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Forest conflict in Asia and the role of collective action in its management

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ABSTRACT

Forest conflict in Asia is on the rise as various stakeholders have different views about and interests in the management of increasingly scarce resources. Unfortunately, in many instances, local communities and indigenous peoples suffer the most when such conflicts play out. The biggest challenge is finding acceptable, fair, and lasting solutions. Focusing on how rights (or a lack thereof) instigate conflict and how collective action plays a role in conflict management, this paper examines eight cases from six countries: Cambodia, China, Indonesia, Lao PDR, Thailand and Vietnam. Participatory methods including semi-structured interviews, field observation, focus group discussions, and multistakeholder workshops were performed. Conflict was found to emerge in the context of the rapid economic development, where communities' deep connection to the forest and land is being cut by the influx of investors or government agencies. Land historically managed and used by local people becomes contested when investors are granted the rights to develop such land (for example, for oil palm plantations, agricultural production, and mining) or government agencies designate new protected areas. Findings illustrate that conflict can strengthen collective action and enhance the voices of the less powerful actors. However, it may also weaken collective action particularly when local institutions are inadequate. To reduce the incidence of future conflict, local and traditional rights need to be properly respected and strengthened legally. In addition, economic development policies need to have built-in social and environmental safeguards to minimize negative impacts at the local level. While conflict can either make or break collective action (and collective action can either escalate or assuage conflict) the need to strengthen local institutions seems to be a key priority to ensure positive conflict outcomes.

Keywords: conflict, collective action, local communities, indigenous peoples, conflict management, Asia

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Forest conflict in Asia and the role of collective action in its management

Yurdi Yasmi, Lisa Kelley, and Thomas Enters

1. INTRODUCTION

The forestry sector in Asia and the Pacific has undergone substantial change over the past two decades in response to broader developments including economic growth, globalization, and attention to sustainable development (FAO 2009). The region has enjoyed high economic growth over much of the last 20 years. Until 1997, Asia attracted half of the total capital inflow to developing countries. Between the late 1980s and mid-1990s, spectacular growth of between 8 and 12 percent per year occurred in Indonesia, Malaysia, Singapore, the Republic of Korea, and Thailand (Stiglitz 1996). Despite the financial crisis of the late 1990s, the region has made commendable progress (Mahbubani 2008). China, India, and Vietnam, for example, have maintained relatively high economic growth over the last decade. The region as a whole has been successful in reducing the number of people living in extreme income poverty (UNESCAP, 2008).

Demands on forest products and services continue to increase due to stronger purchasing power, population growth, and increased international demand on industrial crops, forest products, and services. Consequently, the deforestation rate in natural forests has remained high: 3.7 million ha were lost annually between 2000 and 2005 (APFC 2008; Enters et al. 2009). Recently, demand for environmental solutions is growing as concern about the impacts of climate change and the loss of biodiversity grows. In particular, additional land is being converted into agro-fuel and food crop plantations with the skyrocketing commodity prices of 2008 fresh in people's minds, leading to so-called "land grabbing" (RRI 2010). The region has entered a time of great scarcity and instability, one that particularly affects the local communities and indigenous people that live and work at the forest frontier (Evans and Steven 2008).

Conflict over forests often emerges in this context.² One common type of conflict in Asia is conflict between communities and other stakeholders (such as government agencies and companies), hereafter simply called community-outsider conflict. In Cambodia, 236 community-outsider conflicts were recorded in 2009 (The NGO Forum on Cambodia 2009). In Indonesia, 359 incidents of forest-related conflict occurred between 1997 and 2003 involving community-outsider conflicts, with numbers increasing over time (Wenban-Smith 2001; Wulan et al. 2004). And three quarters of Asia's forests were affected by violent conflict (de Jong et al. 2007). Tens of thousands of local communities and indigenous peoples were severely affected (USAID 2006; Yasmi 2007). Such people stand on one side in conflicts confronting more powerful actors such as companies and governments.

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² When we refer to forest we also mean to include the land where the forest is located, as demand on forest is often not only for the products that the forests produce but also for the land where the forest is located.

Unable to defend their rights and make their voices heard, they usually end up losing in the battle over forests.

The importance of finding a lasting solution to community-outsider conflicts has been recognized by development organizations, the private sector, governments, and NGOs. While much has been written about conflict management in the region, little attention has been paid to drawing lessons from community-outsider conflicts in various contexts. This paper aims to fill this gap. Figure 1 depicts the focus of our analysis. On the one side of the conflict are local people who are often being supported by NGOs and advocacy organizations and on the other are outsiders (companies and governments) supported in several cases by the military and/or police.

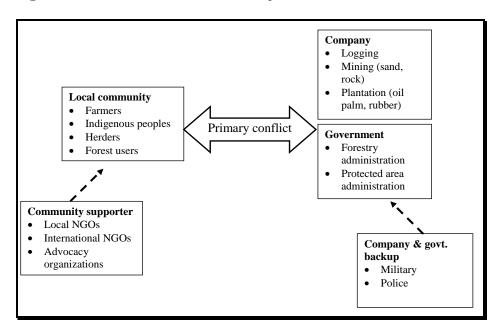


Figure 1. Focus of conflict analysis

Source: Authors

The main objective of this paper is to provide a better understanding of how conflict impacts collective action at community level and vice versa. Realizing that there is no panacea to managing forest conflict, we do not intend to provide comprehensive solutions nor do we provide detailed prescriptions for conflict management. Rather, we aim to demonstrate experiences with conflict management and collective action in various contexts to shed light on what worked under particular circumstances, why it worked, and what needs to be improved.

Our study focuses on three main research questions:

- 1. What are the underlying causes of community-outsider conflict in the Asia-Pacific region?
- 2. How do actors manage their conflict, that is, what approaches do they take?

3. What impacts does conflict have on collective action and what is the role of collective action in conflict management?

2. CONCEPTUAL BACKGROUND

Conflict

Conflict is commonly defined as differences or incompatibilities in interests, goals, or perceptions (Coser 1956; Dahrendorf 1958; Bartos and Wehr 2002). Broad definitions as such have been widely adopted in forestry (FAO 2000).

Recently, there have been more specific attempts to conceptualize conflict in a forestry context. Raitio (2008), for instance, suggests that forest conflict can be understood as a frame conflict, a conflict in which disputants differ in their views, experiences, or understandings of conflict. Through a comprehensive review of frame theories she argues that conflict is perception and value driven (see also Lewicki et al. 2003). Studies by Marfo (2006) and Yasmi (2007) are complementary. Following Glasl (1999), they consider conflict to be defined by impairment, that is, to represent a situation in which an actor feels impaired or restricted by the behavior of another actor (Figure 2). In this paper, we similarly use impairment as the defining quality of conflict.

Differences in thinking, views and perceptions

Differences in emotions

Behaviour of actor A

Differences in interests, will

Figure 2. Conflict model based on impairment

Source: Glasl (1999)

Differentiation between underlying and direct causes of conflict is usually made (FAO 2000). Underlying causes are fundamental and broader factors (related to policies, economic development, population, scarcity, and livelihoods, for example), which are often applicable to broader contexts. Direct causes are those observed as immediate factors of conflict in specific locations.

Conflict management

Four terms are commonly described in the literature in relation to addressing conflict: conflict resolution, conflict management, alternative dispute resolution

(ADR), and conflict transformation (Galtung 1965; Wall and Callister 1995). They have different underlying assumptions and objectives though they are often used interchangeably (Dahrendorf 1958; Deutsch 1973; Pruitt and Rubin 1986).

The main assumption of conflict resolution is that every conflict has to be resolved as it is inherently destructive for society (Coser 1967; Zartman 1991). Its main objective is to terminate the conflict as quickly as possible. In contrast, conflict management, ADR, and conflict transformation acknowledge that conflict is complex and can never be entirely resolved (Daniels and Walker 2001). The main objective of conflict management is to manage conflict in such a way as to avoid or minimize negative outcomes. ADR aims at finding a compromise and negotiated agreement while conflict transformation specifically aims at transforming conflict into "something" positive and productive (Fisher and Ury 1981; Susskind et al. 2000). In this paper, we use conflict management as an umbrella term encompassing all efforts geared towards addressing conflict.

Six common approaches of conflict management exist (Isenhart and Spangle 2000; FAO 2000):

- 1. Negotiation: a voluntary bargaining process whereby disputants take the initiative to meet face to face to find a compromise (Stevens 1958; Scanzoni 1979).
- 2. *Mediation:* a form of a third party intervention where a mediator facilitates conflict management but he/she does not have the authority to impose a solution (Dryzek and Hunter 1987).
- 3. Arbitration: submitting a conflict to a mutually agreed upon third party, the so-called arbitrator who renders a decision, but such a decision is not binding (FAO 2000). It is being used specifically if negotiation and mediation fail, as well as to avoid the high cost of taking a case to court.
- 4. Adjudication: the process where a binding decision is made by a judge through formal procedures in a court (Sarat and Grossman 1975). It is the most formal and contentious form of conflict strategy and normally used as a last resort.
- 5. *Coercion:* the use of power in a conflict due to the excessive power possessed by certain parties (Airaksinen 1988).
- 6. Avoidance: a strategy where conflicting parties avoid overt conflict and prevent conflict from becoming publicly acknowledged (Ulbig and Funk 1999).³

The first four strategies usually require that both parties agree to the course of action; the last two are unilaterally decided by one party.

Collective action and institutions

Collective action is understood as an action taken by a group of individuals to achieve common goals (Marshall 1998). It is voluntary or mandatory depending on

³ Conflict avoidance is a strategy being used once a conflict emerges. A distinction should be made between this strategy and conflict prevention. The latter refers to a proactive approach to preventing conflict from emerging or escalating by devising proactive measures such as public consultation, corporate social responsibility (CSR), and free, prior, and informed consent (FPIC).

the types of action being executed and the institutions within or through which the action is executed (Di Gregorio et al. 2008). Two types of institutions influence collective action at the community level: formal and informal institutions.⁴

Formal institutions relate to rules and regulations that come from governments (such as laws and constitutions) that are enforced by formal state apparatuses such as the police or the judiciary (Bennet et al. 2001). Informal institutions are socially shared rules, usually unwritten, that are communicated and enforced through nonformal channels (Cleaver 1998; Pejovich, 1999). Both structures coexist and influence the governance of resources such as forests (Ostrom 2005).

3. METHODOLOGY

Eight sites in six countries (Cambodia, China, Indonesia, Lao PDR, Thailand, and Vietnam; see Figure 3) were selected for this study based on the following criteria:

- 1. Community-outsider conflict over forests is a serious issue and a better understanding of its causes, impacts, and applied management strategies is necessary.
- 2. All these countries are in the process of tenure reform (such as the decentralization and/or devolution of forest management) although they are at different stages and use different processes.
- 3. RECOFTC has good relationships with key stakeholders. In view of limited resources (namely time and funding), research in these locations was relatively easier.
- Conflicts are affecting the expansion and effective operation of community forestry, associated sustainable forest management, and the security of livelihood benefits for local people.

⁴ Institutions are rules of the game, or more formally, collectively constructed constraints that shape human interaction. Ostrom (1990) defines institutions more broadly as clearly defined groups of individuals who, while defining a set of rules regulating their use of the resource, create a long-enduring local institutional arrangement capable of enforcing such rules.

Inner Mongolia, China Phou Gnai, Thua Thien Hue, Kanchanaburi, Lao PDR Vietnam Thailand Kbal Damrei, Kampong Speu, Cambodia Cambodia East Kalimantan, West Indonesia Kalimantan, Indonesia

Figure 3. Case study locations

Source: Authors.

Field work took place between April and October, 2009 (Table 1). Interviews were conducted by RECOFTC's collaborators with randomly selected representatives of the conflicting parties (though it was not always possible to talk to outsider representatives, particularly company representatives). Interviews were guided by a number of key questions. Probing on certain issues was done when more information was required to better understand the situation. General questions included:

- What caused the conflict in the first place?
- How did the conflict evolve over time and who has been involved at different stages of the conflict?
- What impacts has the conflict had on community institutions and collective action?
- What types of efforts have been taken to address the conflict? Were they
 effective and if so why?

Additional interviews were organized with representatives of local authorities, NGOs, and development agencies. Beside interviews, focus group discussions were

held at the village level. Finally, findings from each case were discussed during a synthesis workshop in November, 2009 in Bangkok.

Table 1. Case study locations and number of interviews conducted

Case Study	Country	Number of interviews
Conflict between rock mining company and forest users in Kampong Speu	Cambodia	30
Conflict between rubber plantation and forest users (such as local communities and indigenous people) in Kbal Damrei	Cambodia	103
Conflict between forestry administration and local herders in Inner Mongolia	China	12
Conflict between oil palm company and local communities and indigenous people in West Kalimantan	Indonesia	27
Conflict between logging concession and indigenous people in East Kalimantan	Indonesia	25
Conflict between state authority and local communities in Phou Gnai	Lao PDR	15
Conflict between national park and local community in Kanchanaburi	Thailand	50
Conflict between sand mining company and local communities in Pho Trach	Viet Nam	30
Total		292

Source: Authors

4. RESULTS

Underlying causes

Conflict is often caused by more than one factor (Table 2). Three fundamental and interrelated factors underlie forest conflict, namely: contested tenure and overlapping claims; a lack of coordination among state agencies; and conservation and economic development policies that prioritize global and national interests over local interests, needs, and aspirations. As shown below, in all cases there was an obvious imbalance in power.

Table 2. Actors and underlying causes of conflict

Case	Main actors	Underlying causes	Description of the Conflict
Kampong Speu, Cambodia	Forest users, rock mining company	Contested tenure, economic development	A rock mining company operated in a community forest. The company had obtained a license from the Ministry of Industry, Mines, and Energy while the latter had their community forest approved by the Provincial Governor. The company, backed by the military, destroyed trees in the community forest and caused dust and noise pollution. The

Case	Main actors	Underlying causes	Description of the Conflict
			community demanded compensation without any success.
Kbal Damrei, Cambodia	Forest users, rubber plantation company	Contested tenure, economic development	A rubber plantation company, with an Economic Land Concession granted by the Provincial Governor, started operations on land a community had already demarcated as part of a community forest under development. The land clearing damaged the community's forest, farmland and burial site. The company employed workers from outside the community, causing further grievances.
Inner Mongolia, China	Herders, Forestry administration	Conservation	Increasing desertification and dust storms led the government to progressively ban herding in Inner Mongolia, allocating certain portions of the grasslands as no-grazing zones. This policy caused conflict between herders and local forestry administration officials enforcing the policy as herders did not feel they had any other option but to continue grazing.
East Kalimantan, Indonesia	Indigenous people, logging company	Contested tenure, economic development	A company was granted a logging concession in an area overlapping with community territory. The local community was evicted from their land, not employed in the operation, and the operation destroyed their trees, graveyard and polluted their river. Throughout the conflict, negotiation and mediation took place and with the help of a mediator after two decades a Memorandum of Understanding was signed marking an end to the conflict.
West Kalimantan, Indonesia	Indigenous people/local communities, oil palm company	Contested tenure, economic development	An oil palm plantation company began clearing land traditionally managed and inhabited by local communities. No free, prior and informed consent was obtained and the district government supported the company throughout the development. Local communities asked the company to halt the operation, without success.
Phou Gnai, Lao PDR	Local communities, government authority	Contested tenure, conservation	The Government of Lao PDR aims to establish a buffer zone and protected area that overlaps with a community garden. There has yet to be any clear information on compensation and the community has been asked to discontinue planting eaglewood in the area thus far delineated.

Case	Main actors	Underlying causes	Description of the Conflict
Karnchanaburi, Thailand	Local communities, national park officials	Contested tenure, conservation	The government established a national park and forest reserve on land historically managed by communities. By this designation, the policy makes the communities illegal encroachers on the land. For over 20 years, they were arrested and had their land confiscated by national park officials, triggering open antagonism and conflict. In 2004, the Sueb Nakahasathien Foundation became involved in a project to implement joint management of the area, which eventually led to redrawn boundaries and the establishment of a Forest Conservation Network
Hue, Vietnam	Local communities, sand mining company	Contested tenure, economic development	A sand mining company's operations on land the Pho Trach community has managed for over 400 years has affected local water supply, damaged burial grounds, and destroyed a small forest plantation. Compensation provided to the community for the loss of their trees has been low and no employment has been offered to local people, triggering conflict.

Source: Authors

Contested tenure and overlapping claims

Tenure and claims over forests and land are highly contested. The State has retained full ownership of most land, supported by constitutional or de jure rights that can often trace their origin back to colonial periods. It enjoys a statutory monopoly over forests. Increased demand for food, perceived future food insecurity, and increased commodity prices have led governments to take unprecedented actions to boost agricultural expansion and to capitalize on productive sectors such as the logging, oil palm, and rubber sectors. To attract investors or developers they are providing access to vast tracts of land on favorable terms. Many local communities and indigenous peoples have managed and conserved the land and natural resources that they depend on for decades, if not centuries, and consider the forests to be theirs. They claim customary rights as they have been the de facto decisionmakers and managers. Conflict is common when the State does not recognize customary rights. For example, in East Kalimantan Province (Indonesia), a government and military-backed logging company failed to recognize indigenous rights and indigenous peoples were excluded from forests to make way for a logging operation, triggering serious conflict throughout the province. Such conflict is widespread throughout Indonesia.

Today, Indonesia is the largest producer of palm oil in the world. This development often comes at high cost at the local level. In West Kalimantan, the

government issued a permit to a plantation company that overlapped with the traditional territory of indigenous Dayaks and Malays. The decision to issue the permit was made without obtaining free, prior, and informed consent from the affected communities. As a result, a conflict between the affected indigenous peoples and the company escalated from a small dispute to an intense exchange of threats. The company was backed by the police and military; indigenous peoples were supported by NGOs.

A lack of coordination among state agencies

The State may provide communities access and management rights to forests and land following prescribed procedures regulated by the government (for example, the legal recognition of community forests in Cambodia or forest land allocation program in Vietnam). Such processes provide local people with certificates that legitimize their rights. Conflict may nonetheless emerge because other government bodies issue development or exploitation permits for the same land. In Kampong Speu (Cambodia), a rock mining company received a permit from the Ministry of Industry, Mining, and Energy (MIME) while the local communities received approval for their community forest from the provincial government. This poor coordination among government agencies at the provincial level can lay the groundwork for conflict at the local level. Exacerbating the situation in this case, the military backed the mining operation.

Global and national vs. local interests on conservation and economic development

Conservation and economic development policies formulated at national or international level without consideration of potential local-level impacts underlie many forest conflicts. Protected areas such as national parks are often established without genuinely consulting resident local communities. In Asia, the area of forest under protection has been rapidly expanded over the last two decades. Conservation is largely based on the Western concept of wilderness, one which is premised on the exclusion of people (including those who already live there). Government agencies often threaten to resettle residents or severely restrict livelihood activities for the sake of conservation (for example, the cases of Kanchanaburi, Thailand and Phou Gnai, Lao PDR).

Across Asia, rapid economic development is another underlying cause, supported by aggressive government policies. In Cambodia, for instance, the implementation of the Economic Land Concession (ELC) policy is responsible for one third of all disputed land cases, included a case here between a community applying for tenure in Kratie Province and a rubber plantation company. In Vietnam, a similar story is unfolding. In a case examined in this study, in Thua Thien Hue province, the government issued a permit to a sand mining company on the same land that has been managed by local communities for four centuries. Sand mining not only threatened the community's access to water for irrigation as it was used by the company for cleaning sand, but its operation destroyed the community's forests and threatened a graveyard adjacent to the mines. When the mining company began operations, predictably, conflict began.

Clearly, conservation and economic development policies triggered various conflicts at the local level. At the beginning, there seemed to be an explicit attempt

by governments to pursue these policies in isolation. In addition, over time it became obvious that the situation deteriorated further due to weak governance, for example, a lack of participation by local residents, inadequate public accountability of powerful actors such as companies, and a lack of transparency in terms of decisions on land-based investments.

Direct causes

The direct causes of forest conflict fall into five categories (Box 1). In the Kbal Damrei case (Cambodia), land clearing for the rubber plantation damaged the community's forest, farmland, and burial site. In the East Kalimantan case (Indonesia), river pollution caused by upstream forest harvesting operations was the main issue.

Loss of income and livelihood opportunities due to the establishment of a conservation area is another major issue, for example, the income lost when a herding ban was strictly and, from villagers' perspective, arbitrarily, enforced in China. In Thailand, a ban on swidden farming in a newly established national park fueled serious conflicts. Other direct causes include eviction of local communities from their land, pollution (air pollution due to mining and logging, noise pollution), and lack of employment opportunities for local people in the wake of industrial development in rural areas.

Box 1. Direct causes of forest conflict

- Destruction of community assets due to company operations (mining, logging, plantation)
- Loss of income and livelihood opportunities due to the establishment of conservation areas
- Eviction of local communities from their land
- Pollution (air pollution, noise) caused by logging, plantation and mining operations
- Jobs in the logging, mining, and plantation sectors being mainly reserved for outsiders with few opportunities for resident populations

Conflict management approaches

Table 3 indicates four main approaches taken by conflict parties in the case study locations: avoidance, coercion, negotiation, and mediation. Co-management is not commonly used in conventional conflict management literature (see section 2.2.) but it is being used in the context of mediation. Co-management is a form of joint management whereby actors jointly decide roles and responsibilities regarding forest management. It may also include measures to determine what area is managed by whom and under what benefit-sharing arrangements. Additionally, an interesting finding from this study is that neither arbitration nor adjudication was used in addressing forest conflict.

Table 3. Conflict management approach applied in study areas

Charles	Approach			
Study areas	Avoidance	Coercion	Negotiation	Mediation
Kampong Speu, Cambodia	No	Yes	Yes	Yes
Kbal Damrei, Cambodia	No	Yes	No	Yes
Inner Mongolia, China	Yes	Yes	Yes	Yes
West Kalimantan, Indonesia	No	Yes	Yes	No
East Kalimantan, Indonesia	Yes	Yes	Yes	Yes, with co- management
Phou Gnai, Lao PDR	No	No	Yes	No
Kanchanaburi, Thailand	No	Yes	Yes	Yes, with co- management
Pho Trach, Viet Nam	No	No	Yes	No

Source: authors

Local communities and indigenous peoples often resort to avoidance as they do not have enough power to confront powerful actors such as companies and governments. Another factor for choosing avoidance is culture. In some cultures in Asia, having a direct confrontation is considered unacceptable (though this attitude is changing). Avoidance was observed to be the primary strategy in two cases. In Inner Mongolia, local herders avoided overt conflict with the forestry administration. They accepted herding bans and paid fines if they were caught by the administration herding in protected areas, which resulted in huge financial losses to them. They chose this strategy mainly because they considered themselves as too weak to confront the forestry administration. Another example is in the case of conflict between local people and a logging concession company in East Kalimantan. During the Soeharto era when the conflict emerged (1980s), they could only resort to avoidance as they were oppressed and intimidated.

Coercion is the use of power to "resolve" a conflict. In five out of eight conflict cases, coercion was applied by powerful actors, at least initially. In the conflict between an oil palm company and local people in West Kalimantan (Indonesia), for example, military and police backed up the company and threatened local people with arrest. Likewise, in the conflict between local people and national park staff in Thailand, villagers were arrested and forced from their homes. In both situations, the company and the national park staff used military or police to coerce local communities and indigenous people.

Negotiation between community and outsiders took place in all cases except in Kbal Damrei (Cambodia). Communities were often represented by their leaders in the negotiation with governments and companies. Usually, negotiation was used at an early stage of the conflict. In negotiation, conflicting parties brought issues to the table and expressed their concerns. In Kampong Speu (Cambodia), for

example, local leaders negotiated with the rock mining companies as the location for the mining site overlaps with a community forest. Both the local community and the company were willing to meet face to face to discuss the issue. In contrast, in the Kbal Damrei case, no negotiation took place because the rubber plantation company refused to meet local leaders. The company had a rigid position that it had received a legitimate permit to plant rubber in the area. This led to a mass protest and in the end a mediation process had to be initiated by the Commune Chief of Kbal Damrei.

Five cases used mediation after negotiations failed. In conflict situations, government agency officials were often expected to mediate—at least at the beginning of the mediation process. However, governments often sided with companies and thus an alternative mediator such as an NGO was needed. Conflict in Inner Mongolia (China) was mediated by a science institute whom both forestry administration and local herder trust. In the case of East Kalimantan (Indonesia), an NGO mediated a conflict between a logging concessionaires and local communities. In the conflict in Kanchanaburi (Thailand) an international project consortium mediated the conflict. It is thus clear that mediation can be facilitated by a third party such as NGOs.

Finally, in the Thai case, a co-management arrangement was agreed upon allowing communities to participate in protected area management while simultaneously continuing livelihoods activities (such as shifting cultivation and planting cash crops) in mutually agreed-upon areas. Co-management was also used in the case of the conflict between local communities and a logging company in East Kalimantan, where a benefit-sharing scheme from timber logging was agreed upon. In addition, there was an agreement to involve the local community in the logging operation, such as by employing community members and setting aside area for exclusive community management.

Collective action and its role in conflict management

As forest and land conflict is a major issue in Asia, our research tried to understand whether this phenomenon has positive or negative effects on collective action at the community level. We also explored the role of collective action in conflict management, illustrating that successful conflict management requires strong and well-coordinated collective action.

Two contrasting observations were made of the impact of conflict on collective action. On the one hand, community-outsider conflict can foster collective action. One of the direct causes of conflict between communities and other stakeholders was the destruction of community assets such as swidden land, trees, nontimber forest products, burial sites, clean water, and rich fishing grounds. In Kbal Damrei (Cambodia), land clearing for a rubber plantation damaged the community's forest, farmland, and burial sites. In East Kalimantan (Indonesia), river pollution from logging was the main issue. As communities viewed those assets as their common property, they felt that they had to protect them. Destruction by outsiders was considered a threat to the sociocultural, economic, and environmental assets of the community. We observed that such a shared feeling often led to a more consolidated collective action at the community level.

In the conflict between a sand mining company and the local community in Vietnam, the local community asked for compensation for damage to graves and

standing trees caused by the company's operation. During negotiations, communities were represented by their leaders and their cooperative. Prior to the formal negotiation several meetings took place among community members to discuss negotiation strategies. Local leaders also consulted various segments in the society including women and youth. Village meetings were held to decide on a course of action. Such process yielded collective agreements such as how much they would ask for compensation and who would come to the negotiation with the company. In the same vein, all other cases involved some level of community coordination in dealing with outsiders, as outsiders were perceived to represent a common threat. Clearly, this led to a better understanding among community members regarding what was at stake as well as what strategies should be adopted to tackle the problem. All of this required collective action.

On the other hand, conflict may weaken collective action, dividing communities into certain camps that respond to outsiders differently or uncoordinatedly. Conflict can further deepen the differences among community members, such as between leaders and common people. A conflict between the local community and an oil palm plantation in West Kalimantan illustrates this phenomenon. In this case, the local community's main concern was that the oil palm company opened a huge area for planting. A village directly affected by this operation argued that the area was its customary forest area. The village was not properly consulted by the company prior to the opening of the land. Regardless, the company continued its operations. Later on, it was found that the company had asked permission from a neighboring village instead. This neighboring villagers, claiming the land was theirs, had granted permission to the company.

While historically the two villages had been good neighbors, the second village's land claim led to horizontal conflict between them. Their historic harmonious relationship was based on shared ancestry and on a land-sharing arrangement. The second village, which approved of the oil palm plantation, had actually received the land from the first village for swidden agriculture on loan. It was done through family relations and based on trust. When the second village permitted the company's operation, this trust was broken. Leaders from both villages stopped talking to one another and harsh words were exchanged between villagers. It was later found out that the village who gave permission to the oil palm company received money from the company. It was believed that the company bribed that village to obtain approval. Tensions continued and the situation got worse. Within the approving village, another horizontal conflict was triggered between those villagers that supported the company and those that did not. It appeared to be a deliberate strategy by the company to generate secondary conflict, thereby deflecting attention from the main issue. The West Kalimantan case clearly shows how horizontal conflict can weaken collective action. First, the two villages could not decide upon a joint reaction to the company. Second, people were divided within individual villages. This resulted in weak and uncoordinated collective action, and in poor conflict management.

Conflict is only likely to foster collective action when local institutions are already strong, that is, where community members have strong leadership accountability and where trust is high. If local institutions are weak (particularly where leadership is not accountable) and where there is no shared interest, it is likely that conflict with outsiders will weaken collective action. Collective action

plays a critical role in community-outsider conflict because the local community's concerns can be best articulated through joint processes; the success of negotiation is in part determined by how strong collective action is at the community level.

Why is finding solution to forest conflict necessary?

Conflict (and conflict management) has diverse outcomes. On the one hand, conflict can foster collective action and yield a number of agreed-upon solutions. On the other, conflict can weaken collective action and divide community members into various camps. In such situations, conflict may continue to have negative impacts for both communities and outsiders. This situation may even be desirable for certain groups that benefit more than they lose by sustaining the status quo.

As discussed, the impact conflict has on collective action; meaning whether collective action was strengthened or weakened, is primarily dictated by the strength of local institutions. Other factors that helped determine the outcomes of conflict management were:

- the mediation process and the role played by supporting organizations (NGOs, for example),
- the ability of the government department representatives to play the role of a neutral broker in rendering agreements (as in East Kalimantan and Inner Mongolia), and
- The role of trust in negotiation and mediation (Box 2).

Box 2. The role of trust in successful conflict management

Pak Ando (not his real name) used to work for a logging company in East Kalimantan, Indonesia. As a community facilitator, his main duty was ensuring that company-community relationships remained strong. But as with many cases of logging operations in the country under the Soeharto regime, the community in East Kalimantan was unhappy about the effect of logging activities on community livelihoods and associated water pollution problems. Local community members had limited job opportunities with the company. Pak Ando's role was to ensure that his company could continue to operate with minimal disturbance of local communities. He allocated a small company contribution to village development projects (for example, donations for the establishment of a village hall and school), but knew that the community was dissatisfied with the size of the contribution. Though Pak Ando listened to many grievances from community members, company policy did not allow him to provide more.

In 1998, when Soeharto lost power, decentralization processes across Indonesia and political instability led the community to protest and threaten company workers. Eventually, the company had to stop its operations on community land. Seeing no future in the company, Pak Ando joined an NGO and was tasked to mediate the conflict his previous employer had experienced. A core issue was lack of trust; despite the change in his position, the local community continued to perceive him as a logging company employee. Proving his sincerity took over a year, and only after he

successfully established trust with local leaders, local governments, and related stakeholders did mediation start to progress, with both community Members and company employees coming to the table. A Memorandum of Understanding between the company and the local community was signed by the logging company and local communities and witnessed by local governments and related authorities following mediation, ending 20 years of conflict.

While forest conflict can be extremely difficult to manage, finding solutions is important and potentially beneficial to all parties, as illustrated in Table 4.

Table 4. Potential long-term benefits of well managed conflict

Community	Company	Government
Clear and secured rights	Ensuring smooth operations	Ensuring stable tax flow
More acceptable and equitable benefit sharing	Ensuring stable economic profits	Reducing potential costs of conflict management
	Minimizing risks	Stability
	Avoiding potential loss of investment capital	
	Maintaining a good corporate image	

Source: Analyzed from the eight cases.

5. CONCLUSIONS

The underlying causes of forest conflict are often fundamental issues such as contested tenure and overlapping claims, a lack of coordination among state agencies, and conservation and economic development policies that prioritize global and national interests over local interests, needs, and aspirations. Direct causes of forest conflict include destruction of assets, loss of income and livelihood opportunities, eviction of local communities from their land, pollution, and few opportunities for resident populations to benefit from investments.

Community-outsider conflict is managed through various conflict management strategies. Often times, a number of strategies are applied in addressing a particular conflict. Four common strategies were found to be used in managing conflict over forests: avoidance, coercion, negotiation, and mediation. Though not a management technique per se, co-management arrangements were successfully used in conjunction with mediation in several instances. The choice of conflict management strategy was influenced by several factors. One of the main factors was power. When actors are overwhelmingly powerful, it is likely that they will resort to coercion. In contrast, weak actors such as local communities and indigenous people may have no choice but to avoid overt conflict.

Finally, conflict may have both positive and negative impacts on collective action. On the one hand, it can foster collective action, particularly where local

institutions are already strong. On the other hand, conflict can also weaken collective action, particularly where local institutions are weak. A number of factors influence how conflict will interact with collective action. Among others, conflict's impact on collective action is determined by the extent to which goals and interests are shared by community members, the extent to which negative impacts are distributed equally amongst individuals in the collective, and the extent to which addressing the current conflict can effectively set a precedent to deter future conflict. In turn, the strength of collective action at the community level can help determine the successes and failures of conflict management.

6. RECOMMENDATIONS

Addressing forestry conflict requires concerted and consistent efforts. A one-stop approach will likely be insufficient to solve deep-rooted issues involved in the conflict. Based on an understanding of conflict (causes, impacts, and strategies in conflict management) as gathered from this study, we propose essential short-term and long-term actions. The short-term actions can be implemented relatively quickly and the long-term actions will require more sustained efforts and coordination with relevant interest groups.

Short term recommendations:

- Strengthen local institutions to foster collective action. Local institutions play a key role in determining the effectiveness of collective action in conflict management. To ensure that a community's concerns are adequately represented in negotiation, local institutions need to be strengthened, accountable, and capable of accommodating multiple interests.
- Encourage early consultation with resident local populations prior to making decisions about land use changes.
- Ensure coordination between government agencies with overlapping mandates.
- Promote co-management arrangements where actors agree upon a strategy to fairly share management responsibilities.
- Be neutral. Governments should remain neutral and avoid taking sides in conflicts between local communities and companies.

Long term recommendations:

- Clarify tenure arrangements and land use policy to minimize the likelihood of resource conflict.
- Strengthen mediation skills to ensure local capacity to manage conflict.
- Respect local resource management and ensure economic development also benefits local communities.
- Integrate local livelihood strategies into conservation policy, as top-down processes and unilateral enforcement can lead to policy failures and exacerbate conflict.

As part of the long-term recommendations, we emphasize that the more that land or other resources are held under genuine collective ownership, rather than

private interests, the more likely there are to be shared interests. Moving into collective tenure arrangements could lead to greater motivation for collective action as well as providing the raison d'être for establishing (hopefully robust) local collective institutions. Additionally, as indicated earlier, strong institutions for collective action with shared interest among community members is necessary to ensure the success of local resource management.

Further research is needed to identify measures to prevent forest conflict from occurring and ensure the negative impacts are minimized. Anecdotal evidence suggests that conflict inflicts high costs, especially in terms of people's time, delayed projects, and damage to assets on both sides. Such evidence would suggest that preventing conflicts from erupting in the first place preemptively is necessary.

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