

Socio-economic impacts of community based forest enterprises in mid hills of Nepal-Case Study from Dolakha district

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This paper endeavors to assess the socio-economic impact of FUG members affiliated with three Community Based Forest Enterprises (CBFEs) in Dolakha district. Important socio-economic variables, especially household income, gender and equity, decision making process, benefit sharing and resource management were analyzed. The study concludes that the CBFEs have created a positive impact on the socio-economic aspects of rural populace.

Key words: Community based forest enterprises, Gender and equity, Benefit sharing, Decision making, Resource management,

Community forestry, a community based development strategy, has been implemented for more than past two decades in Nepal. This concept is primarily based on participatory mode of development in which local users themselves define and set their objectives and implement planned activities according to their needs and priorities.

Master Plan for the forestry sector 1988 has recognized local users as the owners of the resources. As per the legal provisions, forest users are allowed to use and manage all types of forest resources, including NTFPs in sustainable basis (HMG/N, 1988). With the fulfillment of subsistence needs of fodder, forage, litter and timber of forest users in the mid hills to a large extent, these FUGs are moving towards a more commercial use of NTFPs in an organized way. This new found interest in NTFPs has been triggered by the potential impact of these hitherto neglected and under studied resources in rural poverty reduction and growing market demands. According to a study, this sector contributes 5% country's Gross Domestic Products (GDP), and NTFPs worth US\$ 26.8 million has been harvested in Nepal annually (ANSAB, 1995; ANSAB, 1999). However, the NTFP trade is highly fragmented with low level of supply chain consolidations that results in high transaction cost and deprive indigenous collectors from the fair share of the trade.

Community Based Forest Enterprise (CBFE) is a new evolution in community forestry practices to make

sustainable use of NTFPs for the economic betterment of FUG members in general and poor and disadvantaged groups (DAGs) in particular. The concept can be defined as "those enterprises being operated at rural areas, usually near the resource base, that supplies the raw materials, which are planned and operated by local community who are also the primary beneficiaries of the enterprises" (ANSAB, 2001). The widespread belief is that the significance of the enterprise is directly linked to the local community and the major shares of the benefits go to the local people. Such local initiative or micro enterprise is an organized activity for strengthening their economic conditions, better networking of their stakeholders and creating employment opportunities through value addition. In case of forest-based enterprise, it may include collection of the forest products, grading and sorting, labeling, processing, trading, transporting, and manufacturing undertaken either formally or informally.

In this context, a study of three community based forest enterprises was undertaken to identify the impact of these enterprises to household economy, changes and management practices of resources, and assess different socio-economic impacts on the community, especially, equity in terms of decision-making, benefit sharing and gender. The enterprises selected for the study are Bhitleri Ban Paidawar Prosodhan Pvt. Ltd (BBPL)¹, Kamala Pandit Ban

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¹ BBPL is owned by Bhitleri FUG Boch VDC of Dolakha district. The FUG covers an area of 378 ha with 243 HH members. The company process Argeli white-skin that is sold to paper exporter in Kathamndu.

Paidawar Prosodhan Pvt, Ltd (KBPL)², and Deudhunga Multipurpose Co-operative Ltd (DMCL)³- which are located in Dolkha district of the country.

Methodology

The study was undertaken from January to March 2002. The selection of the enterprises was done purposefully. Different Participatory Rural Appraisal (PRA) tools such as wealth ranking, focus group discussion, social and resource mapping and sample households survey. Participatory observations were used for primary data collection. Similarly, secondary information were collected through the review of documents from CFUGs, and governmental and non-governmental organizations.

Results & discussions

Household income

The majority of the poor lives in the mountains or in the Himalayan region of the country, the search for sustainable increases in income lies in diversification of economic activities from subsistence agriculture to off-farm activities (ICIMOD, 1996 and 1999). Prior to the establishment of the CBFs, agriculture and off farm activities such as wage labor, small trade, low-profile job and pension constituted the household

income (DDC, 1995; DDC, 2001). The community based enterprises contributed to an average of 11% increment in the income at household level (HH). In the case of FUG members associated with DMCL, 17% of their income was augmented from the enterprise (TABLE 1).

Gender and equity

The concept of gender acknowledges that women and men have different needs and power relationships and that these differences must be identified and addressed, if possible in such a manner that the imbalance between the sexes is rectified. These small three enterprises created a total of 6312 Man Days (MDs) for rural households in 2001 (Table 2). Compared to the alarming situation through out Nepal for women employment (HRDC, 2005), the employment opportunities offered through enterprise was impressive. Female workers constituted majority of the work force in BBPL (72 %) and DMCL (64%); whereas PBPL had the lowest percentages (20%) of women in its workforce amongst the sampled enterprises.

The employment created in these enterprises can be categorized into three different activities viz. raw materials collection, fuel wood collection and value

Table 1: Average annual household income from different sources

Name of enterprise	Household income from enterprise (Rs.)					Other incomes (Rs.)	Ratio Enterprise vs. Other sources	
	Raw Materials	Fuel wood	FUG Royalty	Employment	Dividends			Total
BBPL	565	166	-	793	-	1524	20997	0.07:1
PBPL	100	50	10	150	34	344	8159	0.05:1
DMCL	1373	1369	274	533	74	3623	20997	0.17:1
Total	2038	1585	284	1476	108	5491	50153	0.11:1

(Source: Field Survey, 2001)

Table 2: Annual employment opportunities in 2001

Enterprises	Employee (Sex)	Employment by raw material collection (MD)	Employment by fuel wood collection (MD)	Employment in processing/ value addition (MD)	Total (MDs)	Total (Rs)	(%) by income
BBPL	Male	150	40	240	430	43000	32
	Female	30	16	1080	1126	90080	68
PBPL	Male	250	30	540	820	82000	82
	Female	60	6	150	216	17280	18
DMCL	Male	197	420	720	1337	133700	35
	Female	1576	807	0	2383	238300	65
Total		2263	1319	2730	6312	604360	NA

(Source: Field Survey, 2001)

² PBPL is owned by two FUGs-Bhatekhola Kamalamai and Pandit community forests users groups –of Jhyanku VDC in Dolakha district. These two FUGs cover an area of 1254.5 ha with 550 HH members. The company produces Lokta sheet paper that is sold to exporter in Kathmandu.

³ DMCL is owned by 25 individuals and Napke Yanmara FUG and located in Lakuridanda VDC of Dolkha district. The FUG covers an area of 160 ha with 135 HH members. The company distills essential oil from Machhino leaves.

addition/processing. It was noted that male highly participated in raw materials and fuel wood collection; female in processing and value addition. The processing and value addition was simple in nature i.e. drying, grading, sorting, labeling, quality control. In cleaning process, women were found more efficient i.e. women can clean 7 to 8 kg of the Argeli white skin per day but man can only clean 5-6 kg. There is, however, a widespread discrimination in the wage structure-female workers received much less than their male counterparts despite their higher productivity. Female workers earned around 65% of the total income in BBPL and DMCL. Due to the low percentage of women in PBPL work force, their share of total income is as low as 18%.

Benefit sharing

Community based enterprises subscribe to the notion that economic benefits, whether cash or subsistence, accruing to local people as a result of sustainable forest management, should be equitably shared among community members in a manner they consider to be fair. Of particular importance is the issue of equitable access within communities to resources and opportunities for obtaining the greatest benefit in the collection, processing and marketing stages.

Table 3 shows the distribution of enterprise income to different wealth class. Overall, 194 HHs are getting benefits from the enterprise activities. Among them, 54% are extra poor, 36% poor, 8% medium and 2%

are from rich category. These groups benefitted from the sales of raw materials to the enterprises and the labor intensive employment opportunities. The table also indicates that benefits to rich households were very limited (2%), as the job opportunities in forest enterprises was and did not suit to their standard. Moreover, the return compared to time investment to the rich households was insignificant.

Decision-making

Decision-making is the key component that determines the benefit sharing among FUCG members of different social and caste hierarchy and the executive committee responsible for the enterprise operations. Even though most of the enterprises were found practicing inclusive decision making process (such as inclusion of the voice of the poor, and women through user group meeting, general assemblies etc), in some cases the concern of these groups were not accommodated in the decision making.

The representation of caste and women in the decision making process was not found proportionate to the caste and gender. For example, the ethnic group of BBPL that comprised 36% of the total of the CFUG members occupied slightly over 50% of the enterprise management committee. In the case of DMCL and PBPL, their representation in the enterprise management committee was 40% and 15% respectively (Table 4). In the case of gender, women's role in decision making was found passive, and they

Table 3: Distribution of enterprise benefits over wealth classes

Enterprises	Benefited households subclass from enterprises			
	Rich	Medium	Poor	Extra Poor
BBPL	-	3	5	16
PBPL	-	3	45	72
DMCL	3	7	20	20
Total	3	13	70	108
Percentage	2	8	36	54

(Source: Field Survey, 2001)

Table 4: Role in decision making by caste in FUG and Enterprise management

Enterprise	Caste in FUG members	No. in FUG members (%)	Caste in FUG executive members	No. in executive members (%)	Caste in Enterprise executive members	No. in Enterprise executive members (%)
BBPL	Ethnic	88 (36)	Ethnic	6 (53)	Ethnic	1(50)
	BCN*	155 (64)	BCN	7 (47)	BCN	1 (50)
DMCL	Ethnic	160 (60)	Ethnic	6 (40)	Ethnic	2 (40)
	BCN	90 (40)	BCN	9 (60)	BCN	3 (60)
PBPL	Ethnic	23(17)	Ethnic	2 (15)	Ethnic	4 (15)
	BCN	112 (83)	BCN	11 (85)	BCN	22 (85)

(Source: Field Survey, 2001)

(Figures in parenthesis give the percentages of the figures)

♣ BCN-Bahun, Chhetri and Newar

limited themselves in observing the meetings and rarely put forwarded their opinions. In all cases, women participation was low though they had received more opportunities in the decision making and more access to employment opportunities in study enterprises (Table 5). Compared to the national scenario, women in the study enterprises has had more opportunity to participate in the decision making process as Nepali women discrimination through the denial of access to resources; having no control over resources or no benefits from resources; restricted mobility, and low representation in decision-making positions in all sectors (Action Aid, 2005).

Resource sustainability

In the case of enterprises oriented CFUGs, resource sustainability ensures regular income to household level, employment opportunities and regular supply of raw materials. Forest inventory was found to be the most commonly used tool to assess the forest products. For example in Bhitleri FUG, resource inventory of Argeli was done and management plan was prepared accordingly. This community forest covers 378.5 ha with ten management blocks; however, Lokta is available in three blocks only (effective area 21.5 hectares). The preliminary survey revealed that 41 kg to 187 kg (Anon, 2001) of dry finished bark of Argeli could be harvested annually. The availability was low compared to the enterprise target of 1000 kg dry Argeli per year (BDP, 2000). As a result, Argeli plantation in public and private land was encouraged and around 60,000 cuttings were planted in the forest and private area (Anon, 2001). Similarly, community based enterprises were found effective in checking premature harvesting of

economically important spices. In Bhatekhola (746 ha) outlined Lokta management plan and provision to seriously dealt with pre mature harvesting to sustain the PBPL. In some cases, the enterprises provided opportunity make commercial use of NTFPs hitherto unexploited. For example, commercial harvesting of Machhino got momentum in Napke FUG, after the establishment of DMCL. In order to check over exploitation of the resources, a management plan was drafted and implemented jointly by the CFUG and DMCL.

Conclusion

The study showed that CBFEs could play an important role in socio-economic empowerment of the FUG members in the mid-hills. The studied CBFs were providing a much needed opportunity for off-farm employment at the local level, and augmented household income. Moreover, the poor, disadvantage groups and women were found to be the major beneficiary from CBFEs, as the employment was labor intensive that suit their low skill profile. Despite increasing representation of poor, women and ethnic groups in the enterprise's executive committee, they were mute spectator to the decision making process. The study also revealed that women got an opportunity to engage in productive activities outside the house; however, discrimination in wage structure was still prevalent –in spite of their productivity. Economic incentives that enterprises generated has had a positive impact on resource conservation by better management of existing resources; cultivating economically important species in forest and private land; and utilization of the species hitherto neglected.

Table 5: Sex ratio in decision-making process of FUG and enterprises

Enterprise name	Sex	No. in FUG (%)	Sex in FUG executive members	No. in executive members (%)	Enterprise executive members	No. in Enterprise executive members (%)	% of Employment
BBPL	Male	127 (70)	Male	11 (84)	Male	2 (100)	32
	Female	53 (30)	Female	2 (16)	Female	0 (0)	68
PBPL	Male	201(80)	Male	12 (80)	Male	5 (100)	82
	Female	49 (20)	Female	3 (20)	Female	0 (0)	18
DMCL	Male	103 (84)	Male	8 (61)	Male	23 (88)	35
	Female	19 (16)	Female	5 (39)	Female	3 (12)	65

(Source: Field Survey, 2001)

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