

**A Comprehensive Report**  
**On**  
**Demonstration Sites**

May, 2013

**Demonstration of Sustainable Forest Management with Community Participation in Nepal**

**Federation of Community Forestry Users Nepal (FECOFUN)**



## Executive summary

The project selected six CFUGs for the demonstration purpose covering an area of 673.21 ha. Of which the selected CF are (**Thuli CF- Panchkhal, Kavre, Taudolchhap CF- Sipadol, Bhaktapur, Bosan CF- Chalnakhel, Kathmandu, Sundar CF- Pathari, Morang, Hariyali CF-Dharan, Sunsari and Hasposa CF- Sunsari**) representing the different geographical and ecological variations within the country. All the demonstration sites for sustainable forest management are managed by the community users under the scheme of community forestry in which users are allowed to conserve, protect and utilize the forest resources as per the forest operational plan prepared by them under the technical assistance from the district forest office. Out of the six community forest demonstration sites 3 in the teari belt of Nepal representing tropical climate with main tree species of *Shorea robusta*, *Dalbergia sisoo*, *Tectona grandis*, *Terminalia tomentosa*, *Syzygium cumini*, *Bamboos spp.* Etc and three of them are in mid hills of Nepal representing subtropical and temperate climate of Nepal with main tree species of *Castanopsis indica*, *Lagerstroemia parviflora*, *Madhuca indica*, *Schima wallichii* and *Pinus roxburghi*, etc. The major thrust of this activity was to establish the piloting sites for demonstration of multi-functional utilization of forest resources and practice forest management activities in line with principle of SFM.

Biodiversity of all six demonstration sites CFUGs was documented and registered with participation of forest users through transect walk, inventory sheet and key informants survey. Fire line in different community forests 3 km in Bosan CF, 1.5 km in Sundar CF, 1 km forest path in Taudalchhap CF, 12 km in Hariyali CF 2 km in Hansposa CF, and 2 km forest path in Thuli CF have been constructed to reduce the risk of forest fire and to mitigate its associated effects. In addition plantation was also done in degraded and ravine areas of other demo sites. Silvicultural operations like cleaning, pruning, singling, thinning, and weeding were done in all the demo sites according to the prescription made by forest resource inventory and biodiversity assessment in the respective CF where 3 ha weeding in Sundar CF, 1.5 ha pruning in Hariyali CF, 1 ha singling/coppicing in Hansposa CF, 5 ha thinning / Pruning in Taudalchhap CF, 8 ha thinning/ Pruning in Thuli CF and 10 ha thinning, pruning and weeding in Bosan CFUG was also done.

Capacity building regarding sustainable forest management, good governance and enterprises development has been done in the CFUGs. CFUGs in demo sites developed a long term strategic plan for CF management, which was prepared in participatory approach.

**Abbreviation**

APFNet	Asia Pacific Network for Sustainable Forest Management and Rehabilitation
CBFEs	Community Based Forest Enterprises
CF	Community Forestry
CFUGs	Community forestry users groups
CPMU	Central Level Project Management Unit
DDC	District Development Committee
DFO	District Forest Office
DoF	Department of Forest
FECOFUN	Federation of Community Forestry Users Nepal
FOP	Forest Operational Plan
GG	Good Governance
GoN	Government of Nepal
LRP	Local Resource Person
NGO	Non-Government Organization
NTFPs	Non-Timber Forest Products
PGA	Participatory Governance Assessment
PHPA	Public Hearing and Public Auditing
SFM	Sustainable Forest Management
VDC	Village Development committee

## Contents

1. Back ground.....	1
2. Introduction.....	2
3. Site selection Criteria.....	2
4. Introduction on demonstration sites.....	3
I. Boson CFUG, Chalnakhel Kathmandu.....	3
II. Taudolchhap CFUG, Sipadol Bhaktapur.....	3
III. Thuli CFUG, Panchkhaal Kavre .....	4
IV. Hariyali CFUG, Dharan Sunsari.....	4
V. Sundar CFUG, Pathari Morang.....	4
VI. Hasposa CFUG, Sunsari .....	5
5. Project Intervention.....	5
6. Project Activities & Outcomes .....	5
7.Overall outcomes of the demo site Activities .... ..	8
9. Key Lessons .....	8
10. Conclusions.....	9
Annex-1: Photo plates: Glimpses of project activities .....	10
Annex-2: PIMS .....	16

## **1. Back ground**

Nepal is one of the richest countries in terms of biological diversity despite covering only 0.01 percent of the earth's land area. It has recognized 75 different vegetation types so far, ranging from dense tropical forest to alpine scrub. The diverse ecosystem of Nepal provides a rich resource base of Non-timber forest products and is home to 2.6 percent of all flowering plants, 9.3 percent of birds and 4.5 percent of mammals inhabiting in our planet. With this incredible richness of different flora and fauna, we have high opportunity to conserve and maintain different types of biological diversity and its components in comparison to other countries of the globe. Significant area of national forest is currently managed by community under the concept of community forestry.

In recent years, Nepal has become renowned through the example of community forestry. CFUGS and CF process is remarkably successful in terms of resource conservation, management and utilization. It has established itself as a successful model to regenerate and restore natural resource base that could be replicated effectively. There are more than 18000 CFUGs in the country reaching out to over 40% of the population of the country. The emergence of federation of community forestry users Nepal in 1995 led the foundation in networking these community forest users groups and brought them together under one umbrella to secure their rights towards forestry guiding them towards better livelihood by facilitating to help themselves. By now, it has established itself as the largest civil society organization working on natural resource management. This network has been conducting various user friendly programs and activities particularly targeted to support the rural poor and forest dependent people. However, CF development has yet to be scale up and build on lessons learned in many areas such as enterprise development, sustainable management of forest resources and governance within the CF process and poverty reduction.

## 2. Introduction

The project **Demonstration of Sustainable Forest Management with Community Participation in Nepal** was initiated to promote participatory sustainable forest management with good governance practices and enhance the livelihood of forest dependent people by establishing forest based enterprises form locally available forest resources as well as to develop local human resources capable of facilitating on the process. This project is funded by **Asia Pacific Network for Sustainable Forest Management and Rehabilitation (APFNet)** in Nepal that was jointly launched by FECOFUN and APFNet through inception workshop in Kathmandu on 1<sup>st</sup> November 2010.

Since the conception of community forestry, the local and indigenous people have mostly been involved in forest management and conservation with only a little support to their livelihoods. Forest management is still not production oriented and reaping benefits by optimal utilization of forest resources is not yet practiced in community level. The community forest managers have inadequate knowledge regarding transformation of ecological resources into economic resources. Taking into consideration the above gap, FECOFUN joined hands with APFNet to promote participatory sustainable forest management to improve the livelihood of forest dependent especially poor people. The main objective of this project is to develop community forestry as the demo site for sustainable forest management while also focusing on economic activities. The 6 CFUGs were selected for the demonstration site programs which are as following:

1. Thuli CFUG, Panchkhaal, Kavre
2. Taudolchhap CFUG, Sipadol ,Bhaktapur
3. Boson CFUG, Chalnakhel, Kathmandu
4. Sundar CFUG, Pathari. Morang
5. Hariyali CFUG, Dharan, Sunsari
6. Hasposa CFUG, Sunsari

## 3. Demonstration Site selection Criteria

To select the demonstration sites, various level of consultation was done with different stakeholders. The consultation identified various criteria to select the demo sites. The glimpse of these criteria is shown below:

- Legally handed over to Community
- Member CFUG of FECOFUN
- Transportation and communication facility for observation tours
- CFUG with ethnic diversity
- CFUG capable of coordination with other stakeholders
- Potentiality of ecotourism and enterprise for long term sustainability
- CFUG having reliable means of sustainable forest management criteria
- Good governance in CFUG
- Inclusion of women and indigenous people in executive committee of CFUG
- Active participation of users in forest management
- CFUG holding regular general assembly and meeting

#### 4. Introduction on demonstration sites

All together 6 CFUGs were selected to develop as demonstration site of sustainable forest management in consultation with respective FECOFUN district chapters and District Forest Offices. Criteria were developed to select the sites for effectiveness. The 6 CFUGs are:

##### I. Bosan CFUG, Chalnakhel Kathmandu

Bosan CF		
1.	Forest type	Natural
2	Total area (ha.)	137.8
3	Total house hold	247
4	Structure of user group committee	11 ( male-, female- )
5	Handed-over date	2051 (B.S.)
6	Main Species	<i>Juglanus regia</i> , <i>Schima wallichii</i> , <i>Rhododendron arboretum</i> , <i>Pinus roxburghii</i> , <i>Alnus nepalensis</i> etc.

##### II. Taudolchhap CFUG, Sipadol Bhaktapur

Taudolchhap CF		
1.	Forest type	Natural
2	Total area	31.09 ha
3	Total house hold	195
4	Structure of users group committee	11 (Male- 4 , Female- 7)
5	Handed-over date	2054 B.S.
6	Main Species	<i>Pinus roxburghii</i> , <i>Schima wallichi</i> , <i>Castanospis indica</i> , <i>Madhuca indica</i> , <i>Alnus nepalensis</i> , <i>Bambusa spp</i> s, <i>Cinnamomum camphora</i> . etc

### III. Thuli CFUG, Panchkhaal Kavre

Thuli CF		
1	Forest type	Natural/Plantation
2	Total area (ha.)	63.21 ha
3	Total house hold	507
4	Structure of user group committee	11 ( male-0, female-11 )
5	Handed-over date	2049 B.S.
6	Main Species	<i>Castanospis indica</i> , <i>Lagerstroemia parviflora</i> , <i>Madhuca indic</i> ), <i>Schima wallichii</i> , <i>Pinus roxburghii</i> , etc

### IV. Hariyali CFUG, Dharan Sunsari

Hariyali CF		
1.	Forest type	Natural
2	Total area (ha.)	197.38
3	Total house hold	566
4	Structure of user group committee	15 ( male-8, female-7 )
5	Handed-over date	2006 (A.D.)
6	Amendment/renewal	Awaiting
7	Main Species	<i>Shorea robusta</i> , <i>Terminalia</i> spps. <i>Syzygium cumini</i> etc.

### V. Sundar CFUG, Pathari Morang

Sundar CF		
S.N	Statements	
1.	Forest type	Natural
2	Total area	85 ha
3	Total house hold	173
4	Structure of user group committee	11 ( Male-6, Female-5 )
5	Handed-over date	1998 (A.D.)
7	Main Species	<i>Shorea robusta</i> , <i>Dalbergia sisoo</i> , <i>Tectona grandis</i> <i>Terminalia tomentosa</i> <i>Syzygium cumini</i> , <i>Bamboos</i> spps. etc



## VI. Hasposa CFUG, Sunsari

Hansposa CF		
1.	Forest type	Natural
2	Total area (ha.)	198.11
3	Total house hold	2310
4	Structure of user group committee	33 ( male-21, female-12 )
5	Handed-over date	2006 (A.D.)
6	Main Species	<i>Shorea robusta</i> , <i>Terminalia</i> spps. <i>Syzigium cumini</i> , <i>Tectona grandis</i> , <i>Cymbopogon flexuosus</i> , <i>Ocimum basilicum</i> etc.

### 5. Project Intervention

Since project's inception in November 2010, various activities at regional, district and community have been completed. The project has successfully built a common understanding on sustainable forest management through various workshops at regional and district levels. It has promoted good governance practices through participatory governance assessment (PGA) and public hearing and public auditing (PHPA) at community level. Coupled with this, project is moving ahead with establishment of forest based micro-enterprises. The project has strengthened the coordination among the different line agencies like DFO, NGOs and local level organizations by promoting the working through consultation with relevant stakeholders. As per the objective of the project to establish the demonstration sites for the sustainable forest management, various activities have been completed with their targeted outcomes. The different activities which have been conducted since the implementation phase are described below with major outcomes.

### 6. Project Activities & Outcomes

The different activities conducted in this CFUG as per the MOU signed between FECOFUN and CFUG are described below with their major outcomes:

	Major Activities	Major Outcomes
Bosan CFUG	<p>Revised Innovative operational plan and constitution to consider SFM Criteria / Indicators and carried out different activities :</p> <ol style="list-style-type: none"> <li>Fodder grass plantation (Stylo and Naiper ),Lapsi (<i>Choerospondias axillaris</i>) plantation</li> <li>Silvicultural activities ( cleaning, pruning, singling, thinning, weeding)</li> <li>Forest management training, Fire management training, Forest enterprise development training and workshops</li> <li>Public hearing and participatory governance assessment</li> <li>Soil conservation activities with plantation</li> <li>Block management ( 9 Blocks)</li> <li>Good governance practice and assessment</li> <li>Biodiversity monitoring and registration</li> <li>Forest fire control and fire line construction</li> <li>Training on multifunctional utilization of forest and alternative energy</li> </ol>	<ul style="list-style-type: none"> <li>Revised Innovative operational plan and constitution to consider SFM Criteria / Indicators and carried out different activities</li> <li>Established Bio briquette enterprise for green job creation</li> <li>Protection conserve the forest with different level of operation</li> <li>Develop ecotourism sites</li> </ul>
Taudolchhap CFUG	<p>Revised Innovative operational plan and constitution to consider SFM Criteria / Indicators and carried out different activities :</p> <ol style="list-style-type: none"> <li>Good governance practice and assessment</li> <li>Silvicultural activities ( cleaning, pruning, singling, thinning, weeding ,biodiversity monitoring and registration)</li> <li>Forest fire control and fire line construction</li> <li>Training on multifunctional utilization of forest and alternative energy</li> <li>Plantation activities and Water and soil conservation</li> </ol>	<ul style="list-style-type: none"> <li>Forest greenery restoration,</li> <li>Developing ecotourism</li> <li>Protect forest from fire and illegal cutting</li> </ul> <p><b>Further Plan:</b></p> <ul style="list-style-type: none"> <li>Hiking route, view tower Children Park and picnic spot development.</li> </ul>
Thuli CFUG	<p>Revised Innovative operational plan and constitution to consider SFM Criteria / Indicators and carried out different activities :</p> <ol style="list-style-type: none"> <li>Good governance practice and assessment</li> <li>Sustainable forest management and silviculture activities ( thinning, pruning and clearing of forest )</li> <li>Biodiversity monitoring and registration</li> <li>Block management</li> <li>Forest fire control and fire line construction</li> <li>Training on multifunctional utilization of forest and alternative energy</li> <li>Plantation activities</li> </ol>	<p><b>Achievements:</b></p> <ul style="list-style-type: none"> <li>Revised Innovative operational plan and constitution to consider SFM Criteria / Indicators and carried out different activities</li> <li>Protection conserve the forest with different level of operation</li> <li>Develop ecotourism sites</li> <li>No illegal felling and cutting in the CF area/greenery restoration</li> <li>Women leadership.</li> </ul>

	<b>Pro-poor activities :</b> <ol style="list-style-type: none"> <li>Scholarship distribution to poor students</li> <li>Provide money for treatment to poor users.</li> <li>Support in village trail and road, irrigation canal construction.</li> <li>Providing fund to poor users to improve livelihood like animal husbandry, vegetable cultivation and other small business.</li> </ol>	<b>Further plan:</b> <ul style="list-style-type: none"> <li>Historical monuments renovation.</li> <li>Change into broad leaved forest.</li> <li>Recreational Park and observation area.</li> <li>Separate block of Camphor and Ginkgo biloba; a rare species for demonstration site.</li> </ul>
Hariyali CFUG	Revised Innovative operational plan and constitution to consider SFM Criteria / Indicators and carried out different activities : <ol style="list-style-type: none"> <li>Good governance practice and assessment</li> <li>Silvicultural activities ( cleaning, pruning, singling, thinning, weeding ,biodiversity monitoring and registration)</li> <li>Forest fire management and fire line construction</li> <li>Training on multifunctional utilization of forest and alternative energy</li> <li>Plantation activities</li> <li>Developed strategy plan for 5 years which has been focused on Eco-Tourism.</li> <li>Management/Conservation of Sati Sal Research block,. developed Demonstration of Resource Center,</li> <li>Manage fire control equipment and forest management Tools is the best practices carried over in this CFUGs.</li> </ol>	<ul style="list-style-type: none"> <li>Revised Innovative operational plan and constitution to consider SFM Criteria / Indicators and carried out different activities</li> <li>Eco-Tourism for green job creation</li> <li>Protection conserve the forest with different level of operation</li> </ul>
Sundar CFUG	Revised Innovative operational plan and constitution to consider SFM Criteria / Indicators and carried out different activities : <ol style="list-style-type: none"> <li><b>Plantation/ Silvicultural Operation:</b> Planted different plant species in the bank of river and waste land every year. Silvicultural operation in the forest blocks every years</li> <li><b>Nursery establish and operation:</b> Seedling production and distribution and sources of income .</li> <li><b>Biodiversity Registration and Conservation:</b> The users have identified 62 species of plants, 49 species of animals and 36 species of birds in CF and they are documented.</li> <li><b>Forest based Enterprise:</b> Bamboo handing craft making and established enterprise.</li> <li><b>Fire control and forest management</b> Tools managed</li> </ol>	<ul style="list-style-type: none"> <li>Revised Innovative operational plan and constitution to consider SFM Criteria / Indicators and carried out different activities</li> <li>Established bamboo crafting enterprise and green job creation</li> <li>Protection and conserve the forest and wildlife</li> <li>Develop ecotourism sites</li> <li>Increased greenery</li> <li>Good block management.</li> <li>Nursery establishment with the capacity of 1 lakhs plants production annually.</li> </ul>

Hasposa CF	<p>Revised Innovative operational plan and constitution to consider SFM Criteria / Indicators and carried out different activities :</p> <ol style="list-style-type: none"> <li>Forest is managed with Block management system</li> <li>Forest fire (2 km long ) construction and fire protection unit</li> <li>Training on multifunctional utilization of forest and alternative energy</li> <li>Silvicultural activities ( cleaning, pruning, singling, thinning, weeding ,biodiversity monitoring and registration)</li> <li>Plantation of different valuable forest species.</li> <li>Cultivation and processing of medicinal and aromatic plants.</li> </ol>	<ul style="list-style-type: none"> <li>Revised Innovative operational plan and constitution to consider SFM Criteria / Indicators and carried out different activities</li> <li>Protection conserve the forest with different level of operation</li> <li>Cultivation of medicinal and aromatic plan (20 ha.)</li> <li>Increased greenery</li> </ul>
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## 7. Overall outcomes of the demonstration site activities

- Conceptualization on Sustainable forest management
- Strategic plan preparation (Community forest management )
- Innovative OP preparation ( Inclusion of SFM principles, criteria and indicators )
- Enterprise establishment in CFUGs.
- Biodiversity monitoring and registration
- Fire line and forest path construction.
- Plantation in bare land of CF.
- Community resource center establishment
- User mobilization in sustainable forest management activities
- Higher degree of coordination among the different stakeholders
- Higher degree of women participation
- Improved level of forest governance ( economic and social)
- IEC materials like brochures, flex prints and hoarding boards preparation in CFUGs.

## 8. Challenges

*The major challenges occurred during the implementation of activities are*

- Improper coordination among different stakeholders
- Conservation oriented users, hard to practice SFM activities
- Conceptualization of SFM through economic, environmental and social perspective to forest users.
- Maintaining community level governance at desired level
- Continuity of demonstration site upon phasing of the project
- High expectations of community towards financial resource from the project

## 9. Key Lessons

*The major lessons learned are as follows*

- Coordination and collaboration with multi-stakeholders result in synergetic relationship
- Periodic monitoring necessary to maintain good governance at community level
- Establishment of enterprises is a long term process
- Conservation mindset must be washed out to accelerate the process.
- Regular backstopping is needed
- Technical intervention is foremost in the process

## 10. Conclusion

As per the project objective to develop this CFUG as the demonstration site of sustainable forest management, it has been developed as the demo site utilizing the guidelines prepared by the project. Different listed activities are conducted in time with the active participation of users. An improved level of forest governance and productive forest management mindset can be overview in the CFUG. As this is the new concept in Nepal we can draw out different positive results from this activity. If we can replicate this type of activities all over the country with multi stakeholder approach, we surely can manage our CF in sustainable way which helps to improve the forest governance, forest health and vitality as well as the economic status of forest dependent people.

## Annex-1: Photo plates: Glimpses of project activities in demonstration site



Fig: 1 Planning meeting of demo site, Thuli CFUG



Fig: 2 Discussion for program, Thuli CFUG



Fig: 3 Operational Plan and Constitution Awareness



Fig: 4 Group Discussion during the Training



Fig: 5 Exposure Visit Meeting, Boson CFUG



Fig: 6 Plantation inside the Forest, Thuli CFUG





Fig: 7 Block Management, Boson CFUG  
Sundar CFUG



Fig: 8 Fencing the Plantation Area,



Fig: 9 Silvicultural Operations inside the Forest



Fig: 10 fire line Cleaning, Boson CFUG



Fig: 11 Fire Line Cleaning, Taudolchap CFUG



Fig: 12 Fire Line Cleaning, Sundar CFUG





Fig: 13 Field Practice of FM Training, Thuli CFUG  
Boson CFUG



Fig: 14 Field Practice of FM Training,



Fig: 15 Fire Line Preparation, Taudolchhap CFUG



Fig: 16 Fire Line Preparation, Boson CFUG



Fig: 17 Fire Line under Preparation, Boson CFUG  
CFUG



Fig: 18 Planting around Wetlands, Sundar





Fig: 19 Forest Management Activities



Fig: 20 Forest Management Training



Fig: 21 Forest Management Activities



Fig: 22 Forest Nursery, Sundar CFUG



Fig: 23 Forest Visit by Project Team and Forest Engineer CFUG



Fig: 24 Grafted Lapsi Plantation, Boson





Fig: 25 Grass Harvesting, Boson CFUG CFUG



Fig: 26 Fodder Grass Plantation Area, Boson



Fig: 27 Tree Tagging



Fig: 28 Tree Tagging



Fig: 29 Community Resource Center, Boson CFUG CFUG



Fig: 30 Community Resource Center, Hariyali





Fig: 31 Community Office, Sundar CFUG



Fig: 32 Community Resources Center, Sundar CFUG



Fig: 33 Fire Control Equipment Demonstrations  
Hariyali CFUG



Fig: 34 Fire Control Equipment Demonstration,  
Sundar CFUG

## Annex-2: PIMS

Demo site CFUGs	Female	Male	Total
Bosan	286	300	586
Taudolchhap	114	264	378
Thuli	271	205	476
Hariyali	271	205	476
Sundar	86	91	177
Hasposa	113	204	317
<b>Total</b>	<b>1090</b>	<b>1332</b>	<b>2422</b>