
SHORT NOTE

Impact of community forest on rural livelihood

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Forest is a renewable natural resource which provides a wide range of socio-economic, environmental, and cultural benefits and services. The rural people are dependent on forest for various products to fulfill their basic needs such as fuelwood, pole, fodder, leaf-litter, fruit, herbs and to provide other services that are essential for the farming system as Wyatt-Smith (1982) has suggested that 2.8 hectares of accessible forests are required for sustaining each hectare of farmland.

For the last two decades community forestry programme has been adopted as one of the major strategies for managing country's forests. The programme aims to fulfill the basic needs of the people and also increases their capability in managing the resources. It encourages people to get involved in forest management for their own benefits. Community forestry is seen as successful programme in many parts of the country, particularly in regenerating forest resources which has contributed directly or indirectly to the dependent people (Mahat 1997).

This paper attempts to record the impact of community forestry in the rural people in terms of agricultural production, animal husbandry and their day to day activities.

Methods

The study was conducted in Gaukhureshwar Community Forest User Group (FUG) of Kavrepalanchok District. The FUG lies in Dhulikhel Municipality of ward-number 1, east of Dhulikhel town. It takes 25 to 30 minutes walk from the local bus stop to reach the FUG.

Questionnaire was used as a major tool for collecting information. An informal discussion was also carried out with forestry professionals and key informants. The information collected through direct observation was also incorporated for the study. The researcher spent a considerable time in

the study area to have a first hand understanding of the impact of the community forest.

Socio-economic conditions of the FUG

Gaukhureshwar Forest User Group of Kavrepalanchok District, was formed in December 1995. The forest area is 21.5 hectare consisting of 35 households as users. The Brahmins represent 46% at the user group followed by Chhetri (37%), Thakuri (11%) and others (6%). The economic status of the users was classified as rich (9%, mostly the Brahmins), medium (85%) and poor (6%).

Impact of community forestry on rural livelihood was assessed in different sectors, particularly in knowledge and use of improved seeds and soil condition, livestock rearing and time consumed by the local women for various household activities. Comparison of these activities before and after the community forestry was formed in the area indicates the impact on rural people.

Results and discussions

Impact in agriculture

The farmers considered the forest as an integrated part of the farming system. Table 1 indicates that the majority of Brahmin, Chhetri and 50% of Thakuri have used improved variety of seeds for agriculture after the introduction of community forestry. Along with forestry activities, discussion regarding improved seeds of the forest trees and agricultural crops and their relation to crop production has been usually discussed in the community forest forums. These interactions increased their perception and awareness among the villagers. The remaining households have the knowledge of the improved variety of seeds but still use the traditional varieties which is due to their traditional belief.

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Table 1: Knowledge and use of improved seeds and soil status by different caste

Caste	Use of improved seeds		Improved soil status	
	Yes (in %)	No (in %)	Yes (in %)	No (in %)
Brahmin	65	35	100	-
Chhetri	65	35	100	-
Thakuri	50	50	100	-
Others	NA	NA	NA	NA

Note: Others include Thami and Giri

Soil condition is a major factor for increasing productivity. Most of the farmers in the area have been using chemical fertilizer such as urea, potassium to increase the productivity in the limited agricultural land. However, the use of chemical fertilizer is decreasing due to the availability of leaf litter. They believe that the soil status has improved by using the compost in the field, which obviously encouraged the farmers to use leaf litter rather than chemical fertilizer.

There is no significant change in crop production before and after the community forestry. However, the farmers are hopeful of crop increment due to increasing use of leaf litter as organic fertilizer.

Livestock

Livestock raising in the village is a common practice. Majorities of the households own livestock, which is also considered as indicator of wealth. Fifty percent of Brahmin, Thakuri and 60

All of the respondents expressed that the number of livestock has decreased in the area due to limited grazing land and also less number of people available for looking after the livestock. It is due to the changed in interest and engagement in other employment. All Thakuris, 80% of Chhetri and 35% of Brahmin expressed that the improved livestock has supported to increase their annual income (Table 2).

Daily household activities

A number of activities such as preparation of meal, fetching water, fuelwood, fodder and leaf litter collection, etc. are done by women in the study area. Shortage of these items caused women to walk more distance to get them. The time consumed by the women in doing such activities was compared before and after the community forest. Table 3 indicates that the community forestry has reduced the workload of women, and thereby saved their

Table 3: Perception towards raising livestock at Gaukhureshwor FUG

Caste	Livestock rearing condition		Increased income from livestock	
	Yes	No	Yes	No
Brahmin	50	50	35	65
Chhetri	40	60	80	20
Thakuri	50	50	100	-
Others	NA	NA	NA	NA

Note: Others include Thami and Giri

percent of Chhetri feel that the condition for rearing livestock is favourable since it is easy to get livestock feed from community forest. Whereas the remaining feel that the conditions are not favourable because of the limited grazing lands (Table 2).

The women expressed that the source of water, availability of fuelwood, fodder and leaf litter have increased after community forestry, which has made their life more easier than before.

The excessive use of chemical fertilizer has resulted

Table 2. Average time consumed by women in different activities at Gaukhureshwor FUG 1999

Activities	Time consumed (hour)		Time saved (hour)
	Before CF	After CF	
Refreshment and fetching water	1.8	1.1	0.7 ⁺
Preparation of meal	1.7	1.7	0.0
Work related to animal husbandry	3.1	2.1	1.0 ⁺
Fuel wood and leaf litter collection	3.0	1.0	2.0 ⁺
Total	9.6	5.9	3.7 ⁺

in compaction of soil, which requires hard ploughing work. It has also deteriorated the soil quality. The farmers feel that if the trend continue for long the soil may become unproductive for cultivation. The use of compost has become very popular in the area. The farmers consider compost as replacement of chemical fertilizer but is required in greater quantities. They believe that the use of compost enhances soil fertility. Such perception of the villagers has increased the use of leaf litter from the forest, which obviously has made the positive impact.

Increment in the foliage and leaf litter production has encouraged the villagers to raise livestock in the area. But livestock number has decreased due to less number of people available to look after them.

The community forest has helped the women to save their time from day to day activities by making available of fuelwood, fodder, leaf litter, water in the nearby area. The women who had to spent a lot of time in walking just to get a bundle of firewood and fodder, now get it from nearby community forest. The saved time could be used for other purposes, such as for taking care of their children or houses, which obviously makes a positive impact in the social life.

Conclusion

The direct and indirect benefits from community forestry have played a great role in social life of the people in the area. It is seen that the farmers have started to use improved variety of seeds to increase agricultural productivity and also to raise improved livestock, which will help increase their income. The availability of leaf litter from community forestry has increased the use of organic fertilizer instead of chemical fertilizer. Less time consumption in performing the different activities by women has made them use the leisure time in

taking care of children, cleaning houses, and involving in social functions. Such activities can help them to keep their environment healthy. It is also a good opportunity for the government to enhance their livelihood by developing a skill oriented training programme in the area.

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