A

Report on

Community Forestry

(Assessment of the Biophysical, Social and Governance situation of the Eklepakha Majuwa Community Forest of Tanahu district)

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1. Introduction

Nepal is a country with diverse biodiversity and natural resources. Its rapid altitudinal variation makes it very rich in biodiversity and natural resources. Albeit it is rich in natural resources, it could not properly manage its resources in the past. The top-down approach was prevailing so that the people are thought to be excluded from the resource management and benefit sharing. By which the problem in forest conservation was existed.

To address these problems the concept of community forestry was evolved. The food and agriculture organization (FAO) of the United Nations defines community forestry as "any situation which intimately involves local people in a forestry activity. It embraces a spectrum of situation ranging from woodlot areas which are short of wood and other forest products for local needs, through the growing of trees at the farm level to provide cash crops and the processing of forest products at the household artisan or small industry level to generate income, to the activities of forest dwelling communities" (FAO, 1978). In Nepal community forestry is defined as 'a part of the national forest either good or degraded which is handed over to a group of users for protection, management and utilization process'.

1.1. Brief overview of community forestry in Nepal

Community forestry in Nepal evolved through an interaction of multiplicity of factors. This stems from a sense of collective spirit embodied in Nepalese society through generations. There were frequent cases, particularly in the hills, of communities having been involved in the conservation of forests and regulating of forest resources. Earlier experiences with different political turmoil, population growth, regulatory enforcement and adjustments, excessive dependence of the people over forest resources, and a paradigmatic shift in global development thinking are some of the other factors that contributed to evolve it to the present scenario of decentralization and devolution.

Earlier statutes have been specifically harmful to the development and conservation of the Nepalese forests. Their main shortcomings stem from their indifference to, or failure to address, the needs and aspirations of the people who continued to depend on forest products for their very subsistence. The Private Forests Nationalization Act 1957 brought forests, which were earlier perceived

to be private, under state jurisdiction. Forest Act 1961 and Forest Protection Special Arrangement Act 1967 failed to democratize the regulation of forests. Coupled with population growth and government's continued inability towards effective protection and misappropriations all led to consistent decline in the forest cover. As such, community forestry could have been adopted also as an ad hoc approach to timely halt the deforestation process.

The National Forestry Plan 1976 listed the major constraints and proposed policies to tackle them. It recognized the critical forestry situation of the time and laid down as objectives for forest management the restoration of the balance of nature, economic mobilization, practices of scientific management, development of technology and promotion of public cooperation. However, the Plan was partly implemented.

The community forestry thrust followed the formulation of Panchayat forest Rules and Panchayat Protected Forest Rules 1978. The community forestry project was introduced in 29 hill districts with assistance from the World Bank. Community forestry was also promoted with bilateral assistance. Later community forestry was also tried in fourteen Terai districts with World Bank assistance.

Community forestry started in one village Panchayat in Sindhupalchowk district with the naming of a forest committee by the District Forest Officer (DFO). The forest committee, having been nominated by the DFO was given authority to decide on the use of forest allotments, which were protected or newly planted by its members.

The Community Forestry (CF) programme is a more than 30 years story of evolving collaboration between the local communities and state forest agency in the governance of forest resources of Nepal (Kanel 2010). In its history of development several researches were conducted related to it and the challenges and opportunities of this program were analyzed.

As per the provisions of present forest legislations, traditional users of forest form a group to manage the adjoining forest. Until now, around 14,500 CFUGs are managing more than 30 % of National Forests (Kanel 2010). A study shows that there is 61% of National Forest potential to community forestry but until now there is only 30% of forest area handed over as community forestry. In order to manage the forest the CFUG prepares the Operational Plan with the

technical assistance from the DFO. The income from the sale of the forest products and the annual membership fee raised by the users is deposited in a fund managed by CFUG itself. A preliminary study (2004) conducted by the Community Forest Division showed that CFUGs of Nepal earn annually more than US$ 10 million (Kanel and Niraula 2004; Kanel 2008).

1.2. Community forestry in Tanahu district

The Tanahu district is not so pioneer in community forestry as it was started from 1978 in Nepal. CF handover in Tanahun was started from 1993 AD, which is about 4 years after the initiation of MPFS(1988).Thingring Otangdi CF of Pokhari Bhanjyang-8 was the first forest handed over to CFUG as Community Forest. At present, there are 511 CFs which have been handed over to CFUGs in 46 VDCs and 1 municipality of Tanahun district. About 35,791 ha of forest area has been handed over to CFUGs for protection, development and, management of the forests (DFO Tanahu 2012). According to the annual report of the District Forest Office of the Tanahu district the community forestry program is seemed to be a successful program for the forest conservation and the livelihood upliftment of the local people i.e. forest dependent poor people.

2.Objectives

- **a.** To investigate current situation of forest resources including their annual supply situations,
- **b.** To find out dependency of local people on forest resources and their demands,
- **c.** To study governance of the CFUG focusing to decision making,
- **d.** To recommend future strategy to manage the forest in a sustainable way,

3. Methodology

3.1 Study area

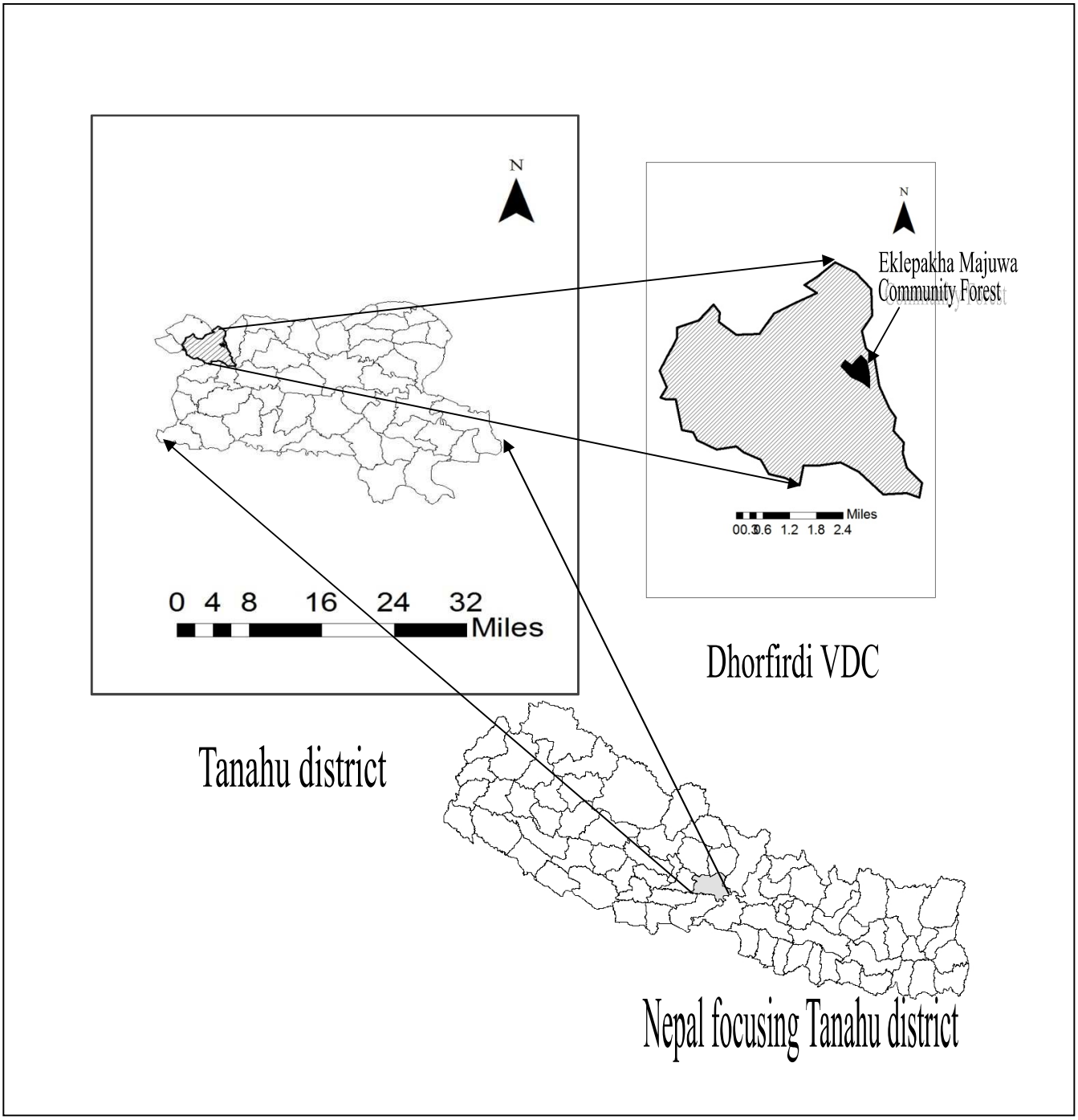

Fig. Map showing the study area

3.1.1District background :Tanahun district lies in the south-east part of Gandaki zone in Western Development Region.It shares boarder with Chitwan and Gorkha in the east, Syanga and Kaski in the west,Kaski and Lamjung in the north and Nawalparasi and Palpa in the south.Total area of this district is 1,54,600ha which is 1.05% of Nepal's total area.

Position:This district lies from 27°36'N to 28°25'N latitude and 84°57'E to 85°34'E longitude.Altitude in this district ranges from 187m(Devghat) to 2325m(Chimkeswari lek).Most part of this district lies in hilly area.

3.1.2 Tanahun district(Focusing Forest):

The total forest area of this district is 78,111.22ha.Community forest covers 35791ha while leasehold forest covers 1964.35ha of the total forest area.Private forest, religious forest and national forest cover 15.28ha, 4.47ha and 40350.73ha respectively. There are 511 CFUGs consisting of 50177 households. Each CFUGs get an average of 73.95 ha forest area with an average of 98 HH per CFUG. Forest area per HH averages to be 0.71ha.Until now, only 45.82% of the total probable CF area has been handed over to CFUGs.

Mostly deciduous forest are found in lower regions up to the altitude of 1000m.Main species being Sal, Asna, Karma, Bot dhairo etc.In mid hills tree species such as Chilaune , Katus , Bamboo etc are found between 1000 to 2000m altitude. Above 1800m, mixed forests of Oak, Quercus and Rhododendron are common.Khayar, Sisso, Simal, Siris etc are found in river banks.Conifer species haven't been seen naturally in Tanahun district.

3.1.3 CFUG:

The study area in Tanahu district was in Dhorfirdi VDC, ward number 3. The name of the community forest in which the study was carried out was Eklepakha Majuwa Community Forest.The name of the range post responsible for the CF was Belchautara which was at an approximate distance of 2 km from the CF. The nearest market from the CF is the Dulegauda Bazzar which is 1km far from the CF.

General information about the CFUG: Eklepakha Majuwa CF was handed over in 2052-03-14 BS. Its OP has been revised once; in 2057-12-14.Then after that this community forest has not been revised yet. A total of 132 households are using this forest among which Barahamins and Chhetris are dominated.

General information about the forest: Eklepakha Majuwa community forest having area 34.49 ha is situated in the ward no.3 of Dhorfirdi VDC of Tanahu district. Altitude in this community forest ranges from 485m(Suraudi Pari) to 722m(Ghumne Chautaro).Most part of this forest lies in hilly area (94%). The dominant species in this forest are natural forest of Chilaune, Katus and Sal. In some plane area there is also plantation forest of Sissoo.

3.2 Data collection

Reconnaisance survey was carried out before detailed data collection. Information about the past condition of forest and social condition were obtained from the Constitution, Operational Plan and the Minuting of the forest user groups. Present conditions about the forest were collected from forest inventory. Social inventory was done by small group discussions, observations, key informants survey, interviews etc. For the collection of data about the governance situation of the community forest, observance of community forest user groups meeting was done. Other required secondary data were obtained from DFO(Tanahun), range post(Belchautara),VDC office(Dhorfirdi), etc. Some other required secondary information were also collected through the internet about the community forestry condition in whole Nepal and in Tanahu district.

4. Findings

4.1 Forest inventory

Condition about the forest was assessed and the several findings were obtained from the research as for example block division according to OP, forest resources situation according to OP and current resource situation. The detail about the biophysical condition of the forest is presented below.

4.1.1 Block division according to OP

The Eklepakha Majuwa community forest is divided into 7 blocks according to the operational forest plan for the management of the forest. The area having the same vegetation (types and condition), slope and aspect which require same kind of treatment are kept in the same block.

The general information about the blocks is presented in the following table.

Block number	Name of the block	Area of the block(ha.)	Dominant species	Slope of the block
1.	Majuwa	1.5	Sissoo	Flat area
2.	Nursery	0.19	Sissoo	Flat area
3.	Eklechautara	3.19	Chilaune, Katus	Upto 30%
4.	Thulo chilaune	3.24	Chilaune, Katus	Upto 40%
5.	Sal ko ban	1.26	Sal	Upto 40%
6.	Mohane Ghari	9.9	Chilaune	Upto 50%
7.	Naya Kulaien Than	15.21	Shrubs	Upto 80%

4.1.2 Forest resource situation according to OP

The forest condition in the time of handover of community forest is very poor. In that time there was no presence of trees, if present only little trees were present in the forest. After that forest is hand over to the community for its management, the forest in that area is improved. At the time of first OP revision

the forest is better than in the time of the handover. At 2057 BS i.e. at the time of first OP revision the tree density becomes better (98 trees/ha.).

The regeneration density was 4898 no./ha. Among the blocks at that time the regeneration density was highest in block number 5 (11198 no./ha) and lowest in block number 7 (1500 no./ha).

There were no trees in the block numbers 2, 6 and 7 at that time. The dominance species was Chilaune among the species found in the forest. Different species were dominant in different blocks as for example, block number 1 & 2 were dominated by the Sissoo and block number 5 was dominated by Sal.

The growing stock of the forest was also low at that time due to less number of trees in the forest.

The regeneration condition, tree density and growing stock of all blocks according to OP are presented in the following table.

Block No.	Area (ha.)	Regeneration (No./ha.)	Tree density (No./ha.)	Growing stock (cft.)
1	1.5	2666	20	222
2	0.19	2000	0	0
3	3.19	3464	200	4843
4	3.24	3464	220	4918
5	1.26	11198	250	2495
6	9.9	10000	0	0
7	15.21	1500	0	0
Total	34.49	4898*	98*	12478

*The quantity specified is average rather than the total sum.

Table 1. Table containing the regeneration, tree density and growing stock of forest at the time of first OP revision

At that time low amount of forest products are specified for the supply from the forest. Timber was not extracted from the forest at that time. The wood or timber obtained from the forest treatment was only used although 603.6 cft. of timber was specified as annual allowable cut, which was obtained from the formula. 22020 bhari of firewood and 5066 kg. of leaf litter was also specified as annual allowable cut which can be supplied from the forest.

4.1.3 Current resource situation

Now the forest resource situation is very good than at the time of the forest handover and at the time of first revision of the OP. Due to grazing prohibition the regeneration are established and developed to the trees. The daily monitoring of the forest by users also control the illegal felling by which the growing stock of the forest is increased.

The current regeneration condition, tree density and growing stock of all blocks are presented in the following table.

Block No.	Area (ha.)	Regeneration (No./ha.)	Tree density (No./ha.)	Growing stock (cft.)
1	1.5	37500	400	661.08
2	0.19	5000	300	363.57
3	3.19	22500	1100	15323.74
4	3.24	25000	1200	9727.45
5	1.26	52500	1000	1984.59
6	9.9	52500	900	9078.3
7	15.21	45000	200	14019.97
Total	34.49	34285*	728*	51158.7

*The quantity specified are average rather than the total sum.

Table 1. Table containing the current regeneration, tree density and growing stock of forest

From the comparison of table 1 & 2, it can be said that there is very much improvement in the condition of the forest i.e. regeneration condition, tree density and the total growing stock. The improvement of forest in terms of total GS, regeneration and tree density is also clear from fig. 1,2 and 3.

The species composition is still same as was in the time of first OP revision. There is no change in the dominance species. In the Sissoo plantation area the Sissoo is conserved and in the other natural forest area also no conversion was done, which could be the cause of unchanged species composition.

Now supply situation of forest is also better than in the time of handover and first OP revision. 1575.616 cft of wood can be cut from the forest annually in the form of fuelwood and timber.

The following table gives the amount of forest product that can be cut from the forest annually. Timber is in cft. and Fuelwood is in bhari (30 kg.).

Block No.	Growing stock			CAI (cft.)	Annual allowable cut		
	Timber	Fuelwood	Total		Timber	Fuelwood	Total
1	330.54	215	661.08	55.09	11.018	7	22.036
2	181.785	118	363.57	30.2975	6.0595	4	12.119
3	7661.87	4992	15323.	952.794	190.558	124	381.117
4	4863.72	3169	9727.4	810.6	162.12	106	324.24
5	992.295	647	1984.5	165.382	33.0765	22	66.15
6	4539.15	2958	9078.3	756.525	151.305	99	302.61
7	4673.32	6090	14019.	1168.33	155.77	203	467.332
Total	23242.	18189	51158.7	3939.0	709.919	564	1575.616

Table 3 GS, CAI and the AAC of the forest at present condition

The growing stock at the OP and at present is presented in the following chart.

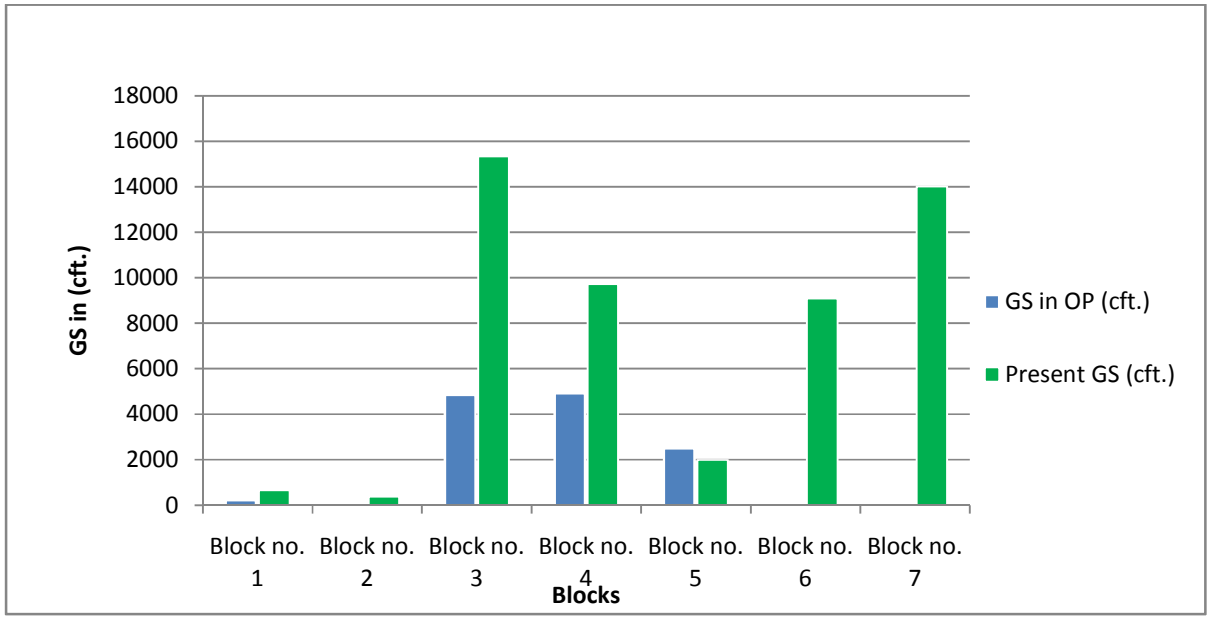

Fig.1 Chart showing the GS in the OP and the present condition.

Here in block no. 5 the GS is seem to be decreased while in other block there is rapid increase in the GS. At previous time there were large trees of Sal in block no 5 which were felled which is the reason of decreasing GS in block no.5.

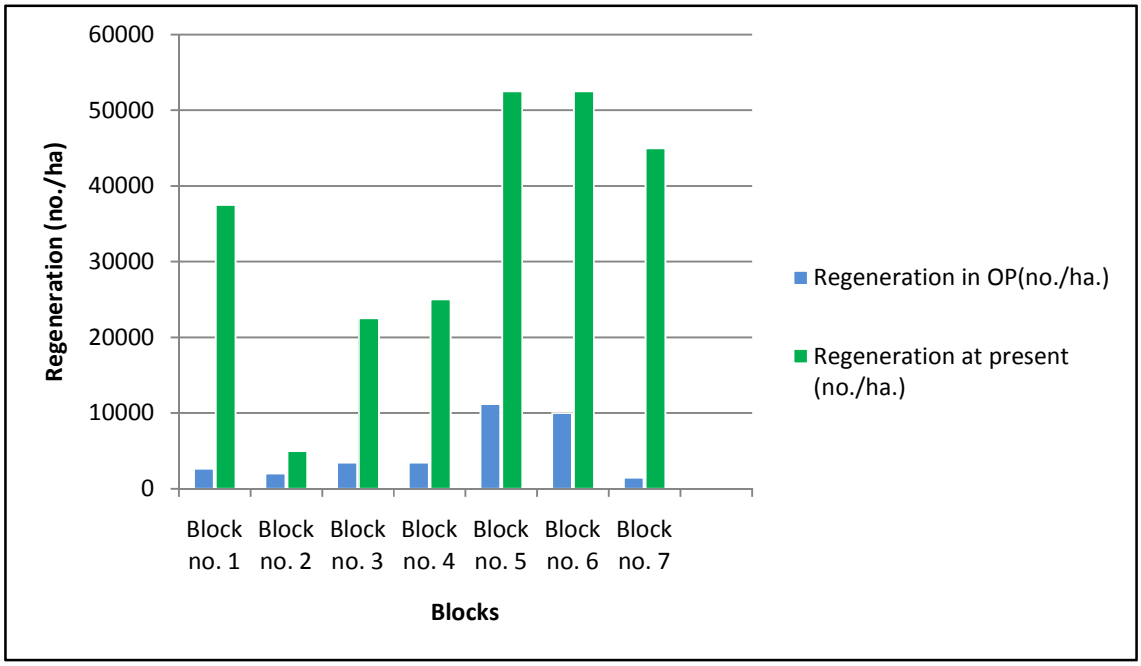

Fig.2 Chart showing the regeneration according to the OP and at present condition.

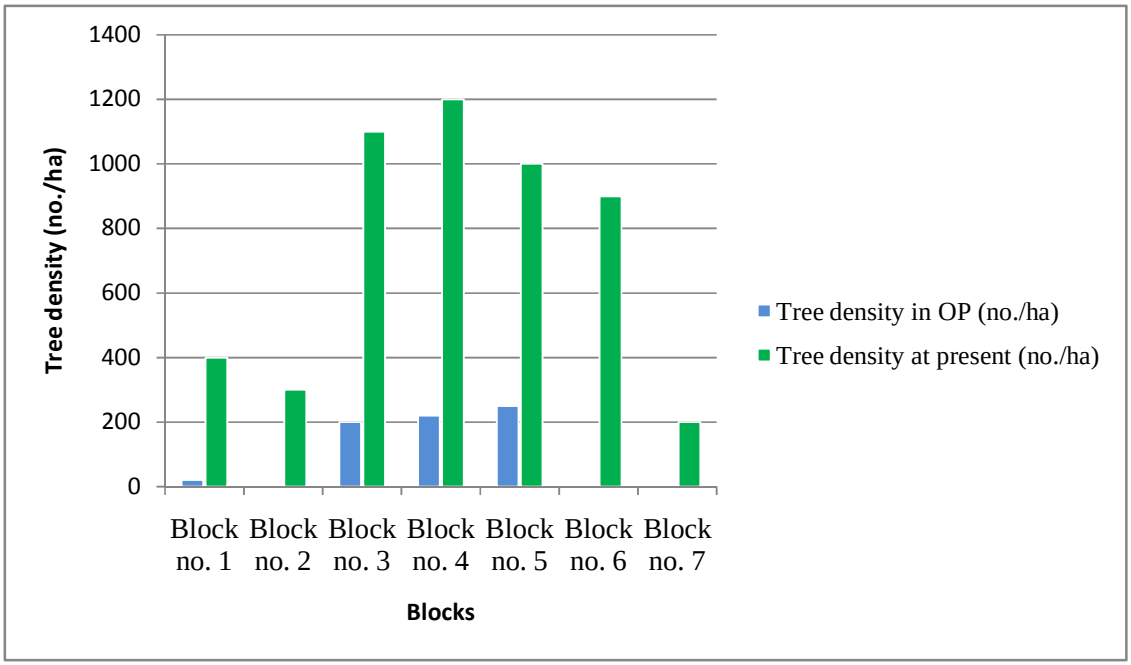

Fig.3 Chart showing the tree density according to the OP and at present condition.

4.2 Social inventory

Users of six villages are managing this community forest. Among 135 user households the Brahimin and Chhetris are dominant (90), followed by Janajatis (30). The number of villages with their name and their respective population are presented in the following table.

S.N.	Name of the village	Households in number				
		Bahun/Chhetri	Janjati	Dalit	Other	Total
1	Eklepakha	16	0	0	0	16
2	Milan chowk	10	3	1	1	15
3	Tallo tandi	30	8	8	0	46
4	Ganesh tole	23	6	2	0	31
5	Bhimsen tole	6	5	2	0	13
6	Ranipokhari	5	8	0	0	13
Total		90	30	13	1	134

Table 4 No. of village using forest with their respective no.of households.

During the initiation of the community forestry there were only 120 households who were recognized as users. But now there are 134 households using this forest. Migration of people from other VDCs of Tanahu district and other district such as Syanjha, Kaski etc. give rise to the number of households using the forest. There is also outward migration of people from the village but it is in very small number as compared to the inward migration. Some households (4) who were formally user are migrated from that village to the Chitwan, Kathmandu and Pokhara.

The participatory well being ranking of the user was done to find the number of rich and poor people. Several criteria are set for classifying the people as rich, medium, poor and ultra-poor. As shown in the following table no. 5 there are 41 households who are rich.

Contrast to the situation of the other places in that community most janajatis are rich. Gurung, Magar of that area are seemed to be richer than Brahimin/Chhetris in the economic condition although there is lower representation of them in the executive committee. Theirs reluctance in doing the work of social welfare could be the reason of low representation of theirs in the committee. The dominance by

the Brahimin/Chhetris is not the reason of low participation as said by the member of user committes.

The number of household in different classes is presented in the following table.

S.N.	Name of the village	Number of households in different category			
		Rich/Well off	Medium	Poor	Ultra poor
1	Eklepakha	1	4	9	2
2	Milan chowk	3	3	2	7
3	Tallo tandi	9	8	11	18
4	Ganesh tole	15	9	6	1
5	Bhimsen tole	7	3	2	1
6	Ranipokhari	6	2	4	1
Total		41	29	34	30

Table 5 No. of households in different well being category.

The percentage of households in different well being ranking is presented in the following figure.

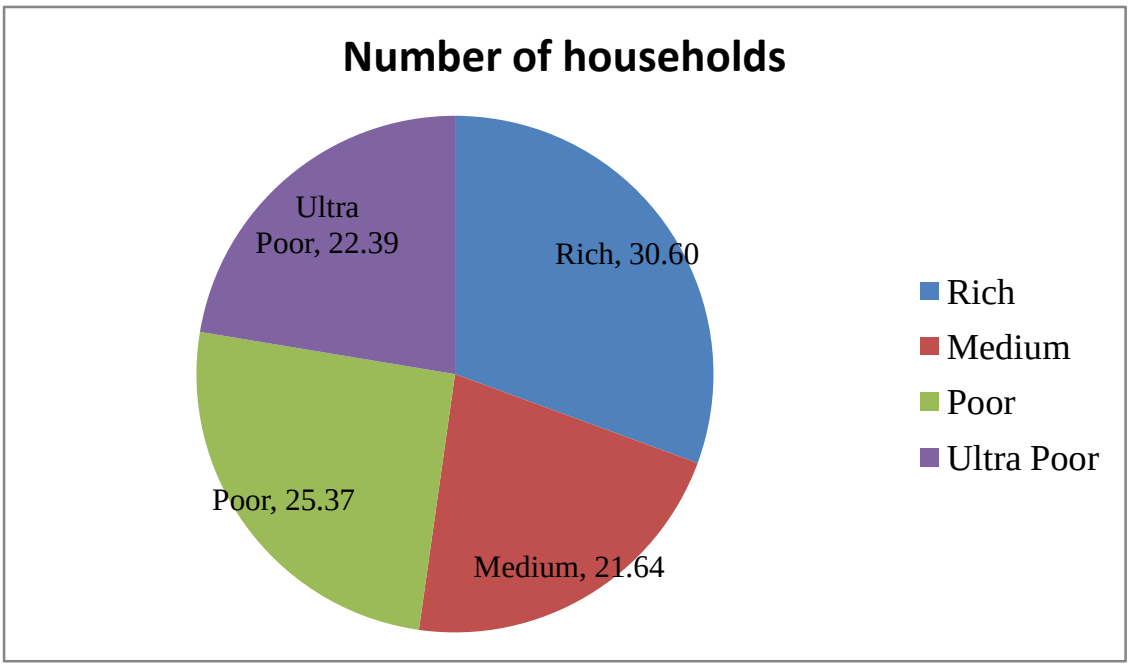

Fig. 4 Chart showing the percentage of households in different well being categories.

Dependency on forest resources

According to the OP there was average annual demand of 500 cft. of timber which the forest couldn't provide. Likewise there was demand of 5,500 bhari of fuelwood and 5066 kg. of leaf litter. Demand of the fodder was also high at that time as compared to the present condition. According to the OP there was demand of 40,000 bhari of fodder/grass. There was no provision of the grazing in the community forest area but some people were dependent on the forest for grazing theirs livestock.

Now there is variation in the demand of the forest products as compared to the demand condition at the OP. The average annual demand of the timber is 700 cft. and there is annual demand of 5,000 bhari of firewood for the CFUG members. According to the members there is lower demand of the fodder (35,000 bhari) than specified at OP. The lower number of livestock and the practice of farm forestry could the reason of lowering demand of the fodder from the forest. It is very good for the forest conservation as this lowers the dependency of users on the forest. Now the dependency of grazing on forest is also lower than the past.

People of lower economic class are mostly dependent groups. As they have low lands as compared to the people of higher class they depend on forest for fodder and firewood.

4.3 Governance situation

The grazing was completely prohibited in the forest according to the OP. Still there is no provision of grazing inside the forest area. Likewise the grazing the lopping is also prohibited in the forest. But sometimes contravene to the provision some people practice grazing and lopping inside the forest illegally. If user committee is informed of such illegal works, the committee charged to these persons who work in the contravention to the provision.

There is not a permanent forest watcher what most of the community forest user group of Nepal has. There is rotational system of forest watcher. Everyday a member of user watches the forest. There are 134 users. So there is repetition of forest watcher from the same household after 134 days. This system of forest watcher is good because it seems very effective to develop the ownership feeling of the user.

Decision making process

The agendas are usually set by the president and secretary. Although there is dominancy of female at the user committee, there is lower number of agendas raised by the female which are approved. But it is crucial that the number of agenda set by the female is more than agendas set by the male. Among 9 members in the committee there are 6 females with key posts president and vice president.

The meeting of the executive committee is held in the interval of 3 months in which agendas are set and approved. The general assembly of forest user group is held annually in which all users are participated. The agendas in the general assembly are decided through whole CFUG member.

Since the handing over of the forest no election has been held for the executive committee. The validity of the executive committee is 2 years. CFUG is less active in terms of effectiveness.

In conclusion, it can be said that there is still the dominancy of elites and the male in the decision making process. There is no procedural equity in community forest. The decision making process in this community forest is less democratic although they said all the users have the right to set the agendas. The dependency of poor to the rich and the dependency of female to the male could be the cause of the passive participation of poor and female in the meetings and the general assembly.

5. Future strategy for managing the forest in a sustainable way

Sustainable forest management is defined as “the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems.” (Ministerial Conference on the Protection of Forests in Europe MCPFE)

Now the sustainable forest management requires the economic, ecological and social well being at the present as well as in the future.

As there is a lot of lacking of this forest to be a sustainably managed forest a lot of things are required to improve forest to manage it in the sustainable way.

Some of the recommendations for managing the forest in a sustainable way are as follows;

- The OP of the forest user group should be timely revised.
- The plantation of suitable species should be done in the open area of the forest.
- Demand of the forest products should be assessed every year in order to know the amounts of forest products needed.
- The growing stock of the forest should also be assessed timely in order to know the annual allowable cut which to obtain sustain yield.
- There should be both procedural and distributional equity among the users group of the forest.
- Farm forestry should be encouraged among the user in order to reduce the dependency of user to the forest for their requirements by which the forest can grow at its best.
- The yield which the forest can yield in perpetuity should be calculated every year and that amount of forest product should be removed.
- The climbers should be removed timely from the forest as they are disturbing forest trees to grow.
- The NTFP farming should be done in the forest area to increase the income from the forest without degrading the potential production capacity of the forest.

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