

Progress Report on
Community Based Fire Management Initiatives
in the Hills of Nepal (CBFiM)



Fire line construction in Bharkhore Community Forest

October 2010
Kathmandu, Nepal

Abbreviation

CBFiM	Community Based Fire Management Initiatives in the Hills of Nepal
CF	Community Forest
CFUGs	Community Forest User Groups
DFRS	Department of Forest Research and Survey
DoF	Department of Forest
FECOFUN	Federations of Community Forest Users, Nepal
FOP	Forest Operational Plan
LFP	Livelihoods and Forestry Programme
MFSC	Ministry of Forest and Soil Conservation
VDC	Village Development Committee

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1 INTRODUCTION

1.1 Background

Forest fire is considered as one of the major causes of destruction and degradation of forest ecosystems. Recurrent uncontrolled forest fires have serious negative impacts on biodiversity, rural livelihoods and the natural environment including regional climate. Every year forest fires wipe out considerable forest resources in Nepal resulting in the loss of biodiversity and deterioration of forest condition. The analysis of satellite imagery of the last one decade shows that the fire incidences in Nepal are in increasing trend. A community based forest fire management project under RSG was implemented in the western Nepal. This report presents the initiatives taken by the project to forest fire management in Parbat district under Community Based Fire Management Initiatives in the Hills of Nepal (CBFiM).

1.2 Objective

The main objective of the CBFiM is to develop capability of community forest user groups and concerned agencies to cope with forest fire disaster.

1.3 Project theme

The CBFiM included four different components as Awareness Creation, Sustainable Forest Management intervention, Institutional networking and dissemination related components totaling to 24 different activities.

1.4 Project area

The project was designed for six Community Forest User Groups (CFUGs) of Siwalaya Village Development Committees (VDCs) of Parbat district. However, it was later implemented into 16 CFUGs of four VDCs in the district.

1.5 Project Partners

The activities were implemented with participation of local people and existing community forest user groups. A functional coordination and linkages among community forest users/networks, government institutions and local political units was established for implementing the project activities. The CBFiM was implemented in partnerships with the Federations of Community Forest Users, Nepal (FECOFUN) - a civil society organization. In addition, District Forest Office, Department of Forest Research and Survey, Livelihoods and Forestry Programme (LFP) contributed to the project implementation.

2. PROJECT IMPLEMENTATION

2.1 Awareness Creation

The startup workshop was organized in Kushma, the district headquarter, on 13th Mangsir 2066 (November 2009). The objective was to share stakeholders on the project objectives and plan the project activities and receive commitments for their involvement and contribution. The workshop was organized by DFO, FECOFUN and LFP, was moderated by Mr. Khem Nath Sharma, the then Chairperson of FECOFUN Parbat. Mr. KP Acharya (MFSC), Mr. KR Goutam (DFRS) and Mr. B. R. Subedi (DFO Parbat) facilitated the workshop on various issues related to forest fire. The list of participants in the workshop is given in Annex 1. The participants actively participated in the discussions and formulated an action plan to implement the project activities.

2.2 Fire management training

A two-days long sustainable forest management combined with fire management training was organized during 17-18 December, 2009. The concept of forest management and fire management was facilitated in the classroom session while fire management practices including controlled burning was demonstrated in Bhadkhore community forest. The objective of SFM training was to motivate users in implementing active forest means which contributes in mitigating incidents of wild fires. Mr. Kiran Timilsina and Mr. Bodh Raj Subedi, DFO, facilitated the training. Altogether 26 forest users (13 male and 13 female) participated in the training (Annex 2).

2.3 Review and amendments of forest operational plans

The existing provisions in the operational plan of the targeted community forests were limited in addressing forest fire problems. This is mainly due to lack of awareness and technical knowhow about the remedial measures to control forest fires. A participatory assessment of forest fire impacts in the CFUGs followed by their existing provisions guided to include key fire management activities in their Forest Operational (FOP) and make necessary amendments to effectively carry out the activities to address the problem of forest fire. For example, making fire-lines could not be possible unless it was incorporated in the FOPs which has five years' term.

The participatory assessment included discussion on the fire trends, fuel types, seasons, duration, and frequency. The users listed various social, economical and environmental impacts of forest fires on this forests followed by the evaluation of existing forest fire management practices. The discussion also identified different fire management planning elements such as preventive and remedial measures.

The key elements included in revised FOPs were awareness creating (Poster, FM media uses, Hoarding board, leaflets and brochures), provisions of fire line construction, user groups level networking and effective forest management. The project implementing team work closely with the DFO, LFP and FECOFUN for assessing the impacts, reviewing and amending the FOPs.

2.4 Distribution of firefighting equipment



An intervention was made to improve and develop local fire fighting instruments. As traditionally, the people have been involved in fighting forest fires using water, mud and green branches of trees and shrubs. They were not very effective in many instances. Considering users' need of advanced fire fighting equipment, the project had decided to modify and distribute these equipments. Some of the equipment have already been distributed while some others are in the process of purchase. Knowhow on use of these equipments was given during the fire management training.

2.5 Fire-line construction

Construction of fire-lines is one of the major project activities for managing forest fire. 16 CFUGs in four VDCs had planned to construct fire-lines in their forests. 12 CFUGs have constructed fire-lines of a total length of 22.5 km. Fire-lines have mostly been constructed along the contour in the slope. As far as possible, the fire-lines have followed borderline between two community forests. Length of fire-lines constructed by each CFUG and the cost in terms of labour days are given in Annex 3. Each of the member households of the CFUGs participated in the construction of fire-lines.



Fig 1. Fireline in Bhadkhore CF

2.6 CFUG networking

Many community forests in the project area are bordered with each other. Fire in a community forest may easily spread over others. Moreover, fighting wild fires requires a lot of human resources. Therefore communication and cooperation among CFUGs is important in forest fire management. For this purpose, a network of 16 CFUGs has been formed. Until now, the network organized five meetings and discussed about how to communicate and cooperate in case of fire in their forests. They also shared their experiences with each other. The users said that due to networking they are aware of forest fire and are inspired for constructing firelines, making hoarding boards and learning fire fighting techniques. The demonstration effect of different fire management activities in the CFUGs within network has inspired other CFUGs in the district for fire management initiatives.

Table 1. Members of CFUG network for fire management

SN	Name of CFUG	Address
1	Aahaldanda	Chuwa-3
2	Bhadkhore	Shiwalaya-1
3	Dhaireni Salghari	Chuwa-8,9
4	Gajaute	Shiwalaya-2,3
5	Galchina	Bachha-2,3,4,5,6,7,8,9

6	Gupteshwor	Shiwalaya-6,7
7	Jhakrisalla	Durlung-4
8	Kali Gandaki	Shiwalaya -8
9	Khoria pakha	Shiwalaya-8
10	Laharepani Ratamata	Chuwa-1,2
11	Nagebagar	Chuwa-7
12	Salleri	Durlung-5
13	Sheradalit	Chuwa-8
14	Sundare Pakha	Chuwa-4
15	Tarebhir	Durlung-6,8,9
16	Thado Pakha	Chuwa-5

2.7 Communication and extension

Besides formal meetings and training, the network has decided to prepare extension materials for wider sharing. Hoarding boards have been installed in ten places, one each in ten CFUGs. They are raised mainly at the entry point to the forests where most of the people could see it. In the board, particularly the messages on how to reduce fire hazards have been written. Similarly, publishing brochures and posters are in process. The project broadcasted awareness related information during fire season in local language through radio programme in a local FM radio. Extension programme through school children and teachers has also been planned.

2.8 Monitoring and evaluation



The net working group of CFUG network is monitoring project activities regularly. Besides, project implementing team in collaboration with the DFO, and FECOFUN Parbat are also monitoring the progress of the project. An evaluation workshop will be organized once the project is terminated, and based on the realized effectiveness of the project, it will be scaled up in the district and region.

Fig 3. Hoarding board in Bhadkhore CF

3. LESSONS LEARNT

Very limited initiatives have been taken for forest fire management in Nepal. This is a community based fire management project which was designed in such a way that the community forest user groups effectively participate in and own the activities regarding forest fire management. The lessons learnt from this initiative can be listed as follows:

- ❖ A CFUG is an appropriate unit for forest fire management combined with local level networking.
- ❖ Community based fire management activities are influential at CFUGs. It has already shown tremendous scaling up effect in adopting various fire management activities in neighboring CFUGs.
- ❖ Local equipments and methods of fire suppression are insufficient for forest fire management/control. Therefore the users would be benefited from modified equipment and techniques combined with technical knowhow.
- ❖ Communication and cooperation is very important in fire management, particularly for fire suppression or control. It is therefore important to prepare communication and cooperation strategy by each CFUG
- ❖ Fire management should be an inherent and important part of community forest operational plan
- ❖ A small support in terms of equipment and skills to the community could produce a very good result in forest fire management.
- ❖ The firelines constructed to separate boundaries between the CFUGs also contributed in reducing boundary disputes between the CFUGs. In addition, provided significant quantity of forest products for immediate needs of the local people.
- ❖ The capability of community forest user groups and concerned agencies to cope with forest fire disaster has increased.

Finally, the project promoted effective multi-stakeholders approach on fire management at community level. This year, there was no fire incidence in these CFUGs. The present project may have contributed for his outcome. It is expected that, the project was able to inbuilt activities within the regular planning process of the CFUGs, the activities will be sustained by the CFUGs and approach will be taken up by the government and other agencies to further develop community based fire management.

Annex 1. List of participants in the Project Inception Workshop

SN	Name	Position	Organization
1	Mr. Bhim Prasad Shrestha	Secretary	Badagaunchaur CFUG
2	Ms. Man Kumari Giri	Vice Chairperson	Badagaunchaur CFUG
3	Mr. Pradip Paudel	Member	Bhadkhore CFUG
4	Mr. Ganesh Giri	Chairperson	Bhadkhore CFUG
5	Mr. Devraj Puri	Ex-Secretary	Bhadkhore CFUG
6	Mr. Bodh Raj Subedi	DFO	DFO, Parbat
7	Mr. Keshab Goutam	Asst. Research Officer	DFRS
8	Mr. Khem Nath Sharma	Chairperson	FECOFUN, Parbat
9	Mr. Bhagawan Puri	Chairperson	Gajaute CFUG
10	Ms. Dil Maya Puri	Member	Gajaute CFUG
11	Mr. Somat Adhikari	Treasurer	Gajaute CFUG
12	Mr. Narayan Prasad Joshi	Chairperson	Gupteshwor CFUG
13	Mr. Hari Narayan Upadhyaya	Secretary	Gupteshwor CFUG
14	Mr. Tek Narayan Shrestha	Chairperson	Kaligandaki CFUG
15	Mr. Rajendra Roka	Secretary	Kaligandaki CFUG
16	Ms. Mina Karmacharya	Treasurer	Kaligandaki CFUG
17	Ms. Sharmila Acharya	Treasurer	Khoria CFUG
18	Ms. Lalita Chapagain	Joint Secretary	Khoria CFUG
19	Ms. Uma Kumal	Chairperson	Khoria CFUG
20	Ms. Ganga Maya Neupane	Programme Officer	LFP, Baglung
21	Mr. Krishna Prasad Acharya	Joint Secretary	MFSC
22	Mr. Raj Kumar Timalena	Seedling trader	Pokhara-16

Annex 2. List of participants in Fire Management Training/Workshop

SN	Name	Position	Organization
1	Mr. Pradip Paudel	Member	Bhadkhore CFUG
2	Mr. Ganesh Giri	Chairperson	Bhadkhore CFUG
3	Mr. Ramkrishna Giri	Member	Bhadkhore CFUG
4	Mr. Khem Nath Sharma	Chairperson	FECOFUN, Parbat
5	Mr. Somat Adhikari	Member	FECOFUN, Parbat
6	Mr. Kiran Timilsina	Facilitator	Freelancer
7	Mr. Krishna Basyal	Member	Gajaute CFUG
8	Mr. Bhagawan Puri	Chairperson	Gajaute CFUG
9	Mr. Suresh Basyal	Member	Gajaute CFUG
10	Ms. Maya Nepali	Member	Gajaute CFUG
11	Mr. Narayan Prasad Joshi	Chairperson	Gupteshwor CFUG
12	Mr. Hari Narayan Upadhyaya	Secretary	Gupteshwor CFUG
13	Mr. Ramu Acharya	Member	Gupteshwor CFUG
14	Ms. Dil Kumari Paudel	Member	Gupteshwor CFUG
15	Mr. Sur Bahadur Chhetri	Chairperson	Jhakrisalla CFUG
16	Ms. Tikadevi Paudel	Member	Jhakrisalla CFUG
17	Ms. Radha Devi Paudel	Member	Jhakrisalla CFUG
18	Ms. Mina Karmacharya	Treasurer	Kaligandaki CFUG
19	Mr. Tek Narayan Shrestha	Chairperson	Kaligandaki CFUG
20	Ms. Gita Chapagain	Member	Kaligandaki CFUG
21	Ms. Sharmila Acharya	Treasurer	Khoria CFUG
22	Ms. Uma Kumal	Chairperson	Khoria CFUG
23	Ms. Amrita Khatri	Member	Khoria CFUG
24	Ms. Brinda GC	Member	Laharepani Ratamata CFUG
25	Ms. Durga Subedi	Member	Laharepani Ratamata CFUG
26	Ms. Lila Paudel	Member	Laharepani Ratamata CFUG
27	Ms. Tuku KC	Member	Dhaireni Salghari CFUG

Annex 3. A general description of fireline construction in the CFUGs

SN	Name of CFUG	Length of fireline (km)	Number of users involved		
			Female	Male	Total
1	Ahaldanda	1.5	100	100	200
2	Bhadkhore	3.0	204	185	389
3	Gajaute	1.0	105	90	195
4	Galchhina	3.0	200	250	450
5	Gupteshwor	2.0	75	140	215
6	Jhakrisalla	3.0	250	175	425
7	Kaligandaki	2.0	100	120	220
8	Laharepipal	1.0	90	110	200
9	Nagebagar	1.0	100	105	205
10	Salghari	2.0	115	100	215
11	Salleri	1.5	110	110	220
12	Sundarepakha	1.5	100	110	210