

Pro-Poor Programs of Nepal's Community Forestry: Who Benefits?

Ridish K. Pokharel¹

Abstract

Nepal's community forestry is a major program in the country in forestry sector. It generates income of over \$10 million annually and also invests part of it in the village for developmental works including pro-poor programs. This paper examines the investment of community forest user group funds in pro-poor programs and also who benefits from it. The paper relies on primary data of 29 community forest user groups of three different mid-hill districts of Nepal. A set of questionnaire was developed and administered to a small group of the executive committee members. The generated income through community forestry is being invested in different development works. The pro-poor programs receive one-third of the annual investment of the community forest user groups which indicates a significant increment in the investment. Although the investment in pro-poor programs has increased significantly poor households are not benefiting from it as expected. Non-poor are benefiting more from flow of loan, one major activity of pro-poor programs, suggesting that pro-poor program is not really pro-poor. The paper argues that providing in-kind as loan rather than cash would benefit poor more and also concludes that the targeted pro-poor activities clearly need significant refinement and monitoring.

Key words: *community forestry funds, pro-poor programs, flow of loan, key positions*

Introduction

Nepal's community forestry is a well established management form in the country as it is three decades old in practice. It is a major program of the government in forestry sector and is being implemented throughout the country. Two-thirds of the country's forests are scheduled to be handed over to community management (CPFD, 1991), and currently about 25 per cent (1.2 millions hectare) of national forestlands have been handed over as community forests to over 14,000 Community Forest User Groups (CFUGs²) involving 1.6 million households (DoF, 2007). Thus, over one-third (38%) of the total households³ of Nepal are involved in managing community forests.

¹ Reader, Institute of Forestry Tribhuvan University, Nepal

² A group of people who regularly uses a particular forest for various purposes and organize themselves to protect, manage, and utilize the forest by forming a group

³ Total households of Nepal is 4,253,220 (NIDI, 2006)

Income generating is one of the important activities of CFUGs in Nepal. They generate income from various sources such as sale of forest products, membership fees, and fines from rule violators. The generated income is not shared with the government rather it accumulates in the CFUG funds. The annual income of CFUGs in Nepal is estimated over \$10 million and the forest products contribute a major share (Kanel and Niraula, 2004). Income from community forestry has encouraged the CFUGs to initiate development works at the village level. Basically, 25 per cent of the income must be invested in forest development and the remaining income can be used wherever the community would like, depending on their needs and the interests of the community (Gautam et al., 2004).

Recently, Nepal's community forestry has moved beyond its original goal of fulfilling basic forestry needs such as fuel wood, fodder and timber only. Good governance, livelihood promotion, and sustainable forest management are the second generation challenges facing community forestry today (Kanel, 2004). The policy of community forestry now is to use community forestry as tool for poverty reduction. Nepal government has considered poverty reduction as high priority where it is expected to achieve by means of human development, pro-poor and broad-based economic growth, inclusive development, good governance and targeted programs (NPC, 2007). In order to achieve the goal of poverty reduction many programs in the country are linked to poverty and community forestry is an example. The community forestry has adopted pro-poor programs as a strategy to contribute in achieving the national goal of poverty reduction. The program is designed helping poor to improve their economic condition by supporting the activity that helps them to generate income. The program includes the activities such as flow of loans, self-employment skill oriented trainings, allocation of forestland for cash crops, and scholarship. The program intends to use part of the generated income through community forestry.

The ideas underlying community driven development projects are being internalized in Nepal's community forestry. The CFUGs itself involve in generating income, allocating the funds to pro-poor programs and implementing it as well. In this context, the paper intends to examine the CFUGs investment in pro-poor programs and also who benefits from it. In order to understand the CFUGs investment we measure the total expenditure of CFUGs in different activities in a year. Similarly, we measure the benefit received by the households with different economic status⁴ from the program which allow us to

⁴ CFUGs classify households economic status into four categories: ultra-poor – owns house only, no regular income, work as wage labor to feed the family; poor – owns land and is good enough to feed the family for six months or less from their own farmland, work as wage labor or borrow money to feed the family for the remaining months; middle class – owns land and is good enough to feed the family for a year from their own farmland and also earns regular income through employment or other income generating

understand who benefits from it. We also measure the inclusiveness in the executive committee of CFUGs in terms of socially excluded groups⁵ to understand what extent poor have voices in CFUGs decisions.

Study Area and Data Collection

This study covers three mid-hill districts (Lamjung, Tanahu and Kaski) of western development region of Nepal. These districts are pioneer districts in the mid-hills where community forestry was initiated from very beginning in early 1980s. The CFUGs in the study areas were classified into three categories based on the fund size information available at the District Forest Office. The CFUGs with less than Nrs20,000 were not included in the sample as there is a common tendency in rural areas not to start financial activity with common funds until it gets Nrs20,000 or over. CFUGs then classified into three categories based on the fund size: (1) Nrs20,000 – Nrs49,999; (2) Nrs50,000 – Nrs99,999; and (3) Nrs100,000 and higher. A total of 100 CFUGs was selected from three mid-hills districts (33 from each Lumjung and Tanahu and 34 from Kaski). The total of 11 CFUGs from each category of each district was selected randomly. One additional CFUGs from the group of Nrs100, 000 and above of Kaski district was selected randomly to fulfill the required number. Information was gathered from the CFUGs through structured questionnaire. An interview schedule was conducted in a group, mostly executive members including chairperson and secretary⁶. The data was collected from April to November 2006 by a team consisted of three undergraduate forestry students.

A second visit was made in 29 CFUGs in July 2007 to gather additional information regarding the loan distribution. It was realized in the first visit that loan distribution is one major activity in pro-poor programs and selected a small number of CFUGs to understand who really benefits from it. The CFUGs among the loan distributors were selected randomly from three mid-hill districts (10 CFUGs from each district Kaski and Tanahu and 9 CFUGs from Lamjung district). This paper focuses and analyzes the data from 29 CFUGs only.

activities; rich – owns land and produces surplus products from own farmland and also generates regular income from other income generating activities. For analysis purposes, we classify household economic status into two categories: poor (ultra-poor and poor) and non-poor (middle class and rich).

⁵ Socially excluded groups are refer to communities and people who are disadvantaged in terms of access to opportunities, resources, and voices such as women, *dalit* (lower caste) and poor households

⁶ Before administering the questionnaire, secretary was asked to bring official record book in the meeting and the team member recorded the information accordingly

Basic Characteristics of Sampled Community Forest User Groups

Table 1 shows the basic characteristics of the sampled community forests. Although community forestry program started late 1970s in Nepal the momentum of handing over took place in the country after the introduction of new Forest Act of 1993 and Forest Regulation of 1995. The CFUGs in the study areas are relatively mature in terms of managing community forests as they are on an average 10 years old. The forest per household is 0.88 ha which is slightly higher than the national average community forest per household (0.73 ha) (DoF, 2007). Forest area per household in the study areas is also higher than the area suggested by Shah (1997) for Gujarat, India. He suggested a norm of 0.2 ha of forest per household for meeting fuel wood and other households' needs. The national average forest area per household varies depending on when the data was obtained since handing over of forests in the country is going on and will continue until it finishes the areas of potential community forests. As there is no ceiling of handing over the forest area it varies from one CFUG to another depending on the accessibility, willingness and also capability of forest users to manage forest resources.

Table 1 Basic characteristics of sampled CFUG (n = 29)

Basic characteristics	Mean	Percentage
Average age of CFUGs (years)	9.55 (2.79)	
Number of household per CFUG	120.34 (72.77)	
Size of the forest per CFUG (ha)	106.60 (147.09)	
Traveling time to forest office (minutes)	73.72 (60.08)	
Percentage of sal dominant forest		52
% of schima-castenopsis dominant forest		48
% of households from advantaged group		56
% of households from disadvantaged group		25
Percentage of households from <i>dalit</i>		19

Note: Number in parenthesis indicates standard deviation

Over one half (52%) of the study forests are dominated by sal (*Shorea robusta*), an important species for timber and valuable as well. The remaining forests (48%) are dominated by chilaune-katus (*Schima-castonopsis*), less valuable timber species. The forests are located in accessible areas as it takes travelling distance on an average of

74 minutes. Over one-half (56%) of the forest users households belong to advantaged groups such as Brahmin, Chhetri, and Newar, followed by disadvantaged groups (25%) such as Gurung, Tamang, and Magar and dalit⁷(19%) such as Damai, Kami and Sarki.

Structure of Forest User Group Committee

There are two tier of organizational structure in CFUGs. General Assembly (GA) which represents all members of the CFUGs and Community Forest User Group Committee (CFUGC) also known as an executive committee of some of 9-15 persons, depending on the size of the CFUGs who are either elected or unanimously nominated by forest users as representatives. Typically the GA meets once a year during mid January to February and CFUGC about once a month. Some CFUGs are quite flexible in terms of allowing any members of the household adults to participate in GA meeting rather than asking household head only. GA has mandate to make any decision related to forest management such as framing rules on forest use, deciding on penalties if rules are broken, fixing schedule for silvicultural operation, and managing generated funds with simple majority. It is the main decision making body and all decision making authority lies with CFUGs. However, there is an increasing practice of making decisions by the CFUGC, particularly use of CFUG funds. The committee makes the decision regarding the use of CFUG funds and put forward their decisions to GA for endorsement. GA, generally makes endorsement in the decisions of the committee without questioning.

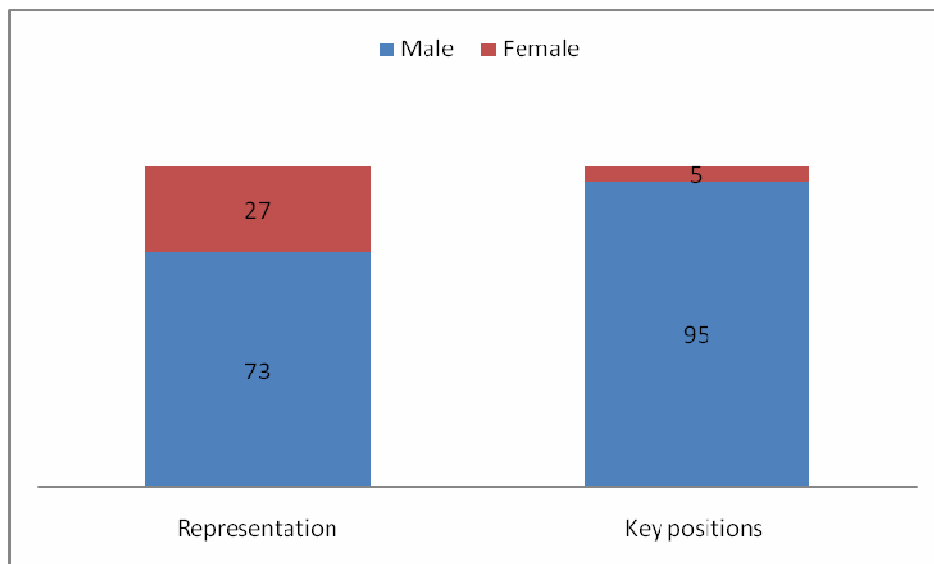


Figure 1 Gender representing and occupying the key positions (n=29)

⁷ *Dalit* are members of occupational castes. They are generally disadvantaged in Nepal as compared with other castes such as Brahmin and Chherti (Kunwar, 2003)

In the study area the average size of the executive committee is 10.83 (± 1.77) members. Overwhelmingly the CFUGs had selected the executive members through consensus and only three per cent CFUGs had election for the key posts as they could not reach to consensus in the candidate for the posts. On an average, the number of executive meeting conducted in 2005 was 10.83 (± 4.58). Over one quarter (27%) of the executive members are women (Figure 1). This finding is higher than the observation made by Adhikari et al., (2004) and Kanel (2004). They observed 15.7 per cent and 24 per cent women in the executive committee, respectively. When we look at different groups representation in the executive committee then we found about two-thirds of the members in the committee are from advantaged groups, followed by disadvantaged groups and *dalit* (Figure 2). A study conducted in the mid-hills by Adhikari et al. (2004) observed that the representation in the executive committee from *dalit* was 9.6 per cent and our finding is also consistent with their findings.

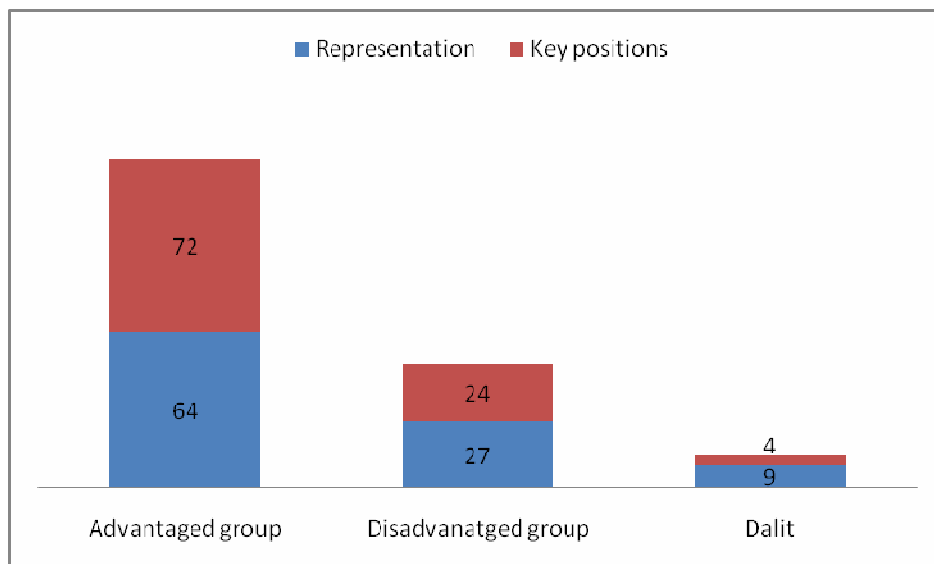


Figure 2 Different groups representing and occupying key positions (n=29)

The key positions in the executive committee are important as they greatly influence the CFUG decisions. The post of chairperson, vice-chairperson, secretary, and treasurer are considered as key positions. These positions hold some kind of power and their individual involvement in the respective field is necessary in order to get the work done. For instance, the decisions are not considered as final unless the chairperson endorse it. Similarly, the secretary keeps the record by maintaining minutes, schedules executive meeting and general assembly with the consent of the chairperson, and determines the agenda for the meetings and general assembly with the consultation of

the chairperson. The treasurer looks after the financial activities and maintains it accordingly. One cannot get the payment unless s/he signs on checks. In the study areas, women occupy only five per cent key positions in the executive committee (Figure 1). In 29 CFUGs, none of the women occupy the positions of chairperson and secretary. Similarly, about three quarters (72%) are advantaged groups who occupy the key positions in the executive committee. Only four per cent *dalit* occupy the key positions in the executive committee (Figure 2). Out of 29 CFUGs none of chairpersons are from *dalit*, however, the post of secretary is occupied by *dalit* in one CFUG.

Land in Nepal is productive economic resources for rural residents and its possession offers economic security. People in rural area are dependent on agriculture for subsistence and land size is seen as an indicator of wealth. Due to Nepal's high population growth and inheritance laws, land is fragmented and farm size continually decline every year. The average farm size in Nepal is 0.96 hectare – 0.68 ha for mountains, 0.77 ha for hills, and 1.26 ha for tarai (Chhetry, 2001). Similarly, average number of livestock holding and goat in Nepal is 1.27 and 1.26, respectively.

Table 2 Individuals occupying key positions in the executive committee and their land and livestock holding (n = 29)

	Average		
	Land (<i>ropani</i>)	Number of Livestock	Number of Goats
Chairperson	18.83 (13.41)	3.69 (2.88)	4.31 (5.13)
Vice chairperson	14.93 (8.73)	3.93 (1.08)	4.79 (3.93)
Secretary	15.38 (8.97)	2.90 (1.65)	3.86 (3.97)
Treasurer	16.93 (10,76)	2.97 (1.95)	3.97 (3.43)

Note: Number in parenthesis indicate standard deviation; one *ropani* = 0.052 ha

In the study areas, every individual occupying key positions in the executive committee own land and their holding size is above the national average landholding size in the hills (Table 2). The table further shows that the chairperson owns more land than others. Similarly, they also own livestock and goat and their holding is also above than the national average. This indicates that the individuals occupying the key positions are the wealthier people in the village. Among them, the chairperson is the wealthiest one which means people prefer to choose the wealthiest one as chairperson.

Investment of CFUG Funds in Pro-Poor Programs

The main issue of this paper is whether CFUGs are investing their funds in pro-poor programs and if yes, what portion of the funds. The pro-poor activities includes such as flow of loan, self-employment skill oriented training and scholarship. The CFUGs generate income from various sources such as sale of forest products, membership fees, and fines from rule violators. In order to calculate the income and investment made by CFUGs we collected explicit information on the investment made by CFUGs in the different activities in the last five years and estimated the annual income. We use annual income as the total investment made by the CFUGs in the last five years divided by five plus annual saving to understand the CFUGs expenditures. We calculate the annual saving as current balance divided by age of the CFUGs. In the study areas, the average annual income of the CFUGs and saving was Nrs75,929 and Nrs10,164, respectively. The annual investment was estimated as the total investment in the last five years divided by five. On an average the CFUGs invest Nrs65,765 annually.

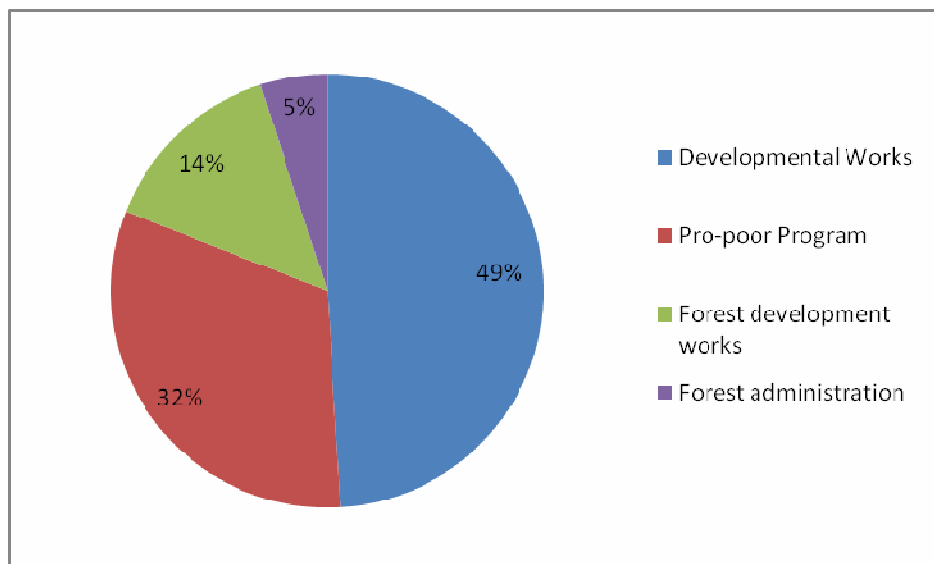


Figure 3 Percentage of annual investment of CFUGs in different activities (n=29)

Generally the CFUGs invest their funds in four categories: (1) developmental works, (2) pro-poor programs, (3) forest developmental works, and (4) forest administration. Developmental works include infrastructure such as school building, temple, and road construction. Flow of loan, self-employment skill oriented training and scholarship are considered as pro-poor programs. Forest developmental works define as any activity that facilitates to improve forest condition such as silvicultural operation, hiring forest watcher, and awareness campaign regarding forestry. Forest administration includes expenses related to CFUG office operation such as honoraria, meeting allowance, and

stationary. Figure 3 shows that the CFUGs invest one-half of their annual expenditure in development works (49%), followed by pro-poor programs (32%), forest development works (14%), and forest administration (5%). This finding suggests that the major source of expenditure of CFUG funds is development works. This finding is consistent with other findings such as Dongol et al (2002) and Kanel and Niraula (2004). In the last five years, the CFUGs made the total investment of almost Nrs2 million on school, road and water reservoir which are crucial for local development. Similarly, they had provided the total of Nrs295,500 and Nrs187,900 as grants to school and salary for teachers, respectively in the last five years. In the study areas, pro-poor program is the second large expenditure of CFUG fund which is surprise finding. A recent study conducted by Kanel and Niraula (2004) suggests that only three per cent of the fund is being used in pro-poor programs. Flow of loan is the major activity undertaken in the pro-poor program. In the study areas, the investment of pro-poor programs in 2005 has gone to flow of loan overwhelmingly (97%). The remaining two and one per cent has gone to self-employment skill oriented training and scholarship, respectively.

Who Benefits from Loans?

Since flow of loan is the major activity undertaken in the pro-poor programs we focus our study in the flow of loan only. The intended scheme of loan is to improve the livelihoods of poor by giving them access to financial resources. In this study, loan was counted as how many households received money as loan in a year from the CFUG funds. Unfortunately, our data does not have enough detail to tell us if these are repeat loans or if the loans were paid off or not.

The CFUGs use different criteria such as food sufficiency, and land holding size (below three *ropanies*⁸) to identify the poor household and give the loan accordingly. The loan distribution in the study areas varies from one month to a year and interest rate varies as well from one to two per cent per month, which is higher than bank rate (10% and higher per year) and lower than local money lenders (2-3% per month). However, this interest rate is similar to the micro-credit scheme of self help group funds as reported by Acharya et al. (2007). Although the interest rate is higher than the bank rate local people prefer to take loan from the CFUGs as it is easy in terms of official procedures (no collateral required) and travelling distance as well. In the study areas, individual requires travelling about two hours to reach the nearest bank for credit which means they are in the population of 21 per cent in the country who walks 1-2 hours to reach the bank (NLSS, 2004).

⁸ *Ropani* is local unit of measuring land in the mid-hills of Nepal (one *ropani* = 0.052 ha)

Table 3 Loan distribution from CFUG funds in 2005 (n = 29)

	Mean	
	Poor	Non-poor
Number of household received loan in 2005	6.17 (7.04)	7.93 (8.67)
Amount loaned out by CFUG in 2005	16,566 (28,491)	38,831 (43,896)
Percentage of amount distributed as loan in 2005	30	70
Percentage of the household in the study area	38	62

Note: Number in parenthesis indicate standard deviation

When we assess the given out loan in 2005 in the study areas it appears that households with different economic status are getting loan rather than only poor households. Table 3 shows that over one-tenth (13%) of the poor households had took loan from the CFUG funds. Similarly, ten per cent of non-poor household also took loan from the CFUG funds. When we look at the value of the loan obtained by different groups, it shows that the non-poor obtained 70 per cent of the amount distributed in 2005 by the CFUGs. On an average, poor and non-poor received Nrs2,848 and Nrs7,608, respectively as loan per household from CFUG funds which means non-poor households are benefiting more from the flow of loan than poor households. This indicates that flow of loan of pro-poor program is not really pro-poor.

Discussions

One third of CFUGs investment in pro-poor program is a big leap in the CFUGs investment in pro-poor programs, indicating that CFUGs are considering it as one major activity. Although the investment in pro-poor program has increased significantly poor households are not benefiting from it as expected. Almost all investment of the pro-poor program has gone to flow of loan and most of the value of loan has gone to non-poor which clearly indicate that non-poor are benefiting more from it. An important question to ask is why poor are benefiting less from the program that is supposed to target poor. This could be due to three reasons. First, the executive committee determines who get loan and what amount. Although there is a policy to give loan to poor the committee considers the potentiality of the individuals to pay back loan in time and capacity as well, putting limit to poor from getting loan. Overall the committee is dominated by local elites in terms of advantaged group and wealth. Almost three quarters are the advantaged group who occupy the key positions in the committee. Regardless of gender and groups the individuals occupying the key positions are wealthier people in

the village. This suggests that the decisions are likely to go in favor of non-poor. Several studies indicated that the CFUGs decisions are likely to dominate by local elites as they dominate the executive committee including key positions (Springgate-Baginski et al., 1999; Baral and Subedi, 2000; Malla et al., 2003; Pokharel, 2003; Banjade et al., 2006). A study conducted by Hills and Shields (1998) in India also made similar observation in the Forest Protection Committee (FPC) of Joint Forest Management (JFM). They observed that leadership of the FPC tend to be hands of the better educated local elites who tend to be less dependent on the forests, as a result, decisions making tend to be reflected their own benefits. Our findings also confirm that the individuals occupying key positions in the executive committee are relatively wealthier people in the village and their decisions are likely to favor non-poor rather than poor. Second reason could be that poor take loan for one activity and often spend it in another activity. Since poor often face the problem of hand-to-mouth they use loaned money either to pay debt or to buy consumable goods. They ask loan to invest in the activity that generates income since the CFUGs give loan only to income generating activity but use it for another activity. Using loaned money in other activity rather than income generating puts poor in the difficult position to pay back loan. The third reason could be that inconsistency in the government policy. The CFUGs fear that the government may take some money back if they see more money in their account. Indeed they look for someone who can return the money whenever they need to give loan. One CFUG in the study areas had given Nrs40,000 as loan to well off family since they had no plan to use the generated money in the year particularly and do not want to show high balance in the account as well. Such fear emerged when the government revised the policy regarding CFUG funds in 2001. In the revised policy, a CFUG is required to share 40 per cent of their income generated from the sale of surplus forest products for commercial use.

Conclusions and Policy Implications

The CFUGs investment in pro-poor programs has increased significantly. However, the flow of benefits from pro-poor programs has not gone to poor as expected. Non-poor are benefiting more from the program than poor, suggesting that pro-poor program is not really pro-poor. Investing loaned money to other activity rather than intended one is one reason for failing to return the loan timely by poor. Poor have hand to mouth problem and they try to solve it with the loaned money without considering the future problems - putting them in the difficult position to pay back loan. Giving in-kind as loan rather than cash would enhance poor access to loan by making them to return loan timely as they cannot use it in other activity than the intended one. In-kind loan may facilitate to reduce the interest of non-poor from loan taking as they cannot use it for other purposes. There is common practice of taking loan for one activity and use part of it for other purposes as well.

Increasing representation from socially excluded groups in the executive committee could benefit more to poor. Higher number from the groups in the committee increases the chance to put them in a position to bargain for their voices regarding the use of CFUG funds. Similarly, inconsistent policy regarding CFUG funds could lead the CFUGs to use their funds unnecessarily and also promote non-transparency in the CFUGs works. In a country like Nepal where hierarchical systems exists, people often manipulate the things in favor of *afno-manche* (own groups or relatives) once they get power. They promote a system of non-transparency as it allows them to exercise the power in favor of own groups. Adopting non-transparency in the investment of CFUG funds further limits the benefits to poor by limiting their access to resources. Based on the analysis, the paper concludes that the targeted pro-poor activities clearly need significant refinement and monitoring.

Acknowledgements

Funding support from South Asia Network for Development and Environmental Economics (SANDEE) for conducting this study is greatly appreciated. The author would like to acknowledge the people from number of villages who participated in the research. The author also thank to all who directly or indirectly involve making the study successful.

References

- Acharya, S., Yoshino, E., Jimba, M. and Wakai, S. 2007. Empowering rural women through a community development approach, *Community Development Journal*, **42** (1): 34 – 46.
- Adhikari, B. Falco, SD. And Lovett, JC. 2004. Household characteristics and forest dependency: evidence from common property forest management in Nepal, *Ecological Economics*, **48**: 245 -257.
- Banjade, MR., Schanz, H. and Leeuwis, C. 2006. Discourses of information in community forest user groups in Nepal, *International Forestry Review*, **8** (2): 229 – 240.
- Baral, JC. and Subedi, B. 2000. Some community forestry issues in the Tarai Nepal: Where do we go from here, *Forests, Trees, and People Newsletter*, No. 42: 20 – 25.
- Chhetry, D. 2001. Understanding rural poverty in Nepal, Paper presented at the Asia and Pacific forum on poverty: Reforming policies and institutions for poverty reduction, 5-9 February 2001, Manila, Philippines,

- CPFD (Community and Private Forestry Division) 1991. The community and private forestry program in Nepal, Community and Private Forestry Division, Department of Forests, Kathmandu.
- DoF (Department of Forests) 2007. Community Forestry User Groups Database, Community Forestry Division, Department of Forests, Kathmandu.
- Dongol, CM., Hughey, KFD. and Bigsby, HR. 2002. Capital formation and sustainable community forestry in Nepal, *Mountain Research and Development*, **22** (1): 70 - 77.
- Gautam, A. P., Shivakoti, G. P. and Webb, E. L. 2004. A review of forest policies, institutions, and changes in the resource condition in Nepal, *International Forestry Review*, **6** (2): 136- 148.
- Hills, I. and Shields, D. 1998. Incentives for joint forest management in India: Analytical methods and case studies, World Bank Technical Paper No.394, Washington, D. C: The World Bank.
- Kanel, KR. 2004. Twenty five years' of community forestry: Contribution to millennium development goals, In K. R. Kanel, P. Mathema, B. R. Kanel, D. R. Niraula and M. Gautam (eds.), *Twenty five years of community forestry, Proceedings of the fourth national workshop on community forestry*, Community Forest Division, Department of Forests, Kathmandu: 4 – 18.
- Kanel, KR. and Niraula, DR. 2004. Can rural livelihood be improved in Nepal through community forestry? *Banko Jankari*, **14** (1): 19 – 26.
- Kunwar, K. B. 2003. The Himalayan poverty: Prosperity through rural development, 2nd edn., Meena Kunwar, Kathmandu.
- Malla, YB., Neupane, HR. and Branney, P. 2003. Why aren't poor people benefiting more from community forestry? *Journal of Forests and Livelihood*, **3** (1): 78 – 93.
- Nepal Development Information Institute (NIDI) 2006. Nepal district profile – 2006, Kathmandu: Upahar Press.
- NLSS 2004. Nepal living standard survey, Statistical report (volume 2), Central Bureau of Statistics, His Majesty's Government of Nepal, Kathmandu
- NPC (National Planning Commission), 2007. Three year interim plan, National Planning Commission, Government of Nepal, Kathmandu

Pokharel, Ridish K. 2003. An evaluation of community forestry program in Kaski district of Nepal: A local perspective, Unpublished PhD Dissertation, Michigan State University, Michigan, USA.

Shah, A. 1997. Jurisdiction versus equity: Tale of two villages, *Wastelands News*, February – April, 5863.

Springgate-Baginski, O., Soussan, JG., Dev, OP., Yadav, NP. and Kiff, E. 1999. Community forestry in Nepal: Impacts on common property resource management (Environment and development series No. 3), *Working Paper*, Department for International Development