

# Scores for Effective Forest Conservation: A Village-to-Village Approach

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Community forestry in Nepal strives for forest conservation and sustainable forest management. Evaluating progress towards this end requires periodic measurements, and currently there are no standard tools for undertaking evaluations in a participatory way. The purpose of this paper is to suggest a standardized way for measuring effective forest conservation through the use of locally set scores. A village-to-village approach was used to assign scores on criteria and indicators developed earlier for forest conservation. A total of eight small meetings with forest users were conducted to elicit their perspectives and quantify their progress towards conservation by means of scores. For the 14 criteria specified, local forest users assigned higher scores to four criteria: two for social and one each for socio-economic and environmental spheres. This paper argues that a score of 59 or above is an effective cut off for determining “effective” forest conservation.

**Keywords:** Community forest, criteria, forest management, indicator, village,

This paper attempts to address the issue about how to compare the performance of community forest management in terms of effective forest conservation. We use the criteria and indicators developed by Pokharel and Larsen (2007) as a basis for assigning scores to evaluate effective forest conservation. The criteria and indicators were developed to determine whether CFUGs conserved forests effectively. Indeed, effective forest conservation is expected to lead to a sustainable forest management, the ultimate goal of community forestry program (Acharya, 2002), and that of Nepal’s forest policy (HMG, 2000). The government has instituted a forest conservation award at the national level to recognize and encourage CFUGs to manage their forests sustainably. Every year, the government recognizes the three most successful CFUGs according to a set of guidelines (MFSC, 2004) for this award. As one of the foundations of Nepal’s community forestry is the participation of local forest users in the planning, implementation and general decision making (HMG, 2000; Springate-Baginski et al., 2003), arguably, the local perspectives on the performance indicators should also be accorded due recognition. In line with this thinking, some exploration of local perspectives have started (Smith et al., 2003; Shrestha and Khanal, 2004; Pokharel and Larsen, 2007; Pokharel and Suvedi, 2007). However, none of the studies of comparison,

proposed so far, have incorporated local priorities. Local scoring of criteria and indicators is one way of providing some means for comparison that will take into account the local perspectives in the evaluation. A set of agreed criteria will furthermore allow evaluation to be highly transparent. Transparency is important to motivate forest users, because in Nepal, people often manipulate things in favor of *afno manche* (ones own people, friends or relatives) once in power. In this context, this paper is expected to contribute to the development of a transparent evaluation system for Nepal’s community forests. Furthermore, it is also expected to assist the villagers to examine the effectiveness of their forest conservation.

## Materials and Methods

This paper uses the criteria and indicators developed by Pokharel and Larsen (2007) for evaluating effective forest conservation. Scores are assigned by local people on their assessment of the criteria and indicators developed by the CFUGs they visit. We chose village to village approach as this permits researchers to cross check the information, and to acquire the perspectives from males, females, and from different castes and so on, to foster a feeling of local ownership of the process. Village to village approach requires visiting rural areas and offering

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local people a chance to reflect on and analyze their experiences. In this study, we used a village-to-village approach by visiting CFUGs and holding 20-30 minutes informal discussions for assigning the score along the given criteria and indicators.

A total of eight small group meetings were conducted with CFUG members separately (one meeting each in Jaykot, Kankali, Rani, and Malatimahila CFUGs and two meetings each in Thanimia and Simalchaur CFUGs). Since only one individual attended the first meeting of Thanimai and Simalchaur CFUGs, we decided to conduct additional meetings with these CFUGs. Locating individuals interested in participating in the discussion was relatively easy as good rapport had been nurtured through earlier visits and the researcher was also familiar with the local situation. We directly approached forest users for small group meetings since the first author was familiar with the local situation and CFUGs. We first contacted a random individual in the field and then requested him or her to invite a few more individuals to a small group meeting. The meeting was conducted at *chautaras* (communal meeting/resting places under specific tree shades in a village) or at one of the respondents' home, depending on the convenience of the respondents. The data was recorded in September 2006.

## Results and discussions

The meetings were conducted with an air of informal ambience. Working together with small groups as indicated by Schusler et al (2003) provided an opportunity for dialog among participants. At each meeting, we explained the purpose and objective of our visit and about the criteria and indicators. Then, with a flip chart, the list of the criteria and indicators was expounded. We invited the participants to assign a score, between 1 and 10, for each application of the criterion and indicator in forest conservation in their own situations. Ascribing a quantitative number or value for each of the criteria and indicators was not easy for forest users, and at first they could hardly agree on a common, assessed value. After discussing among themselves they finally reached consensus. So by applying the criteria and indicators to their own situations and assigning the scores accordingly, they were able to compare the effectiveness of forest conservation for different CFUGs. Each score was recorded onto the flip chart and read aloud so everyone could confirm what number was agreed

on for a given set of criterion and indicator. After the recitation of the scores, the participants sometimes revised the scores for some criteria or indicators.

Table 1 lists the average scores and adjusted scores for the given criteria and indicators used in this study. The average scores and the adjusted scores are the sum of all scores divided by the number of meetings and the final score for each criterion and indicator, respectively. We computed the average score as the sum of the scores for each criterion and indicator assigned by local people divided by number of meetings. Similarly, we computed the adjusted score by converting the total score into 100.

Pokharel and Larsen (2007) identified two types of indicators – cumulative and non-cumulative. Cumulative indicators meant more than one indicator could be assigned to a given CFUG, but only one non-cumulative indicator could be assigned. As values for criteria could be assigned from 1 to 10 to calculate the total score of a CFUG indicator, values proportionate to the value of the relevant criterion are summed. For example, if an area at the time of handover to a CFUG was naked or barren the score value would be 9. When adjusted for the relative importance of the criterion, this value would be 7.63 out of 10, and this score is adjusted to 6.86. For cumulative indicators, the maximum total value that could be assigned was the value of the corresponding criterion. The indicator values assigned are reduced proportionately. For example, if community forest management had resulted in increased greenery and improved water quality, a score of 15.51 was assigned. The average criterion score was 8.38, the total assigned score of indicators was 32.25, and the adjusted score, therefore, came to be 4.03. The maximum total value of a CFUG was 94.06, while the minimum was 23.84, with the average score being 58.95.

The results indicate that local forest users perceived attendance of all users in the general assembly and development of healthy environment as the most important inputs for sustainable community forest management, whereas the size of the CFUG fund and composition of the forest management committee were perceived as less important. The criteria and scores indicate that community forest users envision conservation as requiring a holistic perspective, assigning high scores to criteria on environmental, social and socio-economic spheres such as the use of CFUG funds.

Table 1: Average score on criteria and indicators as perceived by local people

Criteria	Indicators	Average criteria score	Average indicator Score	Adjusted score
Attendance of all users in general assembly*		8.38		7.76
	Up to 50%		5.13	3.95
	51 – 75%		7.63	5.89
	Above 75%		9.38	7.21
Development of healthy environment		8.38		7.76
	Increased greenery		8.63	2.14
	Increasing availability of water source		8.38	2.07
	Reduced soil erosion/landslides		8.38	2.07
	Improved drinking water quality		6.88	1.70
Forest management practices		8.25		7.64
	Block division in the forests		8.75	2.93
	Construction of fire line		7.63	2.55
	Regular silvicultural operation		7.5	2.51
State of forests at time of evaluation		8.25		7.64
	Presence of good shape trees		8.75	1.86
	Reappearance of spp. that were lost		8.25	1.75
	Appearance of wildlife		8	1.70
	Community access to fuel wood		7.88	1.67
Financial transparency of CFUG committee		8.13		7.53
	Presentation of financial report in GA**		8.75	2.14
	Access of all users to financial report		8.75	2.14
	Presentation of financial report in PH		8.13	1.99
	Formation of sub-committee for FM		7	1.71
Use of CFUG funds		8		7.41
	Community development works		7.88	1.56
	Forest improvement activity		7.88	1.56
	Self-employment skill development		7.63	1.51
	Literacy programs for forest users		6.13	1.21
	Soft loan for income generating		5.63	1.12
Proportion of women in general assembly*		8		7.41
	Up to 25%		4.88	3.55
	26 – 50%		7.25	5.33
	51 – 75%		7.88	5.77
	Above 75%		8.63	6.37
Performance of CFUG committee		7.75		7.18
	Preparation of yearly CFUG report		8.75	1.47
	Meetings are conducted regularly		8.63	1.45
	Effective information sharing		8.13	1.37
	Formation of sub-committee for MA		8	1.35
	Assessment of users' needs		8	1.35
State of forest before hand over*		7.63		7.07
	Naked and barren hills		9	6.36
	Plantation areas		7.25	5.09
	Natural forests		6.5	4.59
Forest protection system*		7.63		7.07
	Self-disciplines		9	6.36
	Users on rotational basis		7.38	5.16
	Hiring forest watchers		5	3.53
Awareness of forest importance among users		7.38		6.84
	CFUG organizes tree planting activity		7.25	2.58
	Illegal cutting from forest is reduced		6.88	2.45
	Informal class on forestry issues		5.5	1.96
Forest products distribution system*		7		6.48
	Equity – needy get more		7.75	4.98
	Equal – all get equal share		5	3.24
CFUG fund size*		6.88		6.37
	Below Nrs15,000		4.88	3.05
	Nrs15,000 – 24,999		6.13	3.88
	Nrs25,000 – 49,000		7.25	4.58
	Nrs50,000 and above		8.63	5.47
Composition of CFUG committee*		6.75		6.25
	Proportional representation of sexes		8.5	5.31
	Equal ratio of male and female		7.88	4.87
	50% or more are women		7.25	4.50
	Domination of one group		4	2.50
	Only men		3.13	1.93

\*Indicators under the criteria are non-cumulative

\*\*PH meaning public hearing; FM meaning financial monitoring; GA meaning general assembly; MA meaning monitoring activities

Interestingly, the participants were reluctant to assign full scores to neither criteria nor indicators. This may be the acculturation spill over from experiences with the Nepalese education system wherein students are rarely awarded a hundred per cent score on a test. This tendency introduces methodological problems for the interpretation of the evaluation.

Generally, criteria are assigned higher scores when they reflect current problems, for example, with regards to the distribution of forest products and gender inequality (Agrawal, 2001; Malla et al., 2003), financial transparency, and environmental aspects. The community forestry program is regarded as environmentally beneficial (Gautam et al., 2002; Karna et al., 2004).

At this point an evaluation of CFUGs according to the presented criteria and indicators would yield comparative quantitative information about the success of forest conservation. We propose that, for now, CFUGs earning average or more of the possible score (score with 59 and higher) be designated as demonstrating “effective” forest conservation.

The number of CFUGs visited for this study was small. To develop a national list of criteria and indicators truly representing the views of forest users would call for more observations. In terms of methods, the village to village visit approach was found to be effective for fostering interaction with the local people and for gathering information. This approach allowed us to observe a village, get a sense of what was going on, and to compare the information with field reality. Moreover, it was relatively easy to establish rapport with local people by demonstrating respect and interest. Indeed, local people felt happy when their work was acclaimed and cited as one of the reasons for choosing the area. The village to village approach requires building trust with local people which is not an easy task. Several visits and positive discussions regarding the local work would facilitate the build-up of trust.

## Conclusions

Developing and scoring criteria and indicators for forest conservation assists local people to evaluate their own performances. They can use it as a transparent tool to evaluate themselves independently – whereas central evaluations are perceived to be opaque and often invite controversy and illegitimacy. This study has demonstrated that

forest users can develop and score criteria and indicators for forest conservation, and that their perceptions of conservation are more holistic than narrow. Some conceptual challenges were encountered regarding the reluctance to assign absolute maximum and minimum scores of 100 or 0 to indicators. In general, though, this experience has shown that forest users were able to discuss the evaluation of forest management competently and that the village to village visit approach was effective for gathering reliable information.

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