Forests, Trees and Livelihoods, 2006, Vol. 16, pp. 167–180
1472-8028 $10

STAKEHOLDER CONFLICTS AND FOREST DECENTRALIZATION POLICIES IN WEST KALIMANTAN: THEIR DYNAMICS AND IMPLICATIONS FOR FUTURE FOREST MANAGEMENT

YURDI YASMI[1], GUSTI Z. ANSHARI[2], HERU KOMARUDIN[3] AND SYARIF ALQADRI[4]

[1]*Forest and Nature Conservation Policy Group, Wageningen University, P.O. Box 47, 6700 AA Wageningen, the Netherlands, Email: yurdi.yasmi@wur.nl,*
[2]*Yayasan Konservasi Borneo, Pontianak, Indonesia,*
[3]*Center for International Forestry Research, Bogor, Indonesia*
[4]*University of Tanjung Pura, Pontianak, Indonesia*

ABSTRACT

Stakeholder conflicts in relation to forest decentralization policies were studied in West Kalimantan, Indonesia to determine:

- how these policies were understood by local stakeholders,
- how they were implemented, and
- their impacts in terms of forest management and conflicts.

A case study using qualitative methodologies i.e. semi-structured interviews, field observations and workshops, was made. The results show that the implementation of decentralization policies gave rise to conflicts between local and central government as well as among local stakeholders. Despite the goal of benefiting local stakeholders by decentralizing forest management, the central government's subsequent withdrawal of much of the local governments' authority to manage forestry raises new questions on whether the central government is indeed willing to share power. We concluded that central and local governments and relevant stakeholders need to develop better communication and negotiation procedures to address current conflicts appropriately.

Key words: conflict management, negotiations

INTRODUCTION

Natural resource management (NRM) is almost always characterized by conflict. Many authors have argued that conflict is unavoidable particularly because stakeholders have differing and competing interests, perceptions and ideas about how NRM should be carried out (e.g., Buckles 1999, Castro and Nielson 2003). There is a large body of literature that deals with NRM conflicts and covers areas such as forestry (e.g., Matose, 1997, FAO, 2000, Hellstrom, 2001, Schroeder-Wildberg and Carius, 2003, Yasmi, 2003, Wulan *et al.,* 2004), fishery (e.g.,

[1]Corresponding author
Manuscript received: 12.4.05; revised version accepted 12.6.05

Bavinck, 1998, Jentoft 2000), and land use (e.g., Mardiros, 1997, Valladares-Padua *et al.,* 2002). Because NRM conflicts are so ubiquitous and regular, conflict and conflict management has become a key and inseparable aspect of NRM. A variety of consequences of NRM conflicts have been noted including distrust among stakeholders, resource degradation, hostility etc. However, to a limited extent, conflicts have also had positive outcomes: for instance, new agreements over resource management, policy changes and co-management agreements among stakeholders (Castro and Nielson, 2001).

There has been a long debate about whether conflict is a positive or negative social phenomenon. One school puts forward a "functionalist" or "harmonic" idea and perceives conflict as a mess or hindrance, something dysfunctional and entirely bad (Bailey, 1997). In other words, this school of thought often associates conflict with threat to the status quo. Proponents of this school of thought argue, in particular, that conflict connotes a disruption of reliable and stable conditions (Kriesberg, 1998). As a consequence, the negative perception of conflict gives rise to conflict avoidance, repression or elimination approaches. Others argue that though conflicts may result in dysfunctional situations, they may also offer constructive outcomes (Castro and Nielson, 2001). This school of thought interprets social conflicts as valuable ties that hold modern democratic societies together and provide them with the cohesion they need (Hirschman 1994); accordingly, conflict contributes to desirable positive changes if it is managed and addressed appropriately.

Many authors now contend that conflict has both positive and negative potential (Bailey, 1997, Walker and Daniels 1997, Kriesberg 1998). According to this emerging view, an important factor that influences the positive or negative outcomes of a particular conflict is conflict management. In this regard, the success or failure of conflict management is determined mainly by the development of adequate conflict capabilities, i.e., the ability to anticipate and deal with conflict constructively so that the positive potential is enhanced and the negative potential is eliminated. One of the main prerequisites for the development of such capabilities is a solid understanding of conflict triggers or the fundamental issues that lead to conflict (Glasl, 1999).

NRM conflicts do not occur in a vacuum: they are embedded in a specific social setting and policy context. Some NRM conflicts take place at local level over boundary issues or access to a particular area such as farmland or forest. Other NRM conflicts involve wider issues and stakeholders. For instance, conflicts might take place between local and national actors over specific policy issues such as decentralization.

In this paper we discuss forest-related conflicts among various stakeholders involved in forest management in West Kalimantan, Indonesia, within the context of decentralized forest management policies. We describe the implementation of 'small logging permits' (known locally as '100-ha concessions'); this type of concession was very popular because under decentralization policies district governments had the authority to issue permits for them. Before discussing various conflicts that have arisen in the implementation of these 'small logging

permits', we describe how forest management changed under decentralization policies and the impact that these changes had on local economies and, subsequently, stakeholder conflicts. The results described in this study cover the early stages of decentralization in Indonesia (i.e., from 1999 to 2003).

Forestry in Indonesia: from 'centralistic' to decentralized management

Forests are one of the most important natural resources in Indonesia. This is not only because forestry makes a major contribution to the national economy but also because it has great socio-cultural and ecological importance. The exploitation of Indonesia's forests did not begin until the late 1960s when it became the means of boosting economic development. In 1967, the Government of Indonesia enacted the Basic Forestry Law to regulate forest exploitation. Moreover, in the same year, to attract investment in forestry and other productive sectors such as mining and oil exploitation, the government ratified a regulation on Foreign Investment. The Government of Indonesia granted 35-year concession rights to private and state-owned companies to extract timber from Indonesia's rich natural forests. Concession holders are permitted to harvest trees in designated areas as guided by the *Indonesian Selective Cutting System* (Armitage and Kuswanda 1989).

Since then, the forestry sector has expanded rapidly, and by 1993 the total number of concession holders in the country had risen to 580, with concessions covering an area of 61 million ha (MoF, 2004); the timber-related industries saw similar growth. By 1993/1994 Indonesia had the largest market share of tropical plywood exports with an annual revenue estimated at US$ 3.5 billion (Barr, 2001). Other earnings from exports of logs, sawn-wood, wood working and furniture also generated billions of dollars in revenue.

During the second half of the 1990s, environmentalists and the international community increased their pressure on the Government of Indonesia because the natural forests were being exploited so rapidly. Moreover, by this time the remaining forests had become much harder to access because of the difficult topography. As a result, the forestry sector steadily declined. The number of concession holders decreased to 387 in 1999 and to 267 in 2003, with area of 28 million ha under concession (MoF, 2004). Furthermore, the end of the 1990s was also marked by a political transformation following the demise of President Soeharto's authoritarian regime, which had been in power for 32 years. With the fall of Soeharto in 1998, major shifts in political structure took place that affected all sectors, including forestry.

The first shift was marked by the enactment of Law 22 on Regional Autonomy and Law 25 on Fiscal Balancing in 1999. These two laws formed the foundations of Indonesian decentralization policies. Moreover, in 1999 the Basic Forestry Law was also replaced by a new forestry law known as Law 41. Most stakeholders in the country, particularly those who had long awaited change, applauded the enactment of these three new laws. Nevertheless, many questions

remained as to how to implement this legislation on the ground, particularly in view of the fact that lower-level rulings for the technical implementation of these laws did not exist at that time. As a result, disagreement and confusion occurred among stakeholders at lower levels of government as to who had authority for determining forest areas, utilizing forest products, issuing permits for forest-product extraction, and collecting taxes or fees on forest products (McCarthy 2004).

Amidst this confusion, later in the same year the government published a regulation[2] and two decrees[3] that gave authority to district governments to issue 'small logging permits'. In response to this, local governments throughout Indonesia started to grant two types of small logging permit, namely the Timber Product Utilization Permit (known as IUPHHK) and the Forest Product Harvesting Permit (known as HPHH). The first type of permit could be granted to cooperatives, small to medium-scale businesses and state-owned or privately owned enterprises, with a maximum size of 50,000 ha per permit. In Sintang District, where this study took place, eight IUPHHK permits covering a total area of more than 200,000 ha were issued to private logging companies between 2001 and 2003 (Table 1).

The second type of permit (HPHH), on the other hand, could be issued to individuals, farmer groups and cooperatives, with a maximum area of 100 ha per permit. These permits were popular, and were often called '100-ha concessions': district governments in West Kalimantan issued more than 900 HPHH permits between 2000 and 2002 (Dinas Kehutanan Kalimantan Barat 2004). In Sintang District 464 permits were awarded to various farmer groups and local cooperatives – more than in any other district in West Kalimantan (Table 2).

TABLE 1

IUPHHK permits issued by Sintang District Government

No	Name of Company	Area (ha)	Validity
1	PT. Borneo Karunia Mandiri	12,000	2003–2028
2	PT. Sinergi Bumi Lestari	16,900	2001–2026
3	PT. Safir Kencana Raharja	36,400	2001–2026
4	PT. Lintas Ketungau Jaya	50,000	2003–2028
5	Koperasi Apang Semangai	16,500	2002–2027
6	PT. Rimba Kapuas Lestari	41,090	2002–2027
7	PT. Insan Kapuas	34,000	2002–2027
8	PT. Hutan Persada Lestari	13,500	2002–2027
	Total	220,390	

[2]Regulation No. 6/1999 on Forest Utilization and Forest Product Harvesting in Production Forests.
[3]Decree of Minister of Forestry No. 310/Kpts-II/1999 on Guidelines for Granting Forest Product Harvesting. Rights and No.05.1/Kpts-II/2000 on the Criteria and Standards for Forest Product Utilization and Harvesting Business Licences.

TABLE 2

HPHH 100-ha permits issued by district governments in West Kalimantan

District Government	Year			Total permits
	2000	2001	2002	
Kapuas Hulu	11	165	159	335
Sintang	102	176	186	464
Sanggau	1	7	12	20
Sambas	4	13	7	24
Bengkayang	0	4	9	13
Landak	0	1	1	2
Pontianak	12	32	31	75
Ketapang	1	1	9	11
Total	131	399	414	944

Research location and stakeholders

This study forms part of research on decentralization and its impacts on forestry and livelihoods in Indonesia carried out by the Center for International Forestry Research (CIFOR) since 2002[4]. The study site is located in Sintang District[5], West Kalimantan, which is bordered by Sarawak, Malaysia, to the north (Figure 1). West Kalimantan is about 14.7 million ha in area; some 3.8 million ha are classified as protection forest, while 5 million ha are designated for timber production (Pemerintah Propinsi Kalimantan Barat, 1995, Dinas Kehutanan Kalimantan Barat, 2004). The southern part of Sintang District is said to be the last frontier of conservation forest in the province because three national parks are situated there, namely Betung Karihun, Danau Sentarum and Bukit Baka Bukit Raya National Parks.

Forests in this district have been subject to exploitation since the late 1960s, primarily by concession holders. Of the 2.1 million ha of forested area in Sintang District, 1.4 million ha (65%) of production forest are allocated to 17 concession holders (Dinas Kehutanan Kalimantan Barat 2004). Large-scale forest concession allocation continues to be decided by central government in Jakarta.

METHODOLOGY

This was a qualitative study carried out from July 2002 to August 2003[6], to

[4]In 1999, CIFOR began the first round of research on the decentralization of forest administration and policies in four provinces: Riau, East Kalimantan, Central Kalimantan and West Kalimantan. In conjunction with this study, CIFOR also conducted case studies in four other provinces, Jambi, East Kalimantan, South Sulawesi and West Papua, as part of the second round of research.

[5]On 20 November 2003, as part of the decentralization process, Sintang District was split into two: one district called Sintang and other Melawi. However, the new Melawi District will not be fully operational until 2005 and in the meantime administrative responsibilities are carried out by the Sintang District Office.

[6]This study was conducted by CIFOR in collaboration with the University of Tanjung Pura and Yayasan Konservasi Borneo, West Kalimantan, and Wageningen University, the Netherlands.

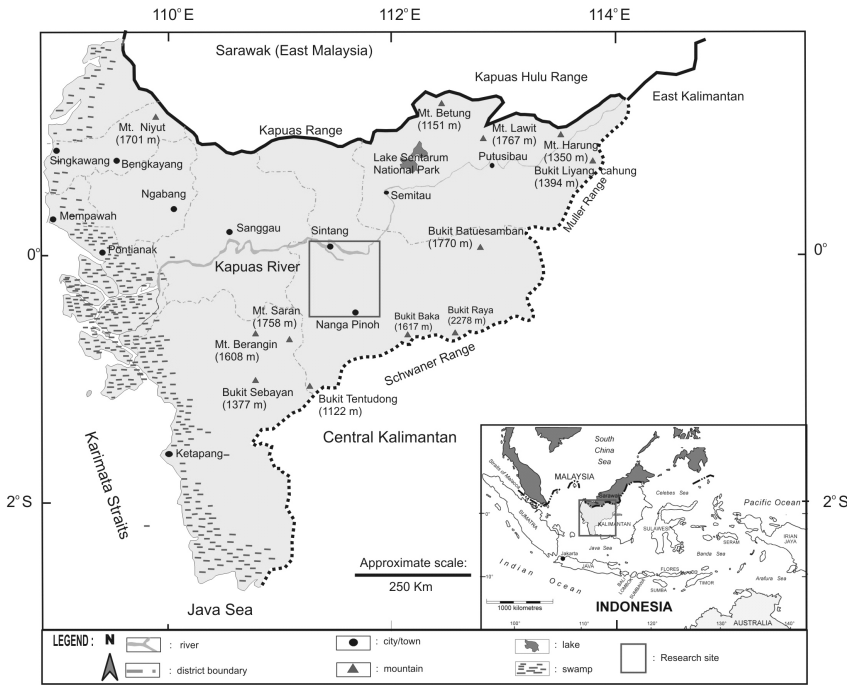

Figure 1. Research area

describe how forest management has changed under decentralization policies, using semi-structured interviews at the village, district, provincial and national levels. One of our research team observed ‘small logging permits’ in operation over an 8-month period and interacted intensively with local communities.

We collected and analyzed secondary data regarding new policies and regulations by interviewing government officials at district, provincial and national levels – in the Ministry of Forestry (MoF) in Jakarta, and in local land-use planning bureaux and district and provincial forestry and tax offices. Furthermore, we convened a multi-stakeholder district workshop in April 2004 to present and discuss our findings. Above all, we shared our findings in a national policy seminar, held in Bogor, West Java, in September 2004, which allowed us to obtain feedback and at the same time learn about decentralization work in other provinces.

The implementation of HPHH concessions and their impacts on local economies

Because central government did not provide clear guidelines for the implementation of IUPHHK and HPHH permits, district governments used their own initiative to

regulate the operation of these new types of logging concessions. Consequently, district governments issued district regulations in the form of Head of District Decrees. For example, the Sintang District Government issued a new forest management regulation through Decree No. 19/1999.

The decree stipulated that concession areas should be located in conversion forests (i.e., forests that are to be converted to other uses such as agriculture, plantation etc.) or production forests as described in the Provincial Spatial Plan (PSP) and Consensus for Forest Land Use (CFLU). There was also a provision for the extraction of non-timber forest products in conversion forests, production forests, conservation forests and privately-owned forests. Furthermore, the decree set conditions for fulfilling administrative requirements, evaluation methods etc. A further condition was that logging should not be carried out using heavy equipment; instead, the use of semi-mechanical equipment was strongly encouraged to ensure that the impacts of logging on forest and soil were minimized. Above all, to ensure regeneration, permit holders had to replant using local species once a site was logged over.

The process for obtaining a HPHH permit normally comprised several major steps. First, the applicant submitted a proposal for a permit to the District Head. Second, the proposal was reviewed by the District Head. If the applicant met all the requirements as indicated in the decree, the District Head issued a 'forest product harvesting rights permit' that was valid for three months and only extendable subject to performance. During the 3-month period, the applicant – normally a cooperative or farmer group represented by its 'coordinator' – was obliged to map the forest area, carry out a survey of tree stands, determine the existence of third-party rights over the area, identify 'partners' for carrying out logging activities[7], pay a pre-felling tax to government and submit a work plan. If the district government approved the work plan, a 1-year logging permit was issued. However, the District Head could revoke the permit unilaterally if the work plan was not submitted within the 3-month period or if it was considered inadequate.

The implementation of the permit on the ground was another story. Most of the workforces were not aware of the guidelines for carrying out logging as laid down in Decree No. 19/1999, and the district governments exercised little if any control. As a consequence, our team observed many practices that deviated from the provisions laid down in the decree, including:

- Boundary and forest surveys were not carried out properly, and area identification was simply done on paper. As a result there was a great deal of overlap among HPHH areas and between HPHH areas and forest company concession areas.
- Felling was almost always carried out using heavy equipment such as chainsaws, tractors and logging trucks. This happened because most cooperatives and

[7]Commonly, cooperative and farmer groups linked up with a party that had capital, equipment and technical knowledghe to carry out logging. Partners were often local entrepreneurs, exisiting logging companies or timber 'brokers' from Malaysai.

farmer groups partnered and sub-contracted their permits to large companies that were already in the area (e.g., existing concession holders). In return, the cooperatives or farmer groups received fees from the companies based on the number of trees logged in their respective HPHH location.
- None of the permit holders in the district replanted their areas, although they were obliged to do so.

According to our respondents, the irregularities in the implementation of HPHH permits were mainly due to the inability of district governments to control the activities on ground. When consulted on this issue, district government officials claimed that they did not have sufficient personnel to carry out monitoring and evaluation nor did they have enough funding for such activities. As a consequence, most of the monitoring and evaluation was based on paperwork and reports provided by permit holders.

Despite the many irregularities in the implementation of HPHH permits, the advantages to the district governments were clear: they could collect taxes from permit holders. At least three types of tax were derived from HPHH, namely application fees, pre-felling taxes and forest rehabilitation taxes. By mid-2003, 602 HPHH permits had been issued by Sintang District Government. We estimated that Sintang District's total revenue from HPHH permits amounted to at least US$ 11 million (see Table 3).

At the community level, the HPHH policy provided economic benefits, particularly to the cooperative and farmer groups that held permits. We calculated the economic return to a cooperative permit holder in Nanga Sayan village to be Rp. 136 million, or about US$ 15,000. This was the net sum received after the deduction of all costs such as administration charges, taxes, coordinator's fee, surveys etc. Each cooperative member received around US$ 500 from this sum.

Cooperative members used the funds for new economic activities such as keeping small shops, operating sawmills and running nightclubs and hotels. Clearly, at the community level the economic benefit of HPHH was relatively low compared to the local government's tax gain. Nevertheless, the new policy

TABLE 3

Estimated revenue of Sintang District from HPHH permits (from 2000–mid 2003)[8]

Source of revenue	Number of HPHH permits	Cost per unit (US$)	Total (US$)
Permit applications	602	167	10,053
Pre-felling taxes	602	1067	64,233
Forest rehabilitation taxes (based on timber volume harvested			11,110,000
Total			11,184,286

[8]Exchange rate: US$1 = (Indonesian Rupiah) Rp. 9,000

was a definite improvement for local communities because under the Soeharto regime the local community had received nothing from forestry, as all logging had been carried out by large concession holders and all taxes had been paid to the central government in Jakarta.

On the other hand, our study also uncovered a degree of corruption involving coordinators from the communities who played a major role in fulfilling the administrative requirements for acquiring permits from district governments. In many cases the coordinators could not account for all expenses with proper receipts: for instance, when they had to pay fees at the district office to have their application processed. The interviews with most of the applicants indicated that this lack of control was common. Therefore conflicts between community members and their coordinators were not uncommon.

As can be seen, the issuing of HPHH permits in Sintang increased the number of actors and activities in the forestry sector; the same is also true for other parts of Indonesia (see e.g., Barr, *et al*. 2001, McCarthy, 2001, Resosudarmo, 2004). One of the major problems with the coexistence of the various permit holders and inadequate boundary surveys was overlapping claims to forest areas. For example, we found at least one concession holder reporting that HPHH operators felled trees in an existing concession area. The HPHH operators based their activities on permission from the District Head to log trees in that particular area. As a result, there were many conflicts and disputes on the ground with regard to boundaries and access to trees.

These various conflicts were made known to the central government. In 2002, on the grounds that the implementation of small concessions was considered to escalate conflicts (i.e., among permit holders and between permit holders and existing concession holders) and illegal logging activities (Schroeder-Wildberg and Carius, 2003), the MoF revoked the legislation that allowed district governments to issue small logging permits[9], a decision that became effective on 1 March 2003. To strengthen its argument, central government further claimed that district governments lacked the capacity to implement and supervise permit holders adequately so that most of the permit holders failed to achieve sustainable forest management (SFM) criteria and standards.

Nonetheless, district governments in West Kalimantan continued to issue permits well beyond the cut-off date. According to the Sintang District Head, the revocation did not comply with the higher legislation on decentralization and failed to support the interests of local forest stakeholders. After several warnings from the central government at the end of 2003, most district governments in West Kalimantan stopped issuing permits.

Multi-level stakeholder conflicts in decentralized forest management

Before the authority to issue logging permits was taken away from District

[9]Decree of Ministry of Forestry No. 541/2002, Government Regulation No. 34/2002 and Ministerial Decree No. 6886/2002.

Heads, interaction between local and central government appeared to function with minimal conflict. The District Government in Sintang stated that it was happy to be able to participate in forest management in its district because, during the Soeharto era, it had not been able to do so as everything had been controlled by central government in Jakarta. Moreover, through the issuing of logging permits at district level, district governments generated significant local revenues. However, after the revocation of the district governments' authority to issue logging permits, Sintang District Government began to accuse the central government of being unwilling to decentralize authority over forest management: Sintang claimed that central government in Jakarta wanted to re-centralize forest management. At this point, the District Government argued that re-centralization of forest management was not in line with decentralization policies as laid down in Laws 22 and 25.

However, a high ranking official of the MoF stated in an interview that the MoF had never intended to fully decentralize authority over forest management. The official said "[…] we are not re-centralizing forest management because from the beginning the central government has never given full authority to local governments to issue logging permits. The government regulation and ministry decrees stated that the central government might give part of its authority to local governments gradually as long as local governments are considered institutionally ready". According to the official, many local governments had misinterpreted the regulations and acted on their own initiative. Clearly, central and local governments differed in their interpretation of government regulations.

A second type of conflict was conflict among stakeholders who participated in the small logging activities. Implementation of the HPHH '100-ha concession' resulted in at least four forms of commonly observed horizontal conflict, namely:

- *Conflicts between cooperatives or farmer group members and their coordinators* about the use of funds and the distribution of money. Coordinators, with their larger roles, would automatically receive the greater share. In many cases irregularities occurred when coordinators used the group's money for their own purposes or did not report money that they had received from private partners.
- *Conflict over customary forests*. This type of conflict arose when HPHH '100-ha' concessions were issued for forest over which two neighbouring villages held customary claims. This occurred when the village borders were unclear and forest survey teams had not made proper surveys in the field (conflict between Bora and Mekar Pelita villages, for example)
- *Conflict between cooperatives or farmer groups and their partners such as logging investors or large-concession holders* (e.g., conflict between a cooperative in Nanga Sayan village with its partner, an existing concession holder). These conflicts revolved around farmer groups protesting when the partner did not adhere to agreed schedules or changed block-felling timetables. In some cases partners failed to keep promises to pay previously agreed amounts of fees to the cooperative.

- *Conflict among members of a particular farmer group/cooperative* occurred when those having proof of customary rights over forest, making use of tax receipts from the Dutch colonial era, claimed higher benefits/fees from HPHH, while others, who did not have such proof, received only smaller benefits (a farmer group/cooperative in Nanga Sayan, for example).

DISCUSSION AND LESSONS LEARNT

This case study has shown that the shift of forest management from centralized towards decentralized management brought with it some economic benefits to local stakeholders such as district governments, local communities and timber-industry entrepreneurs. For the first time local governments gained the local taxes from timber activities; similarly, local communities appreciated that they could receive direct benefits from the implementation of decentralized forest management. At the local level, some new economic activities also grew as a consequence of new forestry-related activities in their area.

Although the indication of positive economic benefits at local level was applauded by many local stakeholders, decentralized forest management also introduced several major problems. The problems included conflicts between local and central government due to differences in their interpretation of decentralization regulations and the revocation by central government of the local governments' authority to issue logging permits; horizontal conflicts among stakeholders involved in forestry activities (e.g., among permit holders, between permit holders and existing concessionaires); and internal conflict among the members of a particular farmer group or cooperative over the distribution of fees from logging activities.

As in many other NRM conflicts (see e.g., Matose, 1997, FAO 2000, Hellstrom, 2001, Wulan *et al*., 2004), the conflicts in West Kalimantan had a variety of consequences. Conflict between local and central government often resulted in lack of trust between them. This lack of trust was reflected in the accusation by local governments that central government wanted to re-centralize forest management. Moreover, central government was often 'attacked' for its unwillingness to share power. Despite these accusations, the powerful central government upheld its decision to revoke the authority of local governments to issue logging permits. As a result, the local government in Sintang delayed complying with the central government's decision, in protest. This situation clearly indicates a continuing power struggle between central and local government regarding forest decentralization. On the other hand, under the decentralized system horizontal conflicts among stakeholders who participated in forest management under the new policies also appeared to be common. Disagreements over boundaries, disputes over work plans and benefit sharing, accusation of corruption and illegal logging activities were often reported. From our observation, the outcomes of the various conflicts have been rather negative. Furthermore, the inability of government to control forest activities has

resulted in widespread illegal logging (Schroeder-Wildberg and Carius, 2003). Although there was no report of hostility, all the conflicts were indications of a dysfunctional system. For this reason, we agree with the argument put forward earlier by many 'functionalists' who described conflict as a mess, bad and a hindrance (Bailey, 1997). In the West Kalimantan case, these negative consequences of conflict had considerable impact.

Nevertheless, the negative consequences indicated above could be explained by the inability of the stakeholders involved to cope with and address the conflicts appropriately. The need for conflict management in the implementation of decentralized forest management had not been taken into account in any of the legislation. We failed to find any clause in the government or district legislation that explicitly regulates how stakeholder conflicts should be addressed. Consequently, it is not surprising that these conflicts had negative impacts.

The most important next step for addressing conflicts in decentralized forest management in West Kalimantan is to develop mechanisms and capabilities to address conflict at different levels (village, district and national) in order to implement desirable changes (Walker and Daniels, 1997, Kriesberg 1998, Castro and Nielson 2001). An initiative to establish good two-way communication between local and central government over the implementation of decentralized forest management is needed. This communication should form the foundation for a shared understanding of the different regulations and how those regulations should be implemented. Most importantly, this communication should find options for local and central governments to carry out forest management jointly and describe their respective roles and responsibilities in such a joint forest management arrangement. In decentralized forest management clear understanding of the roles and responsibilities of the different government levels is essential. Castro and Neilson (2001) have indicated that collaborative forest management initiatives between different levels of government organizations and among various stakeholders often result from bitter conflicts.

Glasl (1999) argued that the success of conflict management relies heavily on the ability to address its triggers. We suggest that there is a need to develop negotiation skills. Negotiation, which has not been used in any of these conflicts, seems to be lacking at the moment. Power intervention was clearly dominant, as indicated by the revocation by central government of the district governments' authority. Ideally, there should have been negotiation between the parties to find a 'win-win solution' rather than a quick and seemingly unacceptable use of power. Furthermore, at the local level negotiation might be beneficial. Local communities need to improve their skills in negotiation in order to deal successfully with outsiders such as timber companies. Local non-government and research organizations should have a crucial role by providing such training. Finally, conflicts must be anticipated (Castro and Nielson, 2003). Policies must include carefully devised conflict management schemes as an integral part of resource management. Furthermore, there is a need to develop awareness amongst all stakeholders that conflict is almost unavoidable. Once they are aware of this, stakeholders should be able to anticipate conflict and therefore strive to develop

their own ability to address it accordingly. The stakeholders themselves must learn how they can best handle their conflicts (Glasl, 1999), and how to obtain outside help (e.g., mediators, facilitators etc.) if they are no longer able to cope with conflicts by themselves.

CONCLUSIONS

The implementation of forest decentralization policies in West Kalimantan resulted in conflicts between local and central government about the authority to issue logging permits. Furthermore, forest decentralization policies also created local conflicts among stakeholders over boundaries, benefit sharing etc. No systematic conflict management mechanisms have been used to address these conflicts. As a consequence, many of the conflicts resulted in negative impacts such as lack of trust, illegal logging, accusations etc. Nevertheless, it has been argued that there is the potential to manage conflicts through the development of communication and negotiation skills. Conflict in resource management must be anticipated from the outset so that when it arises it can be addressed adequately.

ACKNOWLEDGEMENTS

We would like to thank DfID and ACIAR for supporting this study financially. We are grateful to the field team in West Kalimantan: Zuklifli, Erdi Abidin, Ngusmanto, Afifudin and Tri Budiarto. Suman Kurik, the Head of Melawi District, and local community members Zulman, Badrie, Abang M.K. and Darwis helped us during fieldwork. Thanks also to our decentralization team at CIFOR, in particular Sian McGrath and Moira Moeliono, for their invaluable comments and encouragement, and to Retno Maryani of Wageningen University, who read the first manuscript and provided comments. We are equally grateful for the comments provided by an anonymous reviewer. Finally, a special acknowledgement to Rosie Ounsted for reviewing this manuscript and improving the English.

REFERENCES

Armitage I. and Kuswanda M. 1989. *Forest Management for Sustainable Production and Conservation in Indonesia.* UTF/INS/065: INS Forestry Studies. Field Document No. 1–2. Directorate General of Forest Utilization, Ministry of Forestry, Jakarta, Indonesia.

Bailey K.D. 1997. System and conflict: toward a symbolic reconciliation. *Quality and Quantity* **31**: 425–44.

Barr C. 2001. *Banking on Sustainability: Structural Adjustment and Forestry Reform in Post Soeharto Indonesia*. CIFOR and World Wide Fund for Nature Macroeconomics for Sustainable Development Programme Office, Washington D.C.

Barr C., Wollenberg E., Limberg G., Anau N., Iwan R., Sudana I.M., Moeliono M. and Djogo T. 2001. *The Impacts of Decentralization on Forests and Forest Dependent Communities in Malinau District, East Kalimantan.* Case Study 3. CIFOR, Bogor, Indonesia.

Bavinck M. 1998. A matter of maintaining peace, state accommodation to subordinate legal systems: The case of fisheries along the Coromandel Coast of Tamil Nadu, India. *Journal of Legal Pluralism* **40**: 151–170.

Buckles D. 1999. *Cultivating Peace: Conflict and collaboration in natural resource management.* IDRC/World Bank, Ottawa.

Castro A.P. and Nielson E. 2001. Indigenous people and co-management: Implications for conflict management. *Environmental Science and Policy* **4**: 229–239.

Castro A.P. and Nielson E. 2003. *Natural resource conflict management case studies: An analysis of power, participation and protected areas*. UN Food and Agriculture Organization, Rome.

Dinas Kehutanan Kalimantan Barat. 2004. *Laporan Tahunan 2003*. Dinas Kehutanan Kalimantan Barat, Pontianak, Indonesia. (Annual Report 2003.)

FAO (Food and Agriculture Organization). 2000. *Conflict and natural resource management*. UN Food and Agriculture Organization, Rome.

Glasl F. 1999. *Confronting conflict: A first-aid kit for handling conflict*. Hawthorne Press, Stroud, UK.

Hellstrom E. 2001. 2001. Conflict cultures: Qualitative comparative analysis of environmental conflicts in forestry. *Silva Fennica* **2**: 1–109.

Hirschman A.O. 1994. Social conflicts as pillars of democratic market society. *Political Theory* **22**: 203–218.

Jentoft S. 2000. Legitimacy and disappointment in fisheries management. *Marine Policy* **24**: 141–148.

Kriesberg L. 1998. *Constructive conflict: From escalation to resolution.* Rowman & Littlefield Publishers, Inc., New York.

Mardiros D. 1997. Fighting for country: Aboriginal land associations and common law claims in the Kimberley region of Western Australia. *Law and Anthropology* **9**: 146–157.

Matose F. 1997. Conflicts around forest reserves in Zimbabwe: What prospects for community management? *IDS Bulletin* **28**(4): 69–78.

McCarthy J.F. 2001. *Decentralization and Forest Management in Kapuas District, Central Kalimantan.* Case Study 2. CIFOR, Bogor, Indonesia.

McCarthy J.F. 2004. Changing to gray. Decentralization and the emergence of volatile socio-legal configuration in Central Kalimantan, Indonesia. *World Development* **32**(7): 1199–1223.

MoF (Ministry of Forestry of Republic of Indonesia). 2004. *Forest Statistics of Indonesia 2003*. http://www.dephut.go.id/INFORMASI/STATISTIK/Stat2003/Stat_03.htm (Accessed 28 April 2005).

Pemerintah Provinsi Kalimantan Barat. 1995. *PERDA Kalbar No. 1 Tahun 1995 Tentang Rencana Tata Ruang Wilayah Provinsi Kalimantan Barat*. Sekretariat Daerah Kalimantan Barat, Pontianak, Indonesia.

Resosudarmo I.A.P. 2004. Closer to people and trees: will decentralization work for the people and the forests of Indonesia? *European Journal of Development Research* **16**(1): 110–132.

Schroeder-Wildberg E. and Carius A. 2003. *Illegal Logging, Conflict and the Business Sector in Indonesia*. Adelphi Research, InWEnt – Capacity Building International, Germany.

Valladares-Padua C., Padua S.M. and Cullen Jr. L. 2002. Within and surrounding the Morro do Diabo State Park: Biological value, conflicts, mitigation and sustainable development alternatives. *Environmental Science & Policy* **5**: 69–78.

Walker G.B. and Daniels S.E. 1997. Foundations of natural resource conflict. Pp. 13-36 in Solberg B. and Miina S. (eds). *Conflict Management and Public Participation in Land Management*. EFI Proceedings No. 14. European Forestry Institute, Joensuu, Finland.

Wulan Y.C., Yasmi Y., Purba C. and Wollenberg E. 2004. *An analysis of forestry sector conflict in Indonesia 1997–2003*. CIFOR Governance Brief. No. 1. CIFOR, Bogor, Indonesia.

Yasmi, Y. 2003. Understanding conflict in the co-management of forests: The case of Bulungan Research Forest. *International Forestry Review* **5**(1): 38–44.