



Report on Assessment for Developing Bu Nor Community Forest Enterprise (CFE)

Assoc.Prof.Dr. Bao Huy, FREM

March 20th 2017

Contents

1	Background	3
2	Approach, methods of the study	3
3	Results and Discussion	5
3.1	Assessment of current Bu Nor Community Forest Management (CFM)	5
3.1.1	General Information of Bu Nor Village – A Community Forest Management (CFM)	5
3.1.2	Baseline information on Bu Nor Community Forest Management (CFM)	9
3.1.3	Assessment of current forest management, silviculture applied and logging impacts on forest environment	12
3.1.4	Current round wood value chain	15
3.1.5	Current financial mechanisms and credit access	16
3.2	Assessment of opportunities for developing Bu Nor Community Forest Enterprise (CFE)	17
3.2.1	Assessment of value chain enhancement opportunities with reference to market demand	17
3.2.2	Definition of required investments for increased value-added at community level, and to meet key market development goals	18
3.2.3	Identification of financial mechanisms with potential to develop to channel credits for CFE investments.....	19
3.3	Vision and strategy to develop Bu Nor CFE	20
3.3.1	Vision and objectives to develop Bu Nor CFE	20
3.3.2	Create Forestry Cooperative for Community Forest Management at Bu Nor Village.....	21
3.3.3	Action plan of Bu Nor CFE for the next 5 years.....	22
3.3.4	Training Need Assessment (TNA) and training plan for developing Bu Nor Forestry Cooperative.....	25
4	Conclusion and Recommendations.....	26
	Annex: List of participants involved into this study.....	27

1 Background

In close collaboration with Rainforest Alliance (RA), Consultancy Group for Forest Resource and Environment Management (FREM), Tay Nguyen University, Viet Nam has been providing support Bu Nor Village to assess the potentials for developing Community Forest Enterprise. The mission has been done in three key areas: (1) forest management rapid assessment, (2) markets and finance alternatives, and (3) elaboration of a baseline diagnostic for CFE development and monitoring.

The Consultant has coordinated such activities as agreed in work plans and provide the necessary technical inputs to ensure successful implementation of specific tasks and completion of assessment for developing Community Forrest Enterprise at Bu Nor Village.

In carrying work forward, FREM liaises with the Bu Nor Community Forest Management Board (CFMB), the Quang Tam Commune People's Committee, the Tuy Duc District People's Committee, the Dak Nong Provincial People's Committee and central Government of Vietnam agencies as required, and assists efforts to build effective working relations with other non-government organizations, private sector collaborators, financial institutions and potential donors.

This study has carried out main activities as follows:

- i. Adaptation of RA CFE development tools and translation to Vietnamese
- ii. Collection of baseline information (primarily from existing data, but with some primary information gathering required)
- iii. Analysis of forest management, silvicultural and harvesting approach, and identification of gaps for improvement through technical assistance and investment
- iv. Assessment of value chain enhancement opportunities for a select set of identified species, with reference to market demand
- v. Definition of required investments for increased value-added at community level, and to meet key market development goals
- vi. Identification of financial mechanisms with potential to develop to channel credits for CFE investments
- vii. Elaboration of a participatory enterprise development vision and action plan

The study was done from August 2016 to March 2017, and herewith the final report.

2 Approach, methods of the study

To assess the level of community forest enterprise (CFE), different approaches and methods are used including adaptation of RA tools to collect baseline and ADORE information, interviews and group discussions with community, the board and stakeholders, field survey and sample plots to assess the changes and impact of the forest after logging.

Methods, approaches were used for main activities described bellows:

- i. Adaptation of RA tools to collect baseline and ADORE information: Interview and discuss with the Board and member of CFE.

- ii. Analysis of forest management, silvicultural and harvesting approach, and identification of gaps for improvement through technical assistance and investment: Including below activities and methods as follows:
 - a. Evaluation of silviculture treatments applied: Interview members of CFE to describe techniques, efficiency, to find out gaps and discuss to know solution for improvement.
 - b. Assessment of environment impacts of the logging: Discussion and checking with members of CFE in the forest based on indicators and score.
 - c. Assessment of structure changes of the forest after harvesting: 4 circle sample plots 1,000 m² were installed in the forests of the Bu Nor CFE, 02 plots in the forest after logging and 2 plots in the forests that the logging is not yet performed. Diameter at breast height (DBH, cm), total tree height, species were recorded in the plots. DBH distribution analysis used to compare the structure changes under impact of the logging.
- iii. Assessment of value chain enhancement opportunities: Survey some local wood processing companies and interview/discuss with stakeholders, customers, GFTN coordinator
- iv. Definition of required investments for increased value-added at community level, and to meet key market development goals: Discussion with CFE members and stakeholders, customers and GFTN coordinator.
- v. Identification of financial mechanisms with potential to develop to channel credits for CFE investments: Visit local banks and interview credit staffs, managers.
- vi. Elaboration of a participatory enterprise development vision and action plan: Group discussion with participation of the local people, the board of CFE, representative of Tuy Duc District and Quang Tam commune levels.

A list of the board, members of Bu Nor CFE, stakeholders and consultants involved in the study presents in the Annex. A total of 37 persons participated in the study.





Figure 1: Some photos of the study in the field

3 Results and Discussion

3.1 Assessment of current Bu Nor Community Forest Management (CFM)

3.1.1 General Information of Bu Nor Village – A Community Forest Management (CFM)

The Bu Nor Village has been the first site implemented Community Forest Management (CFM) in Viet Nam. The village belongs to Quang Tam Commune, Tuy Duc District, Dak Nong Province, Vietnam, on the southwestern edge of the Central Highlands, near the border with Cambodia’s Mondulkiri Province.

Bu Nor village has 1,250 people with 370 households in which 50% is M’Nong Ethnic Minority people.

Bu Nor CFM is made up of mainly ethnic minority (M’Nong) members, and is located in an area that is globally important for biodiversity. It is one of the only community operations in all of Southeast Asia managing natural forest for timber and other products, making it an important model for Community Forest Enterprise (CFE) development in the region. Since its creation in 1999, the Bu Nor CFE has been supported by Tay Nguyen University’s Forest Resources and

Environmental Management (FREM) and funded by several international projects (SDC/Helvetas, GFA/GIZ) to establish CFM and design innovation for community forest management such developing community based forest operation, establishing low impact simple silviculture, benefit sharing mechanism in timber harvesting.

The Community Forest Management Board consists of five members as follows:

- Điều Lanh – Head of the Board (Male)
- Điều Noi – Vice Head of the Board (Male)
- Điều Hạp – Accountant (Male)
- Điều N Sêh – Member of the Board (Male)
- Điều Bích – Member of the Board (Male)

M Nong Ethnic people who follow the matrilineal family. However, social activities are often undertaken by men, women are rarely engaged. This is reason why the Board Members are only men.

The Community Forest Management was recognized by Law of Forest Development and Protection in 2004. It is reason the natural forest has been allocated to the community/village After forest allocation with “Red Book”, the villagers have developed Village Regulation on Forest Development and Protection, and under the Regulation, they have voted the CFM Board. The Village Regulation on Forest Development and Protection then assisted by Provincial Forest Department and then both the Regulation and the CFM Board have been approved by District People Committee (DPC). The CFM Board on behalf of the whole village manages the forest resources, facilitates planning, coordinate the activities among the villagers, households and communicate with outsiders.

There are four forest management teams with total of 47 members of Bu Nor Village who are nominated by the whole Bu Nor Villagers to join the teams. These four teams are under managed by the CFM Board, their tasks are forest protection patrol, implementation of forest management such as silviculture application.

Since 1999, the government allocated 1,016 ha of natural forests and forest lands to the Bu Nor Village for 50 years management by issued certification of land use (Red Book), and now due to their well-managed forests and population increased the village will be receiving another forest area of 853.7 ha of the natural forests for long term management. Figure 2 shows the forest areas that belongs to Bu Nor Village.

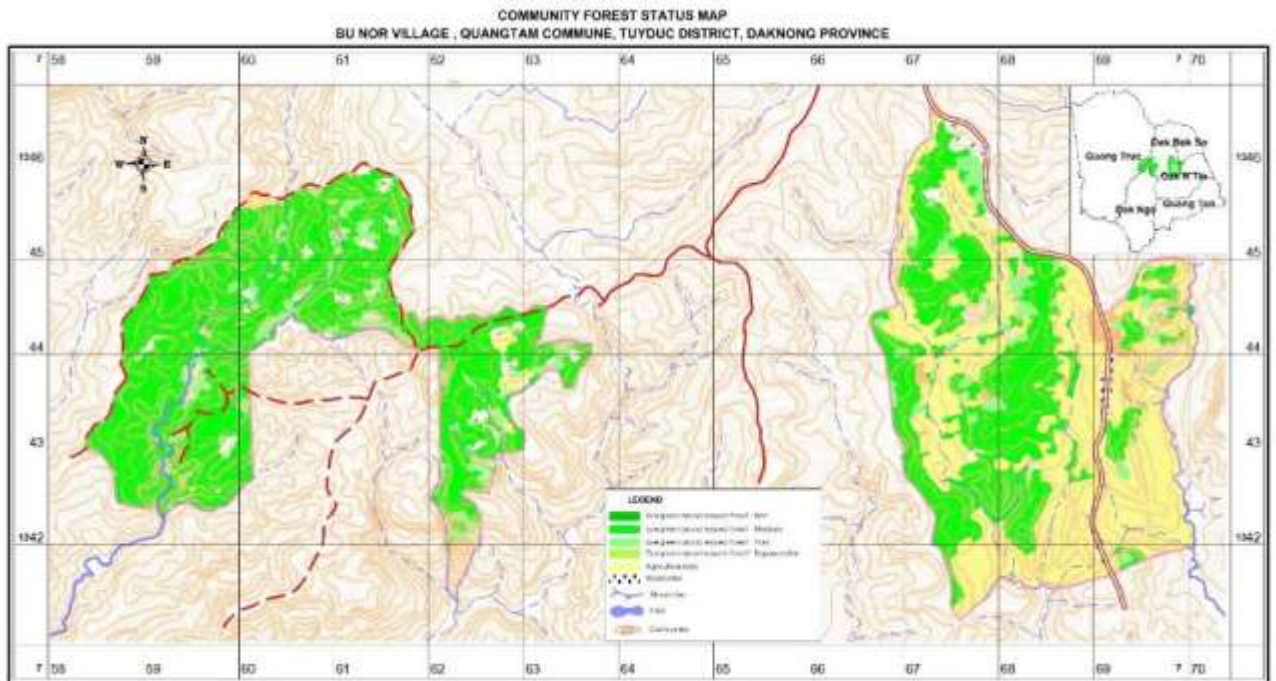


Figure 2: Forest Map of Bu Nor Community Forests

Bellows are some main milestones of CFM at Bu Nor Village:

- 1999: 1,016 ha of natural forests issued to Bu Nor CFM
- 2005: 5-years forest management and annual planning
- 2006 – 2014: Annual timber harvesting and benefit sharing in the Village
- 2013 – Current: Provide watershed management services and receive the payment for this service.

Products from the forests include:

- For commercial: timber, bamboo, rattan
- For own-consumption: food such as vegetables, small animals

Benefits from forest timber harvesting have been managed and distributed under the Village Regulation on Forest Development and Protection showed in Figure 3 below



Figure 3: Benefit sharing from commercial timber harvesting (Source: Village Bu Nor Regulation on Forest Development and Protection, 2013)

On forest management, timber harvesting in Bu Nor is governed as following steps:

- The CFM performs forest inventory and then make 5 years plan, annual plan in which includes timber harvesting.
- Department of Forestry Administration of Province reviews the plans and give feedback, advices
- District People Committee (DPC) approves the 5 years' plan also annual plan for timber harvesting and provide timber harvest permit to CFM.

All above activities for timber harvesting permit have been done under Ministry of Agriculture and Rural Development (MARD) decision, guidelines in recent years. At the beginning (2006) of timber harvesting at Bu Nor, this process has been done as a pilot for benefit sharing from timber commercial purpose which was supported/consulted by FREM/TNU and some international Projects supported by SDC/Helvetas, GFA/GIZ.

Besides forestry activities, the income of the villagers strongly depends on agriculture production such rice, cassava, coffee, rubber, cashew cultivations. 100 % of households apply agriculture cultivation for their livelihood and reaches 80% their income; and around 23% of household involved into forestry activities and get 5% of total income of the household.

Primarily the upland rice cultivation applied in the community, after 1975 according to sedentary policies of the government, the paddy rice has been applied for all the villagers. Today no longer shifting cultivation application, but still high pressure on forests from expanding industrial crops such as coffee, rubber. Therefore benefit balance between forest management objectives and crops development is still very important.

3.1.2 Baseline information on Bu Nor Community Forest Management (CFM)

Two files attached which are results of application of RA tools to collect baseline and ADORE information. Below are some summaries of the CFE baseline information at Bu Nor Village that reveal from these tools:

i) Forestry production and service provision from Bu Nor CFE:

- Products: Round wood and fuel wood with average 420 m³ round wood and 192 m³ fuel wood harvested per year and net income per year is around 333 million VND.
- The CFE Bu Nor has received the consultancy from FREM and some international project funded by SDC, GIZ to develop 5-year plans, annual plan, apply silviculture with low impact logging.
- Forest environment services: Provides watershed management services with average income per year 150 million VND

ii) Current Bu Nor CFE scale:

Base on using ADORE tool of RA to what is enterprise scale at Bu Nor village. Number of employees, volume production, number of products, value of assets, annual income, buyers and markets were indicators to assess the scale. As a result, Bu Nor CFE is a small – medium scale which is indicated by some main indicators in Figure 4. Some indicators were at low score such as number of products, value of assets, buyers and markets. This consists with the reality of Bu Nor forest management level, their product is only wound wood, the asset very poor and only one buyer/customer at local market.

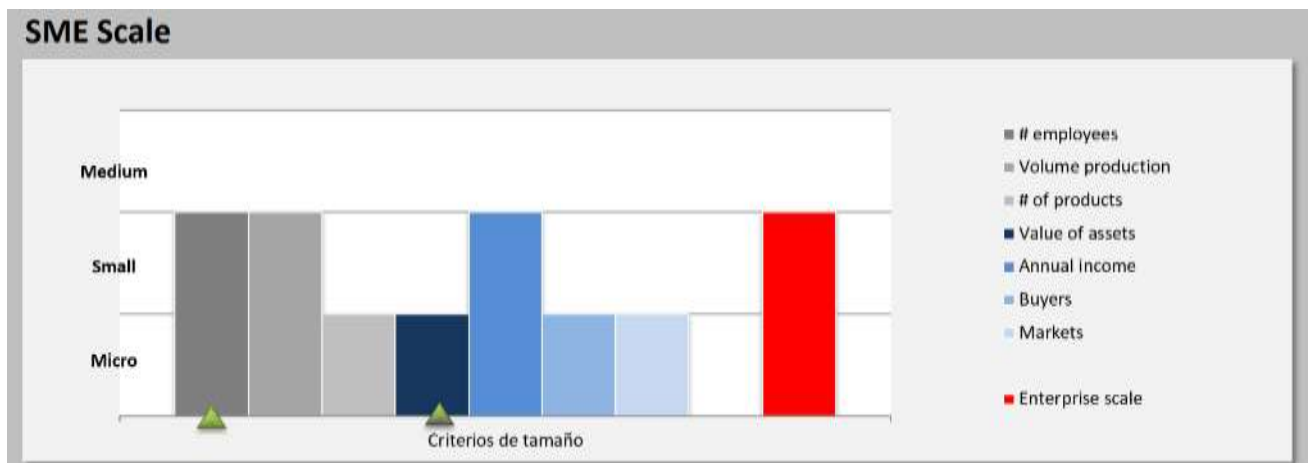


Figure 4: Indicators for Scale Management Enterprise at Bu Nor CFE

iii) *Capacities for sustainable forest management performance at Bu Nor CFE:*

As a result, in Figure 5 and Table 1, the capacities for sustainable forest management at Bu Nor CFE reaches good score for social aspect (72%), medium for economic (57%) and environmental (53%) and lower average (33%) for institutional operation.

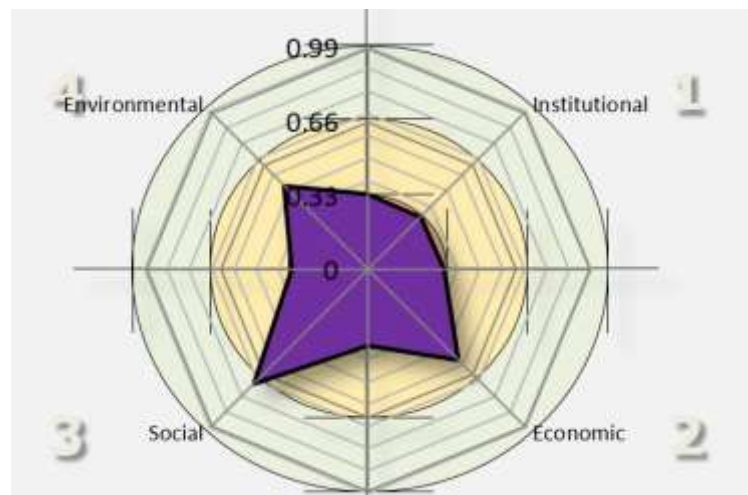


Figure 5: Radar chart of sustainable forest management performance at Bu Nor CFE

Table 1 indicated that Bu Nor CFE has overall score is 54% that reaches average level for forest management performance.

Table 1: Scores by themes of sustainable forest management performance at Bu Nor CFE

SME Performance				
# Theme	Theme	Score	Max	Overall Score 54%
1	Institutional	33%	100%	
2	Economic	57%	100%	
3	Social	72%	100%	
4	Environmental	53%	100%	

The strength of forest management here is community involvement, equity and transparency in sharing responsibilities and benefits from CFM. While the biggest constraint is the management capacity, and organization of community forest management boards. They are indigenous people, have a low level of education and have not been trained in management and operation. Therefore, capacity building and rejuvenation is essential in the coming time.

iv) Capacities of the organizational performance at the Bu Nor CFE:

As results, the capacities for organizational performance at the Bu Nor CFE reaches overall score at 33%, lower average level. This indicated that the CFE Bu Nor is still weak in organizational operation. In which the weakest points are the financial and credit with scores <10%, and product sales capacity and legal status also low at <20% (Table 2, Figure 6)

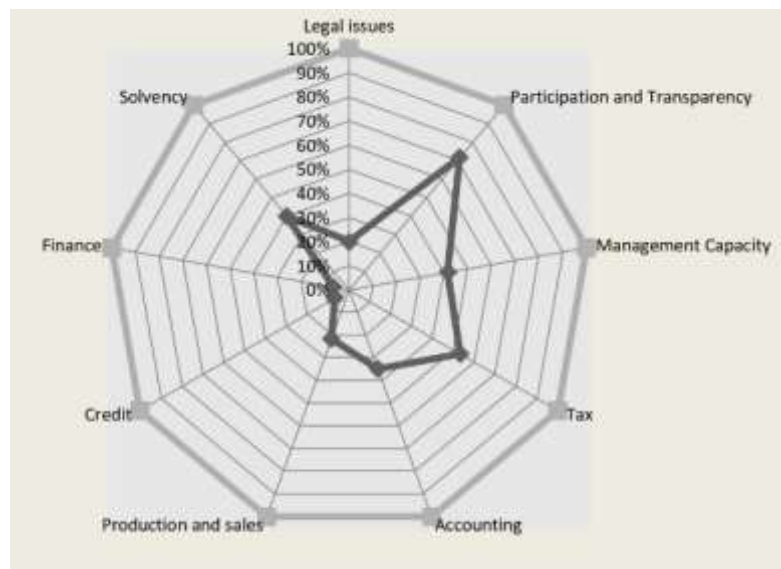


Figure 6: Radar chart of the organizational performance of the Bu Nor CFE

The strongest point of the organizational performance here is participation and transparency, all people of the village are involved in management and decision-making.

Issues at medium score include: Management skills despite the board learn the management by themselves; Tax issue is fair but the capacity for tax declaration is limited; Accountants are also not trained, they have financial records, documents but not system; and still maintain solvency.

Weakness is the problem of product and sale of goods. Only sell unprocessed logs and sell to a single customer (because there are no options). At the same time, CFM's legal status is weak to carry out commercial transactions. These points need to be improved in the time to form forestry co-operatives.

The weakest in administration is credit and finance. Due to lack of legal entity status, over 15 years of production, the Bu Nor CFM has not been able to access credit sources for forest or production development. This content should be considered for improvement in the coming time.

Table 2: Scores for the organizational performance at Bu Nor CFE

# category	Category	Score	Ideal	Overall percentile 33%
1	Legal issues	20%	100%	
2	Participation and Transparency	72%	100%	
3	Management Capacity	42%	100%	
4	Tax	53%	100%	
5	Accounting	35%	100%	
6	Production and sales	22%	100%	
7	Credit	7%	100%	
8	Finance	7%	100%	
9	Solvency	40%	100%	

3.1.3 Assessment of current forest management, silviculture applied and logging impacts on forest environment

The study also applied participatory evaluation on forest management techniques such as forest inventory, silviculture and forest exploitation and participatory assessment of environmental impacts from logging.

Table 3 indicates what silviculture, techniques were applied and their good points, limitations and recommendations for improvement.

Table 3: Results of participatory evaluation of forest management silviculture techniques

Silviculture technique applied	Description of the technique	Good/strong point	Limitation point, gap	How to improve
Participatory inventory applied	<ul style="list-style-type: none"> - Sample plot 300 m² (10x30m) - Measure DBH by using color DBH class - Record: Species, DBH class - Calculation of DBH distribution - Forest mapping support from FREM, TNU 	<ul style="list-style-type: none"> - Size and shape of plot is simple for farmer - Using ruler with color DBH class 	<ul style="list-style-type: none"> - Villagers are unable to calculate stand volume 	<ul style="list-style-type: none"> - Training in analyzing forest data - Measure DBH without ruler color DBH class
Define forest supply (timber and none timber)	<ul style="list-style-type: none"> - Compare DBH distribution of forest stand with ideal DBH distribution to define number of trees can cut and maintain stable forest structure 	<ul style="list-style-type: none"> - Using bar chart 	<ul style="list-style-type: none"> - Villager still has been unable to draw the bar chart 	<ul style="list-style-type: none"> - Training in drawing DBH bar chart

Silviculture technique applied	Description of the technique	Good/strong point	Limitation point, gap	How to improve
Identify annual wood demand of village	- Calculate the volume of wood that village need every year	- Estimate the wood demand	- Too detailed	- Should estimate based on experience of local people
5 years forest management planning	- Identify silviculture for each forest plot - Define Annual Allow Cut (AAC) based on DBH distribution	- Using DBH distribution to define AAC by number of trees	- Villagers, the board still has been unable to calculate AAC	- Training in AAC calculation
Annual planning	- Based on 5 years plan - More activities details defined	- Plan is simple and easy to understand		
Selection of the tree for cutting	- According to 7 indicators for sustainable cutting (there is a guidelines)	- All indicators are simple and easy to apply in the forest - These 7 indicators adapt to "Reducing Impact Logging" (RIL)	- Members of CFE still have not yet remembered all indicators	- Layout/design leaflet to check in the forest
Cutting	- Used chain saw - No safety equipment when felling		- No safety	- Training in safety - Invest safety equipment
Rate of utilization of logs	- 80% of log	- High rate of utilization	- Not yet used the branches	- Primary processing in the forest to increase the rate of utilization of logs.
Forest clean after cutting	- Cleanup, chopped branches to help regeneration tré can grow well	- Support the regeneration after logging		
Log transportation	- Used industrial vehicles for log transportation		- High impact on soil, regeneration, small trees damaged	- Installation of Mobile sawmill in the forest to reduce impacts of log transportation

Silviculture technique applied	Description of the technique	Good/strong point	Limitation point, gap	How to improve
Make log yard	- Use bare land for log yard		- Long distance from harvested forest to log yard make more impacts on the environment	- Installation of Mobile sawmill in the forest

To assess the impacts of timber harvesting in the forest on forest environment, a participatory evaluation has been done in the forest after logging. The causes of environment impact have defined in the forest after logging and environmental impact assessment by scoring. Score 0 is no impact and 5 is highest impact. Figure 7 indicated that the highest impact is to reduce wild animal and soil erosion due to log skidding and then decrease of NTFPs, another indicator has low impact.

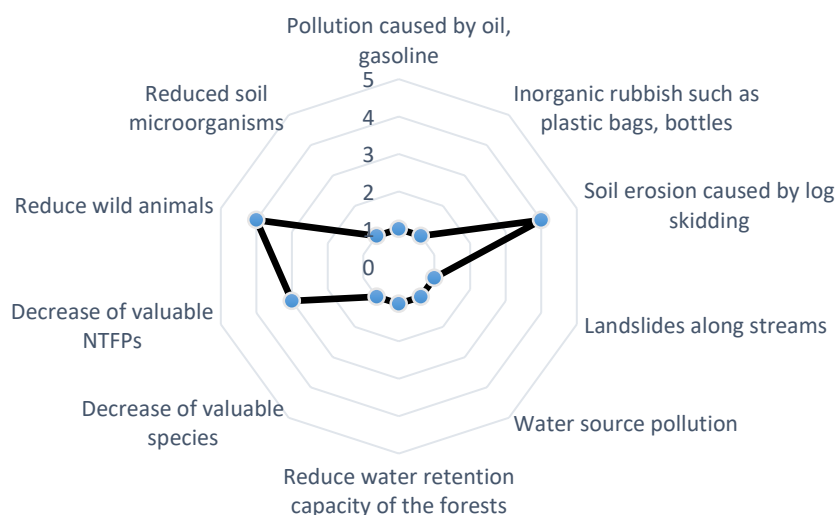


Figure 7: Environment impacts of logging. Score 0 is no impact and 5 is highest impact

The changes of forest structure after the logging was evaluated by comparing DBH distributions of the stand after harvesting and not yet harvested. Four circle sample plots 1000 m² were installed in the forests, 02 plots after cutting and 02 for none cut. Figure 8 demonstrated that the stand after logging there are no more biggest tree over 50 cm in DBH, and small trees at DBH classes of 10 – 20 cm were damaged during cutting and due to log skidding. Therefore, reduce impact of transportation is important, such apply Mobile sawmill in the forest.

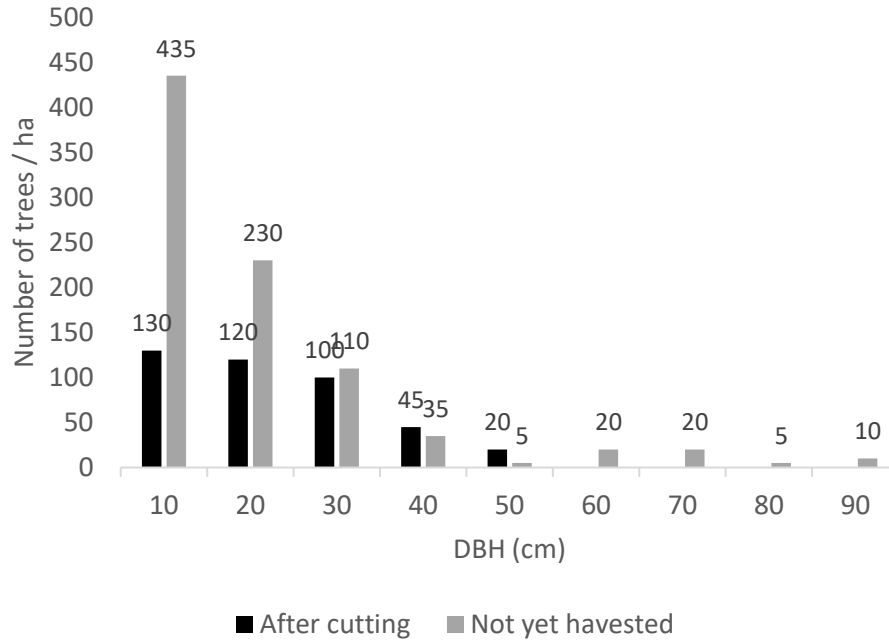


Figure 8: DBH distributions of the forest after cutting and not yet harvested

Finally, the impact of the logging on the regeneration also was assessed. Sub-plots 5 m² for counting regeneration trees (DBH < 5 cm and height > 1.3 m) were done, 02 sub-plots in after logging and 2 another sub-plot for not yet harvested were performed. The regeneration trees after logging or none are 5,000 and 13,000 tree ha⁻¹ respectively. This indicated that the logging damaged the regeneration, only approximately 40% of regeneration trees remaining after harvesting. Therefore, improve technology of logging plays important role to reduce impact on the forest environment.

The main problem is log skidding technology damages to young trees, none timber species and regeneration and also soil erosion on the skidding roads in the harvested forests. Therefore, change of log skidding technology plays important role to reduce impact of logging or apply mobile sawmill in the harvesting forest blocks.

To help improve silviculture, an initial audit for forest certification is needed to indicate what are the gaps that need to be improved for sustainable forest management at village level. On that basis, it aims to get certified forest management.

3.1.4 Current round wood value chain

A current value chain assessment at Bu Nor CFM was carried out and illustrated in Figure 9. The forest product was mainly round wood. Round timber of the community was auctioned starting at the government's floor price, which equals only 30-50% of the free market price. Bidding was not transparent, almost specifying the buyer first and the selling price never exceeds the floor price.

Only a local private company is a customer to buy logs from the community. The company saw the timber and sold it to local furniture workshops or sold it to furniture companies in Binh Duong and Sai Gon.

In this timber value chain, the CFM is not diversified, and is forced to sell raw logs with very low floor prices compared to the free market. Therefore, the profitability of this value chain is dominated by local private sawmills in the district and wood processing companies in other provinces.

In order to improve the timber market chain, it is necessary to participate in domestic and international markets, especially the Global Forest and Trade Network (GFTN). However, in order to connect and participate in the GFTN, the difficulty is that list of timber species harvested from natural forests is large, while many species are “Less Known Timber Species”.

In the coming time, forest product diversification and processing at the community is a matter of concern, while seeking a variety of customers as well as participating in the GFTN are priorities for improving the product value chain from forest.

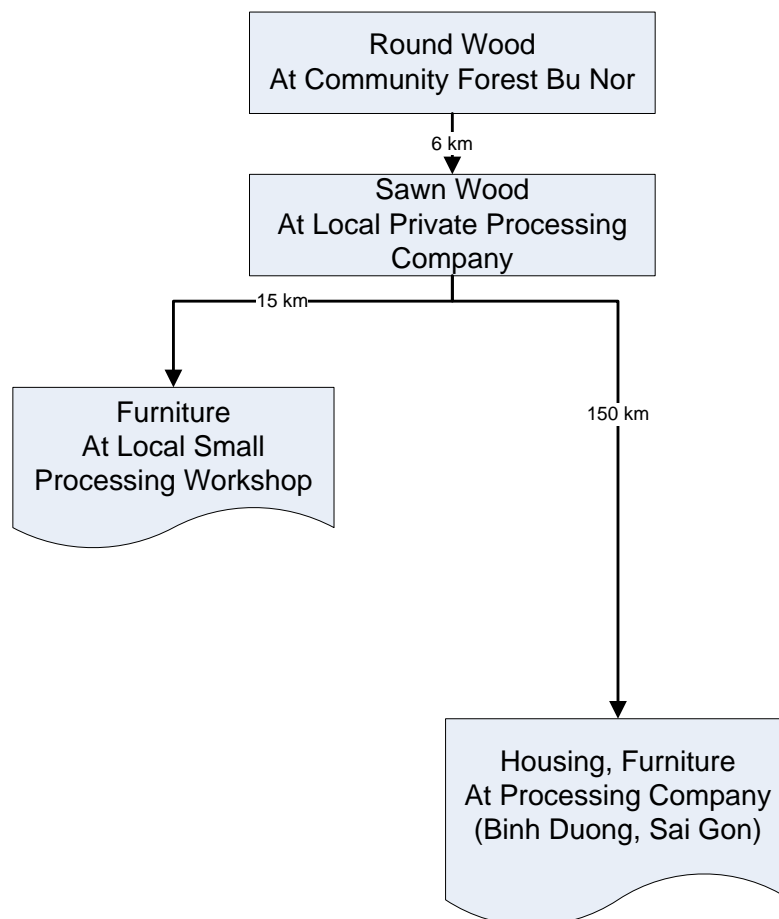


Figure 9: Current wood value chain from Bu Nor CFM

3.1.5 Current financial mechanisms and credit access

The financial management of Bu Nor CFM is quite simple. Revenues from two main sources were round timber harvesting, average 420 m³ round wood per year with a net income of 330 million VND per year; and from receiving payments for watershed protection services, the

average annual income was 120 million VND. Of which, timber harvesting was halted from 2013 to wait for full term of harvesting rotation and forest restoration. Environmental service was implemented since 2012.

Main expenditures were costs for forest protection activities include cost of labor cost, food, transportation for staff of four forest protection teams.

Over more than 15 years implementing forest business practices, as a limited legal entity represented by community forest management boards, Bu Nor CFM has never been able to access any credit to develop production and forest development. This is an important matter of concern to support development of CFE Bu Nor.

3.2 Assessment of opportunities for developing Bu Nor Community Forest Enterprise (CFE)

3.2.1 Assessment of value chain enhancement opportunities with reference to market demand

An assessment was conducted with local communities and stakeholders, GFTN, to look for opportunities to enhance the value chain of timber products from the community forest as illustrated in Figure 10.

In Figure 10, in order to raise the price of wood products, Bu Nor CFE needs a broader range of products and customers.

To diversify products, partial maintenance of logs, and most of them need to be processed into sawn timber to enhance value. Pre-processing into sawn timber at the community will increase the value to 100%. For example, round wood of 6th - 8th wood group (In Vietnam, wood is classified into 8 groups, group 1 is highest value and group 8 is soft wood, lowest value) is sold at VND1.5 million / m³, when sawn timber sells VND6 million / m³, and 2 m³ of logs produce 1 m³ of sawn timber; thus, for 3 million VND of 2 m³ logs will be raised to 6 million VND / m³ of sawn timber, or 1 m³ of log timber will be worth twice as much 100%.

When processing sawn timber, the product will get potential customers include:

- Local people buy to build houses, cages
- Private wood processing workshop
- Wood processing companies, furniture in cities, industrial centers such as Binh Duong, Saigon
- GFTN can help connect with customers processing and exporting wood and furniture. So, these customers can buy logs or sawn timber at the community at international market prices (higher than local prices).

When participating in the GFTN that will create a bridge for the seller and the buyer to have information and be able to meet each other. Help the community have more customers at market prices. The GFTN does not interfere with the manner of sale and pricing of the parties.

Thus, to improve the value chain of timber from community forests, it is first necessary to assist them in processing sawn wood in their location. With this new product that will attract more local and industrial customers, prices will no longer be constrained by the government's floor price.

In addition, participation in the GFTN has the potential to attract timber exports at free market prices. However, this is also a challenge due to requires Bu Nor CFE to obtain FSC Forest Certification. If Bu Nor CFE would like to become a member of the GFTN, the community must undergo a qualification assessment and commit to get a FSC-certified sustainable forest management in the next five years.

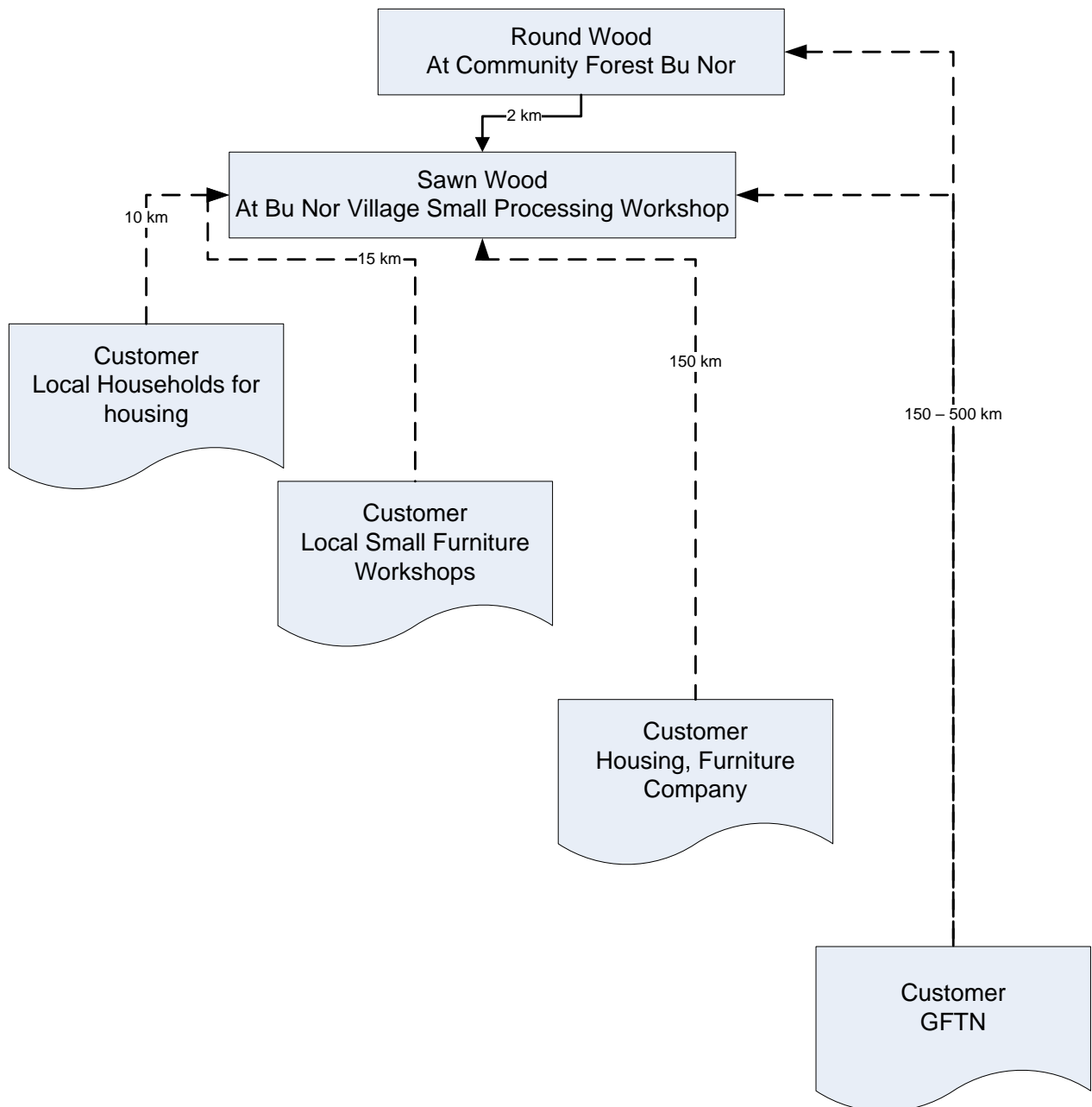


Figure 10: Value chain enhancement opportunities with reference to market demand. Bu Nor CFE will provides a wide range of products such as round wood and sawn timber, with many local and outside customers.

3.2.2 Definition of required investments for increased value-added at community level, and to meet key market development goals

The most important investment to improve the value of wood products at the community is to invest in machinery for processing of timber. At the same time, it is also necessary to train

community members to operate these devices. In addition, the community needs to open up the store to sell sawn timber products. Besides, there is the need to build a representative office of the Forestry Cooperative Bu Nor.

The minimum items needed to improve the value of wood products for Bu Nor CFE are presented in Table 4.

Table 4: Items need to invest for improving the value of wood products at Bu Nor CFE

Item	Qt.	Time to invest
Mobile Saw Mill	1 – 2	2018
Small sawing machine	1 - 2	2018
Lumber Shop, 200m ²	1	2018
Cooperative Office, 250 m ²	1	2017

Another investment to be aware of is how forest management here is certified and to be able to sell timber to the open market and participate in the GFTN to export logs and sawn timber. Therefore, besides investing in wood processing, more attention should be paid to sustainable forest management. In order to accomplish this, it is necessary to carry out the following tasks:

- Accurate inventory and assessment of forest resources, including field survey and use of satellite imagery for forest mapping
- Revised five-year and annual forest management plans on the basis of FSC's Principle 7: Management Planning.
- Set up a system of permanence sample plots for growth and increment indicators and forest structure dynamics to assist in the identification of AAC - Annual Allow Cut.
- Investigate the identification of High Conservation Value Forests (HCVFs) for protection, meeting Principle 9: High Conservation Value of FSC

Invest in over five years to help Bu Nor CFE get certificate for SLIMFs (Small and Low Intensity Managed Forests) in compliance with SLIMFs Eligibility Criteria - FSC-STD-01-003 and FSC International Standard - FSC Principles and Criteria For Forest Stewardship - FSC-STD-01-001 V5-2 EN.

In order for CFE to obtain forest certification, the first audit required is to conduct to pinpoint out the gaps in forest management; follow up is training of community members on conducting forest management in accordance with the ten principles of FSC V5-2 in the field as well as keeping records of forest management.

3.2.3 Identification of financial mechanisms with potential to develop to channel credits for CFE investments

The limited form of community forest management at present in Bu Nor village is not eligible to access loans, credit for forestry production. Hence, the orientation to form a forestry co-operative is necessary in order to have sufficient legal status in accessing credit funds for the development of CFE.

As a result of the interview and discussion with the chairman of the Farmers Association of Tuy Duc district and the director of district governmental treasury pointed out some credit funds that forestry cooperatives is able to access to develop production, improve product value.

There are two types of credit which forestry cooperatives can access:

- Credit Fund for Forestry Cooperatives: The CFE can borrow 500 million VND to invest in production and 300 million VND to pay for employee's stipend. The fund does not require a mortgage, interest 0.7% per year. Implemented through the Farmers Association on the basis of evaluation of production plan of the cooperative.
- Credit Fund to support farmers to set up production groups (Decision 673): To get the fund, need to develop the production plan of the group, the loan amount is 50 million / household, with the size of the community over 100 households, CFE can reach 5 billion VND of the credit loan. The fund does not require a mortgage with interest 0.7% per year.

So, if a forestry cooperative is formed and a feasible business plan is established, the community can access a sufficient amount of capital for investment in timber processing, sustainable forest management under the FSC - SLIMFs and payment for the audit and capacity building training.

3.3 Vision and strategy to develop Bu Nor CFE

3.3.1 Vision and objectives to develop Bu Nor CFE

A vision to develop Bu Nor CFE is defined base on participatory meeting, the results as follows:

- The form of the enterprise:

Current form of Bu Nor CFM is Community Forest Unit which has the representative Board, but still not a real business organization or legal entity.

In the next step the Bu Nor CFM intends to form a forestry cooperative institution under the laws of the State Cooperative. This cooperative has legal status, seal, account for transactions.

Next step Bu Nor members would elect executive director board and accountant for the management.

- Overall, long term goal of the Bu Nor forestry cooperative:

The Bu Nor forestry cooperative will be applying the methodology for managing sustainable forest and improving likelihood of the villagers together and also building capacity for the director board of the cooperative and its members who will have sufficient ability to manage the forestry cooperative.

- Objectives of the forestry cooperative Bu Nor: Main specific objectives are:
 - o Forest sustainable forest management and certificate:

For sustainable forest management, capacity building and suitable technical application, forest certification will be facilitated such as FSC certification for community level.

- o Forest services/products:

Forestry cooperative will plan to provide more diversity of products as follows:

Forest products:

- ✓ Round wood
- ✓ Sawn timber
- ✓ Wood materials for processing the furniture.
- ✓ Bamboo materials for processing the furniture
- ✓ Processed natural clean banana

Forest services:

- ✓ Protection of the watershed
- ✓ Carbon sequestration in REDD+ program
- ✓ Traditional cultural ecological tourism
- Diversification of forest products and improvement of value chain:

Focus and prioritize the diversification of forest products and promote simultaneous access to local and external markets to improve income and profit from forest business. Connection to be a member of Global Forest and Trade Network (GFTN) is a solution for enhancing value chain of the forest products.

- Development of channel credits for CFE investments:

Based on the foundation of forestry cooperative to promote mechanisms to access credit for investment in production development.

- Capacity building:

Capacity for management of forest cooperatives as well as forest management and forest product processing needs to be improved for cooperative members.

3.3.2 Create Forestry Cooperative for Community Forest Management at Bu Nor Village

Current form of community forest management (CFM) limits production development, product diversification, access to markets and credit. Whereas the cooperative mode of forestry is appropriate to local levels and conditions and helps to improve the above limitations. Therefore, there is a real need to make the transition from CFM to forestry cooperative.

Community forest management in Bu Nor village will be transformed into a forestry cooperative in accordance with the Cooperative Law in 2015. Under this law, co-operatives are defined as collective economic organizations, co-owners, have legal status and cooperate mutually in production, business and job creation to meet their needs, on the basis of self-control, self-responsibility, equality and democracy.

The name of this cooperative is: **Bu Nor Community Forestry Cooperative**

The Co-operative will elect directors, accountants, and the directors will form management, service, and production units. The cooperative has official seal, own account.

In order to get decision of foundation of the co-operative, with the advice of FREM, the directors will develop a production strategy plan to submit to the authorities for approval.

Below describes summary of the process for registering as the cooperative under the Cooperative Law in 2015:

- Congress for the foundation of the Cooperative: The CFM Board will hold the congress with participation of all members of the CFM. At this event, the board and all household members will agree to establish their own community forestry cooperative. The congress will develop and get agree on the charter, production and business plan of the cooperative
- Registration of cooperative: Before their operation, the cooperative shall register with the state agency of the locality where the cooperative intends to base its headquarters.

Documents for registration of a cooperative comprises:

- o The written request for registration of the cooperative;
- o The Charter of the Cooperative
- o Production and business plans;
- o List of members of the cooperative; List of board of directors, board of supervisors;
- o The Minutes of the congress for the foundation of the Cooperative.

3.3.3 Action plan of Bu Nor CFE for the next 5 years

After defining the vision, objectives of forestry cooperative Bu Nor, a participatory meeting for action planning was done with participation of stakeholders such as the Bu Nor Board members, representatives from Tuy Duc district, Quang Tam commune and FREM consultant group. An overall action plan was developed in Table 5.

The main actions that Bu Nor Forestry Cooperative should carry out over the next 5 years to promote improvement of its forest management and business:

- Promoting the formation of forestry co-operative and election of directors, accountants
- Conduct an initial audit of forest certification to identify gaps that need to be improved in sustainable forest management. Carry out sustainable community forest management on the basis of FSC – SLIMFs principles and standards
- Produce a variety of wood products through sawmilling at community forests and open a sawmill shop
- Access to GFTN to look for exporters of logs and sawn wood,
- Access to credit for investment in sawn timber processing, sawmill shop and forest management operations.

Table 5: Overall action plan of Bu Nor CFE for the next 5 years 2018 – 2023

Starting Month/Year	Main activity	Venue	Qt.	How to perform/ facilitate the activity	Implementation	Monitoring	Consultant
Dec. 2017	Additional allocation of natural forests to Bu Nor Village	Đăk G' Lung, Bu Nor Village	853 ha	DPC Tuy Duc	DPC Tuy Duc issues “Red Book” for forest land use right for 50 years		FREM
Dec. 2017	Installation of Bu Nor Forestry Cooperative and Executive Director Board	Bon Bu Nor	A Cooperative establishment and its board	CFM Bu Nor register to DPC Tuy Duc Elect the board	The board and DPC Tuy Duc, CPC Quang Tam	Members of CFE, external experts	Experts for Cooperative FREM
Jan. 2018	Development and implementation of sustainable forest management – and certificate FSC	Đăk G' Lung, Bu Nor village	Project	Participatory project planning	Executive director board of the forestry cooperative	Members of Bu Nor CFE Local stakeholder and external experts	FREM, RA
Jan. 2018	Development and implementation of project on sawn wood processing	Bu Nor village	Project	The board develop the project	Executive director board of the forestry cooperative	Members of Bu Nor CFE Local stakeholder and external experts	FREM, RA
June 2018	Assess to join GFTN	Ha Noi		The board to meet GFTN	Executive director board of the forestry cooperative		FREM, RA

Starting Month/Year	Main activity	Venue	Qt.	How to perform/ facilitate the activity	Implementation	Monitoring	Consultant
Feb. 2018	Assess to credit fund for investment	Dak Nong province		The board register the credit	Executive director board of the forestry cooperative	Members of Bu Nor CFE Local stakeholder	FREM, RA
Now	Development and implementation of watershed service	Forests			Executive director board of the forestry cooperative	Members of Bu Nor CFE Local stakeholder	The board of the PES fund
Jan. 2019	Development and implementation of project on cultural eco-tourism	Đāk G'Lung Bu Nor village	Project	Participatory project planning	Executive director board of the forestry cooperative	Members of Bu Nor CFE Local stakeholder	FREM, RA
Jan. 2019	Development and implementation of project on wood NTFPs processing	Đāk G'Lung Bu Nor village	Project	Participatory project planning	Executive director board of the forestry cooperative	Members of Bu Nor CFE Local stakeholder	FREM, RA
To be defined	Development and implementation of REDD+	Bu Nor village	Project		Executive director board of the forestry cooperative	Members of Bu Nor CFE Local stakeholder	FREM

3.3.4 Training Need Assessment (TNA) and training plan for developing Bu Nor Forestry Cooperative

In order to implement the above-mentioned overall five-year plan, it is important to improve the capacity of the community. A discussion with the community forest management board, key members, farmer's union, district agricultural office, and commune, district and provincial stakeholders to assess the training needs of the community and stakeholders to respond to new vision, mission designed. The training plan is shown in Table 6

Four major training activities identified by the community include:

- Training on management of forestry cooperatives for the Board of Directors
- Training on financial management, credit for staff members of the forestry cooperative
- Training community members on the operation of mobile saw mill machine
- Training on sustainable forest management and forest certification for community members

Table 6: Training plan for capacity building

Training	Who participate in	Quantity	Time	Location	Remark
Management of Forestry Cooperative	Director Board Accountant Seller	4	2018	Tuy Duc District, Dak Nong Province	Invite experts from Sai Gon
Finance, accountancy and credit for Cooperative	CFE Members	3	2017 - 2018	Sai Gon	
Technique to use mobile Saw Mill	CFE Members	6	2017 - 2018	Bu Nor Village	Invite expert from Sai Gon
FSC Certificate for Community Forest Management	CFE Members Representatives from Commune, District and Province	27	2018 - 2019	Bu Nor Village	Invite expert from RA or GFA and FREM/TNU
Study tour	CFE Members Representatives from Commune, District and Province	10	2018-2019	Southeast Asia or South America where applied CFE	

4 Conclusion and Recommendations

Based on assessment of the current status and potential forest business management of Bu Nor CFM, and based on RA tools as well as participatory approach with participation of community and stakeholders. The main findings are:

- i) Strengths of Bu Nor CFM over the past 15 years are:
 - This is the first ethnic minority community that was allocated natural forests in Vietnam and to conduct planned forest management, commercial timber harvesting and benefit sharing within the community by their own regulation. The community is capable of self-management, transparency in decisions, responsibilities, and rights.
 - The scale of CFM Bu Nor up to now reached small – medium level.

- ii) Weaknesses of Bu Nor CFM that need to be improved:
 - Legal status is weak so it is impossible to develop production and access to credit.
 - A single product is round wood with a local buyer that made product value low and reduce income of the community;
 - Silviculture applied was not yet to meet the requirements of sustainable forest management.

- iii) There is a need to develop a forestry co-operative in order to have sufficient capacity for business development, access to credit and applying sustainable forest management.

- iv) Key issues that need attention to promote improved forest management, forest business and income for cooperatives and community members are to:
 - Access to credit to invest in wood processing to diversify products, produce sawn wood to improve the value chain and operation of effect forest management.
 - Attract customers in the province, outside the province. Join the GFTN to get customers for timber export.
 - Implement sustainable forest management and look forward to FSC – SLIMFs forest certification
 - Improve the capacity of management boards and members to manage the forestry cooperative and operate saw mill as well.

Annex: List of participants involved into this study

Id	Full name	Position	Gender	Institution	Venue	Activity of the study
1	Bao Huy	Leader of FREM	Male	FREM, TNU	Bu Nor Village and in forest	Collection of Baseline info., Forest assessment, Vision, Planning, forest assessment, Value chain, market, financial mechanism
2	Vo Hung	Member of FREM	Male	FREM, TNU	Bu Nor Village and in forest	Forest assessment, Vision, Planning
3	Phu Quoc	Member of FREM	Male	FREM, TNU	Bu Nor Village	Collection of Baseline info., Value chain, market
4	Dinh Bao	Member of FREM	Male	FREM, TNU	Bu Nor Village	Collection of Baseline info., financial mechanism
5	Tai Anh	Member of FREM	Male	FREM, TNU	Bu Nor Village and in forest	Forest assessment, Vision, Planning, Value chain, market, financial mechanism
6	Doan Le Anh	Chair	Male	Farmer Association Tuy Duc District	Bu Nor Village	Vision, Planning. Value chain, market, financial mechanism
7	Kieu Quy Dien	Vice head	Male	DARD Tuy Duc District	Bu Nor Village	Vision, Planning, value chain, market
8	Dau Xuan Toan	Head	Male	Extension Center Tuy Duc District	Bu Nor Village	Vision, Planning, Value chain, market
9	Dieu Lanh	Head of CFM Board	Male	CFE Bu Nor	Bu Nor Village and in forest	Collection of Baseline info.; Vision, planning, Value chain, market
10	Dieu Noi	Vice Head of CFM Board	Male	CFE Bu Nor	Bu Nor Village and in forest	Collection of Baseline info.; Vision, planning; Forest Assessment, Value chain, market
11	Dieu NSeh	Financial staff of CFM Board	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.
12	Dieu Mpreo	Oldest person	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.

Id	Full name	Position	Gender	Institution	Venue	Activity of the study
13	Dieu Lom	Head of Group for Forest Protection	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.
14	Dieu Sen	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.
15	Dieu Huong	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.
16	Dieu Tho	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.
17	Dieu Thoan	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.
18	Dieu Mbyoi	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.
19	Dieu Khun	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.
20	Dieu Kau	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.
21	Dieu Thim	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.
22	Dieu MPui	Head of Group for Forest Protection	Male	CFE Bu Nor	Bu Nor Village and in forest	Collection of Baseline info.; Vision, planning; Forest assessment
23	Dieu Luan	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.
24	Dieu Sranh	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Collection of Baseline info.
25	Dieu Nhot	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Vision, Planning
26	Dieu Huong	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Vision, Planning
27	Dieu Blom	Member of CFM	Male	CFE Bu Nor	Bu Nor Village	Vision, Planning
28	Dieu Khun	Member of CFM	Male	CFE Bu Nor	Forest of Bu Nor Village	Forest assessment

Id	Full name	Position	Gender	Institution	Venue	Activity of the study
29	Dieu Phuong	Member of CFM	Male	CFE Bu Nor	Forest of Bu Nor Village	Forest assessment
30	Thi Xuan	Member of CFM	Female	CFE Bu Nor	Forest of Bu Nor Village	Forest assessment
31	Dieu Preo	Member of CFM	Male	CFE Bu Nor	Forest of Bu Nor Village	Forest assessment
32	Dieu Thoan	Member of CFM	Male	CFE Bu Nor	Forest of Bu Nor Village	Forest assessment
33	Dieu Nhuk	Member of CFM	Male	CFE Bu Nor	Forest of Bu Nor Village	Forest assessment
34	Dieu Thon	Member of CFM	Male	CFE Bu Nor	Forest of Bu Nor Village	Forest assessment
35	Nguyen Van Cuong	Chair	Male	Quang Tam Commune People Committee	Bu Nor Village	Value chain and market, financial mechanism
36	Nguyen Anh Dung	Vice head	Male	Forestry Board at Quang Tam Commune	Bu Nor Village	Value chain and market
37	Le Thien Duc	Forests Program Coordinator	Male	WWF-Vietnam, Ha Noi	Ha Noi	Link CFE Bu Nor to GFTN