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### Stakeholder perspectives on patterns and causes of forest crimes in Community Forestry in Nepal

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#### Abstract

The present study contributes to our understanding of local level forest crimes and law enforcement in community forestry. A total of 211 individuals from 5 categories of stakeholders, that all are involved in community forestry in Nepal, responded to a structured questionnaire administered face to face. The questionnaire elicited respondents' perceptions on the nature, frequency, motives and consequences of forest crimes. Findings show that illegal collection of firewood is perceived to be the most frequent crime, followed by illegal appropriation of timber, poles and thatch grasses. Stakeholders have clear ideas about the characteristics and motives of forest criminals and sanctions are perceived to be lenient.

#### Keywords

Community forestry, forest crime, law enforcement, poor, Nepal

#### 1. Introduction

Today, forest conservation is highly prioritised nationally and internationally, with a main focus on controlling illegal timber logging through various forms of improved governance (World Bank, 2006). Illegal subsistence forest uses generally receive less international attention, although warnings of negative consequences for rural livelihoods arising from the battle against illegal timber harvest are made (Kaimowitz, 2007). On the other hand, because of the inabilities of the central authorities to enforce the rules (Brunner *et al.*, 1999), decentralised forest management is assumed to potentially be more effective than centralised

management (Agrawal, 2001; Andersson and Gibson 2006; Blair 2000; Ostrom, 1990); and that has resulted in favouring the current trend of forest decentralisation across the developing world1. However, in several developing countries, a strong forest conservation paradigm means that the precautionary principle is invoked to favour forest protection rather than rural livelihoods, even in the absence of evidence on the actual conditions of the forest (Cerutti and Tacconi, 2008; Larsen and Smith, 2004). This has spurred research on the effectiveness of local level forest law enforcement in community forestry, where most of the common forests are managed by people living within their ancestral domains who depend on forests and pasture resources for food, fodder, manure agricultural implements and medicine. Though formally illegal in many cases, such uses of forest products have gained the de facto social legitimacy (Colcherster, 2006) and this makes it difficult to determine what is illegal and what is not. In addition, understanding of the common pool resource problems by different actors involved is uncertain and contested and that are often ignored in policy debates (Adams et al., 2003). Although law enforcement is perceived essential for effective collective action, including ensuring fair distribution of benefits and sustainability of forest exploitation, stronger law enforcement is often practised at the expense of the poor, who are easier targets for suppression than the rich and wealthier (Agrawal, 2009: Kaimowiz, 2007). It has been shown that regular enforcement of forest rules is correlated with lowered probabilities for forest degradation (e.g., Gibson et al., 2005; Chhatre and Agrawal, 2008; Coleman, 2009) and with the success of decentralised forest management more generally according to ordinal indicators of ecological sustainability, social equity and economic efficiency (Pagdee et al., 2006). It is not clear, however, how local level formation of rules and their subsequent enforcement influence the livelihoods of the poorest forest users. It is widely documented that wealthier forest users with a high social status tend to dominate decisions concerning management of decentralised forests and distribution of resulting benefits (Chhetri, 2010; Edmunds and Wollenberg, 2003; Adhikari 2005; Blessings et al., 2006) but does that mean local rule formulation and forest law enforcement lead to inequitable law enforcement?

The present study provides a stakeholder perspective on crimes and rule enforcement in Nepalese forest commons. It explores the perceptions of different level of stakeholders on the nature, severity and causes of forest crimes in community forests. The study does not evaluate the state of the forest resource but contributes a micro-level overview of forest crime and law enforcement. The study argues that illegal actions done by the poor

<sup>&</sup>lt;sup>1</sup> Decentralisation denotes formal transfer of powers to actors or institutions at lower levels in political, administrative or territorial hierarchies (Ribot, 2004). More than 10% of the global forest area is under some form of decentralised management (Sunderlin *et al.*, 2008).

forest users are perceived to be small in scale and low in intensity, and to be connected by the motive to secure basic subsistence needs. Further, effective enforcement of local forest rules and credible penalties in controlling the illegal activities occurring in the Nepalese community forestry is perceived to be lacking.

#### 1.1 Community Forestry in Nepal

Nepal was selected for the investigation because the Nepalese Community Forestry Programme was one of the first forest decentralisation processes globally. Starting in the late 1970s decentralised forest management now covers 25% of the Nepalese forest area (1.1 million ha) and includes 35% of all Nepalese households (1.5 million households) in about 14,000 Community Forestry User Groups (CFUGs) (Blakie and Springate-Baginski, 2007). Forest areas are handed over to users organised in a CFUG by the District Forest Officer according to rules specified in the Forest Act (HMG, 1993) and Forest Regulations (HMG, 1995). The implementing body of the CFUG is the Users' Committee elected at the annual General Assembly. The programme is considered a success in terms of both forest conservation and socio-economic contribution (Tachibana and Adhikari, 2009; Kanel and Dahal, 2008; Adhikari, et al. 2007; Gautam et al., 2002; Dongol et al., 2002), although concerns with elite capture are voiced (Gilmour, 2003; Lachapelle et al., 2004).

#### 1.2 Forest crime

In line with Downes and Rock (1995) forest crime here is understood to include activities and behaviours that are banned or controlled by relevant authorities. Forest crimes in Nepalese community forests are thus defined by the Forest Act and the CFUG work plan and are primarily offenses against properties rather than persons. Therefore, crimes are expected to follow the neoclassical rational choice theory (Becker, 1968): members who break the rules of CFUGs do so only if they perceive the probabilities and costs of apprehension to be larger than the benefits derived from the illegal forest products extracted. Rules, however, are crafted by the CFUG committee where not all members may be able to exert influence, wherefore understanding of forest crime must draw also upon social conflict theory, or radical criminology (Chambliss and Seidmann, 1971). Perceptions of crime are not static and may depend on the social reaction to the criminal act (Schur, 1971), whether a certain act is considered a crime may depend on who undertakes it, and some rules are broken with impunity (Becker, 1978: 13). The approach applied here is, in other words, to investigate forest crimes as conscious undertakings by rational individuals (rather than deviants), who are subjugated rules predominantly crafted by those in the community empowered by the current social conditions of Nepal, i.e. the wealthy and politically well organised. For consistency, rule breakers are henceforth referred to as 'criminals' where this implies that a legally defined rule has been broken without any other negative connotations.

#### 2. Methods

#### 2.1 Study area

The perception of the forest users for the study was collected from Simjung and Ghyachchok Village Development Committees<sup>2</sup> (VDCs) of Gorkha District, located about 1 day walk from the nearest road. The VDCs represent a typical Nepalese middle hill setting where the population depends on small-scale farming, labour wages, army pensions and remittances. All households depend on forest products for cooking, heating, house construction, animal fodder and manure, wood for agricultural implements and to some degree medicine. The altitude of both of the VDCs ranges between 700 and 3000 masl and thus span large variation in agricultural potential and forest types. The community forestry programme in Gorkha District was initiated in 1990 when half of the total forest area was classified as potential community forest area (50,919 ha). By 2008 18,765 ha had been handed over to 404 (CFUGs) involving 47,691 households (about 80% of the District's population) (DFO, 2008). In Simjung, most of the forests near the settlements are managed by FUGs while in *Ghyachchok* major part of the forest land is under the control of the government. Out of all 14 CFUGs included in this study from these VDCs. two of the CFUGs lie in *Ghyachchok* and all other lie in *Simiung*.

#### 2.2 Data collection

The present is a case study that was carried out during extensive field stays in 2008. Perceptions of current forest crimes (their nature, characteristics of criminals, motives of offenses, applied penalties) in community forestry were elicited from representatives of the main stakeholder groups involved in community forestry: (i) forest users, (ii) committee members, (iii) advocacy groups engaged in community forestry, (iv) forest authorities working at district and central levels, and (v) national and international academicians working on community forestry. Respondents were selected as follows: (i) 29 heads of households were randomly selected to cover all 14 CFUGs in *Simjung* and *Ghyachchok* VDCs; (ii) one representative from each of the 14 Users' Committees in *Simjung* and *Ghyachchok* VDCs were selected with additional representatives from 38 randomly selected CFUGs in Gorkha District (52 in total, the respondent was the chairman, secretary or treasurer of the CFUG); (iii) 26 executive members from advocacy groups were selected based on judgemental sampling, criteria for inclusion

<sup>&</sup>lt;sup>2</sup> Smallest political administrative unit in Nepal.

were familiarity with community forestry from working experience in the field and a reputation for being well-informed on community forestry. Respondents belonged to two groups - the Federation of Community Forest User Groups (FECOFUN) and Himalayan Grassroots Women's Natural Resources Management Association Himawanti; (iv) 51 representatives of district and national forest authorities were selected based on judgemental sampling. At the district level the Assistant Forest Officers and the District Forest Officer from Gorkha District were included. At the national level. officers and higher level staff from the Department of Forest, the Department of Forest Research and Survey, and the Ministry of Forests and Soil Conservation were selected based on the criterion of involvement with the community forestry process; and (v) 53 national and international academicians whose work was related with community forestry were selected by judgemental sampling from Tribhuwan University in Nepal, other research institutions, and non-governmental organisations working in Nepal. Groups (iv) and (v) were merged from each two groups as responses were very similar: officer and higher level staff at district and central levels were combined in group (iv) and academicians from non-governmental organisations and research institutions were merged in group (v). A total of 211 individuals provided responses regarding perceptions of forest crimes by answering structured questionnaire administered face to face.

#### 3. Results

The most frequent forest crime was considered to be illegal collection of firewood, followed by illegal cutting of timber, poles and illegal forest grazing (Table 1). Notably, the majority in the respondents in the advocacy group believed forest grazing to be a frequent crime whereas forest users did not mentioned this at all, and the forest users did not mention illegal collection of timber.

**Table 1:** Number (percentages) of stakeholders, by group, mentioning a forest crime to be the most frequently occurring in community forests generally

	Stakeholder groups					
Most frequent	Forest	Committee	Advocacy	Forest	Academicia	All
forest crime	users	members	n=26	authorities	ns	respondents
	n=29	n=52		n=51	n=53	n=211
Collection of						
firewood	15 (52)	29 (56)	11 (42)	26 (51)	31 (59)	112 (53)
Collection of						
timber	-	5 (10)	5 (19)	7 (14)	4 (8)	21 (10)
Collection of						
poles	11 (38)	6 (12)	1 (4)	-	-	18 (9)
Grazing in the						
forest	-	5 (10)	3 (12)	4 (9)	5 (9)	17 (8)
Collection of						
thatching grass	1 (3)	5 (10)	1 (4)	3 (6)	3 (6)	13 (6)
Misuse of forest						
fund	2 (7)	-	-	7 (14)	3 (6)	12 (6)
Encroachment	-	-	2 (8)	1 (2)	3 (6)	6 (3)
NTFP						
trade/smuggling	-	-	1 (4)	1 (2)	1 (2)	3 (1)
Forest fire	-	1 (2)	2 (8)	-	-	3 (1)
Quarrying/mining	-	-	-	1 (2)	1 (2)	2(1)
Failure to pay fee	-	1 (2)	-		1 (2)	2(1)
Poaching	-	-	-	1(2)	1 (2)	2(1)

There was general agreement across stakeholder groups that the main motives behind forest offenses were related to poverty and limited regard for traditional use right systems (Table 2). Academicians especially mention inequitable rules of community forestry, while committee members especially mention lack of knowledge regarding rules among forest users.

**Table 2:** The number of stakeholders, by group, mentioning the main motive behind forest offenses in community forests generally

	Stakeholder groups					
Motive	Forest users n=29	Committee members <i>n</i> =52	Advocacy n=26	Forest authorities n=51	Academicians n=53	All n=211
Limited resource in	2>	02				88
their private land	18	28	13	15	14	
Traditional rights not						46
recognized	4	4	1	17	20	
Limited knowledge						37
about the rules	1	14	5	9	8	
Inequitable rules	1	2	2	3	10	18
Other	3	4	4	5	1	17
High fees	2		1	2		5

Respondents expressed the perception of clear types of forest criminals: the poor collect firewood and thatching grass illegally, the middleclass households graze their animals illegally in the forest, and the committee members misuse funds generated from the community forest (Table 3). With the exception of the advocacy group all agreed that illegal timber harvest is carried out by the rich. The poor were mentioned as the typical forest criminal in 25 cases, the rich in 14, individuals from medium level wealth class in 7, outsiders in 7, and Committee members in 5 cases.

Table 3: Stakeholder perceptions, by group, on types of forest criminals, by type of crime\*

	Stakeholder groups					
	Forest	Committee	Advocacy	Forest	Academicians	All
Forest crime	users	members	n=26	authorities	n=53	n=211
	n=29	n=52		n=51		
Illegal collection of						
firewood	P**	P	P	P	P	P
Illegal collection of						
thatching grass	P	P	P	P	P	P
Do not pay the fee	P	P	P	P	P	P
Illegal grazing	M	P	M	M	M	M
Illegal collection of						
poles	P	M	P	M	P	M
Encroachment	R	O	R	P	R	R
Illegal collection of						
timber	R	R	P	R	R	R
Illegal						
quarrying/mining	P	O	P	R	R	R
Poaching	O	O	R	O	R	R
Miss use of forest fund	C	C	C	C	C	C
Forest fire	R	O	M	-	R	O
Illegal NTFP						
trade/smuggling	-	O	R	P	P	O

<sup>\*</sup> The category listed is the most frequently mentioned category within a stakeholder group.
\*\* P = Poor and D*alits*, M = Middle class, R = Rich, O = Outsiders, C = Committee

members.

The level of law enforcement in community forests generally was perceived to be quite low (Table 4). Respondents in all stakeholder groups agree that most often, when caught, a criminal receives but a warning and frequently nothing happens at all. Fines and seizure of the illegally harvested products are mentioned but by relatively few respondents.

**Table 4:** The number of stakeholders, by group, mentioning most typical consequences of crimes in community forests generally.

•	Stakeholder groups					
consequence type	Forest	Committee	Advocacy	Forest	Academicians	All
	users	members	n=26	authorities	n=53	n = 211
	n=29	n=52		n = 51		
Warning	16	39	18	27	24	124
Nothing	5	6	3	8	10	32
Fine	7	2	3	9	2	23
Seizure of						
collected products	1	4	2	6	10	23
Fine and seizure of						
collected products	-	1	-	1	7	9

In addition to the above results, the majority of respondents in the Committee members, Forest authorities and Advocacy stakeholder groups believed that the current community forest rules generally protect the rights of poor forest users (56%, 62%, 57%). The majority of the Forest users and Academicians, on the other hand, believed the rights of poor forest users are not protected currently (59%, 55%). There was agreement across all groups that the poor have less influence on the community forestry rules than wealthier households. The current rules were not generally perceived to prevent forest crimes (Yes: 36%, No: 55%, Don't know: 9%), with respondents in the Forest bureaucrat group expressing greater belief in the workings of rules (Yes: 55%, No: 45%, Don't know: 0%). No clear picture of the perceived relation between forest crimes and the state of the forest in general emerged – when asked whether the forest condition in general is perceived to be deteriorating as a consequence of forest crimes the answers were: Yes: 40%, No: 49% and Don't know: 11%.

#### 4. Discussion

The present case study presents the perceptions of local and national stakeholders on forest crimes and is likely to be of relevance to forest management in mid hills areas where the community forestry programme is focused. The study found general agreement among stakeholder groups that illegal collection of firewood for subsistence use is the most common current forest crime in Nepalese community forestry (Table 1), that illegal firewood extraction is committed typically by poor CFUG members with no private tree resources or people who have lost their traditional access rights (Tables 2, 3), and that penalties on crimes generally are very lenient (Table 4). These perceptions are in accordance with previous findings from Nepal (Dhakal, 2007).

Lack of effective law enforcement in collective action systems is generally believed to undermine their stability, as acknowledged but unpunished rule breaking increases the probabilities that more users will break the rules. As illustrated by the clear identification of types of forest criminals it is well known to stakeholders that the poor forest users frequently have to resort to forest crimes to sustain their livelihoods. The tendency of lenient sanctions may reflect that the motive behind the crimes is perceived to be basic subsistence needs rather than profits, or maybe that the impact on the forest is considered to be low. Another explanation could be that the present situation with frequent opportunities for the community leaders to show leniency gives them the upper hand in community forestry decision making.

#### 4.1 Methodological consequences

Data collected about the perceptions of stakeholders on different aspects of forest crime in community forestry may, to some degree, reflect strategic answers. For example, forest authorities may be reluctant to report illegal timber harvest because they feel it reveals weakness on their part. On the other hand, as the respondents from the Forest user group were selected only from *Simjung* and *Ghyachchok* VDCs; CFUG committee only from Gorrkha District, their response can not be expected to represent a national set of perceptions. Respondents in other groups, though, in principle, are representative of their organisations, were selected through judgemental sampling, and thus some major opinions might have been inadvertently excluded

#### 5. Conclusion

This study contributes to discussions on local level forest law enforcement through documentation of the perception of stakeholders on crimes and sanctions in Nepalese community forestry. Forest crimes are mainly associated with illegal appropriation of forest products for subsistence use by the poor and the local level enforcement of forest rules is lenient. Implications of this for local perceptions of fairness and continued successful collective action are unclear. At present it seems to be contributing to maintaining the prevailing local power hierarchies. The findings thereby add detail to the ways in which social inequity, documented by several studies (e.g., Nightingale, 2002; Malla *et al.*, 2003), is perpetuated through community forestry in Nepal.

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#### References

- Adams, W. M., Brockington, D., Dyson, J., and Vira, B. (2003). Managing Tragedies: Understanding Conflict Over Common Pool Resources. Science 302 (5652): 1915-1916.
- Adhikari, B. (2005). Poverty, property rights and collective action: understanding the distributive aspects of common property resource management. Environment and Development Economics 10 (1): 7-31.
- Adhikari, B., William, F., and Lovett, J. C. (2007). Local benefits from community forests in the middle hills of Nepal. Forest Policy and Economics 9(5): 464-478.
- Agarwal, B. (2009). Rule making in community forestry institutions: The difference women make. Ecological Economics 68(8-9):2296-2308.
- Agrawal, A. (2001). The regulatory community: decentralization and the environment in the Van Panchayats (forest councils) of Kumaon, India. Mountain Research and Development 21(3):208-211.
- Andersson, K. P. and Gibson C. (2006). Decentralized governance and environmental change: local institutional moderation of deforestation in Bolivia. Journal of Policy Analysis and Management 26(1):99-123.
- Becker, G. S. (1968). Crime and punishment: an economic approach. Journal of Political Economy 76(2):169-217.
- Becker, H. (1978). Outsiders. In Rubington E. and Weinberg M. (eds.), Deviance. Macmillan, New York, pp. 11-24.
- Blaikie, P. and Springate-Baginski, O. (2007). Setting up key policy issues in participatory forest management. In Springate-Baginski, O. and Blaikie P. (eds). Forests, policy and power: the political ecology of reform in South Asia. Earthscan, London, pp. 1-23.
- Blair, H. (2000). Participation and accountability at the periphery: democratic local governance in six countries. World Development 28 (1): 21-39.
- Blessing, C., Jumbe, L., and Angelsen, A. (2006). Do the poor benefit from devolution policies? Evidence from Malawi's forest co-management program. Land Economics 82(4):562-581.
- Brunner, J., Seymour, F., Badenoch, N., and Ratner, B. (1999). Forest problems and law enforcement in southeast Asia: the role of local communities. Resources Policy Brief. World Resources Institute, Washington D.C. 13 pp.
- Cerutti, P. O. and Tacconi, L. (2008). Forests, illegality, and livelihoods: the case of Cameroon. Society and Natural Resources 21(9):845-853.
- Chambliss, W. J. and Seidmann, R. (1971). Law, order and power. Addison-Wesley, London.
- Chhatre, A. and Agrawal, A. (2008). Forest commons and local enforcement. PNAS 105(36):13286-13291.

- Chhetri, B.B.K. (2010). Community Forestry in Nepal: Determinants of User's Participation and Resource Dependency. Lambert Academic Publishing Saarbrucken, Germany.
- Colchester, M. (2006). Justice in the forest: rural livelihoods and forest law enforcement. Forest Perspectives 3. Center for International Forestry Research, Bogor.
- Coleman, E. (2009). Institutional factors affecting biological outcomes in forest management. Journal of Policy Analysis and Management 28 (1): 122–146.
- Dhakal, B. (2007). The issues of oppressed groups' access to collectively managed resources: an empirical analysis. Banko Janakari 16(1):25-31
- DFO (District Forest Office). (2008). Community Forestry Program: Annual Monitoring and Evaluation Report 2007/2008. District Forest Office, Gorkha
- Dongol, C.M., Hughey, K.F.D., and Bigsby H.R. (2002). Capital formation and sustainable community forestry in Nepal. Mountain Research and Development 22 (1):70-77.
- Downes, D. and Rock, P. (1995). Understanding deviance: a guide to the sociology of crime and rule-breaking, 2<sup>nd</sup> edition. Clarendon Press, Oxford
- Edmunds, D. and Wollenberg, E. (2003). Whose devolution is it anyway? Divergent constructs, interests and capacities between the poorest forest users and states. In Edmunds, D. and Wollenberg, E. (eds). Local Forest Management: The Impact of Devolution Policies, London, Earthscan, pp. 150-165.
- Gautam A. P, Webb, E. L., and Elumnoh, A. (2002). GIS assessment of land use/land cover changes associated with community forestry implementation in the mid hills of Nepal. Mountain Research and Development 22 (1):63-69.
- Gibson, C. G., Williams, J. T., and Ostrom, E. (2005). Local enforcement and better forests. World Development 33(2):273-284.
- Gilmour, D. A. (2003). Retrospective and prospective view of community forestry in Nepal. Journal of Forest and Livelihood 2(2):5-7.
- HMG. (1995). Forest regulations. Official translation. His Majesty's Government of Nepal, Government Press, Kathmandu.
- HMG. (1993). Forest act 1993. Official translation. His Majesty's Government of Nepal, Government Press, Kathmandu.
- Kaimowitz, D. (2007). Forest law enforcement and rural livelihoods. In Tacconi, L. (ed.), Illegal logging: law enforcement, livelihoods and the timber trade. Earthscan, London, pp. 110-138
- Kanel, K. R. and Dahal. G. R. (2008). Community forestry policy and its economic implications: an experience from Nepal. International Journal of Social Forestry 1(1):50-60.

- Lachapelle, P., Smith, P., and McCool, S. (2004). Access to power or genuine empowerment? An analysis of three community forest user groups in Nepal. Human Ecology Review 11(1):1-12
- Larsen, H. O. and Smith, P. D. (2004). Stakeholder perspectives on commercial medicinal plant collection in Nepal: poverty and resource degradation. Mountain Research and Development 24(2):141-148.
- Malla, Y. B., Neupane, H. R., and Branney P. J. (2003). Why aren't poor benefiting more from community forestry? Journal of Forestry and Livelihood 3(1):78-90.
- Nightingale, A. J. (2002). Participating or just sitting in? The dynamics of gender and caste in community forestry. Journal of Forest and Livelihoods 2(1):17-24.
- Ostrom, E. (1990). Governing the commons: the evolution of institutions for collective action. Cambridge University Press, Cambridge, UK.
- Pagdee, A., Kim, Y.-S., and Daugherty, P. J. (2006). What makes community forest management successful: a meta-study from community forests throughout the world. Society and Natural Resources 19(1):33–52.
- Ribot, J. C. (2004). Waiting for democracy: the politics of choice in natural resource management. World Resources Institute, Washington, D.C.
- Schur, E. (1971). Labelling deviant behaviour. Harper, New York.
- Sunderlin, W. D., Hatcher, J., and Liddle, M. (2008). From exclusion to ownership? Challenges and opportunities in advancing forest tenure reform. Rights and Resources Initiative, Washington D C.
- Tachibana, T. and Adhikari, S. (2009). Does community-based management improve natural resource condition? Evidence from the forests in Nepal. Land Economics 85(1):107-131.
- World Bank. (2006). Strengthening forest law enforcement and governance: Addressing a systematic constraint to sustainable development. The World Bank, Washington D C.