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CHAPTER 5

BIODIVERSITY RESOURCES GOVERNANCE IN TIMES OF ARMED CONFLICT

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ABSTRACT

Modern political development has transformed the reservoir of peace and cooperation into conflict in some parts of South Asia. Economic, social and political exclusion provide fertile grounds for the emergence of armed conflict in many countries in the region. Nepal has been facing the problem of Maoist insurgency for the last decade, which has claimed over 20,000 lives. Social and cultural discrimination, isolation of marginalized groups and areas, ideological differences and economic discrimination are considered the root cause of the Maoist insurgency in Nepal. Because of armed conflict the economy of the country has severely suffered and the governance has been handcuffed. Nepal is rich in natural resources. Several institutions have been established for the governance of resources. Some forward-looking conservation policies have also been developed and implemented, as showing positive results. During armed conflict the governance of natural resources has suffered. This article examines the governance of forest resources at the time of armed conflict in Nepal and makes some recommendations to facilitate improved natural resources governance.

Key Words: Communities, conflict, forests, insurgency, Nepal

INTRODUCTION

Common cultural and historical processes have interacted with structural reality, the nature of states and politics, and the path of development to transform the reservoir of peace and cooperation into conflict in many parts of South Asia (Pramod 2006). In Nepal the problems of economic, social and political exclusion are the root cause for the emergence of armed conflict. A study carried out to examine the cause of Nepali armed conflict revealed complex causes. Twenty-six percent of respondents reported social discrimination, 4% cultural discrimination, 9 % isolation of marginalized groups and areas, 26% ideological differences and 32% considered that economic discrimination is the root cause of Maoist insurgency (Pathak 2005). The country has been facing a Maoist insurgency for the last 10 years. At the time of writing this paper, the conflict had claimed over 20,000 lives (government figures list 13,000) and had displaced over one million people. Much infrastructure has been destroyed. Like other sectors, forest management and biodiversity conservation processes in Nepal are threatened by the ongoing conflict. Although pro-people policies developed in the past have helped forest and biodiversity conservation in many ways, the threats to Community Forestry (CF) and Protected Areas (PAs) today come from violent

conflicts (McNeely 2004). This paper examines the effect of the Maoist insurgency on the conservation of Nepal's forest and biodiversity resources.

GOVERNANCE OF FORESTRY RESOURCES IN TIMES OF ARMED CONFLICT

The breakdown of law and order in the country as a result of the armed conflict has weakened the chances of lasting peace and hope for sustainable development in the country (Murphy *et al.* 2005). An effort to govern the country under a multiparty democratic system has been implemented since 1990. The country (total area 147,181 km²) has been politically divided into 75 districts, 3,913 Village Development Committees (VDCs) and 58 municipalities. For the governance of biodiversity resources, forest (which includes protected areas, community forestry area, leasehold forest areas and shrub land) management institutions have been established by promulgating forward-looking legal instruments. Biodiversity resources in five key categories -- forest, wetlands, rangelands and agriculture and wastelands -- are managed by institutions at different levels. In each district one forest office, Ilaka (Subdistrict) and range offices were instituted and made functional. Under the Department of National Parks and Wildlife Conservation (DNPWC), 16 protected areas were established with different management modalities. At the bottom of the organisational strata, the country took a pioneering initiative for the establishment of Community Forestry User Groups (CFUG), under the Forest Department, while under protected area (PA) Bufferzone Management (BZ) Committees at district and Village levels were formed. These committees were constituted by household user group members at the local level. Partnership with the people became the principal mantra in the conservation policy of Nepal.

Of the total land mass of the country, 29% is under forest while 10.6% is under scrubland, making almost 40% of the land classified as forest. An estimated 1,184,821 ha (8%) of forest is under Community Forestry (CF) (Department of Forest 2006) On the other hand, excluding shrubland and considering 29% of the forest area in the country, an estimated 27 % of the forest land is currently under CF management system. Almost 19% of the total land mass in Nepal is under PA management.

The governance of forest resources has five departments at the central level. Specific Departments of Forests and of National Parks and Wildlife Conservation (DNPWC) have been functional under the ministry of Forest and Soil Conservation for forest and protected areas (PA) governance respectively. The Department of Forest has 74 District forest offices, 92 Ilka (sub district) offices, 695 range posts and 6 training centres operational within the country. The Community Forest User groups (CFUG) operate under the range posts.

After the conflict began in 1996, governance became difficult. For example, Pyakuryal (2004) reported that the cost of armed conflict in Nepal is bringing the country into a recession. He compared the GDP between the pre- and during-conflict period and reported an average loss of 1.25% GDP annually. In another study an estimate just over US\$ 1 billion has been lost over period of 7 years of armed conflict in Nepal (National Peace Council, 2003).

The Maoist insurgency has severely affected the governance of Forest and PAs by restricting the mobility of government officials in the field and destroying forestry sector infrastructure. For example, to date 29 District forest offices, 52 Ilaka offices, 235 range posts and 2 training centres have been destroyed by the insurgents. The Forest Department has estimated a loss in infrastructure -- mainly office buildings, vehicles and software -- of over US\$ 8.8 million due to armed conflict (Department of Forest 2006). Similarly, losses in protected areas estimated at US\$ 6 million have been reported by DNPWC. At the same time the development budget of PA has been reduced for the year 2005-2006 by over 50% from the previous years (Department of National Parks and Wildlife Conservation 2006). In the PAs, 7 employees have been killed and more have been abducted by the insurgents. Due to office destruction, killing of

counterparts and abduction, and for security reasons the number of guard posts and military posts established for PA patrolling have been reduced and surveillance has become more centralised leaving large areas of PA monitoring at risk. These trends have also reduced the confidence of PA workers to effectively carry out their work.

The movement of army patrols within PAs became more on a convoy basis, which is readily noticed by both the insurgents and wildlife poachers. Today large-scale poaching of flagship species like Rhinoceros has occurred from the core protected areas due to poor surveillance by the military for fear of Maoist assault. On the other hand, in the Buffer Zones (BZ) managed by the community, poaching has been rare. Similarly the movement of wild animals in BZ areas has also increased due to better management of such areas by local communities, which has enhanced the wild animal biomass. During conflict, low patrolling within the core PA have allowed increased illicit hunting while in the BZ areas due to high frequency of movement and surveillance of community user group members, poaching is reported to be restricted (Royal Chitwan National Park Warden, Personal communication).

FOREST AND BIODIVERSITY CONSERVATION AT THE TIME OF ARMED CONFLICT

The government institutions established for good faith and to facilitate the biodiversity conservation in the country have many shortcomings. The institutions established in many cases led to sustained loss of biodiversity, with increased bureaucratic hurdles and corruption. In the quest of good governance the communities were legally empowered. Today over 14,000 community forestry user groups and many buffer zone committees and leasehold forest user groups are involved in the management of forest areas under national jurisdiction. Thus at the core of the local sustainable biodiversity management efforts are community-based institutions – traditional institutions that have functioned locally, mobilizing local resources and working towards biodiversity conservation and community development and for the enhancement of their livelihoods. The spirit of voluntarism and philanthropy is carefully nurtured in these institutions. Even at the time of armed conflict many of them are functioning to meet their goals of serving the community, albeit on a much-subdued scale; many others have metamorphosed into more effective approaches.

Local institutions that have survived despite the armed conflict are the Community Forestry User Groups (CFUG), Leasehold Forest (LF) and Buffer Zone (BZ) user groups. A sense of self-help and the values of conservation and economic gain motivated their efforts, but many of these values have been challenged by the prolonged conflict. Threats from the rebels and the government have influenced the inherent natural rights for using their resources.

Despite these challenges, local level institutions have survived and are providing a neutral cushion against both the insurgents and the army. Because of their resilience and continued presence at the local level during conflict, the urban-based civil society, NGOs and other groups have also started to align themselves with and work through these institutions. In many places, these grass-roots user group institutions now form the only link between the people, the Government, non-government institutions and Maoists in forest and conservation area management (Oli & Kanel 2006).

It is unfortunate, however, that most of the funds accumulated by the user groups (including poor members' loans) have now ceased or been diverted from their savings to investment on community development work because of the fear that rebels will demand donations from the CFUGs and LFUGs and BZ committees, or that their funds will be looted by the insurgents or claimed by the government. At the time of armed conflict the government also violated and ignored previous legal instruments through decrees that were more authoritative.

Government suspects that the user groups were supporting the insurgents from the profits from forest and biological resources, so they are becoming more concerned about forest management of CFUG areas. For example, a zonal commissioner employed by the government at the time of armed conflict in the far western region placed a moratorium on the harvest and sale of forest products from 37 FUGs, thereby freezing US\$ 140,840 worth of forest products from their community forestry area. Another commissioner from the central development region issued a notice through the district forest offices for a moratorium on the sale of forest products from community forestry areas of the six district CFUGS. This notification is in contravention to the Forest Act 1993 and Forest Regulation 1995. Vested interests on the part of the government was also reported to be the main cause for such notification (Weekly Vernacular 2006). That Maoists may be gaining benefit from the CF has also been reported, but one of the rebellion leaders stated that “they are not in the venture of drying the pond for fishing”. The insurgents issued a policy including 75 items for the conservation and promotion of natural resources and herbal and medicinal plants. The state has empowered the CFUG through law and the Maoists have issued a special policy for the conservation of biological resources, but an unwarranted skinning of CFUGs in the name of donations for the people's war from the Maoists and bribes and contravention of law on the part of the government commissioners is a ceaseless process. This has created a great uncertainty among the CFUGs as the custodians of the resources.

With the armed conflict, employment and funding in the development sector is reported to have declined, and many poverty reduction related biodiversity programmes have thus become victims of the Maoist insurgency (Oli 2004). This has forced many NGOs to seek new ways to continue working at the local level. Some have managed to continue working by becoming more transparent regarding their financial commitments and expenditure and developing alliances with CFUGs and LFUGs. Once this innovative NGO approach was understood, some government ministries also began to make their funds transparent in public places.

Today, local CFUGs, LFUGs and Buffer Zone (BZ) community user groups in and around PAs are the main programme implementation vehicles for forest resources management in Nepal. Maoists have forced NGOs to register with the Maoist Government (*Jana Satta*, or ‘new regime’, or ‘People's Government’) so that the latter can keep track of fund flows and charge taxes. Although many CFUGs and LFUGs have expressed their reluctance to register with the new regime, quite a few of them are reported to have made secret arrangements and secured permits from the rebels to continue working in the rural areas. The CFUGs’ strategy is to keep the arrangements from becoming publicly acknowledged. In addition, political factors such as the use of user groups and their federations of CFUGs, LFUGs and leasehold cooperatives, as well as their alliances for political motivation and bargaining, have helped them to continue functioning. Third, the groups are organized into specialized organizations, and power-sharing arrangements are becoming more democratic and decentralized even in times of armed conflict.

By adopting a neutral position vis-à-vis different parties, creating awareness regarding the management of resources and establishing strong cooperation between different elements of society, CFUGs have emerged as impartial vehicles for biodiversity conservation and development. Furthermore, by taking action against corrupt CFUG and LFUG members, seeking diverse financial support and maintaining overall good working relations with different opposing parties, CFUGs and LFUGs have managed to continue working successfully during the conflict. However, because of the constant abduction of rural people by the insurgents and the outflow of able-bodied men from their villages, effective CF, LF and BZ management is not easy. This is further compounded by the army occupation of CF areas to set up camps, barracks or firing ranges, which has increasingly threatened the people’s access to CF resources and livelihoods. Habitat has also been destroyed due to military actions to improve mobility or to deny sanctuary to enemies, such as clearing of forests and vegetation along the highways.

FOREST CONSERVATION DURING THE CONFLICT

The Maoist insurgency has severely weakened the governance of CF and PAs by restricting the mobility of government officials in the field and destroying forestry sector infrastructure as mentioned in the above section. Community members and forest guards are afraid to enter forests because of the risk of attacks from both security personnel and Maoists. In the absence of forest offices and forest guards, smuggling of timber and products from flagship species (rhinos, tigers) has also increased due to opportunistic harvest.

The institutional infrastructure has thus been significantly damaged. This has also affected the functioning of CF and LF and the handover of CF and LF areas to communities. According to the law, government sanctions are required for the registration and monitoring of CF and LF. The preparation of forest operational plans requires a detailed assessment of the area to be handed over to the community as well as technical inputs. Forest officials and community members do not want to risk their lives by entering insurgency-hit areas. From 1996, the number of benefiting households in CFUG has slowed considerably, but the number of women members in CFUG has increased (Table 1; Figures 1 and 2).

Table 1: Status of Community Forestry in Nepal before and during armed conflict

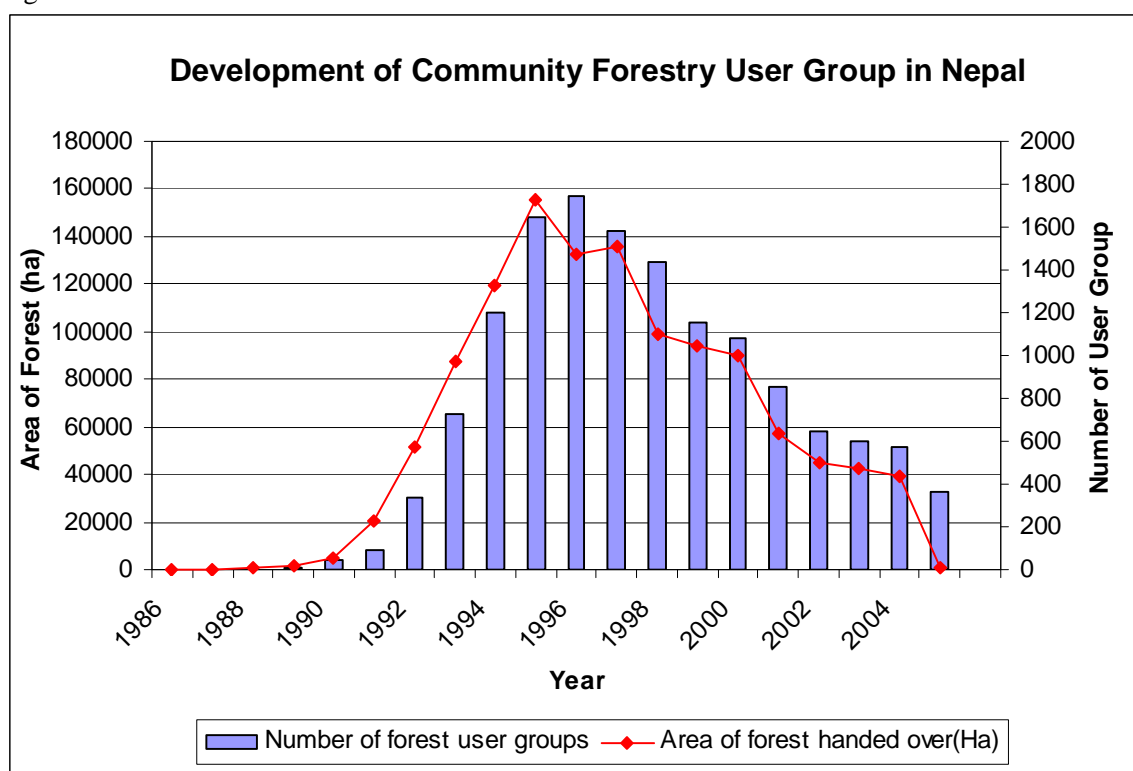
Year	Area of forest handed over(Ha)	Number of forest user groups	Number of household benefited	Number of women in CF	Relation of CFUG to women
	5670	98	10363		
1986	16	1	53	3	3.00
1987	27	1	35	2	2.00
1988	568	10	1115	9	0.90
1989	1973	42	4492	87	2.07
1990	5012	87	12973	226	2.60
1991	20689	339	34927	723	2.13
1992	51935	729	80180	1591	2.18
1993	87693	1204	131809	2729	2.27
1994	119611	1645	178418	3754	2.28
1995	155637	1742	194347	4589	2.63
1996	132634	1586	180337	4285	2.70
1997	135886	1438	168504	3978	2.77
1998	99066	1157	135059	3452	2.98
1999	93806	1079	123577	3334	3.09
2000	89958	854	98543	3086	3.61
2001	57347	644	91333	2340	3.63
2002	44716	600	70359	2236	3.73
2003	42826	575	69778	2298	4.00
2004	39142	366	46444	1462	3.99
2005	599	4	731	31	7.75
Total	1184509	14201	1633377	40215	

Source: Department of Forest (2006).

A quantum leap of over 288 % in the involvement of people in community forestry management took place in the year of gaining democracy in the country in 1990 compared to previous years. This clearly shows the importance of democratic government values, as well as belief in the power of local people, in the

management of forest resources. The trend of increase in people's participation in forest resources management was enhanced further with the promulgation and enforcement of new Forest Act in 1993 and its enforcement in 1995. The synergy of legal improvement along with other factors was important for the increase in participation of community members including of women directly in the management of forest resources. It is also apparent that there is a continuous decline in community forest hand-over processes after the onset of armed conflict in 1996 that reached its lowest point in 2005 (Table 1; Figure 1). This trend reflects that a declining number of community members have had the opportunity to participate in the forest conservation process. This decline corresponds with the increasing armed conflict and control over the lives of rural people by the combatants.

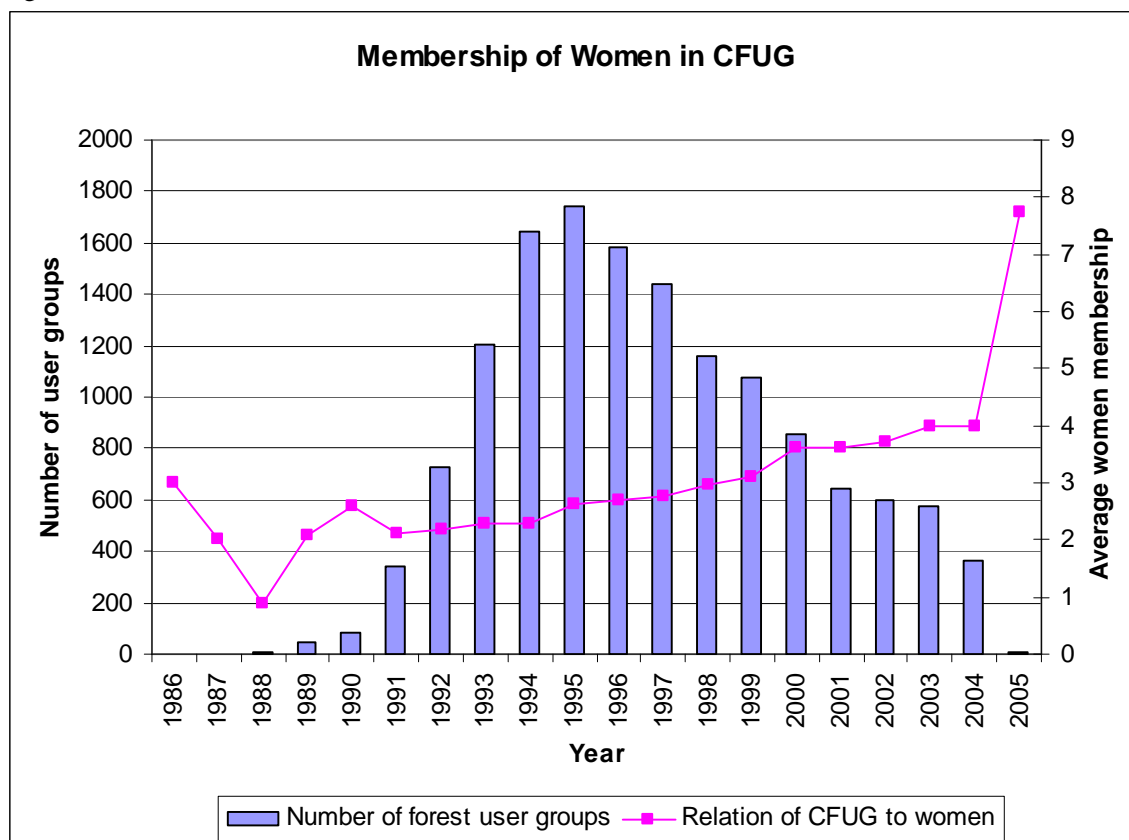
Figure 1



The underlying cause for the number of people not increasing in the forest governance process should not be seen as indicating that the earlier members have given up their forest conservation initiatives at the time of armed conflict. The earlier number of user group members remain, but they are functioning at a low level as there are two parallel governance systems one from the legitimate government and the other by the insurgents. In addition, threats by the combatants limits the mobility of forest officials in the forest areas, thereby hindering or circumventing the forest handover process; this explains the reduction in number of community members participating in the process, as the forest officials must approve the operational plan of the CFUG. In addition the inspiration and momentum created by Forestry Act 1993 has been derailed as many young people have fled from rural areas due to security reasons and others were abducted or joined the Maoist camp. Due to these factors the community forestry management of the entire country has been affected. Table 1 and Figure 2 show that despite the decrease in number of CF hand over-process, the participation of women in the user groups is increasing. This may be due to a large number of male members migrating from the rural areas and women remaining in the house and thus increasing their

membership in the user groups. Second, large-scale awareness arising on women's participation in different conservation-related activities by the government institutions and nongovernmental sector have helped empower women in forestry activities. This is one of the direct impacts of armed conflict.

Figure 2.



From the above it can be seen that not all the impacts are negative, nor can all impacts be attributed to Maoist insurgents. The majority of negative impacts can be attributed to criminals seeking opportunities, while others originate out of need or from the lack of security (Murphy *et al.* 2005).

Most positive impacts can be attributed to strong community groups or the fear of violent consequences. Timber poaching takes place throughout the country, especially in accessible areas. Timber extraction in some CF areas in the Siwalik hills and the Terai continues unabated in the absence of any security measures and legal compliance. In the community forest areas, solidarity and social dynamics among community members and with adjoining communities are still prevalent. Second, Siwalik and Terai forests were used commercially to generate revenue and for resettlement, so there were no indigenous institutions for their management. Timber poaching from the government Timber Corporation in disguise and gaining opportunity from the armed conflict has also been recorded (Anonymous 2006a). In addition resettlement and forceful grabbing of land has also increased at the time of armed conflict. For example a notification was issued to register 404 ha of Royal Bardiya National Park in the name of a person. Due to

media presence and support from insurgents and quick information being circulated in the media the land registration process has been reported to have been stopped.

Third, India constitutes a great market opportunity for timber and non-timber products. Consequently, the management of Terai forests is a major challenge for both communities and the Government, even during normal times. Areas that are patrolled by government security forces rarely fare much better because poachers know the convey movement and whereabouts of security patrols.

Most of the rural areas controlled by Maoists are dependent on local cadre leadership. In some areas, Maoists protect forests and hunt down poachers depending on their needs and opportunities for the sale of forest products. For example, a group of Maoists evicted some 200 squatters by destroying their illicit dwellings in the Koshi Tappu Wildlife Reserve (Personal communication with wildlife officials in Kathmandu). In other areas, rebels have taken over community forests and are using the profits from timber sales to finance their activities. They have enforced a "war tax" in community forest areas, involved directly in the trade of herbs and medicinal plants. Abduction and terrorising the CFUG members has become a common phenomenon. They also patrol the areas. From the Terai forest, Maoists have levied taxes of 10% on non-timber products, while in case of hard timber like *shoria robusta*, 20% and for *Acesia sp* 25% tax. In addition Maoists have made a nationwide demand to adhere to their four points: CF must register in their new government and constitute new committees; the CF area must be named for a Maoist Martyr; and the income from the CF needs to be submitted to them. Despite the proclamation of their leader that they will support conservation, a study conducted by the SDC community forestry project found that 25% of the CFUG are under direct pressure, 16% have renamed their CF in the name of a Maoist martyr, 22 % of the CFUG committee members have joined Maoist cadres and 24% of the CFUG are compelled to submit the income from their forests. In areas where the CFUGs resented, a parallel committee of Maoists has also been formed (Gurung Brahma Dhoj, Personal communication). Community forest based industries, such as the local paper industry in Charikot, that failed to donate to the Maoist have been destroyed. Sale of timber from the Siwalik area in Ilam, east Nepal, has been banned by Maoists due to discrepancies in benefit sharing with the community user groups.

The greatest impact on the lives of forest-dependent communities due to the armed conflict in Nepal is double taxation, i.e. being forced to pay taxes to the Government as well as to the insurgents. Although the impacts on NTFPs are not fully documented because of the security situation, NTFP dealers have reported that insurgents have fixed the rate for the export of medicinal plants and cardamom, normally 10% of the prevailing market price (Anonymous 2006b).

High value products are taxed differently. For example, yarsa gumba (*Cordyceps sinensis*) is an expensive medicinal herb that is in high demand on the international market and can be sold for a very high price. Its price in the local market is said to be US\$ 900-1,300 per kg, but it can fetch as much as US\$ 2,500 in the international market (Kathmandu Post, 2003). Sources claim that yarsa gumba is being smuggled out of Nepal to India and China in large quantities; the Maoists are reported to be benefiting from this trade.

In order to deal with the changing scenario and for fear of Maoist looting CFUG funds, some CFUGs have invested large amount of their deposits on improving cooking stoves, establishing watermills, investment on micro hydro power and other community development activities which are conservation friendly. They have also opened two bank accounts -- one to show the Maoist while the other hides their deposits from Maoist's eyes.

In some areas of Nepal, positive environmental impacts due to the Maoist insurgency have been observed. The most visible impact has been the regeneration of forests and NTFPs in some mid-hill regions. Forest regeneration has been so successful that local communities are also noticing a return of various wildlife

species. The reasons for forest regeneration in some mid-hill regions are varied. The primary reason is the out-migration from the mid-hill regions due to conflict. Men in many villages have simply left out of fear of being recruited into the Maoist forces; others have left their villages because of the perceived fear of being targeted by security forces as collaborators.

Another reason behind forest rejuvenation and the return of wildlife in some districts is that poachers are afraid to enter forests. Both Maoists and the security forces have been known to severely injure or kill poachers. Poaching has also decreased in some districts because both security forces and Maoists have confiscated firearms from local populations. An additional rationale is that the increased insecurity has decreased the mobility of some rural peoples in forest areas.

The positive environmental impacts seen in some regions of the country, however, are usually to the detriment of other areas. The out-migration from some mid-hill districts has placed additional environmental burden on other areas of the country. Depopulation of the hills has increased the pressure on forests in the Terai in the south (considered relatively safer to live away from insurgents), along Nepal's northern border with Tibet (which is highly inaccessible), and in many urban centres. The scale of the migration, however, has not been fully documented.

PROTECTED AREAS IN TIMES OF ARMED CONFLICT

Murphy *et al.* (2005) reviewed the impact of the Maoist insurgency on conservation. Of the total 16 PAs, 11 are guarded by over 4000 army personnel and 1032 civil servants are engaged in the governance of the areas. Remaining areas are either managed under an NGO or in collaboration with the local community. A general feeling of lawlessness prevails in many areas of the country, which has led to a free-for-all mentality with regard to natural resources. Therefore the current state of Nepal's PAs leaves many species at risk from poaching or over exploitation. In some regions, the working mechanisms that oversee sustainable resource use are absent, and in others there has been a complete breakdown of protective measures. This could potentially erase or, at the very least, set back many conservation successes in Nepal.

The only reliable data existing on the poaching of significant species is for the Asian one-horned rhinoceros population. This is undoubtedly due to the high profile nature of decades of successful conservation efforts for this flagship species. Records exist for smuggling seizures of a few other species but these data are scant. Poaching of rhinos increased significantly after the state of emergency was declared in November 2001. The reduction of Royal Nepal Army (RNA) units within the PAs and the ensuing attacks by Maoists on park offices and security forces left rhino populations vulnerable to poachers. Military guards stay in congregations of 50, and sweeping anti-poaching movement is carried out from time to time. Such operations also reach areas where no one within the PA other than the poachers had reached so far. The army found huts and temporary houses built within the PA for poaching at night. Some poachers were shot dead while the others were captured and their establishments demolished. Despite these measures, however, the poaching has continued.

A census conducted in 2000 recorded 612 Asian one-horned rhinos in Nepal. Royal Chitwan National Park (RCNP) contains the bulk with 529 recorded during the census. Royal Bardiya National Park (RBNP) and Royal Suklaphanta Wildlife Reserve are also home to this endangered species. According to the Department of National Parks and Wildlife Conservation (DNPWC), 33 rhinos were poached in Nepal from 1973-1990 (Rana 2003). In a DNPWC annual report, six rhinos were poached in the RCNP in 1998 (Sigdel 2003). From April 2002 to March 2003, 23 rhinos in the RCNP and eight rhinos in the RBNP fell victim to poachers. During April 2003 to March 2004, 17 rhinos fell to poachers in RCNP and RBNP.

Park officials credit this year's decrease in poaching to the arrest of 50 rhino poachers, and a strengthening of anti-poaching units within rhino parks (Chapagain 2002).

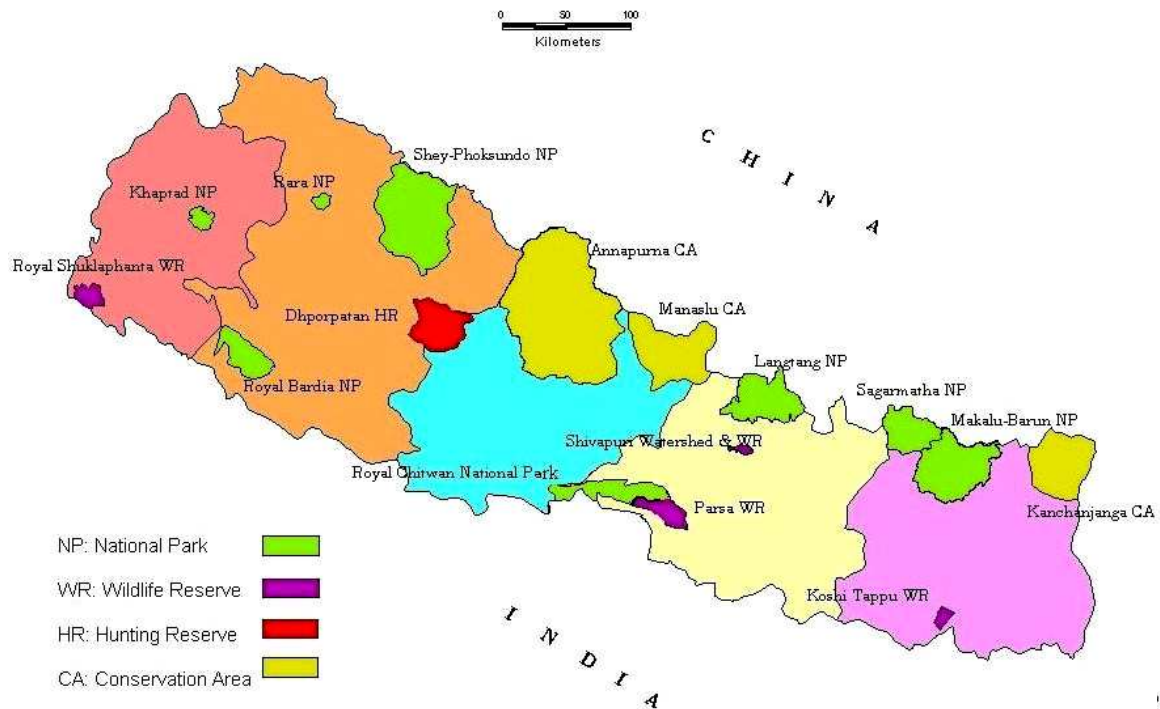
Another census of RCNP carried out by the Department in 2005 shows 372 rhinos, a loss of 157 since 2000 (Department of National Parks and Wildlife Conservation 2006). Out of this 99 deaths are reported to be due to lack of security and directly contributable to conflict. The remaining 76 deaths are reported due to natural death during the five-year period. Such decline in this important species has been largely due to armed conflict. In order to prevent further loss, youth committees of both men and women were formed along the buffer zone. These youth groups located poachers, nursed injured and hunted animals, and reported poachers to the park authority as the BZ committee have no legal standing to take action against the poachers. Unfortunately, the long time to take action and weak judicial decision-making have left the criminals unpunished.

The Maoists began their assault on PAs by strategically striking and destroying outlying PA guard posts and park offices. These targets were remote and sparsely staffed and thus extremely vulnerable. The Maoists continued attacking outlying posts, commonly burning most to the ground. This succeeded in pushing the RNA and park staff into government-controlled district centres. Currently, in many PAs the total number of army has been slightly increased, but administration and park governance has been changed for fear of insurgent attacks, so they no longer patrol the area at night. Similarly the park authorities also remain fortified in safer places with low mobility for surveillance. Therefore PAs are vulnerable to unchecked resource extraction and biodiversity loss. Protected areas with no army presence are used by Maoists as training grounds, such as Dhorpatan Hunting Reserve and the Makalu-Barun National Park. Prior to Maoist attacks on PA infrastructure, there were 112 guard posts positioned throughout Nepal's park system. This number had decreased to 73% by 2005, providing opportunity to poachers and smugglers a new horizon for business (Yonzon 2004).

Officials are concerned about projects in the Annapurna and Kanchenjungha Conservation Areas, following numerous recent attacks by Maoist rebels on various offices. The King Mahendra Trust for Nature Conservation launched the Annapurna Conservation Area Project (ACAP) in 1986, the first and largest conservation area in Nepal. The project was initiated as an innovative approach to PA management through the use of community user groups. In November 2002, Maoists attacked the main office, setting it ablaze. Demands for donations from the park workers are reported to be frequent (Anonymous, 2006c).

Earlier Maoist insurgents threatened the local community engaged in conservation in Kanchenjungha conservation Area. Since then, as part of a local-level conflict management strategy, over 1,000 community members from these remote areas agreed to pursue conservation work for the benefit of the people and asked the insurgents not to hinder their activities and prevent the meagre funds flowing into their poor areas. All the same, it has become extremely difficult for the community to engage in conservation.

Figure 3. Map of the protected areas of Nepal



Source: DNPWC/PPP (1999).

From the above discussion, it is apparent that the Maoist insurgency has weakened the governance and management of biodiversity conservation and development in Nepal. The local level elected bodies have been dissolved, and their absence has led to crises over the ownership of projects and plans and day to day administration important for the people. The local level user groups face blame from the Government if they collaborate with the insurgents to work in conservation or development. On the other hand, user groups working in collaboration with the Government face punishment from the insurgents. Therefore, the local level institutions are caught between a rock and a hard place. Yet they are still providing neutral platform to both the warring factions and helping to further the biodiversity conservation in Nepal.

CONCLUSION

In any armed conflict the combatant's prime target is forest resources in order to drive the opposition groups from their shelter, food and energy requirements. In addition the combatants use and abuse the biodiversity resources to finance their military operation. During conflict, the country's law and order situation remains weak. Therefore the internally displaced people and victims of insurgents have large scale suffering. Individuals and groups try to survive on their own within a society with arms and law in their hands, a situation that can have dire impacts on biodiversity resources. Since the domestic law becomes very weak during armed conflict, international guidelines for the prevention of hostile activities on biodiversity conservation are urgently required.

In order to conserve biodiversity at the time of armed conflict, neutral institutions having international repute can negotiate and act as a faithful conduit to both the warring factions, thereby enforcing the guidelines. Such institutions are working in Nepal, but their approach to conflict management, especially in biodiversity conservation, so far seems to keep away rather than become involved with the warring factions. Instead of facing the challenges of negotiation and mediation for biodiversity conservation, their strategies have been to support local level NGOs or user groups as a conduit for their project implementation and to continue monitoring them from the centre. Because of their international repute, such institutions could raise awareness and put pressure on all the parties and develop strategies to boost the morale of conservation authorities during conflict. They could also forge alliances with conservation groups, federations and journalists, thereby putting pressure on both warring factions. In the absence of any support from mainstream conservation organizations, the fate of biodiversity conservation and its governance is in the hands of relatively powerless community user groups in times of conflict. At the time of armed conflict the communities remain fragmented; the private sector becomes more corrupt. The intellectuals should remain firm and try to collaborate with the communities and warring factions for the sustained management of biological resources.

As stated by McNeely (2004), during armed conflict the sole objective is to destroy the existing governance system and establish a new regime. Natural resources governance needs to be seen from a different angle. Protected areas today are caught in the crossfire of opposing armed groups and armed conflict groups show little respect for protected areas which are the repositories of significant biodiversity resources. The suppression of dissent through laws has multiplied extra-legal killings described as encounters. The excessive use of force by the state in the name of counter-insurgency has contributed to flaring up of armed conflict and has reinforced the culture of violence. Conflict moderation for peace building is the only hope for the sustained conservation of natural resources.

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