time.

Figure 2.1: RNR Conflict Manifestation and Mitigation Model



An understanding of the embedded nature of the conflict components above (A-D) is facilitated by utilizing Marie Dugan's "Nested Paradigm of Conflict Foci" (figure 2.2). This model suggests that conflict issues are embedded within and reinforced by larger systems of social relationships. For example, a group may claim limited access to forest resources (issue) in relation to a more powerful group (relationship) that has greater presence at the national government level (sub-system), which is due in part to regional politics (system). Case analysis of the Andhra Pradesh Community Forest Management Project (Section 3.1) directly applies this framework in order to understand the conflict's components.

Figure 2.2: The Nested Paradigm of Conflict Foci



Sources: Dugan 1996; Lederach 1997.

The Nested Paradigm suggests that conflict issues (micro) are affected by their position within a system, but that in turn they can also "trickle up" and contribute to change at the systemic level (macro). Therefore, *natural resource-related conflict is not strictly about the resources themselves*, per se. These conflicts are rooted in the relative value that is placed on the resources. "Value" incorporates not only the monetary worth of the resource, but also "importance" within a social, cultural, political, and economic context. In practice, conflict-sensitive approaches to RNR take into consideration macro and micro level dynamics, and the relationship between them.

2.1. Causal and Escalatory Factors of Renewable Natural Resource Conflict

The section below has two objectives:

1. To explore factors at play in the RNR-conflict context (Components A-D) so as to support a broad understanding of these types of conflicts, particularly for non-specialists on this topic; and
2. To provide several factors for analysis, the application of which are demonstrated in Chapter 3.

Understanding a conflict context requires a holistic perspective of the relationships between social and environmental conditions. Political economy, and specifically ***systems of access and power***, are key components of resource contestation. The Food and Agriculture Organization cites four political economy factors that can influence resource access:

1. scarcity of a natural resource;
2. the extent to which the supply is shared by two or more groups;
3. the relative power of those groups; or
4. the degree of dependence on this particular resource, or the ease of access to alternative sources (Korf 2005, 22).

Party narratives concerned with renewable natural resources define systems of power and access. These can be clustered into four issue categories:

- **Ownership:** Who *possesses* the resource, and what rights does that bring?
- **Consumption:** How should the resource be *used*?
- **Distribution:** Who *has* access to the resource and who *does not*?
- **Governance:** Who has the *power* to make decisions about the resource with regard to ownership, consumption, and distribution?

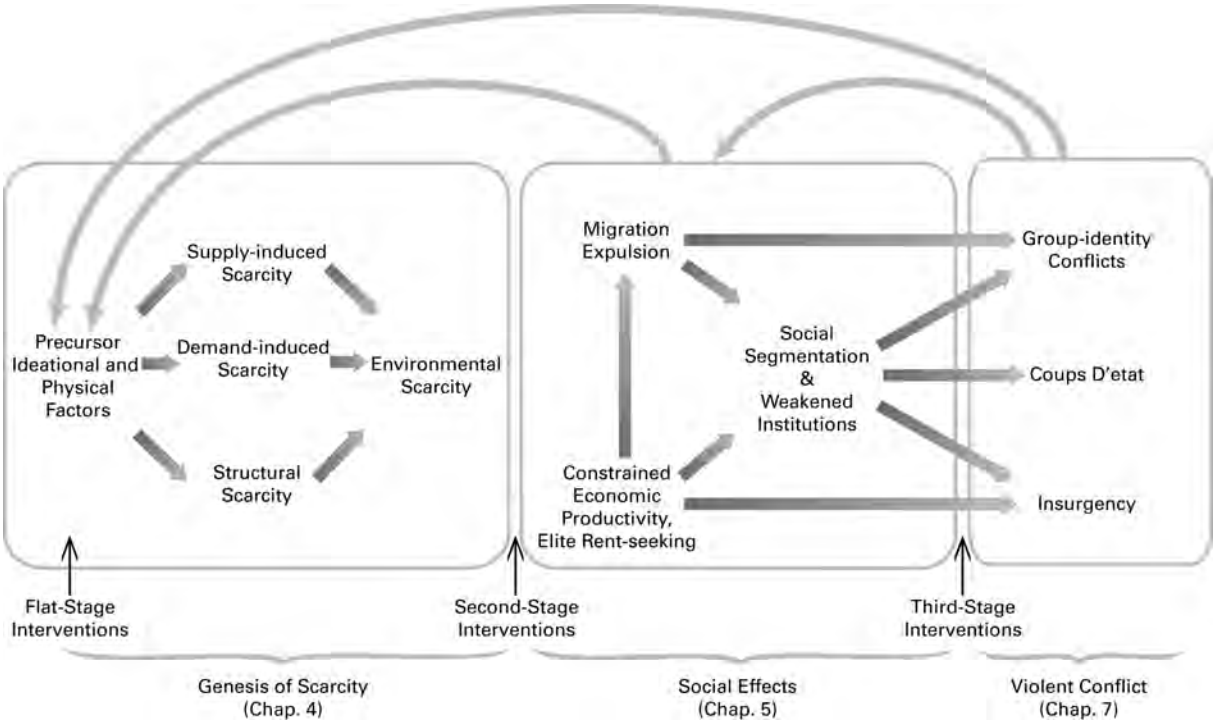
Useful theoretical frameworks describing the links between social and environmental factors incorporate a political economy perspective in which relative resource scarcity (or, on the other side of the coin, abundance) is one driving component that impacts social, economic, and political functions.

Environmental scarcity is a causal or escalatory factor of conflict, and according to Thomas Homer-Dixon is perpetuated by three sub-forms of socially constructed scarcity. These conceptions presume that social and environmental conditions combine to generate scarcity. Scarcity is a social construction of physical conditions. The three sub-forms include:

1. supply-induced scarcity (supply decreases indicate demand cannot be met);
2. demand-induced scarcity (demand increases and cannot be met by existing supply); and
3. structural scarcity (inequities in distribution create relative scarcity) (Homer-Dixon 1999, 14-16).

The social effects of environmental scarcity are demographic (population movements) and economic (constrained productivity and rent-seeking), which in turn can contribute to social segmentation and the weakening of institutions. These social effects, he argues, can lead to violence in the form of (a) localized and politicized group-identity conflicts; (b) coups d'etat; and (c) insurgency.

Figure 2.3: Homer-Dixon's "Core Model of the Causal Links between Environmental Scarcity and Violence"



Source: Homer-Dixon 1999, 134.

Homer-Dixon's model is a useful starting point for understanding the interplay between social, political economy, and environmental factors that can contribute to renewable resource conflict. However, his models have also drawn ample criticism, as many argue they give too much weight to environmental factors in the causal chain of conflict. Homer-Dixon's model is most useful when considered as a web of factors that can contribute to conflict escalation rather than as a social theory that attempts to explain all conflicts. This model also benefits from deeper exploration of: (1) *opportunity and incentives,* which contribute to certain behaviors and increase socially and economically constructed scarcities (e.g., Collier et al. 2003; Collier and Hoeffler 2002; Kahl 2006); and (2) a broader paradigm of the co-production of socioecological conditions (e.g., Forsyth 2003; Peluso and Watts 2001; Galtung 1969).

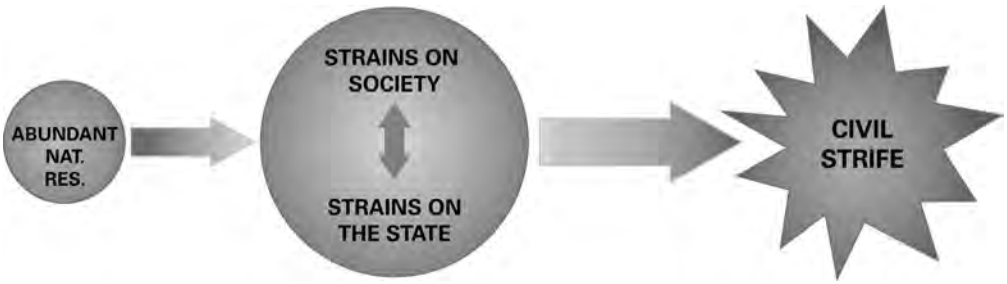
The diagrams below describe four causal pathways to violence associated with natural resources: Kahl's theories of (i) scarcity-driven conflict and (ii) abundance-driven conflict. According to Kahl, weak interethnic relations and poor governance and fragility are key factors in the manifestation of violence vis-a-vis "environmental stress" (relative scarcity or abundance) (Kahl 2006). These circumstances incentivize elite capture and exploitation. Relative deprivation, frustration, and group identity mobilize groups to consequently engage in violence.

Scarcity-driven conflicts are more likely to occur with diffuse renewable resources (e.g., water and land), as these resources are essential to the daily survival of millions living in rural parts of the developing world. The Scarcity-Driven Conflict model below describes two hypotheses:

- *State failure hypothesis*: perpetuated by "bottom-up" violence, structural opportunities, and security dilemma dynamics (e.g., severe environmental degradation that contributes to fragility, as in Yemen and the Sahel); and

- *State exploitation hypothesis*: perpetuated by "top-down" violence such as predatory leader dynamics (e.g., elite capture and control of benefits, including agricultural land, and smuggling of timber and wildlife by authorities) (Kahl 2006).

Figure 2.4: Kahl's Models of Scarcity-Driven Conflict

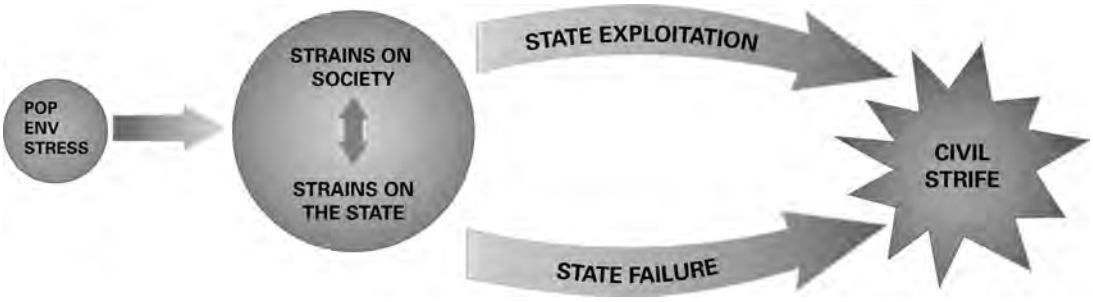


Source: Kahl 2007.

Abundance-driven conflicts are much more likely to occur in the context of non-renewable resources, as these resources are more valuable per unit of volume and tend to be concentrated. But while abundance-driven conflicts are most commonly associated with mineral resources, timber plays an important role in this dynamic. Kahl's model below describes two hypotheses:

- *Honey pot hypothesis*: Groups such as insurgents are encouraged to form and fight over abundant supplies of valuable natural resources (e.g., exotic timber in parts of Africa and Southeast Asia); and
- *Resource curse hypothesis*: Abundance produces "Dutch Disease" (de-industrialization or de-agriculturalization perpetuated by a resource-dependent economy) and corrupt, authoritarian rentier states that encourage rebellion (e.g., several oil economies are cited, potentially including Iran and Venezuela).

Figure 2.5: Kahl's Models of Abundance-Driven Conflict



Source: Kahl 2007.

While these four causal pathways are not universally applicable to *renewable* natural resources (e.g., Resource Curse Hypothesis), they are useful for envisioning some of the chain reactions that can be perpetuated by socioenvironmental conditions. Furthermore, scarcity and abundance occur relative to one another, and thus can both occur simultaneously at different levels of analysis. For example, locally abundant resources are only worth fighting over if they are globally scarce, particularly if they are "lootable." These models are not to assume that *all natural resources* cause conflict; these models simply do not describe mitigating factors, such as those that are discussed in Chapter 4.

A political ecology[4] perspective on natural resource conflict asserts the ***co-production of social-environmental dilemmas***, as in the structural perpetuation of social norms that undervalue natural resources and in turn contribute to environmental degradation. Political ecologists argue that poor environmental conditions embody and in turn foster physical and structural violence that can lead to further social conflict and physical violence.[5] For example, environmental exploitation is perpetuated as social fabric is weakened and a "prisoners' dilemma"[6] paradigm influences decision-making. Systems of power determine *which actions are allowed, and which are not.* If these systems of power are managing the resources unsustainably, this can lead to further environmental degradation and relative deprivation. Practically speaking, interventions stemming from this perspective need to promote the development of social norms that value the environment and its resources more highly, and to policies that mirror these norms and enforce supporting behaviors.

The models above point to numerous ***social and environmental changes*** that are part of a social-environmental context. These can perpetuate a *perception of relative scarcity* and contribute to conflict escalation (increasing violence and expanding the scope of issues and parties). These types of changes are extrapolated from the literature, and outlined in the table below:

Table 2.1: Social and Environmental Changes that Can Trigger and Escalate Conflict

Category	Type	Examples of change	Global trends
Renewable natural resource changes	Quality	Degradation, pollution and contamination, improvement	Climate change, increased seasonality (flood, drought), reduced biodiversity, pestilence and disease.
	Quantity	Overexploitation, depletion, growth	
	Temporal	Long-term changes in seasons—"too much" or "too little" at the "wrong" time	
	Variability	Unpredictability in natural patterns, e.g., as a consequence of climate change that makes long-term resource availability insecure	
Other physical changes	Demographic	Population size, location/proximity, density, and distribution	Urbanization, migration, refugee/IDP movements, overdevelopment.

[4] Forsyth explains political ecology in these basic terms: "Environmental science reflects social and political framings" (Forsyth 2003, 231). Environmental science and politics, in fact, are "co-produced"—or produced in tandem (Forsyth 2003, 266). Political ecology, in its analysis, examines the hidden costs and differential power that produces social and environmental consequences. Political ecology presumes power is discursive.

[5] Structural violence, as differentiated from direct physical violence, occurs when groups of individuals experience systematic lack of access to political, legal, economic, or cultural resources, which can have negative knock-on effects (e.g., disadvantage leading to death, illness, malnutrition, a cycle of poverty, or social marginalization). Structural or "horizontal" inequalities are not only problematic because they might be invisible (indirect violence), but they are also dangerous because they highlight the denial of basic human needs for survival, and may represent latent conflict that is at risk of erupting into direct physical violence. Structural violence can contribute over the long term to grievance, social instability, and fragility. The structural violence perspective emphasizes the importance of addressing violence as a physical criminal act. It defines horizontal inequalities as a social risk, which can contribute to direct violence but in themselves are also a form of indirect violence. Practically speaking, this perspective reinforces the need for pre-project analysis that considers the potential distributional impacts of potential interventions, and for broad and meaningful participation of different stakeholder groups in all phases of planning and implementation (Galtung 1969).

[6] Prisoner's dilemma, based in game theory, assumes that in certain circumstances individuals make decisions with the objective of minimizing negative impacts on themselves. The resulting system that is driven by personal interest or self gain is referred to as a "zero-sum game."

Category	Type	Examples of change	Global trends
	Infrastructure	Quantity/quality, usability and utility to meet community needs (e.g., war damaged or neglected), as related to management and access to resources	
Relational changes	Behavioral	Attitudes and behaviors that underpin intra- and inter-group relationships	Radicalized belief systems, sociopolitical and ideological division, growing income disparity, policy and institutional and implementation failure, militarization.
	Parties (individuals and groups)	New and expanded parties, changed group composition and social capital, leadership, objectives, levels of influence and capacity (formal and informal)	
	Institutions	Formal (changes in laws/rules that directly affect access, usage, ownership) or informal (changes in norms)	
	Power and influence	Power structures and positions, political economy, politicization	
	Conflict tactics	Methods for addressing dispute and dealing with rival groups	
Eco-economic changes	Value of and relationship to the resources	Social and economic values, resource demand and dependence, domestic and foreign market dynamics.	Modernization/traditionalism, industrialization, market and policy failure, economic and food crises.

As conflicts escalate, four categories of ***knock-on impacts*** can be anticipated, enlarging the scope of conflict and further perpetuating the risk of violence:

1. *Psycho-social (individual) impacts*: Perceptions of security change (personal safety, livelihoods and welfare); "relative deprivation"[7]; behavior is adjusted to meet "wants" and "needs".
2. *Social (intra-group, inter-group) impacts*: Social fabric strained; social cleavages emphasized and group identities reinforced; social norms and positions frame interests; benefits accessed and distributed inequitably.
3. *Political impacts*: Environmental norms, positions, and interests permeate the policy domain; environmental issues elevate from "low" to "high" politics; balance of power changes.
4. *Economic impacts*: Goods production, marketing, demand adjust based on shifts in behavioral norms and sociopolitical systems; market influence changes.

Understanding these potential impacts informs conflict-sensitive practices, helping practitioners to project forward, design preventatively, and implement proactively.

[7] Relative Deprivation Theory (RD) is a term used to describe the experience or perception of economic, political, or social deprivation that are relative rather than absolute. RD suggests that "people feel aggrieved insofar as they experience a discrepancy between what they have and what they expect to have" (Kriesberg 1998). RD refers to the dissatisfaction that develops when people compare their positions with those of others in perceived similar situations, and thus the development of a belief that they deserve more than what they have (Bayertz 1999). In his book, *Why Men Rebel*, Ted Robert Gurr defines RD "in psychosocial terms as a perceived discrepancy between one's value expectations and their value capabilities" (Gurr 1970, 319).

2.2. "Conflict Management" and Peacebuilding

"Conflict management," a term used throughout this paper, assumes a holistic approach to dealing with conflict, which includes multilevel capacity development, embodying the principles of peacebuilding and *provention*. Provention, as a theory of practice, targets underlying conflict factors and supports sustainable institutional (e.g., formal laws, social values, and perceptions of "rights" and "fairness and equality") and organizational (e.g., management bodies and stakeholder groups) change to promote conflict resolution and long-term prevention.[8] The principle of provention underpins all of the lessons identified in this paper. As such, the lessons drawn from the following cases emphasize *peacebuilding* through institutional and organizational change and development.

Much of the theory surrounding RNR conflict management mechanisms (E), as the review above implies, emphasizes the practical importance of taking a "systems approach" to *resource governance regimes*—considering the capacity, the relative authority of, and the interplay between *formal* (policy, rules, laws) and *informal* institutions (norms, values, incentives, opportunities) that characterize those structures. Fragility is both a cause and an effect of relative scarcity, and therefore holistic "capacity building" of governance mechanisms is a primary component of increasing stability and enabling peacebuilding. Conflict-sensitive approaches to development enable peacebuilding through two complementary components:

1. safeguarding against causation and/or escalation of conflict, and
2. capitalizing on opportunities for building capacity to constructively manage future conflicts, should they arise.

For example, in practice, Homer-Dixon's model indicates the potential of human ingenuity in addressing scarcity. This includes technological and social innovations to improve supply and manage demand equitably in the context of change. Homer-Dixon's model pinpoints three potential stages for intervention relevant to renewable natural resources.

- **First-stage** interventions might include educational initiatives and environmental policy measures to promote ingenuity and to prevent depletion, manage demand, and ensure equity.
- **Second-stage** initiatives might include governance measures to mitigate population movements, stem negative economic developments, and reduce incentives for elite capture.
- **Third-stage** initiatives might include security enforcement, institution building, and peacebuilding to prevent the onset of violence.

Conflict is not an inherently negative phenomenon, and becomes a social risk only when the context lacks necessary mitigating conditions to enable constructive approaches. Conflict can have positive manifestations: for example, rectifying power imbalances and social injustices, and prompting innovation for addressing modern problems and incentives to find long-term solutions. Development operations can capitalize on these opportunities. While violence begets violence, building institutional and organizational capacity for peaceful cooperation and benefit sharing also perpetuates productive relations, mutual development, and *peace*.

[8] John Burton uses the invented term "provention" to avoid the negative connotations of containment associated with the term "prevention." Provention is both theory and practice based on basic human needs theory, which implies that when one's basic human needs (i.e., physical and psychological needs) are not met there is potential for conflict (Burton 1990).

3. Cases from the Field

The following case studies have two objectives:

1. To demonstrate analytical approaches, conflict risk areas, and intervention options; and
2. To highlight case-specific lessons for conflict-sensitive development approaches.

The case studies briefly outline the experience of six different projects as follows:

1. Background
    a. Location and context (physical, historical, social, and economic)
    b. Project rationale and objectives
2. Conflict analysis and management
    a. Conflict characteristics: renewable natural resources, parties (user groups, management bodies, other beneficiaries), claims and relationships
    b. Social and environmental change factors that risk conflict escalation
    c. Conflict management mechanisms in project
3. Lessons for improving conflict sensitivity in RNR projects

Case study data was collected primarily from project documents and websites, as well as from interviews with staff and other stakeholders (see Annex 1 for the interview schedule template). Conflict analysis was conducted using a streamlined approach, reviewing contextual factors, RNR constraints, and party relations and dynamics. Lessons for conflict sensitivity were identified by modalities that facilitated peacebuilding and prevention.[9]

3.1 Case Study: Andhra Pradesh Community Forest Management Project (APCFM)

Andhra Pradesh (AP) is the fourth largest state in India by landmass, and fifth largest by population. AP has an estimated 63,821 km^2 of recorded forest, representing 8.3 percent of the national total and 23.2 percent of the total geographic area of AP itself. It is regarded as one of the major forestry states in India. Among all states it has the second largest area of recorded forest after Madhya Pradesh (94,689 km^2). Because of their scale, AP forests significantly contribute to reducing global warming through the absorption of CO^2.

Settlement of reserve forests is a controversial issue because of the wide powers granted to forest departments and the historical conflict it created over traditional land rights. Following the 1878 Forest Act, large-scale designation of reserve forests took place through the settlement process in many states. Informal systems of land rights and forest-use privileges that had existed for centuries between rural communities and the government were often rescinded. State appropriation of forest land often involved the dispossession of indigenous *adivasi* communities' ancestral land. This institution contributed to the development of grievances among poor and indigenous user groups, fostering animosities with state authorities such as the Forest Department (FD). Consequently, and due to perverse incentives within the Department, forest governance and policing has historically been fraught with problems. Most states in India have suffered deforestation, especially in the 1970s and 1980s. With the advent of new approaches to forest management, however, forest cover country-wide has increased. Making a complicated governance system even more difficult, Andhra Pradesh is politically sensitive as

[9] In Andhra Pradesh, additional perspective was gained through researcher participation in a project supervision mission, which allowed for interviews with project beneficiaries, NGOs, and government stakeholders. In Afghanistan, interviews were also conducted in Kabul with local experts and subcontracted project staff. Due to the security situation, however, site visits were not feasible.

it is located in the heart of the "Red Corridor" of South Asia, a political reference to a roughly contiguous area of left-wing movements which extend from Nepal to Sri Lanka.

The Andhra Pradesh Community Forest Management Project (APCFM) was launched in 2002 with the objective of reducing rural poverty through improved forest management with community participation. The project followed immediately on the heels of the Joint Forest Management Project, which had similar conservation objectives and had established a system of local forest management through groups called Vana Samrakshana Samiti (VSS), but which did not fully incorporate community planning and management and livelihoods development components. In the development of APCFM, these measures were considered critical to project risk mitigation and to improve sustainability. While project documents do not explicitly discuss the project as attempting "RNR conflict management," the theory of practice employed by the project team indicates that conflict sensitivity is at the forefront of their approach to the project.

The project outputs as defined in the Project Appraisal Document are: (1) strengthening of the legal, institutional and policy framework; (2) VSS assumption of forest management tasks; (3) improvement/rehabilitation of forest resources within VSS areas; (4) enhancement of NGO skills for working with VSS; and (5) identification and support to prioritized social and economic needs of VSS (World Bank 2002). The project incorporated resettlement and alternative livelihoods components that, underpinned by the development of participatory institutions, exemplify principles of conflict management. In attempting to establish a new management and conservation regime, APCFM included a Resettlement Action Plan (RAP), under the provisions of which indigenous groups whose livelihoods were affected by the project were provided financial compensation and technical assistance. The project was recently extended for a year and will close in March 2010.

3.1.1 RNR Conflict Analysis and Management

Although APCFM does not explicitly articulate an objective to address conflict, because of ongoing conflict between government authorities and various forest user groups, and the risk of further escalation of these conflicts due to social, economic, and environmental change, the project team observed a need to employ conflict-sensitive mechanisms in implementation. Though these are not specified as such in the project documents, the project inherently attempts to mitigate conflict in several ways:

- By facilitating and solidifying community management of forest resources, reducing conflict between community groups and the Forest Department, who have overlapping claims of authority over forest resources.
- By promoting sustainable forest management to reduce pressure on forest resources, which, when unchecked, increases competition between groups and encourages illicit activity.
- By generating forest-based and non-forest-based livelihoods opportunities, which encourage community members to participate in the formal economy and to resist crime and violence (such as that perpetuated by some Naxalite groups).

APCFM experiences different levels of conflict and risks of violence concerning multiple stakeholder groups. Central components of potential and existing conflicts are livelihoods, economic, and political benefits. Issues of equity and historical grievance generate resource rights and access narratives. While some groups manage these conflicts peacefully (e.g., through traditional mechanisms), others manifest physical and structural forms of violence. Conflict over rights and power is particularly longstanding between indigenous groups and government representatives.

The AP case demonstrates how issues are contextually nested (see Figure 2.2, Dugan's model).

Table 3.1 Nested Conflicts Addressed by AP Community Forest Management Project

Conflict system	Subsystem	Relationship and issues
Between AP government authorities and socio-political civilian groups	Forest Department and indigenous/tribal groups (shifting cultivators)	As the FD sought to police the forest per its mandate, normal and traditional rights to forest areas clashed. The traditional practice of shifting cultivation was illegal. Population growth (largely due to in-migration from other states experiencing environmental stress) and land degradation contributed to an increase in deforestation. The relationship between forest officers and tribal communities was so weak until the implementation of AP Joint Forest Management/Community Forest Management Projects that both parties recall tribal people "simply running away when a forest officer would enter a community."
	Forest Department and tribal nonbeneficiaries of Tribal Rights Act	Tribal Rights Restoration Act originally intended to rectify rights disputes with indigenous forest peoples. It caused additional conflict for those whose rights were not grandfathered under this law. Naxalite groups fostered and capitalized on this grievance of nonbeneficiaries, and encouraged further encroachment on forest areas. The legality of the Act is now being contested in the Indian Supreme Court.
	Forest Department, communities and illegal loggers	High-value timber such as teak is illegally logged in some areas. The activity involves a range of actors involved in powerful illicit business networks who profit from smuggling. Intimidation and monetary benefits incentivize FD and local civilian collusion. The FD has the authority to punish smuggling activity, but due to the perverse incentive system officers had a reputation of accepting bribes from smugglers until only recently.
Between political and economic interest groups	Between community groups and left-wing insurgents (Naxalites)	Some communities have experienced violence as a consequence of insurgent activity. Insurgents and police are locked in a long-term violent struggle steeped in a broader political conflict playing out on the national and international stage. Communities, sometimes sympathetic to Naxalites and sometimes intimidated by them, become a battleground for this ongoing struggle with the state. During the run-up to the national elections, the mood intensifies. The Naxalite struggle is ideological, but is perpetuated too by the need for financial resources. APCFM overall is "good politics" for the Naxalites to support, as it serves their ideological objectives by bringing power and benefits to the poor.
	Between neighboring communities	In a few cases there is dispute between communities about the resources that have been allocated to the different VSS. In mixed forests one VSS might have more teak in their territory, while another might have more bamboo. Income rates vary over time—the former generates more income over the long term, while the latter more over the short term. Some grievances between some VSS are festering.
Between community members	Between Common Interest Group (CIG) members and nonmembers, gender groups, castes, landed/landless	Given the level of transparency and participation in the project, and the oversight demonstrated by FD, NGOs, and the project team, inter-communal conflicts associated with the project are not a significant problem. Communities do risk increased contestation over distributional issues (income, resource rights, power), particularly if expectations are not met. Social change associated with new income generation can be expected to impact power relations and community roles.

Table 3.2 is used as a model below to categorize conflict risks (triggering and escalatory factors) and associated conflict management mechanisms in APCFM. A general risk assessment was conducted for the project, but a conflict assessment tool such as this was not utilized in the administration of the project. Pre-project conflict risks are retroactively identified for the APCFM project, and linked with conflict management measures inherent in project administration. The exercise illuminates gaps in planning and identifies risks that would benefit from future consideration. The factors discussed below illustrate potential for conflict escalation that could lead to violence if unaddressed.

Table 3.2 Conflict Risks and Management in AP Community Forest Management Project

Change	Type	Case conditions (triggering and escalatory factors)	Conflict management measures	Outcomes
Renewable natural resource changes	Quality	Forest and land degradation and decreasing agricultural and forest resource productivity increase tension and competition between groups.	Improved management, conservation and maintenance of inland and coastal forest areas by empowering decentralized and collaborative regime (VSS-FD management, maintenance, and conservation) through legal and participatory processes, including demarcation of governance areas, and granting VSS legal entitlement to timber and non-timber forest products. Implementation of Resettlement Action Plan to reduce encroachment and allow reforestation, and improve livelihoods (e.g., reducing vulnerability through different agricultural practices and diversifying income sources) with technical support and oversight from FD and NGOs. Development of satellite-based monitoring system will facilitate improved planning by using remote sensing technology.	Seasonal and climatic risks persist, but forest resources and measurements of forest cover continue to improve as encroachment is reduced. Some communities report greater environmental stability and livelihood security, allowing men to migrate less for employment.
	Quantity	Reduction of (i) per capita availability of forest resources largely due to encroachment, and (ii) land resources due to soil and coastal erosion, contributes to environmental stress and scarcity.		
	Temporal	Seasonally related scarcities due to overall temperature increases impact diet, food security, livelihoods and employment.		
	Variability	Variability of monsoon rains is linked to extreme weather events (flood and storm surge) causing environmental damage and risk, which reduces agricultural production. Impacts include migration for employment and environmental security.		
Other physical changes	Demographic	Population growth, partly natural, is also largely due to in-migration from northern states experiencing environmental stress and conflict.	Law enforcement against newly arriving groups encroaching on forest areas. VSS opportunities remain open to new membership (though CIGs do not). VSS and FD officers receive technical training (e.g., for digging trenches for groundwater recharge, small catchments for reserving water), and communities can reinvest income into community infrastructure. Communities piggy-back on benefits of the Rural Employment Guarantee Scheme, which includes development of local infrastructure using local human resources.	Communities describe more "crowding" in the context of population growth, yet improvements in agricultural productivity, adaptation to environmental changes, and satisfaction with some local infrastructure improvements, particularly hydrologic infrastructure improvements. Newly arriving aggrieved groups remain vulnerable to radical movements such as the Naxalites.
	Infrastructure	Local infrastructure is underdeveloped, especially in remote areas, and specifically for mitigating climate and environmental risks (e.g., hydrological infrastructure).		

Change	Type	Case conditions (triggering and escalatory factors)	Conflict management measures	Outcomes
Social changes	Behavioral	Naxalite movement continues to seek new members. Political division and violence intensifies during election periods.	Under a joint, decentralized management structure, empower and build capacity of VSS to protect the land area under their stewardship. Foster openness and inclusion of VSS members to enforce collective values against illegal logging. Increase and improve community livelihoods and village services. Improve relations between communities and FD officers to reinforce respect for the law and partnership in upholding it. Inclusive and participatory VSS structure (including Naxalite participation) preempts spoiler activity and reinforces the requirement of "playing by the rules" (i.e., not using direct violence as a means to gain), empowering communities and improving livelihoods through VSS, and providing funds for local community business and infrastructure development. Governance development includes joint learning and sensitization through workshops on conflict resolution, facilitation, and leadership.	Collaboration and tangible community benefits have strengthened the relationship between FD and communities. Some grievances between neighboring VSS with differentiated benefits are festering. Improved livelihoods have also supported local resistance to Naxalite movement and associated violence. APCFM overall is "good politics" for the Naxalites to support, as it serves their ideological objectives by bringing power and benefits to the poor. The Tribal Rights Restoration Act still awaits a ruling in the Supreme Court. Long-term conflict prevention is called into question with the issue of post-project institutional sustainability.
	Parties (individual and group)	Relationship between forest officers and local communities (especially tribals) was extremely weak. In a few cases there is variation in resources and income between neighboring VSS, leading to dispute.		
	Institutions and governance	The legacy of the 1878 Forest Act has caused historical conflict and grievance between the government and civilian groups. The Tribal Rights Restoration Act originally intended to rectify rights disputes with indigenous forest peoples, but caused additional conflict for those whose rights were not grandfathered under this law.		
	Power and influence	Formal and traditional rights to forest resources clashed as the FD exercised authority to police the forest while indigenous groups sought to conduct traditional (but illegal) practice of shifting cultivation. Powerful illicit business networks profit from timber smuggling; Intimidation and monetary benefits incentivize FD and local civilian collusion. Social change associated with new VSS income generation can be expected to impact power relations and community roles.		
	Conflict tactics	Insurgents and police are locked in a long-term violent struggle steeped in a broader political conflict playing out on the national and international stage. Naxalites capitalize on grievances, and encourage forest encroachment. Some communities experience violence as a consequence of insurgent activity, as Naxalites use it for intimidation and police use force in exercising rule of law.		

Change	Type	Case conditions (triggering and escalatory factors)	Conflict management measures	Outcomes
Eco-economic changes	Value of and relationship to the resources	Some resources are commoditized and become increasingly linked to livelihoods (increasing dependence). In turn, communities risk contestation over resources and their use. If production and distribution expectations are not met (impacting income, resource rights, power) disputes could escalate.	VSS livelihoods programs include technical support and oversight from FD, NGOs and IAG to ensure benefit sharing and support to dispute resolution. Livelihoods development is diverse, including "value adding" activities (e.g., processing bamboo to make incense sticks), non-resource-based activities (public transportation, vermicomposting), and services.	Some VSS communities express frustration in variation of allocated forest resources based on the value that they ascribe (e.g., bamboo vs. teak). Value changes on a larger scale have not been observed at this early stage.

3.1.2 Lessons

There are several mitigating mechanisms that contribute to constructive conflict management in the implementation of APCFM. Outlined below, some of these involve building organizational capacity, while others emphasize changing rules and procedures.

Improved RNR and knock-on livelihoods impacts can reduce violence and increase security in remote areas. Poverty and lack of opportunity is the fuel of many insurgency movements the world over. In AP, these conditions feed grievances and enable Naxalite groups to penetrate communities, bringing the risk of violence and intimidation to households that are otherwise unwilling to participate in the struggle. Mutually reinforcing improvement of renewable resources and livelihoods has proven to head off this trajectory towards insurgent violence. As a consequence, projects like APCFM have become known as viable conflict prevention mechanisms in India. The task team leader (TTL) recently reported: "I had a Minister in another state plead with me for an AP-style project because it would improve rural livelihoods in forest communities and reduce the influence of Naxalites."[10]

Community involvement fosters reinforcing norms of equity and inclusion, which prevents conflict in the longer term. Through the promotion of these values, historical grievances associated with eco-marginalization can be addressed, thus de-escalating and preventing further conflict.

Information about the resources, stakeholders, development and conservation efforts, decision-making processes, and finances were actively communicated and made readily available to literate and illiterate community members. Creating awareness about these contextual components helped to counter misperceptions and encourage dialogue, relationship building, and innovation at the local level. By valuing transparency and facilitating equal access to information, equal opportunity (to accrue benefits and participate in decision-making) was also promoted. In the case of the VSS, information on finances and production was publicly painted on a wall of a village building for all members to see. When project partners—such as the Forest Department, NGOs, and others—visited, documents showing the progress of each community and the benefits they received were presented and discussed publicly. In community fora, which were opened to project partners, questions could be openly asked and answered.

Meaningful participation, particularly in problem-solving and decision-making, reinforces self-esteem and a sense of empowerment. Such participation ensures the incorporation of local problems and concerns into policies and

[10] Grant Milne, email to author, 18 May 2009.

procedures that aim to address natural resource problems. In India the participation of women in VSS is mandated. While women's involvement of some VSS still appears to be symbolic, others have demonstrated that such required involvement can facilitate women's professional and intellectual development, raise the stature of women's concerns in decision-making processes, and create role models for younger women in the community.

Open opportunity to join and form VSS and associated sub-groups prevents conflicts with community members and develops over time an interest in the benefits created through the initiative. Exclusion of interested parties can generate grievances, causing conflict between beneficiary and non-beneficiary groups. Excluded parties may be determined to sabotage the means by which others are benefiting, and violence can erupt. Common Interest Groups (CIGs) are smaller sub-groups that have a stronger interest in forestry or have a common need (e.g., they may be landless). While the project stipulates that all community members must join the VSS, CIGs are more exclusive. Membership in these groups is less controlled by project rules. Open VSS membership ensures flexibility, accounting for change over time, including the transference of membership (e.g., generational) and population growth. Exclusive CIG groups would benefit from a similarly open policy.

Benefit accrual and distribution is a key incentive to maintaining procedures and community participation. The project is concerned with benefit sharing, including the distribution of RNR benefits, including monetary income, as a means of conflict prevention. Allowing community members to determine their own priorities in terms of distributing and reinvesting monetary benefits empowers VSS and their members. People who had seen some benefit from their involvement, such as improved livelihoods and other household-level impacts (paying off debts, improved affordability of school fees, and house improvements), were especially supportive of the project and its RNR goals, and in turn the inherent conflict-mitigating capacity of the project. Livelihood development opportunities need to be made equally available across the socioeconomic spectrum (e.g., landed and landless, those who rely on forest resources and those who do not). Equal opportunity and the promotion of equitable outcomes promotes sustainable environmental outcomes and prevents conflicts between beneficiary groups.

Conflict management is more efficient and effective in smaller CIG groups. Beneficiaries and forest officers suggested that homogeneity (e.g., in tribal communities) made conflict management easier, as social cleavages were virtually nonexistent and systems for conflict resolution were pre-established. These conclusions call two issues into question. First, if smaller and more homogeneous CIGs are established, and if the project were to be replicated or scaled up, then the social cleavages between different CIGs would have to be monitored and constructive relationships maintained in order to prevent intra-VSS conflict. Second, as livelihoods change and communities see more financial benefit, the social fabric of both the community and the VSS changes. Traditional conflict resolution mechanisms may have insufficient capacity (or lack of precedent) to deal with novel problems. Therefore, conflict resolution capacity monitoring and continued development would need to be maintained over the long term. Potential partners in this type of effort are typically NGOs. In AP, NGOs have been identified as a potential partner to take on this extended monitoring role. Feasibility of that engagement, however, is left in question after the project comes to a close.

Resettlement Action Plans, done well, are an inherent conflict-management tool. Many of the conflicts over forest management policies—those between the FD and constituents—were associated with perceived risks to livelihoods. The project addressed this core issue by supporting livelihoods at the VSS level. These efforts were most advanced in the *Resettlement Action Plan* (RAP). Therefore, the RAP in itself is a conflict-mitigation program. As noted above, however, increased development brings with it the risk of conflict over the division of newly perceived benefits. One external observer said, "The RAP is the best part of the whole project. If it were to

be done again, the whole project area should have a rigorous livelihoods component modeled after the RAP [which was implemented specifically in the tribal belt area in the northeastern area of the state]."[11]

Strategic organizational support can be targeted to fill gaps in conflict-management capacity. APCFM identified three areas of organizational support and development that promoted conflict-management capacity: creating an Independent Advisory Group; building local NGO capacity; and establishing grievance processes.

- ***Independent Advisory Group.*** An IAG was established to provide interdisciplinary perspective and oversight of RAP implementation, as described above. The IAG was considered so useful that its mandate could have been extended to provide implementation guidance to VSS outside the RAP implementation zone.
- ***Local Non-Governmental Organizations.*** Both the Project Implementation Unit (PIU) and external observers remarked that overall project implementation was most successful in areas where NGOs were available and worked closely with communities. Local NGOs play many important roles from which virtually all VSS can benefit. These include ensuring transparency in managing financing and in decision-making; maintaining inclusive processes; building technical and managerial capacity; managing community conflict; and so on. Implementing partners observed that communities would have benefited from longer-term investment in NGO development. This would be employed initially to support project implementation, but could then offer longer-term guidance and act as an ombudsman to prevent the development of new conflicts as a consequence of socioeconomic change.
- ***Grievance Mechanisms.*** The project established a grievance mechanism chain-of-command. The protocol extended from community structures (as in tribal areas particularly, traditional mechanisms are the first point of departure to address these issues) up to the highest level of the PIU. Transparency and inclusion also provide outlets for expressing grievances more informally, and on an as-needed basis. Because some rural communities utilize traditional mechanisms to deal with conflict (such as a committee of village elders), project mechanisms depended heavily on these existing institutions. As socioeconomic conditions change, though, these traditional mechanisms may prove to be inadequate, making the process for seeking a higher level of action potentially important. Partner NGOs can play an important role in helping to monitor this situation and provide conflict-mitigation support—or encourage training—as needed.

Targeted educational initiatives can promote intellectual growth and institutional development, promoting social principles of conflict management. Targeted trainings on conflict resolution, facilitation, leadership, and technical skill-building were provided to all stakeholders, including VSS groups, NGOs, FD, and so on. Conflict and sensitivity training for the FD helped to broaden the perspective of Forest Officers as they considered the interconnectedness between conservation, livelihoods, sustainable development, and cultural norms. However, some project stakeholders asserted that the administered training was "the right idea" but was not enough. Also, training with a simultaneous range of stakeholder participation (FD, NGOs, local leaders and community members) was considered by many parties as the most fruitful approach to education. Stakeholders shared a variety of perspectives, heard differing opinions, and emerged with a broader social perspective and new institutional alliances.

Community-driven interventions can have additional violence prevention knock-on effects. VSS members, FD, NGOs and local law enforcement all referenced the violence prevention potential of the project, observed vis-a-vis economic development and livelihood improvement. This point is particularly salient in the context of the

[11] Urmila Pingle, interview by author, 26 February 2009.

ongoing struggle between Naxalite insurgents and government authorities, where local young people referenced their resistance to violence as they saw greater benefit in being affiliated with APCFM. This finding deserves more exploration and analysis, as it represents a special opportunity for AP on a macro level over the longer term as demographic and climatic changes persist. The implications could also be important for future projects to consider when developing the violence prevention potential of relevant institutions.

3.2 Case Study: Afghanistan Building Capacity to Address Land Conflict and Vulnerability Pilot Project

Afghanistan is a fragile state in the midst of a violent conflict involving insurgent groups, porous borders, and weak governance, particularly with regard to linkages between the federal and local systems. A 30-year legacy of war in Afghanistan has fostered deep divisions between ethnic groups and severe land degradation in the absence of a regulatory system. It has created opportunity for warlords to profit socially and financially from a system of chaos. In the absence of a strong and legitimate overarching system of governance, traditional power and conflict resolution mechanisms have been maintained. Cycles of violence propagate long-term perceptions of political, social, and environmental insecurity. Family units focus on protecting their livelihoods, and sometimes, violent means are used to manage disputes. As conflict escalates throughout the region, Afghans are leaving Pakistan and Iran and returning to their homes in Afghanistan. But when they arrive they often find that during decades of absence, others have claimed ownership or usage rights to their land. Disputes over land have emerged as one of the most complex and urgent challenges Afghanistan now faces. With an estimated 80 percent of the population living in rural areas, access to land is often the most critical aspect of livelihood security. Over time, these dynamics have served as a destabilizing force across the country, creating incredible challenges for stakeholders—both national and international—who are attempting to build a sustainable and unified Afghan state.

With land conflict identified as a significant barrier to security and development in the country, the Afghan Ministry of Agriculture, Irrigation and Livestock (MAIL) Department of *Amlak* ("Land Office"), in partnership with the World Bank Afghanistan Country Management Unit, initiated the Afghanistan Building Capacity to Address Land Conflict and Vulnerability in 2006. In contrast to the APCFM case, the explicit overarching objective of this project, as conveyed in its title, was to *build capacity* to manage and prevent land conflict. The NGO Norwegian Refugee Council (NRC), along with an independent research organization, Afghanistan Research and Evaluation Unit (AREU), were identified as implementing partners. The project was implemented between Spring 2007 and Spring 2009 and included a one-year extension.

The project, financed by the World Bank Country Management Unit, had the immediate objective of identifying and resolving five pilot case conflicts. Its long-term objective was to prevent violence by improving federal government capacity through knowledge, policy, and organizational development.
The five project objectives included:

1. To select pilot cases for study, and through them design, trial, and refine a range of land conflict resolution methodologies that can be implemented at community provincial or national levels and are replicable in other parts of Afghanistan.
2. To develop a typology of land conflicts in Afghanistan based on NRC data from their Integrated Legal Aid Centres (ILACs). The goal was to better understand the types, prevalence, and characteristics of land conflict in Afghanistan.
3. To support the development and implementation of Afghan government land law and policy by contributing to the development of effective strategies for land conflict prevention and resolution.

4. To build the capacity of the MAIL's *Amlak* department and of other relevant stakeholders through the implementation of the project and training workshops.
5. To advocate lessons learned from the project, principally for the Afghan government but also for NGOs and other organizations active in land management (Deschamps and Roe 2009).

3.2.1 RNR Conflict Analysis and Management

The conflict identification and resolution piloting component of the project included a desk review that resulted in an Afghan Land Conflict typology of five primary categories of rural land-related disputes:

1. Disputes involving the illegal occupation of land by powerful people;
2. Disputes involving inheritance rights to private property;
3. Disputes involving the return of people;
4. Disputes between villagers involving private property (not involving returnees, refugees or internally displaced persons (IDPs)); and
5. Disputes involving common property resources (including rights to graze pasture, collect firewood, collect food, access irrigation water allocations, and more) (for more detail see Deschamps and Roe 2009, 7).

To aim dispute resolution mechanisms toward the most relevant areas of land conflict, five active conflict cases were identified. These represent experience in each of the categories described above:

- "A land appropriation dispute between two private parties (farmers with families) over 20 *jeribs* of irrigated land in Kunduz Province. Originally brought before the government court system (GCS) and decided in favor of the plaintiff, the dispute was ultimately reevaluated and a decision implemented through a [community-based mechanism] CBM (a jirga) because the institution is viewed locally as more legitimate.
- An inheritance dispute between a female claimant and two of her brothers over 6.9 *jeribs* of irrigated land and a shop in Herat Province. The case was decided using a community-based mechanism (a shura), with legal support to the plaintiff, a female, and the shura with regard to civil rights and the proper application of Sharia law.
- A group displacement dispute in Baghlan Province between communities of different ethnicities (Ismaili and Pashtun) over 630 jeribs of rain-fed land suitable for irrigation and with family dwellings in Baghlan Province. The land is currently little-used due to the conflict. Resolution through CBM and GCS were pursued but failed, probably due to the scope and complexity of the case which may ultimately require reparations for the displaced group. National level political advocacy ongoing.
- A dispute over canal-water allocation for irrigation between two village groups of different ethnicity in Parwan Province. The disputants found common ground on a water sharing agreement with enforcement guarantees through a CBM. The resolution was coupled with a locally-based investment to rehabilitate the canal (financing obtained through another project).
- A pasture access dispute between settled villagers and transhumant pastoralists over approximately 2,000 jeribs of pastureland, which is increasingly being cultivated by the villagers, in Panjshir Province. Traditional CBM measures seem to be adequate for resolving such disputes and continue to be employed." (Deschamps and Roe 2009, 3-4)[12]

The second component of the project was to build dispute-resolution capacity. The pilot cases demonstrate methods for near-term conflict resolution, with agreements reached in three of five by Spring 2009 when the

[12] Detailed information on each of the pilot cases can be found in the final report, which is downloadable at www.areu.org.af.

project concluded. Capacity building to support these long-term goals was envisioned through organizational and policy development.

Several types of Afghan organizations were engaged in this endeavor. *Amlak* was determined to be the primary party to oversee a stable, long-term conflict resolution system to deal with land conflict country-wide. Secondarily, local government and customary institutions were engaged in piloting efforts to establish conflict sensitivity and analytical skills and a repertoire of land conflict resolution mechanisms. At this local level, *shura* and *jurga* were consistently engaged as community-based (or "customary") mechanisms for conflict resolution.[13] The GCS was also engaged in some pilot cases, but organizational and policy development efforts did not specifically target the judiciary.

Risk factors, conflict management measures and outcomes are outlined in table 3.3.

Table 3.3 Conflict Risks and Management in Afghanistan Land Conflict and Vulnerability Pilot Project

Change	Type	Case conditions (triggering and escalatory factors)	Conflict management measures	Outcomes
Renewable natural resource changes	Quality	Land degradation and decreasing productivity (e.g., for grazing fodder) leads to relative scarcity.	Inform stakeholders of the different types of land-conflict in Afghanistan through the development and dissemination of typology of land conflicts and lessons from project experience, via project papers circulated through AREU website and NRC workshops. Secondly, build capacity to *manage conflicts* in the five typology categories (outlined above). Design, trial and refine a range of replicable land-conflict resolution methodologies. There were no provisions—nor the intention—to directly address the physicalities and broader management issues of land resource problems.	Rate of receipt or application of this knowledge is not known. The project ultimately focused the majority of internal resources on near-term *conflict resolution* (mediation) for the five pilot cases. Three of the five pilot cases have been resolved, while the other two are still pending. Poor coordination between the partners meant less time was spent building local capacity to deal with future conflicts, and to developing replicable conflict resolution models. There were no direct outcomes associated with improvements to natural resources.
	Quantity	Reduction of per capita availability of land and land resources, and increasing use of land for agriculture contributes to competition between agriculturalists and herders.		
	Temporal	Seasonally related agricultural patterns and fodder (naturally growing vegetation) availability contributes to cycle of conflict.		
	Variability	Increasing desertification contributes to socio-environmental insecurity. Rainfall variability, frequent drought, and reduction of productive land concentrates communities, crop and livestock production, and therefore more intense competition between neighbors.		

[13] *Shura* and *jurga* are local terms for a "local council of representatives," an institution of authority based on heritage and tradition.

Change	Type	Case conditions (triggering and escalatory factors)	Conflict management measures	Outcomes
Other physical changes	Demographic	Natural population growth and refugee return increases competition and intensifies disputes over land rights.	The project sought to mitigate risks and prevent conflict escalation through building capacity of conflict management processes. Additional financial resources were accessed in one pilot case through the National Solidarity Program (NSP), where funds were allocated to rehabilitate an irrigation canal to support a resolution to a water allocation dispute.	Demographic change is a persistent problem with regard to legal rights, particularly of refugees. The pilot case that deals with returnee rights has yet to be resolved. Collaboration with NSP illustrates opportunity in coupling resolutions with infrastructure development schemes, as in the water allocation dispute.
	Infrastructure	War damage, extreme seasonal conditions, and neglect contribute to poor condition of infrastructure (e.g., damaged irrigation canals lead to decreased access to irrigation water).		
Social changes	Parties (individuals and groups)	Fragility, poor governance, competition, and scarcity foster chaos, animosity, and social division, sometimes reifying group identities (e.g., between Kuchi pastoralists and Hazara farmers, resident communities and returnees, men and women).	Build capacity of *Amlak* to oversee and facilitate resolution of land conflicts from federal to local level through project implementation experience, training workshops, and revised federal land law. Build capacity at CBM and GCS level to sustainably resolve conflicts, through project implementation experience, mediation support, and training workshops. Inform policy makers (in MAIL) of effective strategies for land-conflict prevention and resolution, including development and implementation of MAIL land law and policy.	*Amlak* was engaged from the start of the project, but was not consulted or involved in all components of the project. Meaningful participation of *Amlak* took root only at the end of the project. The project was successful in generating a plethora of knowledge for consideration in development of a conflict-sensitive land law, and though land law was revised by government, project knowledge and staff were not incorporated in its development process. Overall the project had limited impact on *Amlak* capacity.
	Institutions	Weak governance of land resources, including linkages between formal (government) and traditional decision-making/conflict resolution mechanisms. Traditional rule prevails in some areas, sometimes under the banner of *sharia* law, yet manifestations of this rule are not always consistent with Islamic teachings. The system is further destabilized by ongoing multilevel change in the midst of a violent war.		
	Power and influence	Traditional and tribal-based conceptions of authority concentrate power and control over land among the male elite, particularly "war lords" and "war profiteers".		

Change	Type	Case conditions (triggering and escalatory factors)	Conflict management measures	Outcomes
	Conflict tactics	Pastoralist and farming groups become more militant and violent toward one another, continuing to escalate tensions.		
Eco-economic changes	Value and relationship to the resources	Usage and usage rights shift with needs and population growth. Abandoned land is taken over by residents.	Shared usage rights are emphasized in pilot case mediations. Restitution for returnees was one proposed component of the Baghlan pilot case mediation.	Continuing fragility and violent conflict in some parts of the country is a destabilizing force for "shared usage rights" regimes.

3.2.2 Lessons

The pilot cases demonstrate methods for near-term conflict resolution. Agreements were reached in three of five cases by the time the project concluded. But what are the broader lessons for sustainability and long-term management and prevention of RNR conflicts, and particularly of those related to these types of land issues? Some of these conclusions are summarized below.

Knowledge development and dissemination sensitizes parties to conflict issues and creates new opportunities for change. Knowledge products, such as publications and databases, are only useful to those to who know of them and who have access to them—be it through trainings and workshops, community meetings, community billboards, the media or the Internet. Project staff recognized that different dissemination practices are appropriate for different contexts. The project learned that training and other knowledge dissemination efforts were useful in identifying and supporting "champions for change" who supported land conflict resolution and prevention. These workshops were always conducted in Kabul, however, and the implementing partners agreed that these need to be brought to the local level in order to broaden participation and to recognize and value contextual experience across the country.

Conflict management systems can be improved through principled decision-making processes.

Foster participation and ensure representation. The involvement of respected and fair community leaders helped to guarantee that disputants' interests are considered and protected. Neutral third-party participation in mediation sessions increased efficiency, accountability, and transparency. Finally, participation ensured transparency and oversight, and promoted awareness among disputants of their rights. The project learned that: "Working with disputants to understand their desired outcome helps focus the selection and course of the resolution mechanism and increases disputant buy-in. Similarly, explaining the possible outcomes helps keep expectations realistic… [Furthermore,] allowing disputants to express their concerns to a neutral third party without decision making power to facilitate dialogue between the disputants and those involved in resolution." The final report also recognizes that: "Mediated agreements may require some form of incentive to draw the parties into the negotiation." (Deschamps and Roe 2009, xiv)

Balance formal and customary dispute resolution. Clear indicators should be identified to determine whether a land dispute may be more appropriately resolved through the GCS, a CBM, or political advocacy. These decisions should be based on an assessment of the capacity of the organizations involved in these different intervention approaches to execute judgments, their perceived legitimacy of different options, and linkages with decision

enforcement mechanisms. Regardless of the mechanism used, the project found it most constructive to emphasize "shared 'rights of use' rather than 'ownership' of common property" (Deschamps and Roe 2009, 31) throughout the decision-making process.

Allow procedural flexibility. The Project Final Report states: "Some disputes may not be resolvable through existing GCS or CBM methods and so require an ad hoc approach which may include administrative action, executive attention and/or political advocacy up to the national level…The approach taken to dispute resolution must remain adaptive and flexible to setbacks and changes. As circumstances or stakeholders change it may be advantageous to switch dispute resolution approaches completely." (Deschamps and Roe 2009, xiv)

Establish legitimacy of procedures and decisions. This is achieved in part by stakeholder participation, which builds ownership and supports the legitimation of processes and outcomes. When rule of law is weak, enforcing decisions can be particularly difficult. Therefore, some form of official endorsement to guarantee an agreement can promote legitimacy. Forging links between local (particularly customary) and federal authorities provides additional support, and also creates the opportunity to build a more coherent governance structure.

Formal judicial systems are important to land conflict resolution structures, and thus also may require capacity development. Even though CBM were the preferred adjudication mechanism in most of these disputes, the GCS was still involved at different stages in different cases. The Afghan judicial system is weak, and thus during project implementation administrative procedures required support and development. Briefing officials on applicable civil, *sharia,* and common law facilitated accurate implementation. Preparation, advocacy and oversight were seen as "essential to increase the performance of the GCS." (Deschamps and Roe 2009, 30). However, this type of support was provided primarily by NRC, and for sustainability would require the development of permanent institutions. These same areas of support were also perceived to help "build internal capacity and improve the effectiveness of community-based adjudication mechanisms" (Deschamps and Roe 2009, xiv) related to land resources and beyond.

Local-federal and formal-customary linkages facilitate interorganizational cooperation in upholding resolutions and promoting prevention. Local-federal linkages were not fostered to the extent possible, indicating a missed opportunity for establishing mechanisms for sustainable land conflict resolution. Closer partnership with *Amlak* staff throughout the project could have helped address issues of establishing internal incentives to engage with customary systems. The Project Final Report articulated three lessons in this area: (i) central government support is needed for successful local resolution; (ii) supporting both village-level institutions and local government is essential for achieving lasting conflict resolution; and (iii) fostering collaboration between NGOs, civil society organizations, and government agencies fosters efficiency and ownership and improves governance (Deschamps and Roe 2009, 31). An example of the value of these types of linkages is illustrated when CBM agreements are registered with the MAIL, usually via the GCS. This was promoted by the project whenever possible, as it was perceived to increase legitimacy of the agreement. It also improved enforcement and precluded future claim on the same issues. Furthermore, these linkages support long-term decision enforcement and state-building.

Project teams should be interdisciplinary and flexible, but they also require leadership that facilitates a truly integrated approach. NRC was selected for its practical experience in providing legal support and facilitating dispute resolution, particularly involving refugee and returnee groups. AREU was selected for its expertise in providing policy guidance in the Afghan context. The architects of the project envisioned that the different skill sets were complementary and would be a dynamic combination in tackling the project's objectives. And yet, a conflict in expectations was realized between NRC and AREU, to which many attributed the slowdown in

implementation and the need for a one-year extension. The decentralized nature of the project implementation process allowed these two partners to pursue their objectives and the tasks designated to them. While a vision for how their work should be integrated did exist, leadership and influence to implement this vision was weak. Ideally *Amlak* would have played this integrative role, but it had limited involvement as leader of the project once it was initiated. The World Bank team could have exercised some of its influence in order to bring the components more closely together.

3.3 Case Study: Second National Fadama Development Project, Nigeria

The Second National Fadama Development Project (NFDP2) was launched in 2004, five years after the conclusion of the first National Fadama Development Project (1993-1999). The first National Fadama Development Project (NFDP1) was judged "successful" upon completion with regard to agricultural development goals, but it focused mainly on crop producers—a situation that contributed to increased conflict between the users of fadama resources. It was therefore realized that this increase in social conflict and violence in the beneficiary communities shortly after project implementation could have been related to policies neglecting the interests of some user groups—particularly pastoralists. Fadama (the Hausa name for a watershed landscape meaning "floodplain" or "irrigable lands") support a range of user groups and livelihoods, including farmers, fishers, pastoralists, hunters, gatherers, and various service providers. Reflection on this project experience generated lessons for how to improve project conflict sensitivity in NFDP2. Further lessons have been generated through the NFDP2 experience, informing the design of the recently launched the Third National Fadama Development Project NFDP3 (2008).

NFDP2 fadama user beneficiaries include crop and livestock farmers, pastoralists, fishers, hunters, and gatherers. In this way, the project addresses various components of the rural economy, including the agricultural sector which contributes over 40 percent to Nigeria's GDP. The project applies a community-driven development (CDD) model that is implemented in 12 states of the federation and covers most of the northern as well as the western and eastern parts of the country, including the Federal Capital Territory. NFDP2 addresses conflict mitigation explicitly, stating: "The objective is to increase the incomes of fadama users, who depend on fadama resources, by empowering communities and reducing conflict between fadama users." (World Bank 2007a, 3). Now nearing completion, NFDP2 reports: "Conflicts between resource users have been totally eliminated (100 percent) in the project areas, against a 50 percent targeted reduction, through successful implementation of socially inclusive and participatory approach to local development and planning by the communities." (World Bank 2008a, 4)

3.3.1 RNR Conflict Analysis and Management

Environmental characteristics of fadama, such as seasonal scarcity, can have knock-on livelihood and other social impacts. Social division and competition between user groups over the natural resources on which their livelihoods depend can escalate as environmental conditions and insecurity worsens. Yet while there is an inherent risk of conflict in the fadama region, which manifested violence as a partial consequence of NFDP1, there are also opportunities to facilitate benefit sharing and foster sustainable and equitable development by using local knowledge of the environment as a launching point.

Over the course of the twentieth century, population growth and development have put increased pressure on the natural resources in the region. Fadama land, which is seasonally covered by grasses used for grazing, became increasingly used for food production. This was significant, as farming had historically been uncommon in the area (Ajuwon 2004, 1). This tendency was also perpetuated as a result of increased land fertility due to animal

droppings. "Normal" competition risked violent flare-ups under dry conditions as agriculturalists and pastoralists feuded over land resources.

After reflecting on the experience of NFDP1, the NFDP2 project team aimed to incorporate a more explicit conflict-sensitive framework into design and implementation plans. They had observed that the region had experienced an increase in violence between user groups, including rising rates of assault and murder, robbery, and damage to property. The project team identified these clashes as an area of grave social risk for both the upcoming project and the development of beneficiary communities it intended to target. A social and environmental assessment, along with a targeted conflict analysis, were conducted in preparation for NFDP2 (Ajuwon 2004). Conflict expertise was tapped to provide technical guidance and support in order to integrate the analytical findings into the project structure and conflict-sensitive procedures.

Pre-project analysis documented community experience with regard to conflict and violence. The findings outlined three categories of user group conflicts, and several subcategories (Ajuwon 2004, 1-2):

1. Conflict within communities over access rights
    a. Fisher-fisher (over fishing techniques, stealing)
    b. Herder-herder (over grazing land, particularly when the dry season is severe)
2. Conflict between communities over access rights
    a. Farmer-pastoralist (cattle grazing on crops and crop remnants without permission, crop fields block passage of herds and are trampled)
    b. Fisher-pastoralist (fisherfolk block river crossing points for herds with nets, and fishing gear is damaged or destroyed)
    c. Pastoralist-migrant gatherers (pastoralists collect vegetation typically collected by migrant gathers and use it to feed animals)
3. Conflict between community (groups, individuals) and authority
    a. Farmer-authority (over water resources as each diverts water for its own purpose)
    b. Resource user groups (within national park areas) and authority
        i. Gathers collect fuel (potash, wood)
        ii. Hunters poach birds and animals
        iii. Fishermen catch fish
        iv. Pastoralists allow their animals to graze

The analysis found that conflict *between farmers and pastoralists* is by far the most common and significant type of conflict. Competition is most intense where population density is higher, though the nature and outcomes of these conflicts vary from state-to-state due to spatial, economic, and social variation.

The analysis revealed that some communities have experienced conflict escalation between different user groups for as long as 50 years. It also showed, however, that a confluence of relatively recent events was triggering the onset of additional social stress (e.g., recent in-migration, militarization, and drought). In this context, a sense of economic, environmental, and social insecurity prevailed, as various fadama users perceived a "prisoner's dilemma" in a socially hostile and increasingly competitive environment. A rights discourse over common property resources took root in some locations. This resulted in purposeful and systematic violence and destruction, including assault and murder, destruction of infrastructure such as irrigation canals, burning of settlements, damage to farm produce, trampling and sabotage of crops, retribution—and ultimately, land degradation.

The development objective of NFDP2 is to increase the incomes of those who depend directly or indirectly on fadama resources by "empowering communities to take charge of their own development agenda and by reducing conflict between Fadama resource users." (Projects Coordinating Unit, 1). Project rationale and design implies a causal feedback loop in livelihood development and conflict management, meaning in sum that equitable development can be a tool for conflict management.

Table 3.4 analyzes some of the changes that contributed to conflict escalation, and conflict management:

Table 3.4 Conflict Risks and Management in Second National Fadama Development Project

Change	Type	Case experience	Conflict management measures	Outcomes
Renewable natural resource changes	Quality	Long-term land degradation and decreasing productivity for grazing fodder contributes to environmental-social stress.	Build technical capacity of user groups to facilitate technical innovation and to fill key knowledge gaps about sustainable resource management. Incorporate environmental mitigation plans into all community investment projects.	More sustainable land and resource practices are being demonstrated by communities. Farmers are aware of and now invest in income-enhancing sustainable land management activities.
	Quantity	Relative reduction of per capita availability of land and water resources, particularly reduction in watering holes and increasing use of land for agriculture contributes to competition.		
	Temporal	Seasonally related water stress contributes to cycle of conflict.		
	Variability	Increasing desertification in Sahel contributing to socioenvironmental insecurity. Rainfall variability and increasing drought has reduced river flow and productivity in flood plains, thus "concentrating crop and livestock production" in a smaller area (Ajuwon 2004, 5).		
Other physical changes	Demographic	Natural population growth, partly due to development, has increased over time. Crisis in Chad contributes to in-migration to Nigeria (of militant groups).	Community-based organizations (fadama community associations) determine investment needs and develop local development plans. Preference given to micro-investments that encourage conflict prevention and resolution. Illegal activity addressed through building capacity of governance regime (described below).	Destruction of community infrastructure has been reduced and more cattle farmers settle near project supported grazing reserve, watering points etc.
	Infrastructure	Violence has impacted condition of infrastructure, for example, systematic destruction of tubewells and washbores by migrating pastoralists (sabotage water access, demonstration of grievance).		

Change	Type	Case experience	Conflict management measures	Outcomes
Social changes	Behavioral	Unsustainable resource management practices are underpinned by traditional attitudes and norms.	Multi-layered CDD-style approach promotes transparency, participation, social inclusion, empowerment, and community needs assessment and decision-making. Incentivize participation by requiring formalized participation to receive financial benefits. Preference given to micro-investments that encourage conflict prevention and resolution. From the process evolves sensitization to the process, legitimacy, trust, and norms and values that encourage cooperation and reduce intergroup conflict. Conflict resolution committees (of community opinion leaders) were established to deal with disputes as they arose. Underlying objectives of equal opportunity and equitable development, and trust among communities that these objectives can be met, improves sustainability. Build project links with law and order (including police and government) to facilitate law enforcement and build legitimacy; formalize group and resource registration processes; build social capital to change norms and counter crime and violence.	Formalized participation of all FUGs has been virtually guaranteed. Increased social capital and changing social norms deter illegal activity. Increased authority of law and order hinders illegal activity and militarism. Spoiler activity has been reduced. Project reports that "conflicts between resource users have been totally eliminated (100 percent) in the project areas, against a 50 percent targeted reduction, through successful implementation of socially inclusive and participatory approach to local development and planning by the communities." (Ajuwon 2004, 5)
	Parties (individuals and groups)	Division between different user groups has been increasing over the last 50 years. New and more militant pastoralist groups have arrived, some of which do not pay homage. This has increased gang activity and armed more militant-style pastoralist groups.		
	Institutions	NFDP1 seen as contentious among pastoralists who feel other user groups have been given preferential treatment, and who fear it will threaten their grazing rights during the dry season.		
	Interpersonal/ Intergroup relationships/ Power dynamics	Cultural differences between communities and group identities become more salient. Animosity escalates to aggression as stress and insecurity increase.		
	Conflict tactics	Evidence of escalatory tactics of groups include gang-like and illicit behavior, including assault, murder and robbery; increasingly militant tactics of pastoralists; blocking passage to resource areas; increased crime and corruption, such as people "disguised" as officials committing crimes, stealing assets (cattle, money); destruction of tubewells and washbores by migrating pastoralists (sabotage water access and demonstration of grievance between groups).		

Change	Type	Case experience	Conflict management measures	Outcomes
Eco-economic changes	Relationship to the resources	Crop encroachment into traditionally pastoral areas; development interventions (including NFDP1) that encourage the expansion of agriculture into land previously left fallow has increased competition.	Collaborative planning using CDD approach, with all stakeholder interests represented and implementation of conflicts preventing micro-projects such as grazing reserves, cattle watering points and delineation of stock routes. Provide training to support sustainable land practices.	Structured and legitimate fadama governance regime has fostered tolerance and respect for diverse needs and resource uses, and supports a holistic perspective among stakeholders in managing fadama lands.

3.3.2 Lessons

Project documentation already outlines several lessons learned from the series of fadama projects. Some of the most important lessons, particularly those identified by project staff, are outlined below.

*A **layered** and **formalized** process of participation ensures representation and transparency, key components of conflict prevention practice.* All project groupings, including fadama user groups (FUGs), fadama community associations (FCAs) and local fadama development committees (LFDCs), were built on the premise of inclusion and shared resources that belong to the people who rely on them for their livelihoods. All stakeholders are included in these fora, and are encouraged to engage in inter-group dialogue. These group systems are formalized and based on the primary registration of the fadama user groups. This primary registration is required to access the grant mechanism. This incentivizes the formal and explicit buy-in of different user groups, mitigating the risks of spoilers.

Inequitable distribution and elite capture, which escalates structural and physical violence, can be mitigated by pluralistic and democratic approval processes. Over 2,000 local development plans (LDPs) were developed and implemented under NFDP2, making elite capture a critical risk in implementation, and one that could contribute negatively to conflict dynamics. Each LDP was designed as a collaborative product of various formally registered FUGs, which are economic interest groups that come together under an umbrella body called the Fadama Community Association. The LDP is also approved by the LFDC, which comprises of local government officials, traditional rulers, and civil society members as well as representatives of the fadama community associations. While this multi-layered structure is complex, and potentially human resource intensive, it ensures transparency and participation, mitigating the risks of inequitable distribution and elite capture.

Conflict management committees provide an immediate and locally legitimate mechanism for addressing disputes. Respected opinion leaders of various stakeholder groups comprised local conflict management committees, which were set up under the project. The groups meet regularly to discuss conflict issues and to make relevant decisions to resolve disputes that hinder the implementation of sub-projects, and in turn the NFDP2's overarching goals. These committee members were chosen in part for their respect from the groups they represent, based on their constituents' trust in their decision-making abilities. Project staff say the committees have proved valuable to the project. They address any disputes that arise in a quick and efficient manner, prevent escalation, and help keep project timelines on track. However, the team is concerned about the sustainability of these committees after the conclusion of the projects. For this reason they are encouraging local government to begin convening these meetings in order to root the process in existing formal systems.

Prioritizing micro-investments that address common "flashpoints" supports conflict management. In the NFDP2 case, micro-projects that seek to resolve existing resource conflicts receive priority in matching grants from the

project. Targeted development areas for these additional grants include: (1) stock routes; (2) watering points; (3) grazing reserves such as grass planting; (4) aquaculture (e.g., to prevent fisherfolk from artisanal fishing in unfettered territories); (5) grass-cutter rearing (e.g., to prevent bush burning by hunters); (6) sustainable land management (SLM) investment activities; and (7) provision of mobile veterinary services. Targeting frequent "flashpoints" through micro-financing ensured that the most common conflict areas were given priority and signaled to the public the importance of addressing these focal areas.

Sensitizing and training communities to adopt sustainable land practices helps to head off the risk of conflict in the long term. Many of the beneficiaries of NFDP2 are members of traditional societies that rely on traditional practices to maintain their livelihoods. Unfortunately, some of these practices are not sustainable given the environmental and demographic changes the region is experiencing. The project provided technical training and launched community sensitization campaigns to debunk some of the myths that were perpetuating some of these practices. Furthermore, traditional community leaders and opinion leaders were involved in giving official project approvals to validate some of these changes in practice. Project staff view these activities as critical to changing long-standing norms and behaviors associated with traditional resource management, which if unchecked would inevitably contribute to environmental degradation and conflict. In sum, sensitizing communities to more sustainable practices is considered a conflict management mechanism.

Supporting groups for youth and vulnerable people helps to establish a long-term enabling environment for conflict management. NFDP2 is an attempt to reduce competition and pressure on Fadama land and to support downstream farming activities. Participatory measures and representative organizations prioritize the involvement of youth and vulnerable peoples. Such attention helps give these groups a leg up in an otherwise unbalanced system of power, helping them build skills to foster long-term social change.

3.4 Case Study: Conservation of Managed Indigenous Areas, Ecuador

Eastern Ecuador, located in a region that boasts some of the most biologically diverse territory in the world, is part of the Amazon Basin. However, it is plagued by a complex mix of social, economic, political, and external factors that are contributing to severe resource degradation. Ecuador's deforestation rate is the second highest in South America and the highest in any Amazonian country. Ongoing conflict in neighboring Colombia is a further destabilizing force in the area, contributing to refugee movements and cultivation of narcotic plants—which ultimately plays into an already high-risk dynamic of environmental stress and conflict. The USAID environment project in Ecuador aims to mitigate the negative dynamics by helping conserve the country's biological resources and by fostering sustainable livelihoods and economic opportunities for the communities that depend on these increasingly pressured resources.

The objective of USAID-Ecuador's "Conservation in Managed Indigenous Areas" (CAIMAN) Project was to support "development and sustainable conservation in order to help enhance political, economic and social stability in this increasingly troubled region. The program focuses on supporting Awá, Cofán and Huaorani indigenous populations through: (a) securing their legal rights to ancestral lands; (b) building their capacity to conserve and protect their territories, natural resources and cultural identity; and (c) developing mechanisms for their long-term sustainability, i.e. through income-generating activities and financial mechanisms. These three main groups represent more than 6,000 people having ancestral legal rights to more than 1,200,000 hectares." (USAID 2006). In addition, the project also provided limited support to the Chachis, Kichuas, and Secoya populations. The CAIMAN project was implemented in 2002-2007 by Chemonics International, Ltd. Deemed an important

component of achieving USAID's objectives in the region, the project is being followed up by a second phase of work, which is being implemented by the Wildlife Conservation Society (2007-2011). This case study focuses primarily on the experiences of the first project phase. WCS's work has been enhanced through support from USAID's Bureau for Democracy and Humanitarian Assistance Office of Conflict Management and Mitigation (DCHA/CMM).

The incorporation of a more conflict-sensitive approach to the project came to fruition when in March 2007 the country office presented to DCHA/CMM in Washington, DC, a proposal titled, "Reducing Conflicts in the Indigenous Territories on the Ecuador/Colombia Border." The objective was to strengthen the ability of the Awá and Cofan peoples to maintain their territories and cultures by focusing on threats stemming from migration and illegal activities. Both groups would consolidate their communities by unifying traditional ethnic groups across the international border, and in turn increase resilience in the context of social and environmental stress. The CMM consequently found an internal financing opportunity to conduct focused analysis and to provide technical support to the country team for the planning and design phases of the country activity. The analytic work generated recommendations for conflict mitigation and prevention through the project. These included:

1. **Institutional strengthening** on both sides of the border to help improve resilience of these communities to outside pressures, strengthen internal cohesion, and improve their ability to engage constructively with one another and with their governments.
2. **Support for local governance** to help the indigenous groups work constructively with the state to gain the protection and resources they deserve.
3. Finally, given the seriousness of the conflicts between the indigenous groups and their neighbors on both sides of the border (Afro populations, colonists, private sector, and illegal actors), **creating opportunities for constructive interaction and establishing institutional channels for communication between groups in conflict** to help build confidence and mitigate the likelihood of open conflict.

3.4.1 RNR Conflict Analysis and Management

Project documents refer to several conflict-related risks to the communities engaged through this project. In most cases, the power balance (due to differences in financial resources, social capital, influence, access to arms, etc.) was almost entirely skewed against the indigenous groups. These people are among the poorest in the world and have few opportunities for income generation. Risks include:

1. *Encroachment (by poachers, timber traffickers, and "colonists"):* Several economic interest groups—including "colonists" (new settlers, refugees) and resource user groups (agriculturalists, timber traffickers, poachers, ranchers), are contributing to rapid deforestation in the area, endangering one of the most biologically diverse ecosystems in the world. Regulation of the resource and of illegal settlements is limited, as the area is remote and has a limited government/police presence. The groups are socially and economically dominant, pressuring forest users to convert rainforest into agricultural land and palm oil plantations. Some of these interest groups, particularly timber middle men, are inflicting violence on communities. Communities without protection are left to physically defend their land and their way of life. This is accelerating environmental degradation, which negatively impacts the social fabric of the indigenous communities and increases tensions within and between indigenous groups.
2. *Weak state-level authority:* Many of the indigenous groups believe the state authorities have neglected and exploited them, a perception which contributes to tension between these groups (and their federations) and state level authorities. For example, the state government granted concessions to oil companies and colonists in protected areas in the 1970s, acting under the notion that the area was state land. This was done without consulting indigenous groups that lived and depended on the land, and who

considered the land their ancestral right. Poor relations with the government, in addition to other factors, contribute to the generally weak capacity of local and central government in these areas.

3. *Oil companies, transportation, and timber smuggling:* The activities of the oil industry in this region of Ecuador has, some would argue, demonstrated direct physical and structural violence toward indigenous populations. "Seven international oil companies are currently operating in Waorani territory; conflicts with Waorani communities are frequent and often settled through promises of gifts or cash. Oil roads have opened access to the territory and increased its vulnerability to outside pressures. Besides oil, illegal logging is a major threat to the integrity of the Waorani territory and culture." (Chemonics International, Ltd. 2007, 9). Displacement results from conflict, hydrocarbon exploration, and exploitation, and large-scale infrastructure projects, such as highways. "The Cofán have long felt the negative impacts of oil exploration and extraction. In 1966, Texaco sunk a well near Dureno, and subsequent oil-related activities contaminated the soil and water. According to the Cofán, this contamination has led to an increase in diseases, including various types of cancer. Today the Cofán resist oil-related activity in their territory and prefer the sustainable use of natural resources. Nonetheless, like other indigenous groups in the region, the Cofán are cash-poor." (Chemonics International, Ltd. 2007, 9).
4. *Cross-border impacts:* These dynamics are further exacerbated by the pressures associated with the Colombian conflict, including armed violence and economic refugee flows, drug activity, and political risks.

In turn, increasing relative scarcity of natural resources and further factionalization of group interests has contributed to tensions in individual communities. For example, assumption of collusion with illegal groups and illegal activities has sparked distrust and animosity between different tribal groups. For example, for decades the Kichwa and the Waorani struggled with poachers and colonists who gravitated to the area because of its weak rule of law and porous borders. Through mediation, facilitated under the project, the groups identified common goals: to secure territorial boundaries and control over natural resources, and to peacefully coexist with neighbors. By way of these mediations a "peaceful relationship" seems to have been established between the groups (Chemonics International, Ltd. 2007, 16).

To mitigate the negative socioenvironmental risks inherent in these conflicts, the CAIMAN project incorporated three mutually reinforcing thematic areas of intervention, in turn rectifying power imbalances and disputes between different interest groups: (1) territorial consolidation; (2) institutional strengthening; and (3) financial sustainability. Most relevant to lessons of conflict sensitivity is the approach to territorial consolidation and associated institutional strengthening. Territorial consolidation "involved a chain of mutually supporting LTPR (land tenure and property rights) interventions designed to enable indigenous groups to *control* (via support for legal rights to ancestral land), *defend* (via mechanisms to protect legal rights), and *conserve* their associated land resources." (ARD, Inc. 2008, 7). Institutional strengthening efforts focused on improving the capacity of indigenous representative organizations to help constituent groups secure and defend their territory. Because it perceived some risks to sustainability, the project incorporated several conflict-sensitive approaches into the territorial consolidation and institutional strengthening sub-components.

Under these objectives, the project sought to formalize property rights (titling, co-management agreements, boundary demarcation, and dispute resolution) in order to create an enabling environment for sustainable resource management and protection. First, the project team identified boundary areas most vulnerable to environmental pressures and lack of legal status. Second, the project supported the collection of existing legal documentation and brought parties together (i.e., elders) to form agreements about ancestral boundaries, which differed largely from legal boundaries. Colonists were also incorporated into land distribution plans. Formally

rectifying these discrepancies and disputes was an important step in the resolution and formalization process. Third, the agreements were formalized when all parties signed and notarized "binding agreements of good neighborliness and mutual respect." (ARD, Inc. 2008, 15). A total of 38 such agreements were signed over the life of the project. Ancestral rights to conservation areas were legalized vis-a-vis co-management agreements with the Ministries of Agriculture and Environment. Given the increasing environmental problems, MAE recognized it would be in their interest to work together with indigenous groups to protect and manage natural resources. Fourth, teams consisting of parties from both crews then went into the field and posted signs to demarcate the boundary. These steps contributed to a decrease in tensions over boundaries between tribal and colonist groups.

After land rights were formalized, a new regime supporting the conservation and improved management of land resources was established. Both the clarification of property rights, and a complimentary small grants program to support localized development, provided incentives for beneficiaries to protect local resources. This new regime further supports conflict management. To uphold this system, local governance institutions and policing mechanisms were developed. Capacity building conducted under the Institute for Capacity Building and Conservation included training in environmental impact assessment methodologies, forest management, conflict resolution, finance and administration, strategic planning, legal skills, and handicrafts production. Additionally, the project promoted policing mechanisms support to administration, development of the forest guard service, improvements to forest service infrastructure (e.g., patrolling stations), and procurement of technology such as radios, which aided emergency response coordination over longer distances. An overall increase in police technical and physical capacity improved patrolling, with the objective of reducing illegal activity (e.g., coca production, illegal fishing). The micro-financing program also contributed to civil society and NGO capacity development; for example, contract management facilitated accountability, financial administration, and other business skills. Knock-on global environmental effects are associated with biodiversity protection, climate change mitigation, and hydrological services. On a more macro level, the project is credited with strengthening communities against the regional social risks that are associated with cultivating narcotic plants and participating in a drug economy, and against the political and civil violence associated with the conflict in Colombia.

The new land regime was also supported by the establishment of the Cofán Forest Guard Program, under the auspices of which 380,000 hectares are monitored and protected. The final report states: "Well-trained and equipped indigenous guards backed by legal rights, are effectively deterring illegal activities, and mitigating external pressures." (Chemonics International, Ltd. 2007, 19). The impacts of the program trickle down to the household level. "Almost every Cofán family has at least one family member working as a forest guard," says Randall Borman, Director of the Cofán Survival Foundation (Chemonics International, Ltd. 2007, 20). The final report describes an "unexpected impact" of the project: "a feeling of increased unity among the Cofán. Cofán communities are far from each other, so they have had difficulty creating a unified nationality. Because the Cofán guards are from different territories there is a more unified sense of purpose now." (Chemonics International, Ltd. 2007, 20).

Table 3.5 outlines the conflict conditions and management measures of the project, which have occurred within the frame of a skewed economy that historically disempowers indigenous groups.

Table 3.5 Conflict Risks and Management in Conservation of Managed Indigenous Areas Project

Change	Type	Case conditions (triggering and escalatory factors)	Conflict management measures	Outcomes
Renewable natural resource changes	Quality	Land degradation and groundwater pollution due to deforestation and oil pollution.	Territorial consolidation enables indigenous groups to *control* (via support for legal rights to ancestral land), *defend* (via mechanisms to protect legal rights), and *conserve* land and wildlife resources.	Indigenous territorial control has contributed to some improvements in biodiversity conservation, but social and institutional factors remain a hindrance to large-scale, long-term success.
	Quantity	Deforestation (second highest in South America and the highest in any Amazonian country) and loss of biodiversity.		
	Temporal Variability	Rainy season and unpredictable variability in seasonal renewable resources interrupts productive forestry activities.		
Other physical changes	Demographic	Conflict in neighboring Colombia brings economic and political refugees across the border to Ecuador.	Project links with programs in southern Colombia to improve management and territorial control, and to reduce economic refugee flows. Delegating land use authority to indigenous groups stems oil company and other infrastructure development without local consent.	Transboundary socioeconomic improvements have resulted from: improved cross-border communications, development and implementation of transnational action plans, and overall improved collaboration with USAID/Colombia's Alternative Development Program near Ecuador's border.
	Infrastructure	Infrastructure such as roads are often constructed by oil companies, thus increasing access to the region but also causing environmental damage, which contributes to deforestation.		
Social changes	Behavioral	Traditional agricultural practices worsen degradation. External pressures compete to support or oppose conservation practices.	The project rectifies power imbalances and reduces environmentally harmful illicit activity. Clarify land management regime by securing indigenous legal rights to ancestral lands and demarcating borders. Build capacity to conserve and protect indigenous territories and resources by establishing, training, and equipping forest policing body staffed by them. Provide micro-financing and livelihoods training to facilitate long-term economic sustainability. Provide economic development support to improve knowledge of sustainable land practices. Improve local linkages with government authorities to improve rule of law (protection, regulation) and access financial resources.	"Positive changes in public opinion" (Balestino, Bilinsky, Ordonez, and Regas 2008, 23) on NR conservation help support progress toward project goals. Mediation and agreements have helped establish a "peaceful relationship" between many factionalized groups, which has helped to diffuse spoiler risks. Traditional ethnic group communities were linked inside Ecuador and across the international border, improving resilience to outside pressures (political and economic interests), strengthening internal cohesion, and providing platform for
	Parties (individuals and groups)	Multiple parties are involved in overlapping conflicts on both sides of the border, including indigenous groups and their neighbors (Afro populations, colonists, private sector). Several economic interest groups—including "colonists" (new settlers, refugees) and resource user groups (agriculturalists, timber traffickers, poachers, ranchers), contribute to deforestation in the area. Increasing competition over resources helps factionalize group interests. Community realities vary.		
	Institutions	Poor relations with the government contribute to generally weak capacity of local and central government in tribal areas. Weak social capital within tribal groups decreases community resilience. Regulation of resources and of illegal settlements is limited, as the area is remote and has a limited police presence.		

	Power and influence	Indigenous groups perceive state authorities as neglecting and exploiting them. Poachers, timber traffickers and "colonists" are social and economically dominant. Power balance (financial, social, technical expertise, arms) is almost entirely skewed against indigenous groups.		engaging constructively with one another and with their governments.
	Conflict tactics	Encroachers pressure forest users to convert rainforest into agricultural land for palm oil and coca production. Some interest groups, particularly timber middle men, inflict physical violence on communities as means of control. Communities without protection physically defend their communities.		
Eco-economic changes	Value of relationship to the resources	Different land use and income options (oil, narcotics, etc.) increase competition in communities. Some have become dependent on those sources of income.	Improve sustainable livelihoods opportunities through training and financing. Build social capital in communities to enhance collaboration and resilience to outside interests.	"Effective, conservation-friendly ways to generate income for indigenous people have yet to be widely introduced and expanded…in border areas." (Balestino, Bilinsky, Ordonez, and Regas 2008, 23).

3.4.2 Lessons

The project generated several lessons, particularly with regard to working with marginalized indigenous communities. Among these were:

Reforming property access structures can interrupt and reverse conditions of structural violence. A "rights" discourse focusing on ownership and access can fuel inter-group conflict. Formalization of property rights can create an enabling environment for sustainable resource management and protection. Clarifying management regimes and rights therein through participatory and inclusive practices can alleviate conflict. In this case, sustainable resource management (a product of the revised management regime) has alleviated some of the environmental stress that was contributing to social problems. In the case of this project, rectification of power imbalances and structural violence alleviated threats of physical violence that were experienced by some marginalized indigenous communities.

Stakeholder groups may need preparation and consolidation to make them more effective in conflict management processes. The project demonstrated that the concept of "community" as conceived by outsiders of a Western perspective has limited application for some indigenous groups. As such, because of indigenous social structures and systems of authority, this particular project found it more effective to focus on the family unit as the entry point for most project components, including conflict mechanisms. On an organizational level, coalitions for change in favor of sustainable resource management were reinforced by horizontally institutionalizing and capitalizing on this *superordinate* goal (Sharif 1967). This was demonstrated through the Cofán Forest Guard Program, which unified the Cofán tribal group under the banner of sustainable resource management. This helped empower the group and improve power imbalances.

Spoiler participation is important for success, and may need to be incentivized. In this case, "colonists" were also incorporated into property consolidation and formalization efforts, such as the granting of land titles. Legalizing their level

of opportunity had two main results: (1) they were brought inside a legal system and held accountable for their actions; and (2) incentives to align with militant or violent political groups were reduced, as beneficiaries saw real opportunity in the formal system. This had multiple effects on the project communities. For one, they were empowered to become a part of the formal administrative system, which encouraged them to resist further encroachment and stabilized "the sensitive agriculture frontier". Furthermore, formalization of colonist land rights created a gateway for micro-financing, which supported investment in their property and in turn sustainable resource management.

Political leadership is a key component of resolving historical grievances that are rooted in structural issues, and in building a coalition of change to counter the political economy. This becomes even more important when faced with powerful interest groups, such as oil companies. President Jamil Mahuad demonstrated this when he issued a presidential decree in 1999 designating an "intangible zone" (Chemonics International, Ltd. 2007, 19), and President Alfredo Palacio approved its delimitation in 2007, in effect protecting certain clans from the impacts of natural resource exploitation. Elevating the voice and authority of indigenous groups rectifies historic power imbalances and supports their ability to respond to cultural and environmental threats to their communities.

Yet the political economy of development is inherently complex, and this case is no exception. Indigenous groups have grown to depend on many of the economic benefits of the extractive industry (e.g., oil financing for education, health, and transportation). Vulnerable indigenous groups deal directly with a number of different oil companies with little "refereeing on the playing field". For example, given the disorganized nature of Waorani society, cooperation is erratic, the locus of requests and demands shifts from day-to-day, and prices vary widely (Stocks and Oña 2005). On the other side, oil companies seem to be open, welcome, and contribute to some coherent plan. The oil companies receive uncoordinated demands for money from communities, ethnic organizations, parishes, municipalities, provincial governments, etc. In this case, changing these relational dynamics in order to support sustainable management of renewable (and non-renewable) resources requires improved coordination and planning involving all interest groups. Development efforts, including CAIMAN, can contribute to this overarching goal by incorporating these values into methods of implementation.

Risks associated with conflict spillover can be mitigated through cross-border initiatives. The intervention has been expanded to work explicitly with the Cofán and Awá indigenous groups of northern Ecuador and southern Colombia to "mitigate actual and potential conflict by maintaining the integrity of their cultures and their territories in the face of threats. With this additional funding, activities will seek to link current programs in Ecuador to work in southern Colombia to improve governance, territorial control, and resource management." (USAID 2006).

3.5 Case Study: GTZ Palestinian Water Program, Community Development Component, West Bank

Villages in the West Bank suffer from acute drought and limited access to water sources. In a complex water development context, where weak governance and military occupation prevail, community-level solutions remain an effective intervention to develop water resources at the village level. As in the other case studies, the West Bank faces a seemingly "perfect storm" of socioeconomic and environmental factors: population growth, persistent and worsening pollution problems, weak governance, high unemployment rates, limited dialogue on possible solutions between water service providers and community representatives, limited involvement of women in decision-making, and intractable conflict. In dry summer months, many Palestinian households receive water only 1-2 times each week, and one third of all Palestinian villages are still not connected to a water supply network (World Bank 2009, iv). These un-served households pay up to one-sixth of their household income or more to buy water from other sources (e.g., tankers) (World Bank 2009, iv). As Palestinian consumers perceive

access to water resources to be more and more difficult, the issue becomes an increasingly salient locus of tension and dispute between communities and service providers.

The Water Program (WP), implemented by German Technical Cooperation (GTZ) on behalf of the German Ministry for Development and Economic Cooperation (BMZ), consists of four components: (1) National Water Council, (2) Human Resources Development, (3) Service Providers and (4) Community Development. The fourth component is of interest to this case study. Given the difficult development context and the limitations due to the conflict, this project component was developed on the premise that low-cost communal infrastructure improvements with community contributions and active involvement would have more success and sustainable results. The initiative began with a pilot program in which eight central and northern West Bank communities were engaged, and six low-cost local solutions were implemented. The interventions included rainwater harvesting and gray water reuse to improve domestic water supply and local irrigation schemes. Gray water reuse and improved wastewater management also aimed to prevent groundwater contamination.

3.5.1 RNR Conflict Analysis and Management

The Community Development Component objective is to improve cooperation between water service providers (WSP) and peri-urban and rural communities in Northern and central West Bank on low-cost solutions. The water program contributes to this objective of conflict management through two mechanisms: (i) community planning; and (ii) mediation and interest-based participation.

Community planning. Decision-making with regard to the component's micro-investments was locally based, applying an appreciative inquiry participatory approach. While these interventions aim to alleviate water stress, in some cases implementation of these community plans were nested within existing disputes and tension that resurfaced with the induction of the project. These factors threatened progress toward implementing sustainable low-cost infrastructure solutions.

Community-level planning for water resource management interests was applied in this program component to prevent conflict and build capacity to address disputes that might arise in the context of continuing environmental, social, and political stress and insecurity. In each of the beneficiary villages the participatory process began with an original meeting called by the village council, during which the various stakeholders (including the council, women's groups, and community-based organizations) discussed water management and service issues. The following infrastructure solutions were implemented in the selected communities:

Table 3.6: Infrastructure Interventions and Locations in Palestinian Water Program Capacity Building Component, West Bank

Intervention	Location	Beneficiaries (people)
Rain water harvesting systems	Kufr Nimeh	3,800
	Beit Leed	5,000
	Beit Sira	500
	Kharbatha Al-Musbah	3,000
Spring rehabilitation	Ramin	2,500
Gray wastewater treatment plant	Kafr Nimeh	3,800
	Kharbatha Al-Musbah	83
Water supply pipelines	Beit Imrin	3,000
	Ramin	2,500
Water meters	Kafr Allabad	5,000
Chlorination unit	Bedya	10,000
	Beit Imrin	3,000

Source: German Technical Cooperation (GTZ), 1.

In each beneficiary community a coordination committee was established which consisted of 7-9 members who represented various stakeholder groups. These stakeholder representatives included community-based organizations such as: rural development groups, cultural centers, farmers, teachers, women's groups, and youth clubs. The implementation team argues that this diverse representation of community interests promotes sustainability, encourages creative problem solving, and alleviates possible future conflicts over management and power. Candidates for membership nominate themselves, and the equal representation of women is required. According to the program officer: "It helps to have the women involved, to include their interests. Women like to participate in the dissemination of experience, and they feel the water scarcity and the sanitation problems more acutely than the men in the community."[14] Due to the scale of the pilot initiative, the implementing agencies in cooperation with Palestinian NGOs (e.g., Agricultural Development Association and Palestinian Hydrology Group) were able to provide a relatively high level of direct technical support to each of the targeted communities.

Four types of low-level (non-violent) conflicts were identified during the community planning process, which subsequently required focused third party intervention:

Table 3.7: Conflict Parties and Issues in Palestinian Water Program Capacity Building Component, West Bank

Issue	Parties to dispute	Types of parties
Water rights (spring)	Ramin/Bazaria villages	Neighboring villages
Payment of arrears, consumer dissatisfaction (high water prices)	Ramin/Anabta service provider	Service providers, consumers
Water access (limited supply from utility)	Kharbatha Al Musbah/West Bank Water Department	Service provider, consumers
Water management power relations	Kharbatha village council/CBO	Village council, constituents

Mediated agreements. Community mediation was utilized to address the three longstanding conflicts that posed challenges to the implementation of community-based solutions.

In the case of the Ramin/Bazaria dispute, the Ramin community had planned to rehabilitate the spring and supply pipeline to channel water from the spring shared with Bazaria. The pipeline would improve direct water supply to the village of Ramin. Initiation of this plan renewed historical tension between the villages over spring water rights. The WP provided a platform for local dialogue and negotiation, facilitated by local mediators as part of a community-based and culturally rooted mechanism.

The disputants came to collective understanding and clarified rights to the spring. An agreement on the solution process was signed. The agreement is widely respected and facilitated the implementation of the planned pipeline, which is now operating without any incident. Similarly, the dispute between Ramin and the Anabta service provider was negotiated, the decision to pay off the debt was agreed upon, and a two-year payment plan was established.

In Kharbatha, a community suffering from acute water shortages, the GTZ intervention originally generated some competition over which of the 5,500 villagers would benefit from the project. Negotiations by the PWP resulted in the village council being used as an entry point to assess and coordinate community interests. Community-based organizations (CBOs) which represented the different interests of the community, particularly those of the neediest households, prioritized the development of household-level gray-water treatment plants and communal

[14] Samar Samara, interview by author, 16 November, 2008.

rainwater harvesting cisterns for public use. The planning committee determined project participation eligibility of needy households in combination with other indicators of feasibility and sustainability, including: (i) willingness to contribute; (ii) self-help potential; and (iii) technical sustainability. Highly-rated households were given priority to use the treated gray water for their household gardens. The use of the community cisterns was granted to community infrastructure: two schools and a mosque.

Table 3.8 Conflict Risks and Management in Palestinian Water Program Community Development Component

Change	Type	Case conditions (triggering and escalatory factors)	Conflict management measures	Outcomes
Renewable natural resource changes	Quality	Variable water quality due to poor sanitation services (e.g., solid waste, sewage dumping), dropping water table.	Implemented six infrastructure solutions to ensure safer, more reliable, and better quality water and access. Gray water reuse and improved wastewater management aimed to prevent groundwater contamination and increase supply.	It is beyond the scope of this project to address macro-level water management and transboundary issues, which are central to the water problem. However, improved water supply is now available with more reliability, providing a near-term localized solution to the water stress experienced by some communities.
	Quantity	Reduction of per capita water availability due to drought, dropping water table, transboundary conflict and poor infrastructure.		
	Temporal	Seasonally related water shortages contribute to cycle of water stress.		
	Variability	Increasingly unpredictable rainfall is difficult to cope with, particularly in current water regime and ongoing transboundary conflict.		
Other physical changes	Demographic	Population growth contributes to reduction in per capita availability.	Focus on improved and expanded infrastructure to address the needs of local populations, as identified by those communities and their representatives.	The project has humbly improved conditions in select communities through infrastructure improvements (though on a territory-wide basis, war damage and neglect continue to plague the water system).
	Infrastructure	Crumbling infrastructure and some war damage is a consequence of ongoing conflict, occupation and poor management regime.		
Social changes	Behavioral	Dissatisfied consumers not willing to pay for services they have used, as they feel those services are poor.	Participatory community planning approach (with specific requirements for women's involvement) used to determine priorities for investment. In each beneficiary community a coordination committee representative of various stakeholder groups was established. Disputes mediated by local third party, including arrears solution and payment plan established. Communities determine who receives which benefits, and poor households are given preference in new water allocations (e.g., rainwater and gray water).	Agreements were reached with regard to arrears and water rights disputes. Communities empowered in short term to develop and implement solutions, but may be short lived in the midst of larger sociopolitical conflict.
	Parties (individuals and groups)	Historical tensions between villages are revived in context of water spring water usage dispute. Poor water availability, governance and services combine to foster grievances between citizens and authorities. Social division escalates with water stress. Larger Palestinian context troubled by Fatah-Hamas conflict.		
	Institutions	Weak internal governance and ongoing conflict with Israel over shared water rights.		

Change	Type	Case conditions (triggering and escalatory factors)	Conflict management measures	Outcomes
	Power and influence	Shortages are experienced by everyone, but because of the high cost of water the poorest experience the worst effects, as they pay the largest percentage of household income for water.		
	Conflict tactics	Protest over circumstances is demonstrated by boycotts, such as boycotting payment of water bill.		
Eco-economic changes	Value of relationship to resources	Cost/value of water continues to go up with increasing scarcity and high operational costs. Yet people are less willing (and perhaps less able) to pay.	Infrastructure development focuses on low cost solutions.	Reconciliation between consumers and providers, and infrastructure improvements, have laid the groundwork for a better relationship. Potential for further immediate conflict is reduced.

3.5.2 Lessons

The project, though modest in size, has generated some preliminary lessons for scaling up:

Joint projects between villages promote cooperation and reduce inter-communal conflict. The program strategy[15] targets community projects that foster collaboration between neighboring villages. Support in bringing neighboring communities together sets a precedent for this approach and fosters dialogue, helping to generate future inter-community initiatives.

*F*ocusing on communal interests empowers communities to identify and resolve their own problems. In the selection of community infrastructure investments, PWP gave explicit preference to communal interests rather than individual needs. Following training on low-cost local infrastructure solutions, communities were asked, "What do you want to work on yourselves? What would you like us to support you in?" (Palestinian Water Program, GTZ). Where feasible, as in Kharbatha, technological solutions that "expand the size of the pie" through wastewater reuse, improvements in efficiency, or other mechanisms of benefit sharing have added conflict-mitigation benefits. One lesson to highlight in this approach is the need for local third party facilitators to ensure that identified "communal interests" also lead to equity in community member benefits.

Mediation support can be applied to "un-block" community-level implementation challenges. Capacity development and sensitivity training associated with negotiations in conflict management receive particular attention in this project. The goal is that community members should have the skills to mediate conflicts as they arise. Direct third party mediation support also proved important in the short term as it facilitated the implementation of local infrastructure plans. WP provided this support directly, utilizing a "culturally adapted" mediation mechanism to achieve outcomes widely accepted by the communities (German Development Cooperation (GTZ), 4). While it may have been preferable for the Palestinian Water Authority or other authority to play the role of mediator, in the Palestinian context, where the water governance system is weak, third party donor roles are seen as being particularly useful. Over the long term, however, institutions need to be formalized to more coherently coordinate grievance resolution and infrastructure planning.

[15] For more on the strategy, see http://www.waterprogramme.ps/community_overview.php.

Giving special attention to the particular role that women play promotes sustainable outcomes and enhances conflict resolution. Involving women in community coordination committees, capacity development activities (e.g., training), dialogues, and mediations was an explicit objective of this component. Involving women in technical trainings was seen as particularly important, as they often ensure low-cost infrastructure maintenance.

Long-term prevention of conflict over scarce water resources needs to be supported by broad infrastructure and institutional development. Localized low-cost interventions are important to help communities cope with current water stress. Long-term prevention through coherent infrastructure planning and improved management, however, requires de-politicization of technical issues and a long-term solution to the Israeli-Palestinian conflict over water resources. Inter-communal and inter-factional conflict, which are likely persist in the near term, are also relevant issues that are linked to the Israeli-Palestinian conflict. Because justice and the rule of law are still weak in the West Bank, traditional conflict resolution mechanisms are used in many communities. Project staff consider it "logical to maintain an existing system that has survived for centuries while building a functional judiciary that would address weaknesses in the traditional system."[16]

3.6 Case Study: Building the Capacity of ICCN to Resolve and Manage Environmental Conflicts in the Virunga National Park, DRC

Region-wide conflict consumed Zaire (now the Democratic Republic of Congo) in 1996. Following the Rwandan genocide, and with refugee camps in the eastern part of the country housing *genocidaires*, regional parties supported the overthrow of President Mobutu Sese Seko. These events were both preceded and followed by political and social fragility that have facilitated massive violence, particularly in the east. Virunga National Park (PNVi) is located in this area of the country, and is Africa's first national park and one of the richest biodiversity sites on the continent. When the violence escalated in the mid-1990s, park programs ceased. Congolese Parks Authority (ICCN) staff did not receive salaries for almost two years before the UNF-UNESCO (United Nations Foundation and United Nations Educational Scientific and Cultural Organizations) Partnership for World Heritage Conservation and several conservation NGOs stepped in and began providing stipends to them (Kujirakwinja et al. 2008, 7). Pressure on park resources increased, and neighboring communities encroached illegally into the protected area. In turn, cattle grazing, fishing, hunting wildlife, and new settlement creation increased. By the early 2000s it was clear that ICCN lacked the capacity to effectively protect PNVi from these stressors.

Virunga National Park is now fraught with conflict and riddled with socioecological dilemmas. Thirteen years of civil war in DRC, along with regional conflict, porous borders, weak governance, poverty, presence of armed groups, refugee movements, and overpopulation have created an enabling environment for encroachment and illicit use of the forest's resources, generating a complicated mix of conflict causes and escalatory factors that require an integrated analysis of both grievance and opportunism in order to be fully understood and addressed. Forest resources in the center of this violent conflict include rich soils used for agriculture, high-value timber sold to external markets, charcoal that supplies urban centers around the park, bush meat for domestic and foreign consumption, wildlife, and fish. Pressure on these resources comes from different user groups (including poor refugee populations) looking to benefit from them, whether for survival or for profit. As park rangers and untrained military personnel attempt to protect the resource, conflict between the user groups intensifies. ICCN has attempted to enforce state policy and protect the national park using military means, but the presence of armed groups operating within the park has only grown.

[16] Samara, interview.

The Project, initiated in August 2006 and concluded in 2008, was implemented by the Wildlife Conservation Society (WCS), with technical support subcontracted to World Wildlife Fund and International Institute for Sustainable Development.[17] All field activities were implemented in coordination with ICCN.

3.6.1 RNR Conflict Analysis and Management

The project sought to strengthen "the ability of ICCN and its partners to resolve and manage conflicts in and around Virunga Park" (Kujirakwinja et al. 2008, 8) in order to improve conservation efforts. Four project objectives included:

- Undertaking a conflict management assessment with ICCN and identifying a strategy to deal with the conflicts;
- Providing training to ICCN staff and its partners in conflict management techniques and in more community-friendly methods of interacting with local communities;
- Reducing transboundary conflicts and promoting regional peace; and
- Encouraging a political environment more conducive to conflict resolution (Kujirakwinja 2006, 2).

To achieve these objectives, the project implemented five components. The first of these was a stakeholder conflict resolution training workshop, which facilitated a participatory conflict analysis (inclusive of mapping actors, causal relations, impacts, and identifying risks) and development of a Conflict Resolution Plan. [18] This plan provided the basis for planning the remainder of the intervention.

Over several weeks of workshops, the stakeholders collaboratively identified and analyzed the web of conflicts encompassed within the PNVi area. Participants identified three conflict categories: (1) inter- and intra-institutional power conflict; (2) human-wildlife conflict; and (3) conflicts over access to resources (Kujirakwinja et al. 2008).

One donor representative describes four administrative regimes in the area, which in his opinion complicate ownership and perceptions of rights and in turn contribute to contestation and conflict. These four regimes include: (1) communal access, in which the government limits in few ways; (2) traditional ownership, which is not recognized through constitutional law; (3) colonial regime legacy; and (4) a decentralized constitutional system, which is not yet financially sustainable and is vulnerable to powerful interests and elite capture of benefits.[19]

Facilitators identified a subset of the identified conflicts and facilitated the collaborative development of "conflict trees" (a process of identifying stakeholders, relationships, causal factors, and impacts) over several weeks of meetings. The subset of conflicts included:

1. Lack of revenue sharing
2. Deforestation and encroachment
3. Involvement of the military
4. Illegal fishing on Lake Edward

[17] WCS has a history of implementing similar projects in other parts of the region. These projects bring together military, police, and customs officials with the objective of reducing conflict and improving conservation outcomes. This project built on USAID-supported conflict resolution work in the Virunga National Park, expanding its conflict-sensitive components at the time of design. The project also supported knowledge development at a regional level, facilitating WSC's local transfer of regional knowledge and experience to the national park area and then creating the opportunity to expand these to other protected areas within the Albertine Rift, including the Kahuzi Biega National Park and the Itombwe Community Reserve.

[18] The workshop was convened in Goma, DRC, in December 2006.

[19] John Flynn, interview by author, 2 April 2009.

5. Involvement of ICCN in illegal activities
6. Settlement of people in the park
7. Abuse of power by management authorities
8. Poor management by ICCN
9. Human-wildlife conflict

Following the conflict assessment, the project identified four park-related representative and significant "sub-conflicts" to address through the pilot interventions in partnership with the ICCN. The conflict issues in the four pilot cases were:

1. Access to fishing rights in Nyakakoma village
2. Encroachment on protected areas on the western coast of Lake Edward
3. Looting of forest resources by military personnel (bush meat, fish, charcoal)
4. Illegal settlement in Lubilya

Each pilot case began with an inclusive stakeholder-based conflict resolution analysis. The outcomes of this analysis were used to establish representative committees of the conflict parties, creating a forum where disputes could be openly discussed and expressions of wrongdoing could be mediated, and solutions could be collectively developed. Each committee participated in action learning, building conflict resolution capacity, and monitoring skills. Potential spoiler groups, particularly those who might oppose conservation efforts, are systematically engaged through this process.

Collective conflict risk factors from the pilot cases and associated intervention mechanisms are summarized below:

Table 3.9 Conflict Risks and Management in Building the Capacity of ICCN to Resolve and Manage Environmental Conflicts in the Virunga National Park Project

Change	Type	Case conditions (triggering and escalatory factors)	Conflict management measures	Outcomes
Renewable natural resource changes	Quality	Forest and land degradation due to encroachment, deforestation.	Convene stakeholders (communities, village council, police, ICCN, local chiefs, local NGOs) to establish sustainable land and fishing regime and to mitigate encroachment and poaching.	Revitalized and more stringent resource management regimes (governing land, fish, etc.) have seen localized success, but remain plagued by a broader cycle of violence, war, and poverty.
	Quantity	Decrease in per capita availability of fish, wildlife, timber and other forest resources due to poaching, charcoal trade and other illegal activity.		
	Temporal	Increasing soil degradation and water scarcity.		
	Variability	More severe weather events and increasingly erratic rainfall.		
Other physical changes	Demographic	Regional conflict (e.g., Rwanda) contributes to in-migration, illegal settlement (as in Lubilya), and expansion of refugee camps.	Voluntarily resettle people who have illegally settled inside the park area and assist with return of Ugandan migrants. Transboundary meetings between Ugandan	Clarified land management regime supports law enforcement efforts. ICCN conducts patrols to remote areas with new infrastructure in place. Improved transboundary

Change	Type	Case conditions (triggering and escalatory factors)	Conflict management measures	Outcomes
	Infrastructure	Underdeveloped infrastructure impedes ICCN's ability to patrol remote areas.	and Congolese park staff and regional government authorities, and cooperative policing arrangements. Convene dialogue with customs and border officials, police, army, traditional chiefs, development, and business associations and ICCN to reaffirm and enforce boundaries. Collective investigation and demarcation of boundaries clarifies the land management regime. Improve patrolling, including facilities such as patrolling stations.	coordination supports regional stability and peacebuilding.
Social changes	Behavioral	Prisoners' dilemma mentality, particularly in poaching, where users "race to the bottom" or are unaware of impacts of overconsuming resources. Lack of incentives for conservation.	Improve rule of law by including ICCN in all components, and coordinating multi-stakeholder inputs into fish and land activities (electing and convening coordinating committees, inclusive policy development, licensing, community-based policing, M&E). Sensitize and build awareness of higher levels of authority and build coalitions between communities and politicians, e.g., through: (i) meetings and workshops with stakeholder representatives, including a VIP workshop with regional leadership; and (ii) public information campaigns using radio, television, magazines, and educational posters. To counter spoiler potential of military, commander takes a prominent role in banning and punishing for military involvement in the illegal activities. Provide public education on the impact of unsustainable consumption, and legal training to fill critical knowledge gaps and change behaviors.	Improved cross-border coordination strengthens porous borders. Leadership and other stakeholders have expressed support for project efforts.
	Parties (individual and groups)	Arrival of illegal groups and refugees who become squatters, increases social tensions. Poor relationships between policing authorities and civilians ensue due to breakdown of law and order. Cross-border tension and spillover contributes to regional instability.		
	Institutions	Illicit activity, enabled by weak governance and lack of understanding of legal texts, fuels conflict (in some cases, directly financing it), and aggravating conditions of socioenvironmental stress. Corruption among police and weak rule of law enables illegal activity, such as poaching, charcoal trade, and squatting.		

Change	Type	Case conditions (triggering and escalatory factors)	Conflict management measures	Outcomes
	Power and influence	The military, a potentially powerful spoiler group, benefits from current system, as they profit from looting forest resources.		
	Conflict tactics	Crime and corruption are linked to illegal trade, and physical force is used as a tool for intimidation to maintain system of illicit activity.		
Eco-economic changes	Value of relationship to the resources	Looting of forest resources by military (bush meat, fish, charcoal). Dependence on fish and bush meat for food and on charcoal for fuel and livelihoods.	Convene dialogue with senior military commanders to mitigate wildlife poaching and other exploitation of forest resources.	Illicit activity and overconsumption have been reduced through better leadership and strengthened police capacity and legitimacy.

3.6.2 Lessons

The project generated several lessons, among them:

Conflict analysis is useful as a continuous process throughout the project life-cycle. These interventions were entirely preceded by a comprehensive participatory conflict analysis exercise, which grounded decisions about the size, scope, and feasibility of interventions in local knowledge and experience. The conflict analysis included stakeholder identification and mapping and allowed participants to work together to identify entry points for addressing key conflicts within the park. Reflecting on project experience, project staff identified as important to success the continuous monitoring of conflict dynamics and the ability to adapt to changing conditions, as the context in which interventions are being implemented were ever changing.

Workshops that involve participatory exercises, such as analysis and planning, facilitate simultaneous and self-reinforcing problem solving and group learning. Participatory approaches provide stakeholders with the opportunity to take on different process roles under the guidance of a third party facilitator. For example, ICCN officers practiced facilitation and developed leadership skills by co-facilitating workshops alongside the project's hired facilitator. Because individuals learn differently, and because participatory exercises are in many ways stakeholder-driven, coupling this method with formal training ensures better coverage of specific subject matter. The project therefore also implemented directed trainings for military, ICCN, and NGO staff on (i) conflict analysis and resolution and (ii) monitoring. It also provided technical training for customs and immigration officials and allowed regional monitoring of protected areas and research wardens to build their technical capacity.

Where stakeholders of all levels of influence can voice their grievances on a "level playing field," fora provide an outlet for frustrations and prevent conflict escalation. The project team considered this institution as one of the primary successes of the overall program. The forum was overseen by respected third party facilitators. It ensured marginalized individuals were given a voice and the consistent opportunity to challenge power structures and powerful interest groups. While the team admits that these methods are not a panacea for rectifying the power

imbalances that are a common feature of the social landscape, they feel this mechanism helped prevent elite power and influential spoilers from overwhelming the project process.

Re-establishing rule-of-law and empowering the parks authority can reduce conflict-generating behaviors. Lawlessness in many of these remote areas helps sustain a system of chaos and insecurity, which in turn contributes to the unsustainable use of resources. Reestablishing a rule of law requires first that the relationship between communities and policing bodies, such as ICCN, be rebuilt. The re-legitimization of ICCN, and recognition among communities of the value of their service, creates an enabling environment for law enforcement and a disabling environment for illicit activity. Creating a community policing mechanism that works collaboratively with ICCN, as in the case of the Nyakakoma fishing village, helps to facilitate a longer-term change in institutional relations, and in turn the practices of beneficiary communities.

Linkages with higher levels of authority and transboundary cooperation is integral to facilitating regional peace and security. By ensuring incorporation and recognition of a national mandate to govern and protect natural resources, the interventions benefit from higher-level mechanisms of enforcement. The initiative also supports a broader objective of peace and stability in the region, as well as state-building. In addition, international agreements helped put pressure on senior politicians. The global recognition that Virunga is a jeopardized World Heritage Site has been useful in generating interest in its conservation at the higher political levels.

The four pilot initiatives help to build peace and stability on a local level—a positive development in the context of violence conflict. Sustainable outcomes from the project cannot be ensured, however, unless the broader conflict that perpetuates a system of instability is addressed on a parallel track. Specifically, paramilitary and insurgent activity continues to be a destabilizing force. For example, armed groups continue to demand resources such as fish from fishing communities, forcing them to break their own laws. Refugee movements and other population pressures also continue to pose a risk to the area. Furthermore, cross-border cooperation, as in the resettlement of encroachers in Lubilya back to Uganda, serves to support regional stability and transboundary peacebuilding.

4. Improving Conflict Sensitivity: Lessons from Experience

This section has the following objectives:

1. To define the parameters of RNR conflict management capacity building;
2. To describe the principle components of conflict-sensitive development approaches as they pertain to renewable natural resources; and
3. To outline a list of practical tools for peacebuilding in RNR initiatives.

This chapter draws on the reflections of field staff and stakeholders to highlight ways in which development practitioners can maximize these opportunities as *conflict management mechanisms* (component E of figure 2.1). Practical lessons outlined below describe *how* to promote conflict sensitivity through renewable natural resource projects. Entry points for improving conflict sensitivity and conflict-management capacity include *organizations* (e.g., management bodies and stakeholder groups) and *institutions* (e.g., "formal" policy laws, procedures, and traditional or "informal" rules).

4.1 Conflict Management Mechanisms: Rooted in "Capacity Building"

Chapter 2 discusses factors that enable the escalation of conflict and sketches a theory of conflict-sensitive development practice. It identifies two components:

1. safeguarding against causation and/or escalation of conflict; and
2. capitalizing on opportunities for building capacity to constructively manage future conflicts, should they arise.

These two components emphasize that conflict management and peacebuilding are promoted through organizational, institutional, and procedural *capacity support and development*. These "capacity building" initiatives fall into two categories: *direct* and *indirect*.

- **Direct capacity building** promotes *procedural and intellectual competence*, which enables conflict management through knowledge development, dissemination and education, and organizational and procedural development. This type of capacity building includes the establishment of bodies and procedures for conflict resolution and training.
- **Indirect capacity building** advances *normative competence*, which promotes norms, values, attitudes, and behaviors that enable conflict management.

Direct and indirect interventions are mutually reinforcing. Collectively, they facilitate institutional (e.g., formal laws, social values, and perceptions of "rights" and "fairness and equality") and organizational (e.g., management bodies and stakeholder groups) change to promote holistic conflict management. For example, an education intervention can build conflict resolution technical skills and knowledge (procedural and intellectual competence), which in turn promotes critical thinking that challenges existing perspectives with regard to a problem (normative competence). Or, policy reforms could mandate the establishment of a new policing mechanism (procedural and intellectual), thus changing an existing incentive system that perpetuates crime (normative).

4.2 Conflict Management Mechanisms: Principles of Practice

The previous chapters define an understanding of RNR-conflict factors and dynamics and describe diverse experiences in addressing those dynamics through development projects. Parameters for conflict-sensitive approaches to RNR projects are extrapolated from the cases, and summarized below. Each of these existing areas of operation presents opportunities or "entry points" for improving *conflict management* through direct or indirect capacity building.

These principles are *lessons* identified by implementing teams and other stakeholders involved in the field operations of the different cases studies. This section draws on interviews with project team members (and stakeholder representatives, when possible), and project implementation and completion reports. During the interviews, team members were asked, "What would you do the same, what would you do differently, and why?" This section analyzes staff reflections on conflicts their projects encountered, and the methods they employed to address these conflicts. Despite the diversity of cases, these lessons in many ways overlapped. Seven categories of principles, described in detail below, are extrapolated from field staff accounts. Each includes attention to direct and indirect capacity building components in support of long-term conflict management. The categories are:

1. Considering "conflict management" as a principle of renewable natural resource interventions
2. Conducting practical and interdisciplinary conflict analysis throughout the project
3. Improving diverse opportunities for development
4. Advancing stakeholder participation for improved RNR governance
5. Developing skills to fill knowledge and technical gaps
6. Building organizational support
7. Incorporating "transboundary" perspectives

4.2.1 Considering "Conflict Management" as a Principle of Renewable Natural Resource Interventions

A conflict-sensitive approach is relevant even when conflict and violence are not immediately evident. This is because it embodies both direct and indirect capacity building for conflict management. This is particularly important when considering the factors that underpin RNR-conflict (table 2.1) are ever-changing risk multipliers. Development interventions associated with RNR regimes can inadvertently manifest violence from overlapping claims and latent conflict, particularly in fragile settings or where distributional imbalances are relatively large. For example, as seen in the first National Fadama Development Project, conflict *in*sensitivity can negatively impact development and contribute to poor social and economic outcomes. Incorporating a conflict-sensitive lens at the earliest stages of a project is an effective *risk protection mechanism* and can translate into real sustainable results, as demonstrated in the experience of the Second Fadama Development Project.

Go beyond "do no harm" by incorporating conflict-sensitive development approaches. Projects that go beyond "do no harm" extend beyond a safeguards approach. They consider all three elements of the *triple bottom line*: economic, social, and environmental benefits. This means the value of all three areas is evident in preparatory analysis, project design, and monitoring and evaluation methods, each of which demonstrates some level of innovation. Such projects positively impact communities through improved capacity, policy dialogue, and governance. They also promote social improvements, such as cohesion and accountability. Conflict-sensitive RNR projects also target and promote environmental improvements in accordance with global agendas, such as those associated with resource rehabilitation and climate change. In the triple bottom line approach, these social and environmental improvements are pursued in conjunction with objectives toward poverty alleviation and economic

growth. Beyond a basic approach to addressing risks, conflict-sensitive approaches foster sustainability and *resilience*. In an increasingly pressurized world confronted by escalating climatic and demographic change, building social resilience is the most critical form of conflict management.

Manage institutional constraints in dealing with conflict. Some assume that it is inherently political to engage conflict in any sort of a direct way. This perspective poses significant operational challenges for staff within strictly "apolitical" organizations such as the Bank. This issue is not unique to RNR projects, but in some country contexts where a particular RNR issue is highly political (e.g., water in West Bank and Gaza), this lesson is more salient. Over its history the Bank has played a number of third party roles, from facilitator to mediator to arbiter to ombudsman. Development interventions sometimes benefit from being associated with conflict prevention and resolution, and other times conflict-sensitive practices are more subtly incorporated under more benign nomenclature. Conflict analysis or other explicit references to conflict might benefit from a more general "social" frame, depending on the context. Similarly, "conflict resolution training" can be incorporated into a "sector-specific or technical workshop," or billed as "organizational" or "leadership training."

4.2.2 Conducting Practical and Interdisciplinary Conflict Analysis

Root conflict-sensitive operations in contextual understanding of relationships between stakeholders, and between stakeholders and renewable resources. Conflict risks can be internalized into project operations to prevent implementation bottlenecks and promote conflict sensitivity. Analytical methods for developing contextual understanding include:

- Categorization of conflict risks, including triggering and escalatory factors (as modeled in the case studies above);
- Disaggregated stakeholder analysis of the interests and needs of different groups within a socioecological system;
- Identification of destructive vs. supportive coalitions for equitable RNR management;
- Layered analysis of components of nested systems, such as RNR issues, to trace the structural factors that perpetuate the conflict paradigm (i.e., Dugan's Nested Model);
- Mapping inter-party power relations, systems of RNR access, and interactions of historical grievances;
- Political economy analysis of positive and perverse incentives to socioecological sustainable practices; and
- Projected impacts of different types of social, environmental, and economic change (see table 2.1).

The World Bank publication *Tools for Institutional, Political and Social Analysis of Policy Reform* (2007) provides methodological instruction for conducting inquiry in these areas. Peace and Conflict Impact Assessment (PCIA) frameworks are also useful for both project- and a programmatic-level analysis. There are several useful handbooks for applying PCIA, including Kenneth Bush's *Hands-On PCIA* and the *Peace and Conflict Impact (PCIA) Assessment Handbook* by the CPR Network. Additional analytical guidance is provided in several of the toolkits referenced in box 5.1. Some analytical perspectives are also shown in preceding case studies. However, these illustrations are not comprehensive, and practitioners would benefit from referring to resources that are dedicated to conflict analysis methods.

*I*ncorporate a conflict-sensitive perspective into existing analytical mechanisms. A conflict perspective can be incorporated into existing analysis relatively inexpensively by including conflict analysis skills in the team's skill set. This also ensures that analysis is practical and relevant. Provisions for assessing conflict risks can be incorporated into existing analytical mechanisms:

1. Country Social Analysis/Conflict Analysis Framework used in preparing Country Assistance Strategies;

2. Poverty and Social Impact Analysis/Political Economy Analysis used to understand impacts of policy reform;
3. Social and Environmental Impact Assessment (SEIA) and other context-specific analytics such as the "Conflict Filter"[20] used to inform lending preparations; and
4. Social audits including conflict indicators to determine project impacts.

Project staff expressed utility in incorporating a RNR-conflict-sensitive perspective into country and policy-level analyses in order to facilitate client thinking around these issues. For example, this perspective could be piggy-backed on broader efforts to incorporate climate sensitivity into country policies and poverty reduction strategies. Furthermore, an exploration of RNR conflict dynamics and risks is a natural point of integration between social and environmental agendas. In Nigeria, a focused conflict analysis was conducted as part of project preparation and strategic environmental assessment (SEA), which staff feel was critical to informing the successful conflict-sensitive design and implementation efforts of the project. In Andhra Pradesh, the social audit included four conflict indicators out of a total of 52. This demonstrated an opportunity to facilitate thinking and discussion about conflict risks and conflict resolution. Yet the constraints faced by implementing staff in terms of financial cost, time, and quantified data (versus more nuanced qualitative data), showed that this kind of opportunity has its limitations.

If social analysis (such as in technical assistance projects) is not part of the project, a team member with conflict analysis expertise can conduct analysis during project implementation using an action research approach in targeted fit-for-purpose analytics.

Identify "entry points" for building conflict-management capacity. "Entry points" are *opportunities for engaging agents of behavioral, attitudinal, and/or relational change*. Catalysts can be first and third parties to a conflict and *play a transformative and enabling conflict management role*. In Andhra Pradesh, the Forest Department is a first-party agent of change, modifying its policies and behaviors to benefit its relationship with forest-dependent communities for the long term. NGOs were a third-party agent of change, helping to foster norms of transparency and equity while also providing technical capacity building support. Some factors to consider when seeking change agents for empowerment through a project include:

- *Legitimacy:* How is the agent involved in the conflict? Does the agent understand the physical environment and its inherent RNR challenges? Would other parties to the conflict consider them a legitimate and trustworthy agent of change?
- *Level of influence:* Can the agent positively influence the behavior of other society members to promote peacebuilding?
- *Proximity:* Does the agent have access to conflict actors and the conflict context?
- *Perception and willingness:* Is the agent willing to champion change? Does the agent anticipate success?
- *Organizational capacity:* Does the agent have the organizational mandate and technical knowledge to promote change?

Positive answers indicate that the agent in question could be a viable catalyst to support conflict-management capacity building. Since new opportunities and agents of change can emerge over time, it is useful to remain flexible in order to take advantage of those as they arise.

Manage risks through RNR conflict monitoring. Fragile and conflict-affected contexts are dynamic, and even the most "benign" intervention can impact latent conflicts, active disputes, and violence. Environmental change and

[20] The "Conflict Filter," based on PCIA principles, was implemented by the Sri Lanka country team in 2009. A similar analysis was done in Nepal around the same time, but was called the "Peace Filter."

risk of natural disaster compound this complexity, and stakeholders and donors need to be prepared for sometimes sudden social and environmental changes (table 2.1). Formal monitoring of social and conflict indicators is best practice, but it is not always feasible for a large donor agency to implement on a micro scale. Furthermore, the refined skill of examining environmental conflict indicators is still a niche area for many development partners. It is neither a general part of our repertoire, nor incorporated into our process requirements. Practical approaches require flexibility and creativity to incorporate these methods into existing project systems. Monitoring can be labor intensive, and so combining data sources can be useful. In this context, opportunity is golden and the "best" should not be the enemy of the "good." Conflict monitoring can be made more practical by:

- Mandating, training, and supporting a third party, such as the project management unit (PMU) or an independent local NGO;
- Incorporating data gathering into social auditing exercises; and
- Grounding statistical data (e.g., official statistics) in qualitative fieldwork that can be carried out in tandem with site visits during supervision missions (e.g., participatory analysis and interviews with stakeholders).

Stakeholder participation in the monitoring process helps make stakeholders sensitive to conflict issues, building their own analytical capacities to support sustainable outcomes. In short, analysis has even greater value when it contributes to skill building and general learning.

Use monitoring and evaluation to envision, facilitate, and measure change. This lesson is not unique to RNR conflicts and peacebuilding, but is no less important to RNR conflict management. Monitoring and evaluation can help to measure results and can be used as a tool for generating knowledge. It should focus on *impacts* and *outcomes*, rather than just *outputs*. For example, some of the project cases use indicators such as "number of conflicts resolved" or "number of people trained in conflict resolution." These indicators are based on an evaluation system that favors quantification, and tell us little about sustainable impacts and institutional change over time. M&E benefit from more diligent collection of baseline data during preparation. Another primary challenge is that there is limited knowledge of good measurable indicators of "stakeholder capacity to deal with conflict risks". Some investigation into this topic, along with practical guidance, would benefit future projects. Unfortunately, none of the project cases conducted this level of analysis, and thus none can provide examples for how to execute this type of assessment.

Participatory monitoring and evaluation facilitates sensitization and builds conflict analysis and problem-solving capacity among stakeholders. Though not always practical as a sole M&E method, participation improves data collection and generates action learning opportunities.

4.2.3 Improving Opportunity for Development

Reduce violence and increase security by improving livelihoods. Environmentally-conscious, context-sensitive livelihoods development, capacity building, and education can serve to mitigate unsustainable RNRM practices, social power imbalances, and structural violence. Primary to this, the equitable distribution of opportunity and benefit sharing need to be ensured. In Andhra Pradesh, many forest-dependent communities perceive conflicts around forest management policies to be driven by risks to livelihoods. The project addressed this core issue by making livelihoods development a core component of the project.

Furthermore, poverty and lack of opportunity is the fuel of many insurgency movements. In AP, these conditions feed grievances and enable Naxalite groups to penetrate communities, sometimes bringing risk of violence and intimidation to households that are otherwise unwilling to participate in the struggle. Improving livelihoods has

proven to head-off this negative trajectory towards insurgent violence. As a consequence, projects like APCFM have become well-known as conflict prevention mechanisms in India. The TTL recently reported: "I had a Minister in another state plead with me for an AP-style project because it would improve rural livelihoods in forest communities and reduce the influence of Naxalites."[21]

Reduce competition over renewable resources by increasing the "size of the pie." Increasing the "size of the pie" includes creating new economic opportunities and improving the value generated from resource-dependent livelihoods. Activities demonstrated in the cases above include:

- Promoting non-resource dependent or less resource intensive livelihoods (e.g., transportation services, agricultural services, and production of goods such as honey and vermicompost) ;
- Improving efficiency of resource-dependent livelihoods (e.g., through agricultural extension) ; and
- Adding value to existing resources and raw goods (e.g., processing and manufacturing).

Each of the project studies included such components, perhaps with the exceptions of the Afghanistan and West Bank cases.

Mitigate structural violence by addressing power and distributional issues. Conflict-insensitive development can add fuel to what might already be a destructive political economy. This fact is particularly salient in rural communities that are directly dependent on renewable natural resources, and in countries where resources and their revenues are critical to stability and development. These conditions can foster perceptions of relative deprivation and frustration over poor governance, and in turn contribute to grievances, power struggle, and violence. Resource conflicts are particularly amenable to political economy analysis and policy interventions (For more see World Bank 2007b and 2008b). When expectations and distribution are managed in a way that is acceptable to the stakeholders, livelihoods development manifests opportunity and discourages violence. In AP, project beneficiaries described a general decrease in communal willingness to join insurgency groups as community livelihoods and general living conditions improved. Real evidence of poverty alleviation constitutes "good politics," incentivizing political endorsement of participatory development processes. Engaging public officials in public processes ensures accountability and at the same time encourages recognition of the needs of constituents.

Make livelihoods development opportunities equally available across the socioeconomic spectrum. (e.g., landed and landless, those who rely on forest resources and those who do not). Equal opportunity and the promotion of equitable outcomes encourage sustainable environmental outcomes and prevent conflicts between beneficiary groups. Sharing benefits (such as ecological and resource improvements or the distribution of monetary income) allows community members to experience the advantages of determining their own priorities, thus reinforcing participatory management. In many of the project cases, when communities saw benefit—and particularly *equal* benefit—from managing natural resources, they experienced less conflict and violence and expressed more satisfaction with the initiative.

Reinforce conflict-management capacity by promoting green practices. As populations grow, demand for livelihoods resources and general consumption continues to grow. Promoting green innovations and the institution of a light footprint over time will slow the pace of increasing stress on resources, which itself mitigates the risk of conflict over the long term. In many developing countries where population pressures are increasing exponentially, these dynamics of competition and increasing relative scarcity are of real concern.

[21] Milne, email to author.

4.2.4 Advancing Stakeholder Participation to Improve RNR Governance

*Foster **meaningful and broad** participation through flexible and phased processes.* The role of participation in promoting peacebuilding and conflict-management capacity is a critical component of conflict-sensitive development that extends beyond RNR projects. Natural resource specialists working on project implementing teams emphasized the importance of outlining these issues in the lessons for this paper. To start, establishing *meaningful* participation requires multiple phases, which are not mutually exclusive:

1. building awareness;
2. internalizing egalitarian values and norms;
3. building trust;
4. analyzing the issues;
5. contributing to planning; and
6. partaking in management.

Participation has multiple benefits. It ensures the incorporation of local values into policies and plans and builds local analytical, problem-solving, and governance capacity. It also reinforces self-esteem and a sense of empowerment. Engaging stakeholders can sometimes require proactive facilitators, for example when engaging spoilers or marginalized groups such as women.

Participatory institutions need to remain flexible enough to absorb new members and newly interested parties. In AP, for example, CIGs are sometimes exclusive. While exclusivity can serve to promote standards and incentives, exclusion can also generate grievances and cause conflict between participants and non-participants. Excluded parties may sabotage the means by which others benefit, triggering violence. Allowing open opportunity to join participatory bodies accounts for demographic changes over time (e.g., generational transference of membership, population growth, etc.).

Furthermore, broad participation can be incentivized through conditional access to different types of benefits. The project cases have illustrated this practice, and benefits have included access to natural resources, technical assistance services, and micro-financing. In the case of NFDP2, organizational registration and representation in planning committees (which is open to all stakeholders) is required for micro-financing eligibility. "Second order" benefit incentives can also be utilized by the project team to promote participation. These second order benefits include community or market development, political capital, and social influence.

Foster norms of accountability and value diverse RNR interests through community involvement. Group ownership and increased self-esteem advance values for protection of renewable resources and resistance to spoiler groups. Promotion of these values can help rectify historical grievances due to marginalization and access limitations. The case studies demonstrate that closely involving stakeholders in natural resource management efforts fosters protection and ownership of results. With improved inter-group relations, renewable resource management becomes a source of cooperation and joint opportunity, and less a focal point of dispute and conflict. Consequently, better RNR management in turn further fosters norms that promote equity and positive relations between stakeholder groups.

Cultivate a broad relationship with RNR stakeholders by making information accessible. "Equitable opportunity" is underpinned by awareness of and access to information—regarding the resources, development and conservation efforts, decision-making processes, finances, and project impacts. Knowing the capacities of a stakeholder audience is key, as information needs to be conveyed in ways that make it readily available to both literate and

illiterate, high-tech and low-tech parties. Creating awareness helps to sensitize stakeholders to forthcoming ideas and change, counter misperceptions, and encourage dialogue, relationship building, and innovation. High-tech literate audiences benefit from the World Bank's ImageBank and externally-hosted project websites. In addition to these modern tools, the projects discussed in Chapter 3 also used as communication tools community meetings and bulletin boards, news and entertainment media (newspapers, magazines, radio, television), and workshops. This is what was done in APCFM, as it dealt with over 1,000 rural communities, plus government and other stakeholders, each of which had different information needs, means, and levels of technical knowledge. Transparency and equal access to information supports a framework of knowledge about renewable resources, and in turn equal opportunity. Transparency contributes to legitimacy and trust-building and thus conflict resolution and prevention mechanisms.

Facilitate relationship building between resource user groups through collaborative knowledge development and learning. Collaborative approaches to knowledge development ground analysis in a community's environmental values and resource priorities. They also create new opportunity for resource user groups to work together toward a common goal. But ultimately, knowledge is only useful to those who have access and are aware of its utility. Therefore, participatory knowledge development efforts must be coupled with a collective dissemination plan. As discussed above, different dissemination practices are appropriate for different contexts. Training workshops create further opportunity for bringing together different stakeholders to learn collaboratively from each other. A joint learning process, centered around issues and risks of dispute, can build common ground, facilitate the discovery of common experience between parties, and build relations between groups in pertinent ways.

Consider the unique environmental values and RNR management roles of women in the community members. As some of the case studies recognize, women play a central role in natural resource management and biodiversity conservation. Because they are traditionally in charge of food preparation, domestic maintenance, healthcare, and sanitation, women are often responsible for collecting wood, plant products, and water. Gendered role differentiation in some communities means that men and women value natural resources differently. For example, in some case study communities, women voiced support for project components that maintain and cultivate diverse flora and fauna species, as they use these goods for different household purposes (e.g., cooking and cleaning). Men, in contrast, often expressed an interest in focusing cultivation on a few high-value crops that generate income. Understanding and addressing these varying interests requires meaningful participation in resource management from both men and women.

In India and West Bank, the projects mandated the participation of women in community-based project implementation agencies. While women's involvement in some communities still appears to be more symbolic than meaningful, experience has demonstrated that over time, compulsory involvement facilitates the community-wide professional and intellectual development of women. This elevates the importance of women's concerns in decision-making and creates role models for younger women. Mandatory women's participation lays the groundwork for more equitable participation, consideration of diverse needs, and distribution of authority.

Engage powerful RNR interest groups with a targeted approach. More powerful groups do not always immediately foresee the benefits of engaging with less powerful interest groups. Firstly, they seek to maintain authority. Secondly, admitting the existence of problems in the community can be perceived of as a weakness. Direct one-on-one engagement and consultation with these groups, particularly in the beginning earliest stages of a project, can help build group trust in the process and in the third party facilitator of that process (e.g., the donor). It also establishes a foundation for a broad stakeholder-driven process and allows powerful groups the opportunity to participate in solution-making while saving face. In the case of the Virunga National Park, for example, military

and governorate-level officials were directly and successfully engaged on the issue of illegal encroachment west of Lake Edward. Through a targeted approach, the project got these authorities to counter corrupt behaviors within their own organizations. High-level organizations were able to support progress while saving face.

Encourage visionary leadership to support ground-level change. Each of the case studies engaged local leaders, empowering them to support conflict-sensitive processes through RNR policies and procedures. Projects can benefit from mobilizing local political support, which can endorse and even formalize participatory processes and validate egalitarian norms and values. Field staff named this as an important lesson from the Afghanistan case, which required and sometimes struggled to obtain strong leadership to support conflict management processes, both locally and nationally.

Visionary leadership also includes "out of the box" thinking about interlinked socioenvironmental challenges. Local implementing partners, such as PMUs and NGOs (which tend to be less politically constrained), are useful entry points for championing this kind of thinking. This is because government agencies by nature are often confined to thinking within their organizational silos. Donors too can exercise this type of leadership, particularly with regard to ensuring an interdisciplinary approach between organizations that have different operational philosophies (e.g., NGOs, ministries, local government).

4.2.5 Promoting Skills Development to Fill Knowledge and Technical Gaps

Educational activities can play several roles in building conflict-management capacity. Skills development and promoting intellectual and institutional growth are generic components of much of the Bank's work. Training can be targeted to fill identified gaps in behaviors/norms and knowledge/skills. Education further equips communities to be resilient and adaptable to environmental, social, and economic change by promoting innovation, challenging assumptions, and changing attitudes. The project cases illustrate that education in several areas can support RNR conflict management by sensitizing stakeholders to environmental issues, which improves renewable resource use practices and management institutions. Targeted approaches include:

- *environmental education* in schools, as was done in Andhra Pradesh, where young generations were seen as key to establishing a higher appreciation for environmental resources and services;
- *mass public information campaigns* in communities, as was undertaken in Ecuador, where traditional practices were contributing to land degradation; and
- *technical skills-building* in horticulture, livestock management, and handicrafts production, which was done in all of the cases to improve management, efficiency, and income generation.

Additional examples of training include:

- *conflict resolution training* to increase conflict sensitivity and mediation skills;
- *leadership training* to encourage conflict-sensitive and inclusive management practices;
- *facilitation training* to build capacity to organize and manage participatory meetings; and
- *project and financial management training* to improve transparency and reduce elite capture and corruption.

Furthermore, learning side-by-side with different stakeholder groups provides additional opportunity to learn about the different values and experiences associated with resource management.

4.2.6 Building Organizational Support

Capitalize on local NGO capacity as facilitators, ombudsmen, trainers and champions of change. NGOs staffed with local experts tend to be widely respected and trusted, and thus have the ability to play multiple roles. For example, on a

project-wide level, APCFM benefited from the independent attention of an Indian NGO that lobbied the project and provided technical support to ensure a participatory, stakeholder-centered, conflict prevention focus. This NGO convened workshops and independently conducted a stakeholder assessment later incorporated into project design. It also implemented a public information and sensitization campaign and executed skills-building workshops in conflict resolution, facilitation, and leadership development. The NGO's work was not financially supported by the project. Implementing partners acknowledge the importance of this NGO's work in helping to design an effective project, and suggest that future projects budget for this type of partnership. Others suggest that the NGO's independence allowed the organization more freedom in its work.

Perhaps the most unique role that NGOs can play is that of ombudsman. In APCFM, while the FD played the primary role in project and RAP implementation, NGOs also played a consultative role. They oversaw VSS decision-making processes and finances to ensure equity, provided a safe place to voice grievances and discuss disputes, monitored institutional capacity, and provided technical guidance. As development progresses and socioeconomic changes emerge in communities, the ombudsman role becomes even more important. Practice shows that CDD projects benefit from close partnership with local NGOs. APCFM observed that investment in NGO development would have been beneficial as a conflict management mechanism. The outstanding question with regard to working with project partners such as NGOs is always, "What happens when the project ends?" Given the value of NGOs' roles, donors might consider incorporating NGO sector development initiatives into projects where appropriate.

Establish an independent advisory group to provide an interdisciplinary perspective on project impacts. To provide additional professional and technical perspective and local guidance, APCFM established an interdisciplinary IAG. The group consisted of experts in five fields: politics, anthropology, philosophy, law, and forestry. Assembled by the PMU, the IAG was mandated with providing contextual analysis and guidance to support RAP implementation, and in so doing was contracted to conduct field visits twice a year. The group also served as ombudsman and mediator to mitigate and resolve communal disputes. The IAG was so effective and useful a resource, the project team recommended expanding its mandate in future projects to give it jurisdiction over monitoring impacts in all beneficiary communities.

Provide a "safety valve," such as a mediation body or grievance reporting mechanism, to deal with active RNR disputes. Too often, *conflict resolution* is equated with mediation. This paper has focused on dispelling this notion and broadening development practitioners' and natural resource specialists' conceptions of "resolution" or "conflict management." Yet this is not to say that mediation is an unimportant component of resolution efforts. Direct support to establish conflict resolution bodies outside of formal court systems has been viewed in several of the case studies as useful conflict management components. For example, "conflict committees" composed of traditional and opinion leaders (nominated based on the trust their constituents have in them) were assembled in the Nigeria and DRC cases. They were mandated to discuss and make decisions about disputes within their communities. Project staff suggest these committees help empower groups that might otherwise be marginalized or afraid to confront issues publicly. They provide an outlet where such groups can express their frustration and seek guidance from trusted leaders. Conflict committees also created a facility where corruption can be spotlighted, inspiring community responsibility to blow the whistle on illicit behavior.

Institutionalizing grievance reporting processes was also useful to some of the NRM project cases. In Andhra Pradesh, the project established a "chain of command" to address grievances. This chain extended from community structures (where traditional mechanisms are the first point of departure to address these issues) up to the highest level of the PMU. Transparency and inclusive processes also provide an outlet for expressing

grievances more informally, and on an as-needed basis. Because some rural communities utilize traditional mechanisms to deal with conflict (such as a committee of village elders), projects sometimes depend heavily on these existing institutions. As socioeconomic conditions change, though, these traditional mechanisms may be inadequate. Partner NGOs can help monitor this situation and provide conflict-mitigation support, or encourage training, as needed.

Build on and build up legal systems and police forces associated with renewable natural resources. Sometimes engaging formal legal and policing systems can escalate conflict, particularly if one of the parties has historical grievances with government authorities. However, engaging these systems can deter violence by legitimating user group needs vis-a-vis stakeholder agreements and local policy, and in turn promote official recognition, enforcement, and RNR policing.

As some cases demonstrate, the police and security sector can be corrupt, and thus constitute an equal part of the problem. In the case of DRC, participatory and transparent mechanisms revealed that forest service officers were part of a fish poaching and bush meat racket. In India, some communities bore historical grievances against Forest Department officers who had been known to take bribes and enable illegal logging activities. Training officers and relegitimizing their role in a just system became an important step in rebuilding the police system. Similarly, reconstructing the relationship between FD officers and communities through project implementation helped to revalidate the FD and reinforce a system of rule of law.

Some projects anticipate that over time, local communities stand to earn more income than the police. Such is the case in India. This calls into question the role that forest officers may or may not choose to play in future management, and whether corruption could again become an issue. Attention to this perverse incentive system and to human resource management is therefore needed in order to ensure that corruption does not again take hold.

4.2.7 Incorporating "Transboundary" Perspectives

Where possible, incorporate transboundary RNR issues and opportunities into the intervention. As we know, ecosystems and the natural resources of which they are made know no political or administrative boundaries. Nor does climate change or natural disasters. Even social and economic change can spill over, be it because of globalization or porous borders. Cross-border coordination, on an international or a local level, can mitigate negative spillover effects of social and environmental problems that can contribute to conflict. Cross-border coordination can bring compounded, more significant resources to bear (e.g., timeliness, manpower, finances) in an intervention. In the face of long-term social, environmental, and economic risk, transboundary coordination can improve resilience and serve as a stabilizing force. For example, in Virunga National Park, DRC and Ugandan forest officers coordinated to facilitate the return of refugees, which in turn alleviated some of the pressures on the resources of the park area. The DRC project team also emphasized the need to support stakeholders in other administrative districts outside the targeted "conflict area" (e.g., civil society groups intervening in parallel activities in peaceful areas). A transboundary approach facilitated the exchange of technical lessons and the building of a coalition to prevent conflict enlargement and escalation. In a region riddled with conflict, transboundary cooperation provides a basis for future collaboration in support of regional security.

Consider both traditional and official government conceptions of RNR boundaries. The cases above demonstrate how traditional and formal claims to resources can overlap, bringing particular challenges to management efforts. Different governance structures may be linked in numerous ways, including through policing, maintenance, and conflict resolution mechanisms. There are also added benefits to linking these systems. For example, supporting

local systems and capacity in highly traditional societies is important for building legitimacy among constituents. Sustainable land and biodiversity protection requires a system that is recognized by all parties, with agreements based in local tradition and direct dialogue. In many cases this means expanding a state-level legal framework to recognize and endorse or validate traditional systems. Linkages between formal and customary systems for conflict resolution is key. This is particularly true when disputes are based in conflict between claims rooted in customary systems, as demonstrated in Afghanistan, West Bank, and Ecuador, all of which used mediation to resolve property rights, and then formalized those agreements through government institutions or other legal agreements. Formalizing these agreements also facilitates links with official policing and regulatory services, thus providing a platform for "policy" enforcement. In the end, these overlapping formal and traditional claims can create opportunities when management systems are reconciled. For example, tribal groups that span formal administrative boundaries, such as the Cofán in Ecuador and other scheduled tribes in India, can unite under the mission of collective management, and thus improve official "transboundary" cooperation.

4.3 RNR Conflict Management Mechanism "Tool Box"

The previous chapters highlight a range of conflict management mechanisms (component E in figure 2.1) that can be integrated as conflict-sensitive components of RNR initiatives. These mechanisms facilitate organizational and institutional capacity building outcomes, both directly and indirectly. As a series they represent a "tool box" for RNR conflict management and peacebuilding.

These mechanisms are extrapolated from the cases and categorized with two objectives in mind: (1) to emphasize the broad range of mechanisms that can be operationalized to manage RNR conflicts and facilitate peacebuilding, and (2) to enable further thinking about these mechanisms, the opportunities they represent, and the forms they can take. This "tool box" is not intended to be instructive about the nuanced application of each referenced mechanism, but rather the compilation can be used to brainstorm context-specific modalities for promoting RNR conflict-management capacity.

Table 4.1 RNR Conflict Management Mechanism "Tool Box"

Conflict-Sensitive Project Administration Mechanisms **Capitalize on opportunities inherent in the project cycle by incorporating conflict considerations into requisite procedures and documentation.**	
• Pre-project assessment and other social analysis (EIA, PSIA, PE, micro, macro) • Stakeholder consultations • Public communications • Community-driven development approaches	• Resettlement Action Plans • M&E indicators and logical frameworks • Terms of reference • Human resources (conflict expertise on task team, local/social context-specific expertise)
Non-Official and Traditional CR Intervention Mechanisms **Support conflict resolution through targeted procedures and dedicated organizational bodies.**	
• Conflict analysis and mapping • Stakeholder-driven Conflict Resolution Plan • Grievance mechanisms • Facilitation • Informal consultations	• Conflict resolution committees • Support to community-based CR mechanisms (e.g., *shura*, *jurga*) • Third-party mediation and mediated agreements • Pilot mediation programs • Ombudsman

Stakeholder Engagement and Social Accountability Mechanisms **Address political economy, mitigate powerful interests, and ensure equity by fostering broad participation of representative stakeholder groups and building process ownership.**	
• Community planning and decision-making • Benefit- and income-sharing mechanisms • Local community development plans • Participatory analytics (conflict assessment, social auditing, evaluation, and impact assessment) • Stakeholder participation recruitment programs • Equity standards in procedural guidelines • Open enrollment policies	• Strengthening territorial rights • Payment to communities for environmental services • NGO and CSO development • Transparency and inclusion as institutional mandates • Consensus building exercises • Local-federal administrative linkages • Inter-communal coordination • Cross-border cooperation • Trust-building activities
Natural Resource Management Mechanisms **Slow or reduce environmental pressure by supporting sustainable management and consumption policies and micro-level initiatives.**	
• Conservation • Protection • Sustainable resource management and development	• Demand management • Climate change mitigation • Climate change adaptation
Economic and (Green) Technology Development Mechanisms **Reduce resource dependence and expand the "size of the resource pie."**	
• Income generation and livelihood improvement programs • Non-land-based livelihood development • Incentives for technological innovation (tax cuts, public competition) • Value-adding resource processing activities • Community reinvestment and "self help groups"	• Green infrastructure and services development and improvement • Climate change adaptation solutions (low and high technology) • Micro-financing schemes (particularly those that support conflict mitigating and green investments) • (Green) business development incentives and technical support

Policy, Legal and Judicial Mechanisms **Strengthen RNR governance and leadership by formalizing and enforcing a robust regime characterized by joint management responsibility, equitable access, and shared benefits.**	
• Conflict-focused policy research • Legitimizing indigenous rights • Reconciliation of ancestral land claims • Policy that facilitates protection of land by owners • Strengthening traditional and national/federal levels of authority • Linking traditional and national/federal institutions • Governance and maintenance partnerships (with civil society, private sector) • Co-management agreements (between state, public, private, and common actors) • Delimiting and demarcating territorial boundaries • Transboundary policy harmonization • Regional agreements or treaties	• Establishing and relegitimizing legal and policing bodies • Community policing • Communal titling • Patrolling borders • Cross-border police coordination • Physical protection of boundaries and resources • Utilization of government court systems (including adjudication) • Judicial development programs • Political advocacy • Leadership gestures • "VIP" and policy maker workshops • Anti-corruption measures • Building conflict-resolution trained/conflict-sensitive police capacity
Communications and Education Mechanisms **Empower stakeholders and fill "knowledge gaps" through information and training, building awareness, facilitating sensitization, and improving technical capacity.**	
• News and entertainment media integration (newspapers, magazines, radio, television, Internet) • Public sensitization and information campaigns (radio, magazines, TV, informational posters, Web) • Blogging and online social networking • Dissemination of lessons and topical materials • Environmental education programs • Announcements and information dissemination via community bulletin boards and regular public meetings	• Action or experiential learning (e.g., through implementation) • Online e-training modules • Technical resource sciences and management training • Conflict resolution training • Leadership and strategic planning training • Conflict resolution training • Legal training • Business training (finance and project management) • Monitoring training • Handicrafts training • Impact assessment and analytical training

5. Next Steps

Competition over natural resources is a natural social phenomenon that is not necessarily negative unless it manifests violence. Risk of conflict, in fact, often has positive impacts on development operations because it encourages more context-sensitive design and implementation. While competition associated with achieving and maintaining environmental security can serve as a dividing and polarizing force, management of natural resources also poses opportunities for collaboration and development through projects that address NRM issues.

At this stage, it is impossible to in actuality measure the long-term peacebuilding impacts and sustainability of conflict management in the case studies. However, it is possible to identify risks, monitor trends, and take precautionary measures to address these risks. Collectively, these case studies demonstrate how to integrate conflict-sensitive approaches to natural resource project design and implementation.

So, what do we know? This study does not attempt to present global best practice. Rather, it describes some lessons and highlights where further inquiry could be useful. First, environmental stress is increasing in the context of population growth and resource depletion and degradation. Fortunately, human ingenuity and social adaptation has historically meant that societies have maintained the capacity to adapt over time. Some theorists assume there is a threshold or "tipping point" upon which a society may no longer be able to cope with the stress, causing institutions to unravel. Concerns about these types of social risks are compounded in some areas of the world that face extreme environmental risks and where coping mechanisms may prove inadequate in times of crisis and shock.

The prevention and resolution of complex conflicts such as these requires an equally creative, innovative, and interdisciplinary approach. But beyond this, conflict resolution and prevention works best when local organizational and institutional capacity is linked with that of a broader authority—individual to group, local to national, formal to customary—and establishing legitimacy and sustainability. Building networks helps foster resilient communities that can constructively address environmental risks, whether these be near-term impacts of natural disasters or long-term effects of climate change. Several respected organizations have assembled toolkits that provide specific guidance on how to deal with these challenges in the field. Some of these are listed in box 5.1.

Box 5.1: Practical "Toolkits" for Addressing NRM Conflict in Development

Several development agencies have developed toolkits and other practical guides for mitigating natural resource conflicts. Below are some of the most useful:

Land and Conflict: A Toolkit for Intervention (USAID, April 2005)
http://www.usaid.gov/our_work/cross-cutting_programs/conflict/publications/docs/CMM_Land_and_Conflict_Toolkit_April_2005.pdf

A Post-conflict Land Administration and Peacebuilding Handbook (UN-Habitat, April 2007)
http://www.unchs.org/pmss/getElectronicVersion.asp?nr=2443&alt=1

Post-conflict Land Tenure: Using a Sustainable Livelihoods Approach (FAO, 2006)
http://www.fao.org/sd/dim_pe4/pe4_060301_en.htm

Land Tenure Alternative Conflict Management (FAO, October 2006)
http://www.fao.org/sd/dim_in1/in1_061001_en.htm

Forests and Conflict: A Toolkit for Intervention (USAID, July 2005)
http://www.usaid.gov/our_work/cross-cutting_programs/conflict/publications/docs/CMM_Forests_and_Conflict_2005.pdf

Water and Conflict: Toolkit for Practitioners (Adelphi Research, USAID, Woodrow Wilson International Center for Scholars, May 2004)
http://www.adelphi-research.de/projektberichte/Water.pdf

Livelihoods and Conflict: A Toolkit for Intervention (USAID, December 2005)
http://www.usaid.gov/our_work/cross-cutting_programs/conflict/publications/docs/CMM_Livelihoods_and_Conflict_Dec_2005.pdf

Post-Conflict Needs Assessment Transitional Results Framework Toolkit: Note on Addressing Environmental Issues (UNEP, February 2009)
http://74.125.47.132/search?q=cache:aenSeN6iBfEJ:www.undg.org/docs/9926/Final-Draft-Toolkit-Note-Environment-9-March-2009.doc+PCNA-TRF+Tool+Kit&cd=1&hl=en&ct=clnk&gl=us

Conflict-Sensitive Approaches to Development, Humanitarian Assistance and Peacebuilding: A Resource Pack (Saferworld, 2004)
http://www.conflictsensitivity.org/?q=resourcepack

What still needs to be done? Technically and operationally there remain several questions associated with addressing these challenges.

Awareness of these issues and how they relate to development and poverty alleviation operations needs to be broadly cultivated across the development field of practice. Given the interconnectivity of these issues, interest in the RNR-conflict nexus can be developed within existing agendas on governance and fragility, climate change, the food crisis, and disaster preparedness.

Operationally, "capacity building" needs to be applied as a more holistic and diverse concept. Beyond training and knowledge management, on a more fundamental level *capacity building as peacebuilding* means affecting institutional norms and fostering constructive relationships and innovative behavior to support long-term conflict management.

Practitioners interviewed during the development of this paper repeatedly highlighted a few areas in which more technical and practical guidance is needed:

- Incorporating a RNR conflict analysis and resolution perspective into existing conflict and social analysis tools;
- Developing outcome indicators for measuring conflict impacts, which can be incorporated into monitoring, evaluation, and impact assessment mechanisms;
- Managing the political economy factors at play in RNR conflict regimes;
- Understanding how natural resource management institutions can play a role in rural violence reduction; and
- Networking local and global communities of practice for knowledge development and exchange, and promoting this field of inquiry.

This paper has initiated a broad discussion around these issues, and it may be beneficial now to develop targeted technical guidance for practitioner use. A few excellent toolkits have been developed already (see box 5.1), which are useful to both Bank and non-Bank professionals.

Looking forward, the intellectual and practical challenges are large, but with the right mix of institutional incentives to encourage engagement on this topic, the World Bank can draw on abundant knowledge and experience and build a role for itself as a leader in conflict-sensitive development approaches to renewable natural resource management.

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Annex 1: Interview Schedule Template for Case Studies

Interviewee:
Date/Time:
Place:

1. How does the project address/face/experience renewable natural resource **conflict**? (Describe the issues, parties, roles, dynamics, incentives, outcomes)

2. How does the project attempt to **mitigate/manage** the conflict(s)? What **components** of the project contribute to conflict mitigation/management/prevention?

3. What **institutions/organizations** does it attempt to engage? How are those institutions/organizations **agents of change**? How were they and their capacity **identified**? **How** were they engaged: (1) through support to existing CR mechanisms, and (2) by building new capacity?

4. How was the project/component **successful** in addressing conflict? How was it **unsuccessful**? How was success **measured**? What indicators did the project apply? What methods?

5. Reflecting on the experience of this project in how it mitigated or managed conflict, what are the **lessons for design**? For **implementation**?

6. If you were going to do the project again, what would you do **differently**? The **same**? What are some other ways you could have dealt with these conflicts? Why did you not choose them?