Vietnam Administration of Forestry

Ministry of Agriculture and Rural Development

Department of Agriculture and Rural Development

of Dien Bien Province

THE SOCIALIST REPUBLIC OF VIET NAM
DIEN BIEN REDD+ PILOT PROJECT
FINAL REPORT

MARCH 2014

Japan International Cooperation Agency
(JICA)

Japan Overseas Forestry Consultants Association
(JOFCA)

Japan Forest Technology Association
(JAFTA)

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Abbreviation

AD	Activity Data
CFM	Community Forest Management
CPC	Commune People's Committee
C-RAP	Commune REDD+ Action Plan
DARD	Department of Agriculture and Rural Development
DONRE	Department of Natural Resources and Environment
DPC	District People's Committee
EF	Emission Factor
FMS	Forest Monitoring System
FORMIS	Forest Monitoring Information System
FOs	Forest Owners
FPD	Department of Forest Protection
FPDP	Forest Protection and Development Plan
FRELs/FRLs	Forest reference emission levels/Forest reference levels
GHG	Greenhouse Gas
GIS	Geographic Information System
GPS	Global Positioning System
IPCC	Intergovernmental Panel on Climate Change
JICA	Japan International Cooperation Agency
MARD	Ministry of Agriculture and Rural Development
MNNR	Muong Nhe Nature Reserve
NFI&S	National Forest Inventory and Statistics
NFMS	National Forest Monitoring System
NRAP	National REDD+ Action Program
NTFP	Non-Timber Forest Product
ODA	Official Development Assistance
PFES	Payment for Forest Environmental Services
PFMB	Protection Forest Management Board
PFMS	Provincial Forest Monitoring System
PPC	Provincial People's Committee
PRAP	Provincial REDD+ Action Plan
PaMs	Policies and Measures
REDD+	Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries
SBSTA	Subsidiary Body for Scientific and Technological Advice
SUF	Special Use Forest
SUFMB	Special Use Forest Management Board
SUSFORM-NOW	Project for Sustainable Forest Management in the Northwest Watershed Area
Sub-DOF	Sub-Department of Forestry of Dien Bien Province

Sub-FPD	Sub-Department of Forest Protection of Dien Bien Province
UNFCCC	United Nations Framework Convention on Climate Change

Preface

The Dien Bien REDD+ Pilot Project (hereafter "the Project") has been implemented since March 2012 and will end in March 2014. The Final Report describes the activities carried out during the implementation period, their results and comprehensive recommendation, which was presented at the Project Management Unit (hereafter "PMU") in January 2014. The Project is implemented on the basis of the Record of Discussion and Minutes of Meeting signed upon by the Ministry of Agriculture and Rural Development (hereafter "MARD"), the Ministry of Planning and Investment (hereafter "MPI"), People's Committee of Dien Bien Province (hereafter "PPC") and the JICA Vietnam Office in February 2012. The planned activities of the Project described in the Inception Report were presented at the joint coordinating committee (hereafter "JCC") on April 24, 2012 and the Progress Report was presented at the JCC on October 19, 2012.

1. Outline of the Project

1.1 Background

The forest area of Vietnam declined to 27.7% of the total area of the country by 1990 because of the war in the past, conversion of the forest to farm land as a result of population increase, illegal logging, etc. In order to cope with this situation, the Vietnamese government set forest recovery as one of the important goals for the forestry sector and carried out a range of national projects; as a result, it had recovered to 39.5% (13,388,000 ha) by the end of 2010. However, it is thought that the policy goal of recovering the forest area to 47% of the total area by 2020 may not be possible to achieve. Moreover, it has been pointed out that, not just recovery of the forest area, but improvement of forest quality and sustainable management are also important.

To deal with these challenges, Vietnamese government's interest in "reducing emissions from deforestation and forest degradation in developing countries and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks" (hereafter "REDD+") has been increasing. A range of programs, while keeping an eye on the international discussion at the initiative of the United Nations Framework Convention on Climate Change (hereafter "UNFCCC"), are currently underway under the initiative of Vietnam Administration of Forestry (hereafter "VNFOREST"), MARD, in cooperation with multilateral/bilateral donors, international/domestic NGOs, and domestic research institutes, universities, etc.

After the latter half of 2010 in particular, the country has envisaged national-scale implementation of REDD+ for the future by starting pilot implementation at sub-national (province) level, in parallel with REDD+ preparation at the national level, and utilizing the knowledge gained from the pilot implementation to develop REDD+ policies/frameworks. This is in accordance with the "phased approach" recognized at the 16th UNFCCC Conference of the Parties (hereafter "COP16"). It has also been suggested that the country is going to take a path of developing concrete policies, frameworks and technical approaches such as Forest Reference Emission Levels/Forest Reference Levels (hereafter "FRELs/FRLs"), credible measurement/ reporting/verification methods for REDD+ activities (hereafter "MRV"), Benefits Distribution System (hereafter "BDS"), etc. through both discussion at the central level and "pilot projects at sub-national (provincial) level" that will be also implemented.

Furthermore, in Vietnam where forest area is increasing, although natural forest area continues to decline gradually, it is considered that the increase of re-growth forest and plantation forest is leading to continuous increase of the total area. Therefore, it is possible that "REDD" that only focuses on deforestation and forest degradation would bring less benefits for the nation as a whole. Accordingly, with respect to REDD+ in Vietnam, it is argued that, in consideration of the situation where both deforestation and forest degradation and "+" or enhancement of forest carbon stocks are occurring at the same time, it is necessary to measure "REDD" and "+" separately by some appropriate means.

In the meantime, having conducted "The Study on Potential Forests and Land Related to "Climate

Change and Forests"" (September 2009-March 2012) (hereafter "the JICA REDD+ Study"), forest data at national level as well as FRELs/FRLs were developed, supplying information to potential investors, and basic survey was carried out in Dien Bien Province.

At the same time, in response to the request from the Vietnamese government to Japan to implement "Project for Capacity Development of Forest Inventory, Monitoring and Assessment in Southeast Asia" and "Project for Capacity Development of Climate Change and community Forest", the Japanese government accepted them as one of the technical cooperation projects under the ODA in forest/natural environment conservation area. The initial request was related to, in the case of former, technical exchange in Southeast Asian region concerning forest administration, particularly development of forest information which will be important in implementing REDD+, and in the case of latter, promotion of community forestry in the Central Highland Provinces with some elements of REDD+.

On the other hand, in relation to promotion of REDD+ in Vietnam, the UN-REDD program under the assistance of Norway became active involving many players such as international organizations, bilateral donors, and international NGOs, etc. Responding to this, it became necessary for JICA to reformulate the means of cooperation by organizing and integrating the contents of two projects and reviewing the cooperation policies concerning the promotion of REDD+ in Vietnam.

Following the situation mentioned above, having dispatched the Detailed Planning Survey mission, between September and October 2011, to examine implementation policies and concrete details of two above-mentioned projects, put the two approved projects together after discussing it with Dien Bien Province and VNFOREST, MARD, and also revised the cooperation target area, JICA agreed to conduct it as "Dien Bien REDD+ Pilot Project". In February 2011, the Record of Discussion (hereafter "R/D") was signed with the government of Dien Bien Province, the responsible agency of the Vietnamese government, and VNFOREST, MARD.

1.2 Objectives of the Project and the Implementation Period

The purpose of the Project is to enhance the skills and framework of Dien Bien Province for the purpose of implementing REDD+ in accordance with National REDD+ Action Program[1] (hereafter "NRAP") through formulation of a Provincial REDD+ Action Plan[2] (hereafter "PRAP") in Dien Bien Province. As PRAP is formulated on the basis of NRAP of which VNFOREST plays a leading role in formulation and various policies relevant to REDD+ including National Target Program to Respond to Climate Change (hereafter "NTP-RCC"), National Green Growth Strategy, Forest Protection and Development Plan (hereafter "FPDP") (2011 – 2020), Payment for Forest Environmental Services (hereafter "PFES"), etc., it is required to have full knowledge/understanding of these policies and make them reflected upon the formulation of PRAP. The following shows a summary of the Project

[1] The NRAP is shown as the National REDD+ Program (NRP) in the Project Design Matrix (PDM), but the word of the NRAP is used in this report because the document named as NRAP came into effect in June 2012 after starting the Project.
[2] The PRAP is shown as the Provincial REDD+ Program (PRP) in the PDM, but the word of the PRAP is used in this report because it was referred as PRAP in the NRAP.

constitution including overall goal, project purpose and outputs for the Project.

[Overall goal] Findings and experiences obtained through Dien Bien REDD+ Pilot Project implementation will be reflected into National REDD+ Program (NRAP) and other related policies, and applied to REDD+ implementation in other provinces.
[Project objectives] Technical and institutional capability for REDD+ implementation in Dien Bien Province, under the framework of NRAP is strengthened through preparation of the Provincial REDD+ Program.
[Output] 1. Implementation plan for the pilot areas is designed. 2. Measurement, Reporting and Verification (MRV) system for Dien Bien Province is developed. 3. Benefit Distribution System (BDS) options for Dien Bien Province are developed. 4. Lessons are shared to develop and implement NRAP, and the REDD+ implementation in other provinces
[Project period] March 2012 - December 2013 (1 year 10 months)
[Target region] Dien Bien Province (Pilot area will be decided in the Project)
[Target group] DARD (Dien Bien Province) and the key stakeholders

1.3 Area Covered by the Project

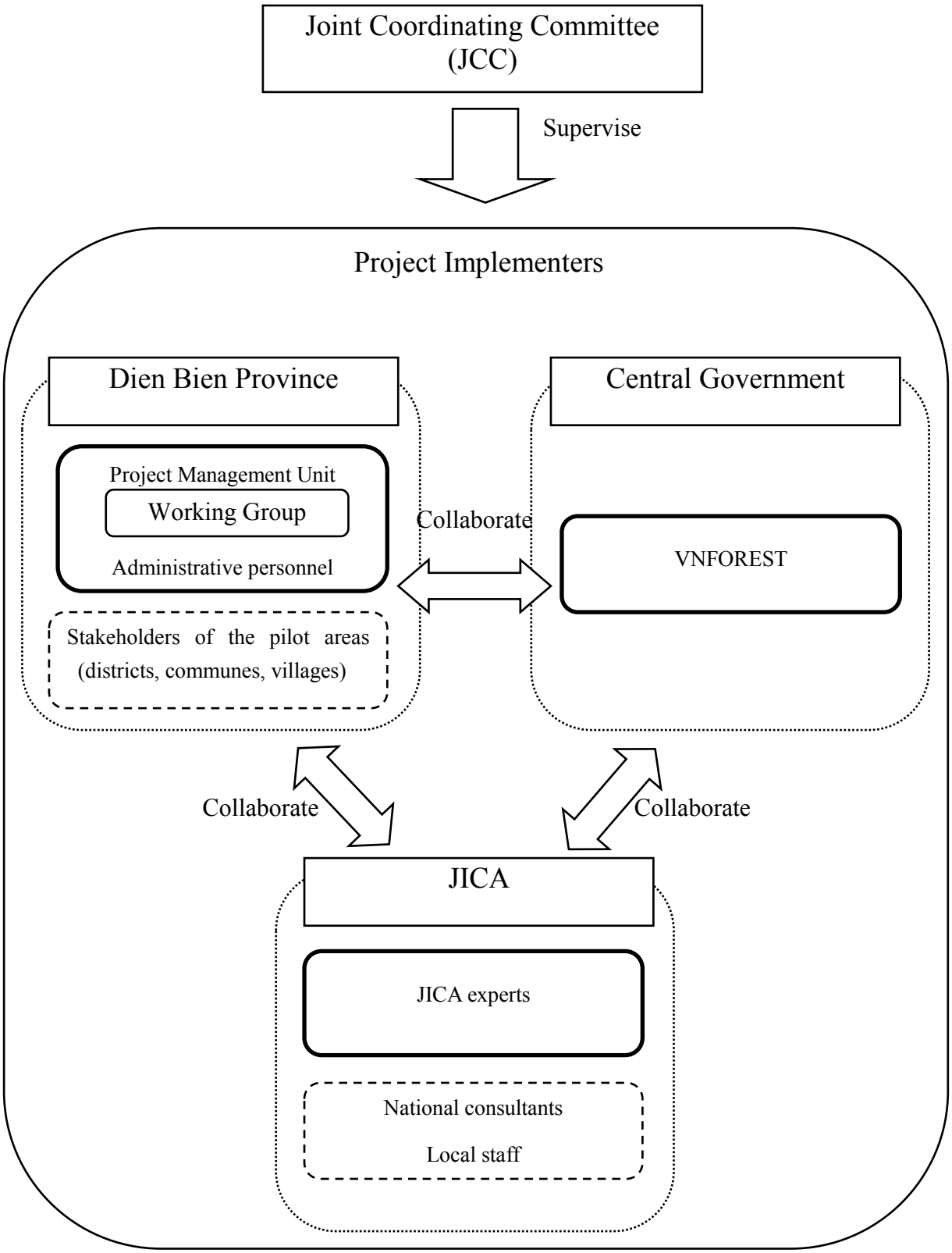
The Project covered the entire area of Dien Bien Province. Within the province, Muong Phang Commune, Dien Bien District and Muong Muon Commune, Muong Cha District were set as the pilot areas.

1.4 Project Implementation System

The Project was implemented with an effort to promote cooperation between Dien Bien provincial government, the central government and Japanese expert team. Project activities were implemented mainly in Dien Bien Province; the working group was established under the provincial project management unit that was set up in the Department of Agriculture and Rural Development (DARD) of Dien Bien Province which is the target group of the Project. The working group consists of Deputy Director of DARD, Deputy Chief of Technical Department of Sub-DoF and 3 technical personnel of Sub-DoF, Vice Director of Sub-FPD, Chief of FPD Department, Deputy Chief of FPMB of Sub-FPD, total of 8 members. Meetings were held occasionally among the Japanese experts and working group members to share information on the progress, plan the project activities, discuss the issues confronting the Project, etc. In particular, the PRAP which is one of the main outputs of the Project was prepared, sharing the information with VNFOREST and obtaining its consultation.

Preparation of the C-RAP for the pilot areas (Muong Phang and Muong Muon Communes) involved administrative agencies such as district people's committee (DPC), projection forest management board (PFMB), special use forest management board (SUFMB), commune people's committee, etc. and adopted their ideas. Moreover, administrative personnel of the districts and communes were selected to be trained as facilitators for the village meetings that will prepare the forest management plan and livelihood development plan for every village inside of the pilot areas. These facilitators are to assume an advising role for the villagers in preparation and implementation of the forest management and livelihood development plans under instruction of the Project for Sustainable Forest Management in the Northwest Watershed Area (SUSFORM-NOW).

Joint coordinating committee (JCC) is set up to discuss the progress and issues of the Project among the three parties, and the project activities were implemented in accordance with the decisions made in the JCC. The following diagram illustrates the project implementation system.


Joint Coordinating Committee (JCC)
Supervise
Project Implementers
Dien Bien Province
Central Government
Project Management Unit
Working Group
Administrative personnel
Collaborate
VNFOREST
Stakeholders of the pilot areas (districts, communes, villages)
Collaborate
Collaborate
JICA
JICA experts
National consultants
Local staff

2. Activities

This chapter describes implementation of the activities set under the PDM for achieving the project outputs.

Activities for Output 1:
1-1 Modify and update the provincial REDD+ Program, which is one of outputs of the JICA REDD+ Study according to the National REDD+ Program (NRP), the current relevant policies of the Government of Vietnam and regulations and conditions of the province, and international negotiation.
1-2 Formulate a REDD+ action plan for pilot areas.
1-3 Conduct training (e.g. OJT, Off-JT) for the key stakeholders
Activities for Output 2
2-1 Review and modify FREL/FRL by using available data, and additional field biomass survey, etc.
2-2 Modify MRV system including monitoring of Policies and Measures (PaMs).
2-3 Develop a performance monitoring system for the different REDD+ activities[i].
Activities for Output 3
3-1 Estimate potential benefit from the implementation of the REDD+ activities.
3-2 Explore the financial sources of payment/support.
3-3 Modify provincial BDS options.
Activities for Output 4
4-1 Feedback to Nation REDD+ program through TWG and STWG meetings.
4-2 Hold regional workshops.

Besides the activities listed above, the activities necessary for projct operation are described ([1] – [7]), [20] – [22]).

2.1 The Project Implementation Period

[1] Management of Project Design Matrix and Plan of Operation

There was no change in to the Project Design Matrix (hereafter "PDM") and Plan of Operation (hereafter "PO") during the implementation, but the following changes were made regarding the contents of the works and the period of the Project. The detailed PO was prepared and updated occasionally.

Preparation of REDD+ Action Plan in the pilot areas:
The REDD+ Action Plan for the two communes selected as the pilot areas was prepared in the Project. Works of organizing workshops with concepts of Free, Prior and Informed Consent (hereafter "FPIC") in each village of the two communes and preparing village development plan based on results of the workshops are taken over to the Project for Sustainable Forest Management in the Northwest Watershed Area (hereafter "SUSFORM-NOW") to which the Project will be unified after end of the Project. In order to promote the activities of the Project in the SUSFORM-NOW, it is appropriate approach that parts of process to prepare the REDD+ Action Plan in the pilot areas is taken over and

implemented to/by SUSFORM-NOW within the period of the Project, which was confirmed by the midterm evaluation study for the SUSFORM-NOW.

Addition of work for the design of the forest information database:
The Project undertook the design and development of a proto-type of forest information database needed for the MRV in Dine Bien province, into which information on Policies and Measures (hereafter "PaMs") etc. is incorporated, taking into the account of the linkage with the national MRV system. For improving the existing provincial forest monitoring system (hereafter "PFMS"), it is indispensable to strengthen the system regarding collection of field information by mainly Forest Rangers, and the PFMS is placed as role to complement the National Forest Inventory (hereafter "NFI") data, which the central government conducts every five year, based on the outputs of the JICA REDD+ Study.
In addition, the following viewpoints were concluded;

- Strengthening the existing PFMS and monitoring of implementation of forest policies should be managed in integrated way, and such management can be connected to the robust and transparent MRV.
- It is indispensable that the system for monitoring of PaMs including PFES considerably effecting the forest conservation and increase should be incorporated into the database system.
- It is also indispensable that the development of proto-type and establishment of logic of the database, which is needed for the provincial MRV as the tool, is needed.

In addition, end of the Project period was changed from September 30, 2013 to December 31, 2013 due to the delay of the PRAP preparation based on a result of the discussion in the final JCC held on September 19 2013.

[2] Participation in local meetings and meetings in Japan

In addition to the above activities, the Project participated following international conferences to follow up retest negotiation process and feed back to PRAP development and implementation of NRAP.

- SBSTA36 (17^{th} ~25^{th} May,2012,Bonn)
- SBSTA38(5^{th} ~14^{th} Jun,2013,Bonn)

The following discussions were hold in SBSTA 36.

- The methodology of the development of National Forest Monitoring System (hereafter "NFMS") was discussed based on the agreement of the NFMS made in COP16.
- Importance of applying the latest version of the IPCC guideline in stages (phased-approach) for the development of the system contributing to the governance and the safeguard system was discussed. Aiming to adopt the methodology and the guideline at COP 18, the clarification on the above was scheduled to be finished by next SBSTA37.

- Discussion on MRV were encouragement of the "stepwise approach"; providing information in Biennial Update Report (hereafter "BUR"); measuring of the co-benefit on economic, social, and environmental aspect in addition to the carbon.
- Discussion on Safeguard Information System which provides the information of the care and cope with social and environmental Safeguard were: detailed discussion of the guidance adopted in COP17 was started in terms of the ensuring of consistency and transparency, frequency of reporting; continue discussing to be finalized at SBSTA 39in 2013.
- Regarding to the driver of deforestation and forest degradation, consideration of the social factor was mentioned in the preamble of the resolution document of SUBSTA36.
- Regarding to the FRELs/FRLs, agreement was made that the actions shall be carried out to report concrete methodology of the guideline in COP 18 and 19 in accordance with the output by Ad hoc Working Group on Long-term Cooperative Action under the Convention (hereafter "AWG-LCA") which determines the financial aspect of REDD+. In SBSTA38, detailed technical Annex (draft) composed of the reported reviews of FRELs/FRLs was shown and the agreement was made to be discussed about it in COP19.

This situation was shared among VNFOREST, JICA and other stakeholders in Vietnam, and the idea of FRELs/FRLs was used to the documentation of Annex in the PRAP. Meanwhile, regarding results of negotiation on the NFMS for which a series of discussion has been made in the COPs, consistency of data and requirements of transparency has been applied for establishment of the NFMS. In addition, corresponding viewpoint for the strengthening of governance which has been highlighted in recent years, system of verification also has been incorporated in the forest monitoring system.

[3] Public Relations

In implementing the operation, the webpage for introduction of the Project was opened in the website of Vietnam REDD, and information on the project summary and the related information has been provided in the webpage in order to let the stakeholders in Japan and Vietnam and the donor organizations implementing activities on REDD+ in Vietnam correctly understand objectives, contents of activities and outputs of the Project. In addition, the newsletters were compiled/published four times in both English version and Vietnamese version of 1-2 pages (A4-size) in order to publicize the latest information of the project activities etc. Moreover, a project website based on JICA platform in Japanese and English was also constructed, on which introduction of the project summary and the newsletters mentioned above has been put.

2.2 Preparation Period in Japan (March – April 2011)

[4] Examination of Basic Principles and Details of the Operation

The Project provisionally defined basic principles, methods, implementation framework, schedule, etc. on the project operation on the basis of signed R/D, M/M, result of the detailed plan formulation study for the Project, UN-REDD second phase (draft), the basic plan prepared by the JICA REDD+ Study

and other information. In addition, the Project clarified, in advance, additional information necessary to operate the Project.

[5] Preparation of Inception Report

On the basis of [4], the Inception Report (draft) was prepared. The Inception Report contains the following details.
1) Outline of the Project
2) Operational policy
3) Method of implementation of operation
4) Structure of the project implementation
5) Operation plan of the Project
6) Reports prepared during the project implementation period
7) Plan of making contract with the local consultants
8) Personnel plan
9) Appendices

[6] Holding the meeting on Implementation Principles

On the basis of the Inception Report (draft), the Project participated in the implementation policy meeting organised by JICA, and gave detailed explanation of/consultation on Inception Report (draft) which has been prepared in [5] to/with relevant parties. Based on its outcome, correction was added to the Inception Report (draft).

2.3 Local Operation (April 2012 – September 2013)

[7] Briefing and Discussion on Inception Report

The Project had detailed consultation with relevant parties at the Vietnamese side concerning the Inception Report (draft) in an effort to build consensus; on the other hand, the Project made correction to the Inception Report (draft) based on the outcome of the consultation, which was finalized and submitted to JICA and the Vietnamese side.

2.3.1 Output 1: Formulation of the REDD+ Action Plan for Pilot Areas

[8] Preparation of the Provincial REDD+ Action Plan (Activity 1-1)

In the JICA REDD+ Study, “Basic Plan for REDD+ Development in Dien Bien Province” (Provincial REDD+ Basic Plan) was prepared and its contents were explained to the Dien Bien Provincial government and VNFOREST. In the Project, in accordance with NRAP, circumstances of Dien Bien Province, update on the international negotiations on REDD+, etc. and the basic principle described in “2.1 Basic policies from the technical point of view” in the Inception Report, the Provincial REDD+ Basic Plan was reviewed in order to prepare the PRAP. Provincial REDD+ Basic Plan is a reference to

develop ideas for PRAP and its contents include the followings.

1) Objectives of Basic Plan for REDD+ Development in Dien Bien Province
2) Natural and Socio-economic Conditions of Dien Bien Province
3) Conditions for REDD+ Implementation
4) Forestry Policy/Program and Institutional Framework in Dien Bien Province
5) Draft Potential REDD+ Activities in Dien Bien Province
6) Prioritized Areas for Potential REDD+ Activities
7) Classification of the Districts for the Implementation of the Potential REDD+ Activity
8) Legal Intervention in REDD+ Activity
9) Proposal of Option for Setting Interim FRELs/FRLs in Dien Bien Province
10) MRV and BDS Options
11) Arrangement to implement REDD+ Activities
12) Safeguard
13) Issues and Recommendation on Implementation of REDD+ Activities

In order to prepare the PRAP for Dien Bien Province, its compatibility with the NRAP has to be taken into consideration. Most of the subjects covered in the NRAP are also covered in the Provincial REDD+ Basic Plan. However, the Provincial REDD+ Basic Plan is not based on the time scale, and therefore, this aspect was added for preparation of the PRAP. Moreover, the Provincial REDD+ Basic Plan does not cover the capacity development either. The PRAP covers this subject as one of its specific objectives. The PRAP was also attempted to prepare in collaboration with administrative personnel of Dien Bien Province for the purpose of capacity development. In particular, the Working Group (hereafter "WG") consisting of the personnel of DARD of the counterpart organization of the province was formed. Then the methodological process of creating PRAP was considered through discussing the items which should be incorporated as contents of PRAP between Japanese experts and WG members.

However, since capacity development activities was not fully conducted and the complicated methodology of REDD+, the understanding of REDD+ by WG member was insufficient. Therefore, Japanese experts mainly took the central role in drafting of PRAP. Basically, although the draft which the Japanese experts wrote was distributed to WG member and the meeting for correcting the draft was conducted to obtain questions and comments from the WG members, it was difficult to obtain the essential comments which lead to improvement of the draft for PRAP from WG member.
Furthermore, since the measure of the creation of PRAP was unprecedented in the Vietnam, there was no example as a reference. Then the creation of PRAP was carried out with repeating trial and error and the composition and the contents of the PRAP including the setup of the goal have been greatly changed every meeting in three province meetings in order to deliberate the PRAP draft.

Under this circumstance, it was clarified that the PRAP should be prepared in accordance with the format generally used in Vietnam for the official documents. According to this official format, how to develop REDD+ implementation in the province is explained by clarifying the overall goal, specific objectives, key tasks and solutions. Each of them is described below.

Overall goal: what is to be achieved by implementation of REDD+
Specific objectives: breakdown of the overall goal on specific themes
Key tasks: what is to be done in order to achieve the specific objectives.
Solutions: measures to be taken to execute the key tasks.

First of all, the overall goal of the PRAP was set; discussing with the VNFOREST and DARD of Dien Bien, it was mutually recognized that the PRAP should contribute to achieving the goal of master plan of forest protection and development (Decision 57/QD-TTg) and reducing emission of the greenhouse gases. Consequently, these were set as the overall goal. Then the specific objectives of the PRAP were set. It was considered that the overall goal could be achieved on the basis of the following five aspects: 1) implementation framework; 2) tools for forest protection and development; 3) forest information; 4) finance for the implementation; 5) capacity building. The specific objectives were then set on these aspects.

As methods of implementations of REDD+, it is considered that the most efficient way is to tie effective utilization of the existing related policy, the programs, and the projects with REDD+ by fulfilling conditions involving MRV, BDS, and Safeguard, which are demanded by UNFCCC. FPDP, PFES, and poverty reduction program (hereafter, "30A Program") support protection and development of a forest directly or indirectly. Then Deforestation and degradation are eased and this links to forest increasing if these enforcements are successful. This leads to the emissions reduction and the increase of the absorption of carbon dioxide. Emissions reductions and the increase of the absorption are measured, reported, and verified according to the conditions of UNFCCC. Furthermore, it is recognized as REDD+ by fulfilling conditions involving BDS and Safeguard and then carbon credits can be gained.

Upon developing the strategy to implement REDD+, the problem was that there is no specific fund for implementing REDD+. According to the NRAP, although each province is supposed to establish the provincial REDD+ fund, during the implementation period of the Project, the provincial REDD+ fund was not established. There is no prospect to secure the fund of REDD+ besides it. On the other hand, it is considered that the REDD+ would be based on implementation of the existing the related policies, programs or projects with budget arrangement as mentioned above as effective approach against this problem.

In Vietnam, Program 661 was implemented from 1998 to 2010 and the FPDP is succeeding. The main activities of these programs are forest protection, regeneration and afforestation. These activities will directly affect emission reduction and carbon sequestration and hence given in the PRAP as the fundamental activities. However, it is not expected for these activities to be successfully implemented by only the forest policies. According to the survey carried out in the Project, it was identified that most of the deforestation that took place between 2000 and 2010 are due to shifting cultivation. Since the population is still growing, pressure on the forests to be converted into agricultural field is increasing. On the other hand, the activities like forest protection, regeneration and afforestation will reduce the land for cultivation. Therefore, these activities should be complemented by support for livelihood development. The idea of building a model to combine the forest activities with the

livelihood development support is provided in the PRAP.

The PRAP covers the period from 2013 to 2020 and define the period from 2013 to 2015 as the pilot period and the period from 2016 to 2020 as the scaling-up period. During the pilot period, an implementation model is to be established through the implantation in the pilot areas. This established model is then to be applied to other areas during the period from 2016 to 2020 in order to scale up to the province-level implementation. In order to facilitate the implementation in phases, the prioritized communes are selected; among these are Muong Phang Commune in Dien Bien District and Muong Muon Commune in Muong Cha District and these communes are set as the pilot areas. During the period from 2016 to 2020, application of the model established in these pilot areas is to start from the other prioritized communes. Moreover, it is expected that removal of 376,650 CO_2 ton will be increased every year in comparison with the FRLs between 2016 and 2020 by implementation of the PRAP.

In the course of preparation and modifications of the PRAP for the approval of the draft, three provincial consultation meetings were held as mentioned above. Moreover, there was a consultation meeting held for other donors working on REDD+. Through these opportunities, the draft of PRAP was revised. The draft then is to be inspected by VNFOREST. The draft PRAP will be finalized in accordance with the comments made by the VNFOREST and to be approved by the PPC.

Also, the PRAP preparation handbook was made for the purpose of providing the information used as a reference at the time of making PRAP in other provinces (Submission as a separate volume of the completion report). Moreover, there is also the purpose as reference materials for making PRAP which is in process of creation by the central government. This handbook illustrated not only the procedure of the creation of the guideline but also lessons learned based on the experiences in the province of Dien Bien.

[9] Preparation of the REDD+ Action Plan for the Pilot Areas (Activity 1-2)

Objective of REDD+ action plan in pilot areas is to show a model of REDD+ implementation for other areas in the Dien Bien Province through planning and implementation of REDD+ activities in the pilot areas for implementation of REDD+ in sub-national level (in case of Vietnam, province level corresponds to sub-national level) for which the Dien Bien Province take initiative in the framework of NRAP.

The Project set the pilot areas in the unit of commune taking into account of scale of pilot area and core implementation body, and prepared the action plan at the commune level as the pilot area. Since the action plan was prepared at the commune level, it is named as Commune REDD+ Action Plan (hereafter “C-RAP”).

Therefore, pilot communes had to be firstly selected for the preparation of the C-RAP. In this section, selection of the pilot commune, process of preparation for the C-RAP, and outline of the C-RAP are described.

(1) Selection of Pilot Communes/Prioritized Communes

1) Selection of Pilot Communes based on the Selection of Prioritized District

In the stage of the Progress Report of the Project, for the selection of pilot communes, the following method was taken;

i) firstly prioritized district was selected based on Forest change patterns, cause of deforestation and forest increase, and socio-economic condition. Muong Cha District was selected as prioritized district.
ii) secondary prioritized commune was selected from among communes in the prioritized district (Muong Cha District) based on the same criteria for selection of prioritized district. It is considered that Muong Tung has high eligibility for pilot implementation of REDD+ in the Muong Cha District.

Meanwhile, from another point of view for the method to select commune, commune in which a Japanese private firm is implementing feasibility study on REDD+ implementation was also selected as the pilot commune, which is Muong Phang Commune.

For detail of above mentioned method for selection of pilot commune, please see Appendix 5 for which the related parts are extracted in the Progress Report.

Forest area as of 2000 and 2010 and the forest change between these two periods are treated as principal criteria for selecting the pilot communes and communes to be prioritized as described in 2). Forest area as of 2010 is estimated on the forest distribution map of 2010 prepared in the Project by analyzing the ALOS satellite image of 2010. How this map has been prepared is described in [11] (2). On the other hand, forest area of 2000 is estimated on the forest distribution map of 2000 prepared in the JICA REDD+ Study by analyzing the Landsat TM data of 2000 in approximation. Method of preparation of the forest distribution map of 2000 is described in the Appendix 6 that is extracted from the relevant section of the final report of JICA REDD+ Study.

However, in the discussion for the decision of selection of the pilot communes after submission of the Progress Report, Muong Tung Commune was not selected as the pilot commune considering volume of works for CPC staff who are engaged in activities of the projects because the commune already occupied with another JICA`s project. Therefore, the Project decided to select another commune in the Muong Cha District. Consequently, Muong Muon Commune was selected as a pilot commune with results of consultation with other communes in the Muong Cha District based on the following conditions;

- Commune which has 3rd largest forest area in the district
- One of the three communes in which forest area decreased in the duration from 2000 to 2010 in the district
- Population density is lowest
- Area of paddy field per person is largest
- Accessibility to the activity site

- Interest of communal staff in REDD+ implementation is high

Lastly, the Project selected two communes that are Muong Muon Commune and Muong Phang Commune as the pilot communes.

2) Selection of prioritized communes from among all communes in the Dien Bien Province

After the selection of pilot communes mentioned above, instead of the selection method for pilot communes based on the selection of prioritized district, the following methodology has been adopted for the selection of pilot commune in the PRAP;

i) prioritized communes from among all communes in the Dien Bien Province are selected without considering the district to which communes belong,

ii) pilot communes should be selected from among the prioritized communes. (However, concrete pilot communes are not selected in the PRAP.)

In this section, the selection of prioritized communes based on criteria used in the PRAP is described. Furthermore, the selected pilot communes of the Project mentioned in the above section 1) are included in the prioritized communes in the PRAP. Moreover, the methods for the selection of pilot communes and prioritized districts mentioned in the above section were referred when the criterion for the prioritized communes in the PRAP was considered.

(Criterion 1) Large forested area (10,000 ha or larger) remaining in 2010

A commune with remarkably large area of the forests is considered potential for REDD+ regardless of whether the forest has been increasing or decreasing. For this criterion, the forested area of 10,000 ha or larger is set as the indicator to identify the large forested area. As shown in the Table 2.1, six communes meet this criterion and hence selected as the prioritized communes.

Table 2.1 Six communes with large forested area (10,000 ha or larger) remaining in 2010

Commune	District	Forested area in 2010 (ha)
Muong Loi	Dien Bien	15,247
Muong Nha	Dien Bien	13,274
Sen Thuong	Muong Nhe	11,895
Chung Chai	Muong Nhe	11,530
Muong Mun	Tuan Giao	11,029
Leng Su Sin	Muong Nhe	10,986

Source: JICA Dien Bien REDD+ Pilot Project

(Criterion 2) Large forested area remaining (5,000 ha or larger) in 2010 and net decrease of the forested area between 2000 and 2010

Forested area was net-increasing in most communes between 2000 and 2010 largely due to Program 661 and other efforts to protect and develop forests. Under this circumstance, attention should be paid

to the communes where the forested area has been net-decreasing. It can be suspected that the efforts of forest protection and development did not go well in these communes. In order to address the deforestation and forest degradation, these communes should be carefully looked at and hence were selected for prioritized communes for REDD+.

On the other hand, communes with little forest to protect are not suitable for being prioritized on forest protection. Consequently, the communes should have somewhat large amount of the remaining forests. Therefore, among the communes with forested area of 5,000 or larger, those where the forests are net decreasing are considered to be prioritized under this criterion. Eight communes listed in the Table 2.2 are selected as the prioritized commune on this criterion.

Table 2.2 Eight communes with large forested area remaining (5,000 ha or larger) in 2010 and net decrease of the forested area between 2000 and 2010

Commune	District	Forested area (ha)		Change of the forested area (ha)
		2010	2000	
Chung Chai	Muong Nhe	11,530	14,790	-3,261
Muong Tung	Muong Cha	6,988	9,363	-2,375
Muong Toong	Muong Nhe	6,825	8,977	-2,152
Nam Ke	Muong Nhe	7,792	9,813	-2,021
Muong Nhe	Muong Nhe	8,802	10,482	-1,680
Leng Su Sin	Muong Nhe	10,986	11,604	-618
Cha Cang	Nam Po	6,870	7,478	-608
Muong Muon	Muong Cha	5,890	6,392	-503

Source: JICA Dien Bien REDD+ Pilot Project

(Criterion 3) Large forested area remaining (5,000 ha or larger) in 2010 in the target area for PFES

PFES is a useful tool for protecting forests and therefore, the communes where PFES is targeted should be prioritized for REDD+. Moreover, the payment of PFES will be applied to areas with the forest cover. Therefore, the communes with large amount of the remaining forests can receive large payment in the target communes for the PFES. For this criterion, among the communes lying in the watershed areas covered by PFES, those with the forested area of 5,000 ha or larger are considered as the prioritized communes. 15 communes listed in the following Table 2.3 are selected as the communes to be prioritized.

Table 2.3 Fifteen communes with large forested area remaining (5,000 ha or larger) in 2010 in the target area for PFES

Commune	District	Forested area (ha)
Sen Thuong	Muong Nhe	11,895
Chung Chai	Muong Nhe	11,530
Muong Mun	Tuan Giao	11,029
Leng Su Sin	Muong Nhe	10,986
Hua Ngai	Muong Cha	9,698
Sin Thau	Muong Nhe	9,464

Commune	District	Forested area (ha)
Nam Ke	Muong Nhe	7,792
Muong Tung	Muong Cha	6,988
Cha Cang	Nam Po	6,870
Muong Toong	Muong Nhe	6,825
Muong Muon	Muong Cha	5,890
Muong Pon	Dien Bien	5,715

Pa Tan	Nam Po	8,989	Nam Khan	Nam Po	5,199
Muong Nhe	Muong Nhe	8,802			

Source: JICA Dien Bien REDD+ Pilot Project

(Criterion 4) Large area (1,000 ha or larger) planned for regeneration under FPDP (2012 – 2020)

Regeneration to be implemented under the FPDP supports enhancement of the forest carbon stock. In this association, communes where large area of the regeneration is planned under the FPDP have more potential to sequestrate large amount of the carbon. For this criterion, the planned area of 1,000 ha or larger is set as the indicator to select the prioritized communes. The regeneration activity takes 5 years to complete for any given area. For calculating the total planned area, areas planned for the only 1st year are counted avoiding repetition of calculation. In other words, since areas planned for the five year activities in the FPDP is added up, the area planned should be divided by five. As a result, 7 communes meet the criterion and hence selected as the prioritized communes.

Table 2.4 Seven communes with large area (1,000 ha or larger) planned for regeneration under FPDP (2012-2020)

Commune	District	Area planned for regeneration (ha)		
		2012 - 2015	2016 - 2020	Total
Muong Tung	Muong Cha	400	3,088	3,488
Muong Loi	Dien Bien	500	1,660	2,160
Muong Nha	Dien Bien	400	1,540	1,940
Hua Ngai	Muong Cha	1,400	448	1,848
Sen Thuong	Muong Nhe	1,796	0	1,796
Muong Toong	Muong Nhe	1,334	0	1,334
Muong Dang	Muong Ang	1,000	0	1,000

Source: FPDP for Dien Bien Province 2012 – 2020

(Criterion 5) Large area planned for afforestation under the FPDP (2012 – 2020)

Afforestation to be implemented under the FPDP supports enhancement of the forest carbon stock. In this association, communes where large area of afforestation is planned under the FPDP have more potential to sequestrate large amount of the carbon. For this criterion, the planned area of 500 ha or larger is set as the indicator to select the prioritized communes. The afforestation activity takes 4 years to complete for any given area: planting in the 1st year; tending in the 2nd through 4th years. For calculating the total planned area, areas planned for the only 1st year are counted avoiding repetition of calculation. As a result, 14 communes meet the criterion and hence selected as the prioritized communes.

Table 2.5 Fourteen communes with large area planned for afforestation under the FPDP (2012-2020)

Commune	District	Area planned for afforestation (ha)		
		2012 – 2015	2016 - 2020	Total
Muong Loi	Dien Bien	1,000	1,040	2,040
Muong Nha	Dien Bien	965	945	1,910
Toa Tinh	Tuan Giao	482	320	802

Nam Ke	Muong Nhe	730	20	750
Keo Lom	Dien Bien Dong	280	420	700
Bung Lao	Muong Ang	370	250	620
Pa My	Muong Nhe	220	330	550
Xa Nhe	Tua Chua	126	402	528
Muong Dang	Muong Ang	320	187	507
Luan Gioi	Dien Bien Dong	220	280	500
Muong Luan	Dien Bien Dong	220	280	500
Chieng So	Dien Bien Dong	220	280	500
Phi Nhu	Dien Bien Dong	220	280	500
Pu Nhi	Dien Bien Dong	210	290	500

Source: FPDP for Dien Bien Province 2012 – 2020

(Criterion 6) Potential for external funding source for REDD+ implementation

Since there is no specific fund for REDD+ confirmed yet as of October 2013, the existing policies, programs and projects with their budget are tools to be applied to forest protection and development activities. However, the budget may not be enough to implement the policies, programs and projects as they are planned. and external funds may be needed. There is a plan of private investment on forest protection and development in Muong Phang Commune and therefore, Muong Phang Commune is selected as the prioritized commune.

(Conclusion based on all six criteria)

Result of the analysis of the whole communes on the six criteria to select the prioritized communes is shown in the following Table. All communes are indicated, and highlighted parts are criteria and communes which are applicable to each criterion. These communes are prioritized communes and total 29 communes are selected as prioritized communes.

Table 2.6 Selected prioritized communes on the six criteria

Unit: ha

No	Commune	District	Crit. 1 Forest in 2010	Crit. 2 difference 2000/2010	Crit. 3 PFES	Crit. 4 Regeneration under FPDP	Crit. 5 Afforestation under FPDP	Crit. 6 Private investment
1	Muong Loi	Dien Bien	15,247	10,751		2,160	2,040	
2	Muong Nha	Dien Bien	13,274	7,643		1,940	1,910	
3	Na U	Dien Bien	5,772	2,593		560	230	
4	Nua Ngam	Dien Bien	4,710	1,891		620	210	
5	Sam Mun	Dien Bien	2,421	1,628		520	100	
6	Nong Het	Dien Bien	45	16		80	50	
7	Noong Luong	Dien Bien	742	490		80	50	
8	Thanh An	Dien Bien	195	148		130	100	
9	Thanh Yen	Dien Bien	522	342		70	50	
10	Pa Thom	Dien Bien	3,864	2,234		110	50	
11	Thanh Xuong	Dien Bien	255	191		130	50	
12	Thanh Chan	Dien Bien	964	666		0	30	

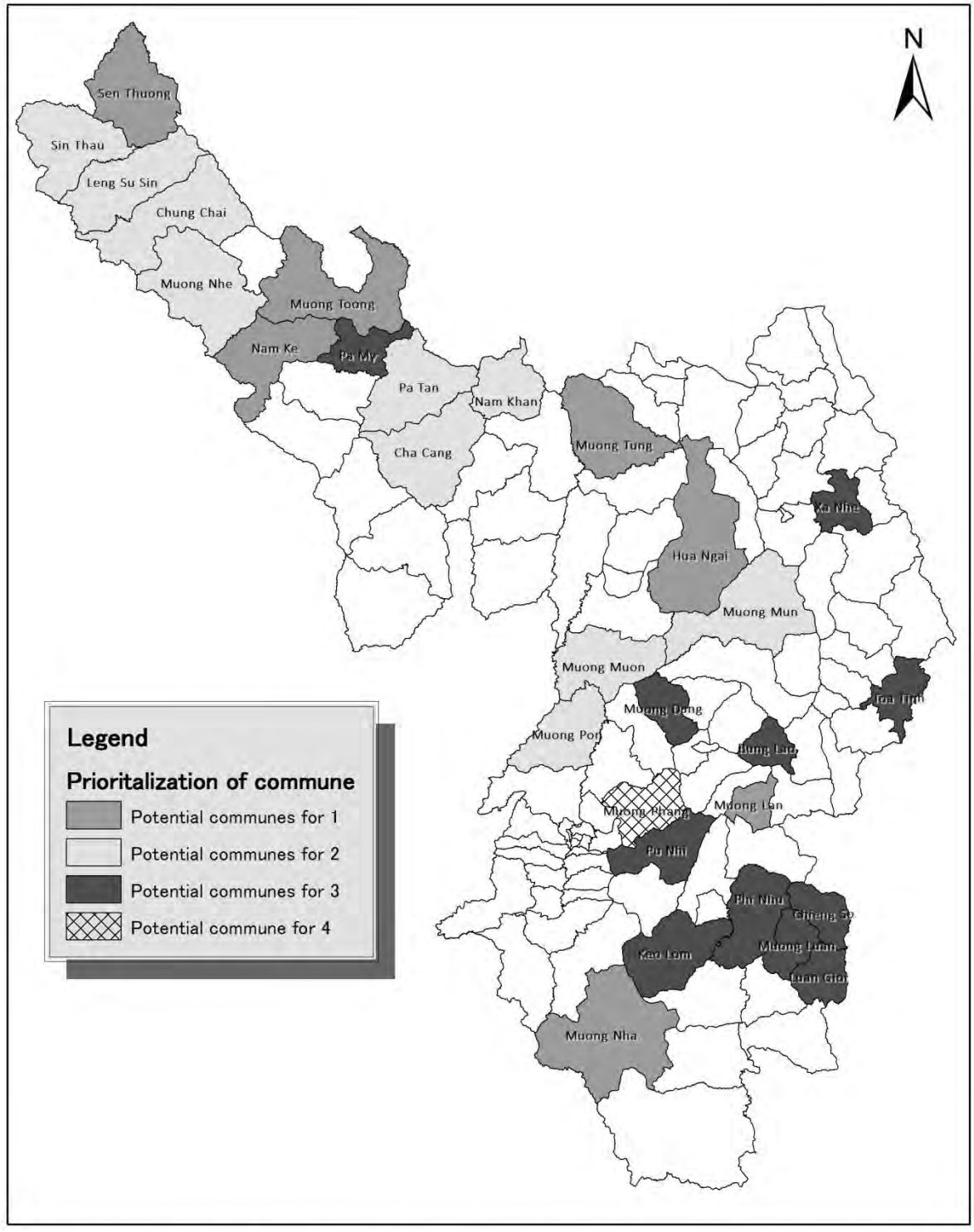
No	Commune	District	Crit. 1 Forest in 2010	Crit. 2 difference 2000/2010	Crit. 3 PFES	Crit. 4 Regeneration under FPDP	Crit. 5 Afforestation under FPDP	Crit. 6 Private investment
13	Thanh Hung	Dien Bien	802	561		100	30	
14	Thanh Luong	Dien Bien	920	315		360	150	
15	Muong Phang	Dien Bien	3,060	1,667	3,060	590	150	Yes
16	Thanh Nua	Dien Bien	3,663	2,834	3,663	410	200	
17	Na Nhan	Dien Bien	2,374	1,348	2,374	920	250	
18	Na Tau	Dien Bien	3,671	65	3,671	100	100	
19	Muong Pon	Dien Bien	5,715	3,253	5,715	620	320	
20	Pu Hong	Dien Bien Dong	3,876	1,872		537	300	
21	Tia Dinh	Dien Bien Dong	4,071	2,714		530	200	
22	Phinh Giang	Dien Bien Dong	2,616	1,162		587	400	
23	Hang Lia	Dien Bien Dong	2,242	733		567	200	
24	Luan Gioi	Dien Bien Dong	1,743	1,060		537	500	
25	Keo Lom	Dien Bien Dong	3,037	2,242		617	700	
26	Muong Luan	Dien Bien Dong	1,481	258		567	500	
27	Dien Bien Dong	Dien Bien Dong	528	181		525	100	
28	Chieng So	Dien Bien Dong	952	515		537	500	
29	Phi Nhu	Dien Bien Dong	2,486	504		587	500	
30	Noong U	Dien Bien Dong	1,902	788		537	200	
31	Xa Dung	Dien Bien Dong	2,066	1,360		525	200	
32	Na Son	Dien Bien Dong	944	851		617	400	
33	Pu Nhi	Dien Bien Dong	3,112	1,537	3,112	530	500	
34	Nam Thanh	Dien Bien Phu	64	61		0	20	
35	Muong Thanh	Dien Bien Phu	30	20		0	0	
36	Noong Bua	Dien Bien Phu	78	29		20	55	
37	Tan Thanh	Dien Bien Phu	56	21		0	10	
38	Ta Leng	Dien Bien Phu	582	436		30	120	
39	Thanh Binh	Dien Bien Phu	0	0		0	0	
40	Him Lam 2	Dien Bien Phu	12	-23		0	0	
41	Him Lam	Dien Bien Phu	126	-3		0	30	
42	Thanh Truong	Dien Bien Phu	16	10		0	5	
43	Thanh Minh	Dien Bien Phu	1,038	706		50	180	
44	Muong Lan	Muong Ang	970	447		281	260	
45	Xuan Lao	Muong Ang	1,315	941		700	440	
46	Nam Lich	Muong Ang	650	404		400	270	
47	Ang Cang	Muong Ang	1,299	960		602	477	

No	Commune	District	Crit. 1 Forest in 2010	Crit. 2 difference 2000/2010	Crit. 3 PFES	Crit. 4 Regeneration under FPDP	Crit. 5 Afforestation under FPDP	Crit. 6 Private investment
48	Muong Ang	Muong Ang	84	84		0	30	
49	Ang Nua	Muong Ang	277	277		234	67	
50	Bung Lao	Muong Ang	1,008	481		400	620	
51	Ang To	Muong Ang	934	659		622	380	
52	Ngoi Cay	Muong Ang	1,179	993		839	110	
53	Muong Dang	Muong Ang	2,389	615		1,000	507	
54	Muong Muon	Muong Cha	5,890	-503	5,890	330	370	
55	Muong Cha	Muong Cha	874	541	874	302	40	
56	Na Sang	Muong Cha	3,625	49	3,625	230	340	
57	Sa Long	Muong Cha	3,346	257	3,346	836	180	
58	Ma Thi Ho	Muong Cha	2,873	1,372	2,873	821	462	
59	Pa Ham	Muong Cha	2,174	-66	2,174	329	380	
60	Huoi Leng	Muong Cha	2,545	1,027	2,545	517	313	
61	Hua Ngai	Muong Cha	9,698	2,586	9,698	1,848	400	
62	Muong Tung	Muong Cha	6,988	-2,375	6,988	3,488	402	
63	Xa Tong	Muong Cha	3,248	1,513	3,248	672	420	
64	Na Lay	Muong Lay	1,325	284	1,325	75	100	
65	Lay Nua	Muong Lay	2,601	518	2,601	540	300	
66	Song Da	Muong Lay	1,485	1,162	1,485	75	200	
67	Quang Lam	Muong Nhe	4,279	1,275	4,279	473	180	
68	Pa My	Muong Nhe	2,378	470	2,378	182	550	
69	Nam Ke	Muong Nhe	7,792	-2,021	7,792	466	750	
70	Muong Toong	Muong Nhe	6,825	-2,152	6,825	1,334	270	
71	Muong Nhe	Muong Nhe	8,802	-1,680	8,802	567	220	
72	Nam Vi	Muong Nhe	1,753	-1,906	1,753	33	110	
733	Chung Chai	Muong Nhe	11,530	-3,261	11,530	797	210	
74	Leng Su Sin	Muong Nhe	10,986	-618	10,986	847	120	
75	Sin Thau	Muong Nhe	9,464	483	9,464	602	340	
76	Sen Thuong	Muong Nhe	11,895	2,187	11,895	1,796	220	
77	Si Pa Phin	Nam Po	364	-235	364	0	0	
78	Phin Ho	Nam Po	1,210	-68	1,210	0	0	
79	Cha Nua	Nam Po	3,976	-672	3,976	0	0	
80	Cha To	Nam Po	3,203	1,228	3,203	0	0	
81	Nam Khan	Nam Po	5,199	3,129	5,199	0	0	
82	Na Bung	Nam Po	3,850	74	3,850	0	0	
83	Na Hy	Nam Po	4,113	-44	4,113	0	0	
84	Na Khoa	Nam Po	3,145	559	3,145	0	0	
85	Cha Cang	Nam Po	6,870	-608	6,870	0	0	
86	Na Co Sa	Nam Po	4,148	1,993	4,148	0	0	
87	Pa Tan	Nam Po	8,989	814	8,989	0	0	
88	Tua Chua	Tua Chua	29	-23	29	0	0	
89	Muong Bang	Tua Chua	1,216	615	1,216	326	407	
90	Xa Nhe	Tua Chua	1,133	683	1,133	351	528	
91	Muong Dun	Tua Chua	1,599	781	1,599	282	273	
92	Sinh Phinh	Tua Chua	2,056	716	2,056	251	0	
93	Trung Thu	Tua Chua	1,861	332	1,861	251	0	
94	Tua Thang	Tua Chua	3,537	856	3,537	408	463	

No	Commune	District	Crit. 1 Forest in 2010	Crit. 2 difference 2000/2010	Crit. 3 PFES	Crit. 4 Regeneration under FPDP	Crit. 5 Afforestation under FPDP	Crit. 6 Private investment
95	Ta Phinh	Tua Chua	1,434	254	1,434	299	0	
96	Lao Xa Phinh	Tua Chua	1,786	40	1,786	278	0	
97	Ta Sin Thang	Tua Chua	1,167	191	1,167	142	0	
98	Sin Chai	Tua Chua	3,983	-242	3,983	433	0	
99	Huoi So	Tua Chua	1,224	140	1,224	270	179	
100	Tenh Phong	Tuan Giao	2,155	575	2,155	0	230	
101	Chieng Sinh	Tuan Giao	1,278	-37	1,278	90	311	
102	Quai To	Tuan Giao	1,468	897	1,468	190	489	
103	Tuan Giao	Tuan Giao	582	88	582	30	106	
104	Quai Cang	Tuan Giao	714	77	714	80	283	
105	Toa Tinh	Tuan Giao	2,304	1,559	2,304	106	802	
106	Na Say	Tuan Giao	4,565	1,156	4,565	40	250	
107	Muong Thin	Tuan Giao	1,247	818	1,247	98	138	
108	Qoai Nua	Tuan Giao	714	147	714	90	364	
109	Pu Nhung	Tuan Giao	2,083	558	2,083	70	260	
110	Ta Ma	Tuan Giao	4,839	1,450	4,839	99	190	
111	Muong Mun	Tuan Giao	11,029	60	11,029	49	449	
112	Mun Chung	Tuan Giao	2,131	521	2,131	70	493	
113	Phinh Sang	Tuan Giao	4,331	610	4,331	50	380	

Result of the selection on the prioritized communes is illustrated in the Figure 2.1 map of prioritized communes for the REDD+ implementation attached to the next page. Prioritized communes are categorized in the following 4 potential groups.

- Potential commune 1: communes which are applicable to at least one from among the criteria 1 – 3 (suitable for reducing deforestation and forest degradation) and at least one of the criteria 4 – 5 (suitable for increasing forests)
- Potential commune 2: communes which are applicable to at least one from among the criteria 1 – 3 (suitable for reducing deforestation and forest degradation)
- Potential commune 3: communes which are applicable to at least one of the criteria 4 – 5 (suitable for increasing forests)
- Potential commune 4: communes which are applicable to criteria 6 (socio-economic conditions)



Potential communes for 1; Reducing deforestation and forest degradation and increasing forest
Potential communes for 2; Reducing deforestation and forest degradation
Potential communes for 3; Increasing forest
Potential commune for 4; External funding source

Figure 2.1 Map of prioritized communes for the REDD+ implementation

(2) Preparation of the C-RAP

Although the preparation is not demanded in the NRAP, it came to draft C-RAP in the consideration of necessity as an enhancing arrangement in order to implement PRAP. Moreover, PRAP aims at implementation of FPDP and C-RAP was also decided to be made in accordance with this FPDP. The Project prepared the C-RAPs for Muong Muon Commune in Muong Cha District and Muong Phang Commune in Dien Bien District, which are set as the pilot communes mentioned above. The process of preparation and outline of the C-RAP are described in this section.

1) Process of preparation of the C-RAP

The process of preparation of the C-RAP is shown in the Figure 2.2 roadmap of C-RAP preparation. The roadmap consists of activity flow and discussion flow and the two flows are closely linked. For main activities, contents and detailed process are describes as follows.

Furthermore, the Project decided not to prepare the official C-RAP preparation handbook because right and wrong for preparation of the C-RAPs in other communes will be discussed, and, contents and process of preparation for the C-RAPs in case of judgment of the preparation will be considered through the progress of activities in the SUSFORM-NOW. However, when the C-RAPs will be prepared in other communes, the C-RAP preparation handbook (proto-type) as reference is attached in the Appendix 6 taking into consideration of possibility that actual C-RAP preparation handbook will be prepared.

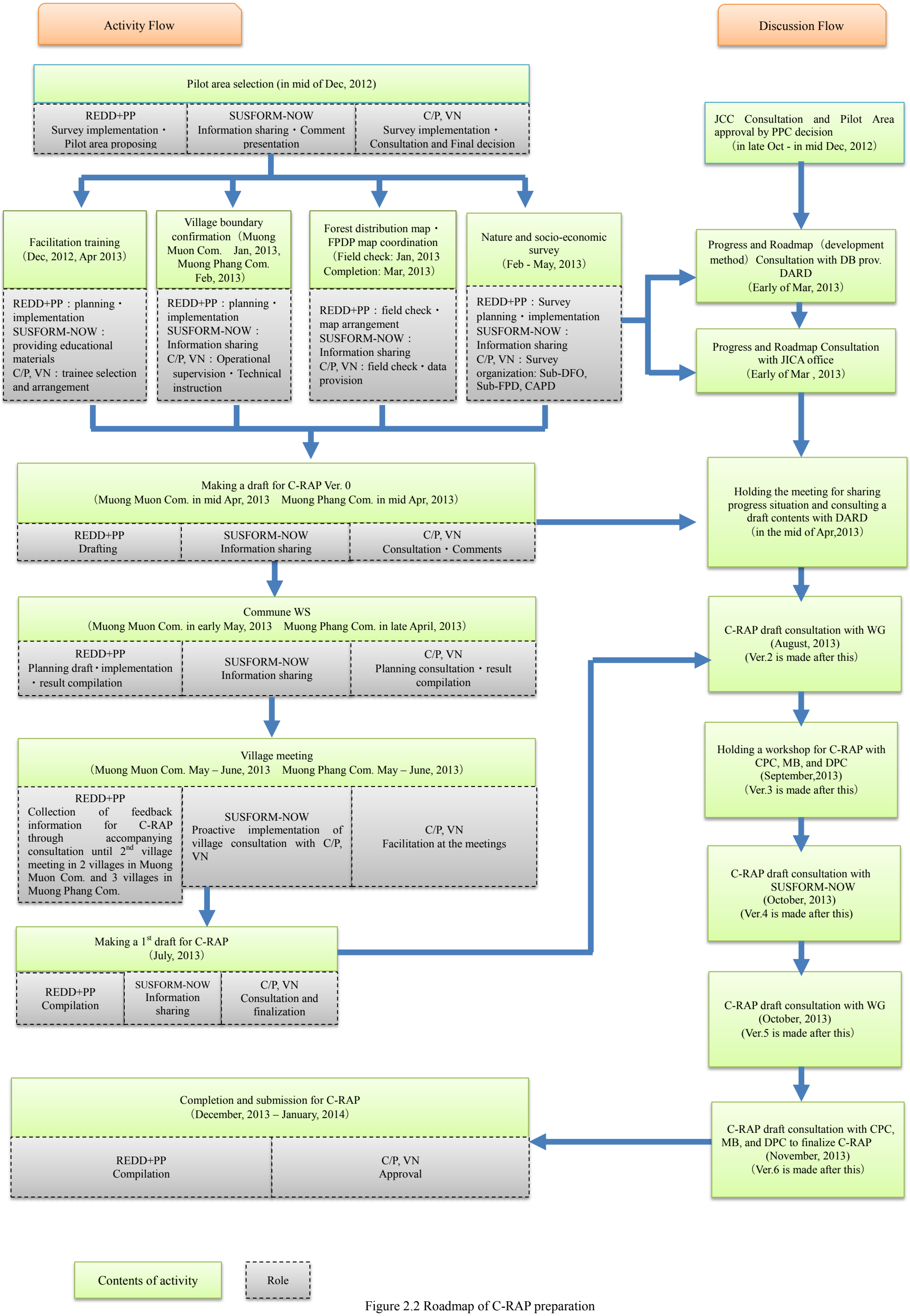


Figure 2.2 Roadmap of C-RAP preparation

(a) Facilitation training

Twice facilitation trainings were conducted in the following contents.

a) 1st Facilitation training

Objective: To improve ability of staff in DPC and CPC who facilitate villagers to prepare the village development plan in conjunction with C-RAP in the village meetings, and to understand basic knowledge on REDD+.

Date and Duration: 3 days (from 18 - 20/12/2012)

Participants: three staff from DPC of Dien Bien District, two staff from PFMB of Dien Bien District, two staff from Muong Phang SUFMB, two staff from CPC of Muong Phang Commune, two staff from DPC of Muong Cha District, two staff from PFMB of Muong Cha District, two staff from CPC of Muong Muon Commune. Total 15 peraticipants

Place: lecture in Muong Thanh Hotel of Dien Bien Phu city, filed practice in Muong Phang Commune

Lecturer: Nguyen Quang Ninh (Consultant for Communication / Facilitation)

Program: the following table

Time	Activities	Lecturer
Day 1		
8h00-8h10	Openning speech	JICA
8h10-8h40	Introduction. Expectation. Pre test	Nguyen Quang Ninh
8h40-8h45	Introduction of target of training, content. Working principles	Nguyen Quang Ninh
8h45-10h00	Introduction on REDD+ - What is REDD+ - Benefit of REDD+ - Relation bewteen REDD+ and Climate change	Nguyen Quang Ninh
10h00 -10h15	*Tea break*	
10h15- 10h45	Participation and the importance of local participation	Nguyen Quang Ninh
10h45 -11h30	Participatory approach - Charieristics of participants - Form of participation - Steps of participation	Nguyen Quang Ninh
11h30-13h30	*Lunch time*	
13h30 -14h30	- Principles of participation - Barriers of participation - Method promote participation	Nguyen Quang Ninh
14h30 -15h00	Role of facilitator - Why we need facilitator - Role of facilitator	Nguyen Quang Ninh
15h00 -15h15	*Tea break*	
15h15 -15h45	- Participatory planning	Nguyen Quang Ninh
15h45 – 17h 00	- Practice participatory planning	Nguyen Quang Ninh

Time	Activities	Lecturer
	+ Group discussion + Present the result	
Day 2		
8h00-8h10	Review the first day	Nguyen Quang Ninh
8h10-8h30	Presentation skill	Nguyen Quang Ninh
8h30 – 9h15	Questionning skill Listening skill	Nguyen Quang Ninh
9h15 -10h15	Identify problem and solving problem	Nguyen Quang Ninh
10h15 -10h30	*Team break*	
10h30 -11h00	Using visualized material skill	Nguyen Quang Ninh
10h00 -11h30	Skill of team management	Nguyen Quang Ninh
11h30-13h30	Luch time	
13h30 -14h45	Practices skill - Step to organize community meeting - Team work to discuss on sellected topic	Nguyen Quang Ninh
14h45-15h00	*Tea break*	
15h00-17h00	Practice community meeting	Nguyen Quang Ninh
17h00 -17h15	Prepare for field trip	Organizer and Nguyen Quang Ninh
Day 3		
7h00-12h00	Field trip in Muong Phang commune	All participants
13h30 -14h45	Feedback on the field trip - Sharing result of the field trip - Lession learnt	Nguyen Quang Ninh
14h45-15h00	*Tea break*	
15h00-15h30	Discuss on the difficulties in the field trip	Nguyen Quang Ninh
15h30 -1600	FPIC implimentation - Principles - Steps	Nguyen Quang Ninh
16h 00 -16h15	Post test	Nguyen Quang Ninh
16h15-16h30	Closing speech	DARD of Dien Bien

b) 2nd Facilitation training

Objective: To have capacity to prepare the village development plan in conjunction with the C-RAP based on the manual on preparation of village Forest Management Plan (herearter "FMP") and village Livelihood Development Plan (hereafter "LDP") following the 1st facilitation training mentioned above.

Date and Duration: 2 days (from 11 - 12/4/2013)

Participants: three staff from DPC of Dien Bien District, two staff from PFMB of Dien Bien District,

two staff from Muong Phang SUFMB, two staff from CPC of Muong Phang Commune, two staff from DPC of Muong Cha District, two staff from PFMB of Muong Cha District, two staff from CPC of Muong Muon Commune. Total 15 peraticipants

Place: lecture in Sub-FPD office, field practice in Phieng Ban village of of Dien Bien Phu city

Program: the following table

Time schedule	Content	Lecturer
Day 1: April 11th		
7:30-8:00	Registration	
8:00-8:10	Opening	PPMU (Sub-FPD)
8:10-8:20	Introduction of workshop purpose	Le Quang Trung, FSIV
8:20-9:20	Introduction of REDD+	Nguyen Quang Ninh, Freelance
9:20-10:00	Understanding basic knowledge	
10:00-10:15	Coffee break	
10:15-10:45	Presentation of planning process (part 1)	Le Quang Trung, FSIV
10:45-11:30	Presentation of planning process (part 2)	Le Quang Trung, FSIV
11:15-13:30	Lunch	
13:30-14:00	Group discussion and presentation	Participants
14:00-15:15	Presentation of planning process (part 3)	Le Quang Trung, FSIV
15:15-15:30	Coffee break	
15:30-16:00	Group discussion and presentation	Participants
16:00-17:00	Presentation of planning process (part 4)	Le Quang Trung, FSIV
17:00	Finish day 1	
Day 2: April 12th		
7:00-10:00	Visit Phieng Ban (or Hang Tro B) village	Participants + Le Quang Trung, FSIV + Working group
10:30-11:30	Introduction of communal plan for REDD+	Hiroyuki Chiba, REDD+ PP
11:30-13:30	Lunch	
13:30-14:30	Group discussion and presentation	Participants
14:30-15:00	Presentation of planning process (part 5)	Le Quang Trung, FSIV
15:00-15:30	Group discussion	Participants
15:30-15:45	Closing	

(b) Survey for natural and socio-economic condition

For the description of natural and socio-economic conditions for the communes in the contents of the

C-RAP mentioned below and the collection of the information to develop a C-RAP with the consideration of safeguards, the Project conducted the survey for natural and socio-economic condition. The survey methodology is as follows,

Survey methodology

i. Information to be collected from CPCs through interviews with the relevant personnel of CPCs in accordance with the questionnaires and instructions provided by the Project
ii. Information to be collected from Village Chiefs through interviews with the chiefs of all villages covered in this survey in accordance with the questionnaires and instructions provided by the Project
iii. Information to be collected from sample households (3 households in every village, each representative of a living standard category) in accordance with the questionnaires and instructions provided by the Project

The questionnaire is referred in the Appendix 7. In addition, since the summary of the results of the survey is described in the C-RAP, please refer the C-RAP of both communes.

(c) Setting village boundary

The Project organized twice meeting on setting village boundary for each pilot commune (Muong Muon and Muong Phang Communes) in each commune office by calling representatives of each village in the commune. The outline of the process for the meeting is as follows,

i） Show the map to the participants, brief explanation of satellite image, land-marks, contours and interval of the grid.
ii） Support villagers to identify the main land-marks and commune boundary on the map with visualizing them.
iii） Villagers from every two adjacent villages discuss together to identify the tentative village boundary with supports from relevant facilitators, including forest rangers, land administration staffs, extensionists, etc. (other villagers should wait for their turn);
iv） Draw tentative lines on the paper-based map, in accordance with discussing progress; Lines are often drawn along the ridges, ravines or borders of the fields or forests;
v） Confirm the boundary with unanimous recognition among the villagers, land administrator staff, Forest Rangers, and CPC (vice) chairman;
vi） Adjust the line of boundary in accordance with the confirmation and draw a bold line. Erase all draft and unnecessary lines;
vii） Proceed with the steps from ii) to vi) for other couple of the adjacent villages.


Villages trying to identify the village boundary with assistance of facilitators

After the meeting, the boundaries which were not able to be defined by the above-mentioned meeting were confirmed and also, errors of the boundaries which were set in the meeting were found through village meetings which SUSFORM-NOW organized. The errors are caused by that mistaken boundaries are possibly delineated in only meeting because villagers' ability on understanding of satellite imagery and topographic map is limited even though land-marks, ridges and ravines on the map are shown to the villagers. However, since it is difficult for a right village boundary to be set up by the meeting, it is a realistic solution to proceed to the village meeting as the next step.
However, the situation with the errors of the village boundary will become remaining as it is. Therefore, in case of finding errors through the village meeting, the modification of boundaries has to be made based on the confirmation of the boundaries in the field. The SUSFORM-NOW has been supposed to conduct the field check and make the modification. In addition, since it is important to set the boundaries in the forested area for the preparation of village development plan, the field check has been conducted in only boundaries in the forested area.

In the above context, the manual of setting the village boundary in the forested area was prepared including the field check (Details are in Appendix 8).

(d) Commune workshop and village meeting

Commune Workshop and village meeting are implemented as follows.

Commune workshop was conducted by the Project as a leading role and they were held for the officials at commune and district level, and village leaders at the Muong Muon Commune and Muon Phang Commune as pilot communes.

Regarding the village meeting, it was promoted with the consideration of the social safeguard as an alternative to FPIC and it was actually led by SUSFORM-NOW. Therefore, the attending schedule of the village meeting was decided through the discussion with SUSFORM-NOW. As a result, Muong Muon 1 village, Muong Muon 2 village, and Huoi Vang village were decided for the attendance of the Project for first village meeting in the Muong Muon Commune. On the other hand, Long Luong 1 village, Long Luong 2 village, and Long Nghiu village were decided for the attendance of the Project for the first village meeting in the Muong Phang Commune. At the second village meeting, the high resolution satellite imagery overlaid with FPDP planning map was prepared for identifying forests on the FPDP map and exchanging opinions about the present condition of the forests in the village. The Project attended just 2 villages for Long Luong 1 village and Long Luong 2 village in the Muon Phang Commune.

a） Muong Muon Commune

（Commune workshop）
In order to prepare the C-RAP for the implementation of REDD+ in the commune level, every associated party involved in this process shall participate in the procedure of preparing and implementing the C-RAP through building the consensus and promoting the understanding of the

contents among the concerned parties.

Also, the contents of workshop include an introduction of basic REDD+ framework, the impact of global warming and its countermeasure, Vietnamese response to REDD+ (issuing NRAP and pilot implementation), the outline of PRAP, the outline of C-RAP, and the procedure to implement the REDD+ activities. Then the village meeting was introduced. Furthermore, main participants are officials for DARD, officials for DPC, officials for MCPFMB, officials (Chairman, vice-chairman, and extensionist) for Muong Muon CPC, Commune Forest Rangers, Farmer's Union, Women's Union, Veterans association, Village Leaders, the members of SUSFORM-NOW Project and the Project. Commune workshop was held at Muong Muon Commune on May 3rd and this was attended by an estimated 45 people.

（Village meeting）

The objective of the first village meeting is to understand REDD+ and to confirm villagers' decision on their participation in the pilot activities by introducing the outline of C-RAP and the several activities cases so far. The contents of the village meeting were to provide basic understanding on REDD+ scheme, to introduce SUSFORM-NOW Project, and to introduce the framework of C-RAP. At the end of the meeting, intention of the all villagers present at the meeting to participate in the REDD+ activity was confirmed by having them raise their hands if they agree to participate. After gaining their agreement to participate in the activity, the schedule for 2nd village meeting was prepared. Then the villagers' decision on their participation in this pilot scheme was confirmed at the end of session.

Also, main participants in the first village meeting were village leader, representatives of all HHs in the villages. The main supporters were officials for CPC and DPC, Commune Forest Rangers, Officials for MCPFMB, and the members of SUSFORM-NOW and the Project. The schedule, venue, and participants were illustrated in the following Table.

Table 2.7 First village meeting in the Muong Muon Commune

The dates	Village	Participants
May 14, 2013	Muong Muon 1 Muong Muon 2	157
May 15, 2013	Huoi Vang	74

b） Muong Phang Commune

（Commune workshop）

The objective of this workshop and the contents of the workshop are the same as that of above-mentioned in the Muong Muon Commune. Also, main participants are officials for DARD, officials for DPC, officials for DBPFMB, officials for MPSUFMB, officials (Vice-chairman, and extensionist) for Muong Phang CPC, Commune Forest Rangers, Farmer's Union, Women's Union, Veterans association, Youth union, Elderly association, village Leaders, the members of SUSFORM-NOW and the Project. The commune workshop was held at Muong Phang Commune on

April 26th and this was attended by an estimated 62 people.

（Village meeting）

The objective and the contents of this first village meeting are the same as that of the village meeting in above-mentioned in the Muong Muon Commune. Also, the composition of the main participants and the main supporters was the same as the village meeting in Muong Muon Commune.

Moreover, the objective of the second village meetings is to decide the orientation to formulate the plans for both FMP and LDP. With regards to the second village meeting, the conference was held by dividing into the orientation of FMP and the orientation of LDP to consider the implementation of the forestry management activities and to implement livelihood improvement activity. Regarding the FMP, checking the location of forest which exists in each village, checking the forest plots on a FPDP map, and grasping the present condition though the exchanging of opinions with the villagers were conducted. As for the LDP, after identification and analysis of the existing livelihood activities and identification of the natural resource which are currently utilized in the village, the menu of the livelihood development activity was narrowed down based on the opinions of the villagers who participated. At the second village meeting, the participants and the supporters were the almost same as the ones at the first village meeting. The schedule, venue, and participants were illustrated in the following Table.

Table 2.8 First village meeting in the Muong Phang

The Dates	Village	Participants
May 8, 2013	Long Luong 1	32
May 9, 2013	Long Luong 2	20
May 10, 2013	Long Nghiu	36

Table 2.9 Second village meeting in the Muong Phang

The dates	Village	Participants
June 4, 2013	Long Luong 1	37
June 5, 2013	Long Luong 2	16

2) Outline of the C-RAP

In this section, table of contents of the C-RAP is mentioned as the outline of the C-RAP.

Introduction
I. Legal basis and documents used for preparing the C-RAP
1. Legal basis
2. Used documents
II. Natural and socio-economic conditions
1. Natural conditions
2. Socio-economic conditions
2.1. Demographic characteristics

2.2. Economic status
2.3 Production activities
3. Issues of forest protection and development and causes of the issues
III. Commune REDD+ Action Plan
1. Overall goal
2. Specific objectives
3. Key Tasks
3.1 Task for forest protection, regeneration, and afforestation
3.2 Task for forest change monitoring system
3.3 Task for livelihoods development of the villagers
3.4 Task for enhancement of institutional framework for forest management and livelihoods development
3.5 Task for capacity development for CPC staffs and villagers
4. Solutions
4.1 Solution for promoting forest protection, regeneration, and afforestation
4.2 Solution for establishing and operating forest change monitoring system
4.3 Solution for promoting livelihoods development of the villagers through improved agricultural crop cultivation, animal husbandry, and other production activities
4.4 Solution for establishing and strengthening institutional framework for forest management and livelihoods development considering REDD+ activities
4.5 Solution for developing capacity on forest management and livelihoods development for CPC staff and villagers
IV. Implementation arrangement
V. Implementation cost and funding sources
1. Implementation cost
2. Funding sources
3. Financial solution
VI. Monitoring and evaluation of C-RAP implementation
Appendix: Activities under the solutions

For the detailed contents for the C-RAP, please refer the C-RAP as separate-volume.

[10] Providing Trainings for Main Relevant Parties (OJT/OFF-JT)

The Training for capacity building is conducted for the needs specified from the points of view to improve their skills to implement both provincial and Commune REDD+ Action Plans. The following trainings were mainly conducted during the implementation of the Project.

Topics for training	Time of year	Participants
First REDD+ Local Facilitator`s Training Workshop in Dien Bien	December, 2012	DPC, MCPFMB, MPSUFMB, district-FPD, CPCs and Forest Rangers of MM and MP
Remote Sensing/GIS/GPS training	April, 2013	Sub-DoF, Sub-FPD, District-FPD,PFMB, Forest Ranger, CAFPD
Second REDD+ Local Facilitator`s Training Workshop in Dien Bien	April, 2013	DPC, MCPFMB, MPSUFMB, district-FPD, CPCs and Forest Rangers of MM and MP
How to monitor the forest changes by using Map Info, GPS and DBR 2012 Software	June, 2013	Sub-DoF, Sub-FPD, District FPD,FPDF
First PFMS Introduction workshop	June, 2013	Sub－FPD,Sub-DoF, Sub-FPD, District FPD, FPDF,Dien Bien District FPD, Muong Cha District FPD
Second PFMS Introduction workshop	June, 2013	Sub-DoF, Sub-FPD, District FPD,FPDF,Dien Bien District FPD, Muong Cha District FPD
Understanding of Safeguard and its Monitoring System in Dien Bien Province proposed by Dien Bien REDD+PP	July, 2013	PMU and TG members; district-DARD ; Sub-FPD; MCPFMB and MPSUFMB; district-FPD; CPCs and Forest Rangers of MM and MP

2.3.2 Output 2 : Development of the system of Measurement, Reporting and Verification (MRV) for Dien Bien Province

[11] Review and improvement of FRELs/FRLs by use of available data

Review and improvement of the FRELs/FRLs took into account the following three factors and activities: 1) Consideration of national circumstances and qualifications for FRELs/FRLs development; 2) Renewal of forest status map; and 3) Biomass survey.

(1) Consideration of national circumstances and qualifications

The current guideline regarding methodology for the estimation of FRELs/FRLs was prepared through discussions conducted at COP 19. Based on the UNFCCC decision document, it is allowed to add national circumstances when estimating FRELs/FRLs. However, details on how to, include these national circumstances are not indicated in the document. In considering the national circumstances relative to forest conditions in Vietnam, it is important to note that policies dealing with forest

regeneration and afforestation on national lands had already been adopted prior to the start of regular discussions on REDD. The policies have contributed to an increase in forest cover on national lands from about 28 % in 1995 to about 40.70% in 2012 (MARD website) (Decision No. 1739/QĐ-BNN-TCLN of Jul. 31, 2013 of MARD). Two other countries in which forest cover is increasing are China and India. These countries are in a disadvantageous position for estimation of FRELs/FRLs unless the countries insist on adding the results of past forest activities as relevant early actions, prior to the establishment of REDD. It should be noted that FRELs/FRLs information submitted to UNFCCC must be characterized by transparency, consistency and completeness.

In consideration of the above, the Project estimated FRELs/FRLs taking into account the outputs from implementation of the pre-REDD+ "Program 661" policy on forestation. These outputs were included in the national calculation of early action. Moreover, the Project concluded that Program 661 satisfies the requirement for "high transparency" of information. Program 661's records accurately document investments on a time series basis. Additionally, the Project conducted a conservative estimate of the Program 661 success rate by using satellite imagery data for verification purposes. Taking these factors into consideration, the Project developed a method for estimating FRELs/FRLs which includes adding the success rate of Program 661.

(2) Renewal of forest map

To derive the FRELs/FRLs, the forest maps of earlier years were needed. The previous JICA REDD+ Study had already prepared 5-year interval forest status maps (1990, 1995, 2000, 2005 and 2010) of all provinces in Vietnam. However, the forest status map for Year 2010 in Dien Bien Province was actually based on satellite imagery taken in 2007. In deriving the FRELs/FRLs, data from analysis of 2007 imagery was used in combination with the forest status map of year 2005. Although less than ideal, this procedure was resorted to because recent satellite information covering these areas had not been efficiently archived. Thus, the only available option was to go back to year 2007. Consequently, derived forest carbon accomplishments in Dien Bien Province in between years 2005 and 2010 appear to be rather small when compared with other sources of information by year. In order to improve map information, , the Project revised the 2010 forest status map by using ALOS panchromatic satellite imagery, with 2.5m resolution and multi-spectral imagery with 10m resolution. Both of these imageries were taken on dates as close as possible to year 2010. Qualitative verification of the accuracy was conducted by a 3rd party (i.e. an independent image interpreter) for the forest status map that was prepared. As a result, an updated forest status map of 2010 was produced (See Figure 2.3).

(3) Biomass survey

For accurate estimation of FRELs/FRLs and the average carbon stock data per unit area such as hectare (called the "emission factor"), it is indispensable to have knowledge of the forest type, and the area covered by each forest type. The Project studied the following two methods for establishment of the "emission factor";

- Nationally standardized approach: Applying NFI data derived from surveys conducted at the national level

- Provincial specific approach: Specifying provincial original data by fractionalizing the NFI data.

Results of studies conducted by the Project, clarified that classification of forest types in the existing forest monitoring system at the provincial and lower levels, follows the classification criteria of the National Forest Monitoring System (NFMS). In other words, the Project did not use a province-specific approach for classification of forest type. Instead, the national classification was used to determine the forest type at the provincial level. This procedure helps ensure consistency of the definitions by classification. Conversely, applying a provincial specific approach might produce data that are not consistent with national level information, thus leading to confusion.

In addition, relatively sophisticated techniques and large budgets would be needed for conducting accurate and thorough biomass surveys. Dien Bien Province does not have the capacity to independently conduct such surveys. Recognizing these factors, the Project concluded there would be low cost-benefit results from conducting a survey using the limited Diet Bien Province capabilities. Taking this reality into consideration, the Project decided to apply the nationally standardized approach. That approach uses forest inventory data of the whole country obtained in the past, instead of a provincial specific approach which would require a province-specific biomass data survey. In brief, a biomass survey was not considered feasible in Dien Bien Province at this time and no such survey was carried out in the Project. Data from the 4th cycle of the National Forest Inventory (NFI) was applied in preparation of the PRAP (Provincial REDD Action Plan).

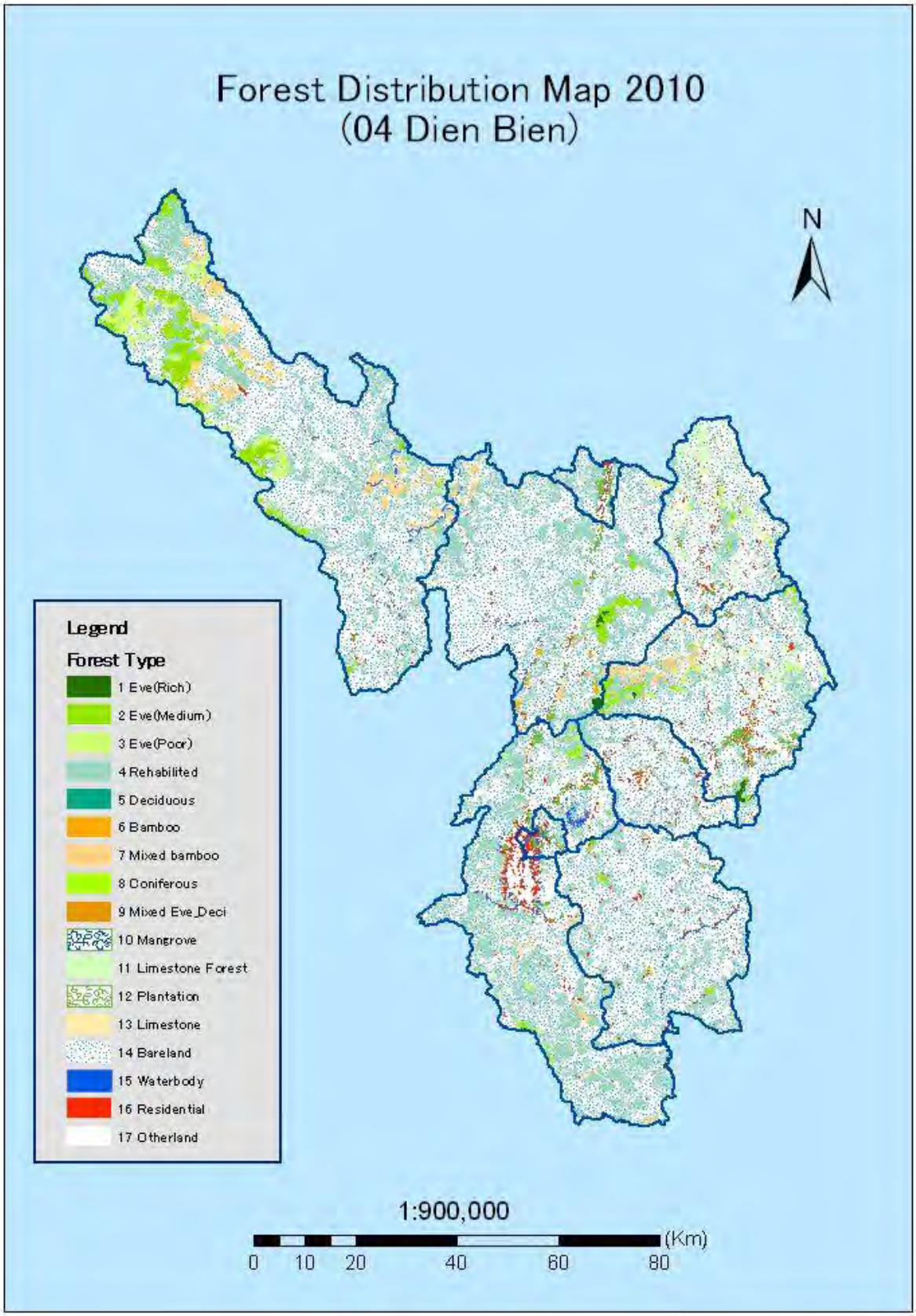


Figure 2.3 Updated forest status map of 2010 (updated in 2012)

The work flow for the estimation of FRELs/FRLs based on the results of the consideration mentioned above is as follows,

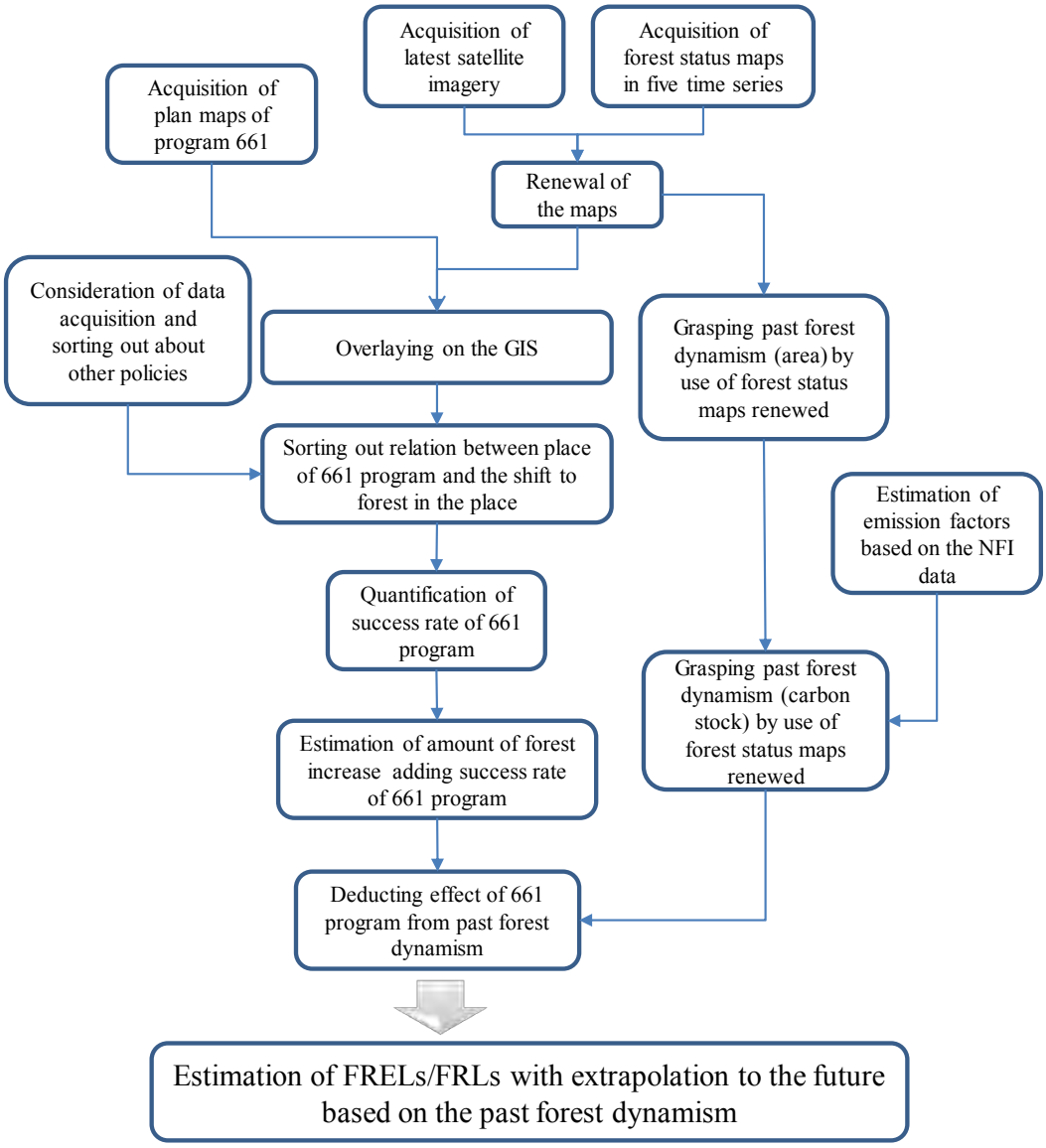


Figure 2.4 Work flow for the estimation of FRELs/FRLs

(4) Result of reviewing FRLs

Result based on the survey method described above is illustrated below.

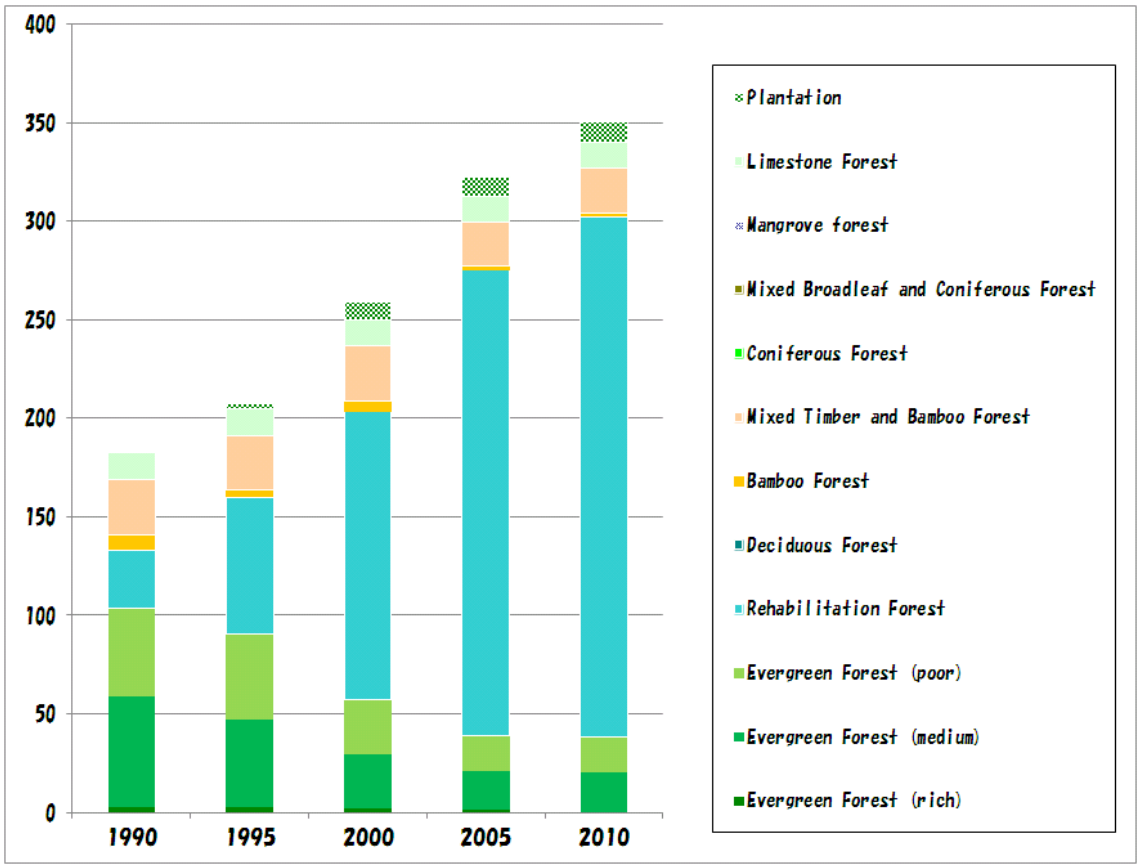


Figure 2.5 Change of the forest area in the province from 1990 by categories (unit: 1,000 ha)

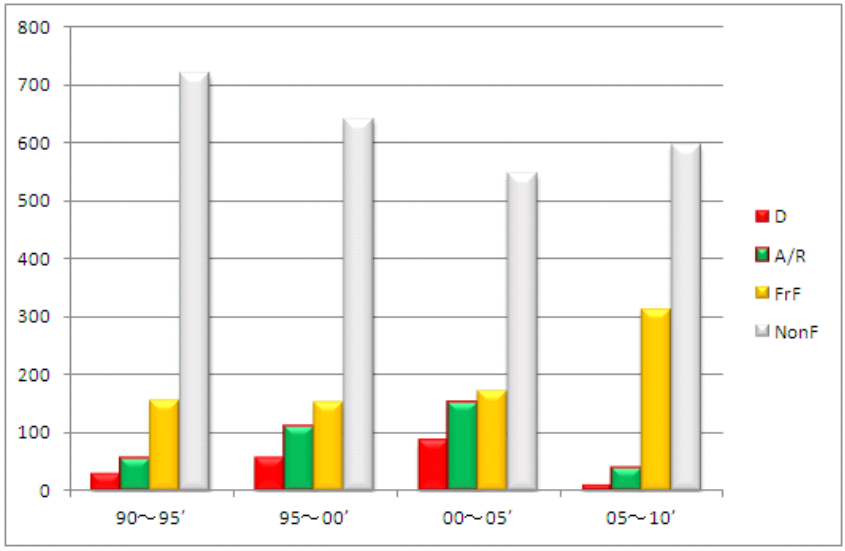


Figure 2.6 Area of land cover change: forest to non-forest; non-forest to forest; forest to forest; non-forest to non-forest based on the forest change matrix

Table 2.10 Area of land cover change: forest to non-forest; non-forest to forest; forest to forest; non-forest to non-forest based on the forest change matrix

(1,000 ha)	90 ~ 95'	95 ~ 00'	00 ~ 05'	05 ~ 10'
D	28.8	56.1	86.5	9.5
A/R	53.4	107.5	149.5	37.6
FrF	154.4	151.7	173.1	313.0
NonF	720.2	641.6	547.3	595.8
Total	956.8	956.9	956.3	955.9

Table 2.11 Data on area by land cover categories at three points in time in association with Program 661

Categories	Effort of 661 Program (ha)		
	2000	2005	2010
Bare land with scatter tree	1,535	9,553	47,596
Bare land with shurb	644	739	1,890
Mixed timber and bamboo forest	-	-	1,070
Natural medium forest 100 - 200 m3/ha	77	6	19,606
Natural poor forest < 100m3/ha	-	-	792
Natural rich forest > 300m3/ha	-	-	481
Plantation	1,206	4,193	2,348
Regrowth forest < 10m3/ha	-	106	15,742
Regrowth forest > 10m3/ha	222	18	15,223
Total	3,684	14,614	104,748

The figures entered in this table are area of planned input for Program 661 and rate of success is not considered.

Assuming that effect of Program 661 is expressed in area of land cover change as "non-forest to forest" or "forest to forest" of Table 2.12, ratio of implementation area of Program 661 to forest change matrix becomes those as shown in the table below.

Table 2.12 Ratio of implementation area of Program 661 to forest change matrix

(1,000ha)	95 ~ 00'	00 ~ 05'	05 ~ 10'
A/R+FrF	259.2	322.5	350.6
661	4.0	15.0	105.0
Portion	1.5%	4.7%	29.9%

As shown on Table 2.12, the effects of Program 661 on the entire area of land cover change from "non-forest to forest" and "forest to forest" were rather limited prior to 2005. However, from 2005 onward to 2010, the figures above indicate that the effects of Program 661 account for 30 % of the

entire area of land cover change from "non-forest to forest" and "forest to forest". If Program 661 is considered as the national circumstances, the difference from the "business as usual" trend is small up until 2005. On the other hand, Program 661 is expected to lower the baseline from 2005 to 2010.

Regarding the amount of input and rate of success of Program 661, the implementation map of the Program and the satellite image were overlaid. Then, the effects of regeneration implemented under Program 661 were checked by visual observation and sampling. Thus, results of sampling/visual observation could be compared with the results from analysis of the satellite imagery. Therefore, if the satellite image showed positive results in terms of regeneration and/or forest protection, the regeneration activities can be considered successful. Table 2.13 below shows the results of analysis/comparison initiatives, on the basis of planned area, area of success and rate of success by the categories and years associated with Program 661.

Yellow line: boundary of the compartment; the number indicates the activities (e.g. 6 indicates afforestation).

Figure 2.7 Planning map of Program 661 overlaid with the satellite image

Table 2.13 Area of success of Program 661

Planned Area of 661program (ha)

Land use/Land cover	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total (ha)
Bare land with scatter tree	1,535			1,345	80	2	8,125	10,212	31,401	4,718	1,265		58,683
Bare land with shurb	644			500			239	748	956	122	65		3,273
Mixed timber and bamboo forest										260	810		1,070
Natural medium forest 100 - 200 m3/ha	77					6				16,074	3,207	325	19,690
Natural poor forest < 100m3/ha										560	173	59	792
Natural rich forest > 300m3/ha										481			481
Plantation	683	523	457	636	1,370	1,004	726	357	692	508	493	299	7,747
Regrowth forest < 10m3/ha					106					6,448	8,010	1,285	15,848
Regrowth forest > 10m3/ha	222			18						8,158	6,406	659	15,463
	3,161	523	457	2,500	1,556	1,013	9,090	11,316	33,049	37,330	20,428	2,626	123,046

Successed Area of 661 program inerpretated by satellite imagery (ha)

Land use/Land cover	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total (ha)
Bare land with scatter tree	629			606	32	2	3,351	3,236	15,933	2,673	482		26,944
Bare land with shurb	343			98			105	327	171	54	16		1,114
Mixed timber and bamboo forest										205	271		476
Natural medium forest 100 - 200 m3/ha	1					-				2,336	790	-	3,127
Natural poor forest < 100m3/ha										25	6	-	31
Natural rich forest > 300m3/ha										-			-
Plantation	103	60	11	29	86	46	8	46	143	56	52	1	641
Regrowth forest < 10m3/ha					77					2,310	4,427	639	7,453
Regrowth forest > 10m3/ha	88			15						5,178	4,443	367	10,091
	1,165	60	11	747	194	48	3,464	3,608	16,246	12,839	10,488	1,007	49,878

Success rate of 661 program (%)

Land use/Land cover	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total (%)
Bare land with scatter tree	41			45	32	80	41	32	51	57	38		46
Bare land with shurb	53			20			44	44	18	44	25		34
Mixed timber and bamboo forest										79	33		45
Natural medium forest 100 - 200 m3/ha	2					-				15	25	-	16
Natural poor forest < 100m3/ha										5	3	-	4
Natural rich forest > 300m3/ha										-			-
Plantation	15	11	2	5	6	5	1	13	21	11	11	0	8
Regrowth forest < 10m3/ha					72					36	55	50	47
Regrowth forest > 10m3/ha	40			81						63	69	56	65
	37	11	2	30	12	5	38	32	49	34	51	38	41

Outputs of analysis and comparisons conducted show that the success rate of Program 661 varies depending on the type of investment items. However, the rate of success up until Year 2007 may not be an appropriate reference. Prior to Year 2007, the area planned for Program 661 was small. Thus there is the risk that the rate of change could be overestimated. But in Years 2008, 2009 and 2010, the areas included for implementation were larger. Thus the rate of change could be estimated with greater accuracy and confidence, and the risk of overestimation could be avoided. The rates of change by year were calculated at 34 %, 51 % and 38 % respectively. Consequently, it can be concluded that the rate of success varies between 30 % and 50 %. Finally, the area of success calculated on the basis of the rates of success by years and activities, rather than the average, was used for calculating the national circumstances.

The tables below show results of the analysis based on area and the conversion of area into carbon equivalent.

Table 2.14 Amount of successful input of Program 661 (area and carbon equivalent)

Area of Program 661 and the carbon equivalent (the planned area basis)

Categories	Effort of 661 Program (ha)			EF for each categories(Ct/ha)			Total stock due to 661 program (Ct)		
	2000	2005	2010	2000	2005	2010	2000	2005	2010
Bare land with scatter tree	1,535	9,553	47,596	0	0	0			
Bare land with shurb	644	739	1,890	30	28	36	19,311	20,328	67,452
Mixed timber and bamboo forest	-	-	1,070	N/D	N/D	19	-	-	20,534
Natural medium forest 100 - 200 m3/ha	77	6	19,606	81	82	82	6,199	523	1,598,682
Natural poor forest < 100m3/ha	-	-	792	N/D	N/D	40	-	-	31,660
Natural rich forest > 300m3/ha	-	-	481	N/D	N/D	218	-	-	104,945
Plantation	1,206	4,193	2,348	22	32	25	26,351	134,773	57,655
Regrowth forest < 10m3/ha	-	106	15,742	N/D	0	0	-	-	-
Regrowth forest > 10m3/ha	222	18	15,223	51	36	40	11,293	640	603,296
Total	3,684	14,614	104,748	183	177	459	63,155	156,265	2,484,223

Area of Program 661 and the carbon equivalent (the success area basis)

Categories	Effort of 661 Program (ha)			EF for each categories(Ct/ha)			Total stock due to 661 program (Ct)		
	2000	2005	2010	2000	2005	2010	2000	2005	2010
Bare land with scatter tree	629	3,991	22,324	0	0	0		-	-
Bare land with shurb	343	203	568	30	28	36	10,296	5,598	20,262
Mixed timber and bamboo forest	-	-	476	N/D	N/D	19			9,142
Natural medium forest 100 - 200 m3/ha	1	-	3,126	81	N/D	82	116		254,887
Natural poor forest < 100m3/ha	-	-	31	N/D	N/D	40			1,254
Natural rich forest > 300m3/ha	-	-	-	N/D	N/D	218			-
Plantation	163	179	299	22	32	25	3,563	5,759	7,341
Regrowth forest < 10m3/ha	-	77	7,376	N/D	0	0		-	-
Regrowth forest > 10m3/ha	88	15	9,988	51	36	40	4,496	517	395,839
Total	1,225	4,464	44,189	183	95	459	18,471	11,873	688,726

*The upper table and the lower table calculate the carbon equivalent based on the planned area and successful area respectively. EF in the table represents emission factor.

For example, in data shown for Year 2010 the planned area calculated at 104,748 ha, is compared with the successful area of 44,189 ha. Consequently the ratio of the planned area to successful area is 42 %.. To derive results in terms of carbon stock, these figures are converted into 2,484,223 Ct for the planned area and 688,726 Ct for the successful area, or a comparative ratio of 28%.. This is attributed to evaluating the average carbon stock for first and eighth categories as 0.

Table 2.15 and Figure 2.8 below describe the results of comparison between (i) forest carbon stock change calculated from the forest change matrix by using the forest distribution map at five points in time and (ii) the emission factors based on the NFI and successful area of Program 661. Forest carbon change as shown on Table 2.15 is a result of applying data of the revised forest distribution map of 2010 (developed by FIPI)..

Table 2.15 Carbon change based on the forest change matrix

(Unit: 1000 CO2t)	90 ~ 94'	95 ~ 99'	00 ~ 04'	05 ~ 09'
De F	-4,822	-8,051	-9,470	-868
A/R F	5,608	9,800	11,647	3,799
Fr F	-680	-2,429	-468	-300
Total Stock	106	-680	1,708	2,631

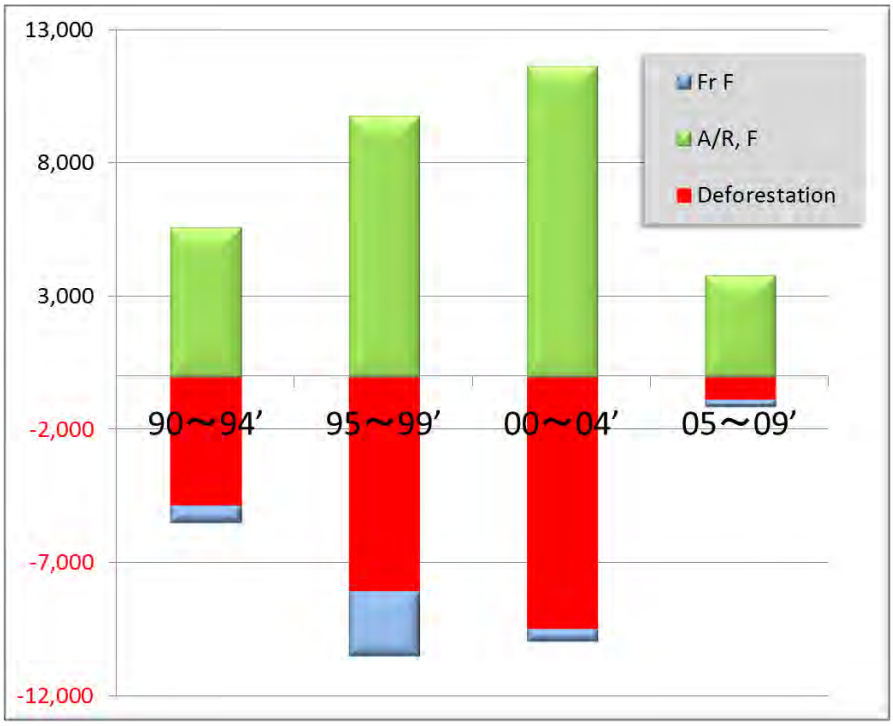


Figure 2.8 Change of carbon stock based on the forest change matrix (unit: CO2t)

Emissions from deforestation reached a peak between 2000 and 2005 and decreased thereafter. Likewise, removal due to the change from non-forest to forest reached a peak between 2000 and 2005 and then decreased. The change from forest to forest can be considered net emission or net removal. It was net emission before 2005 and later turned into net removal.

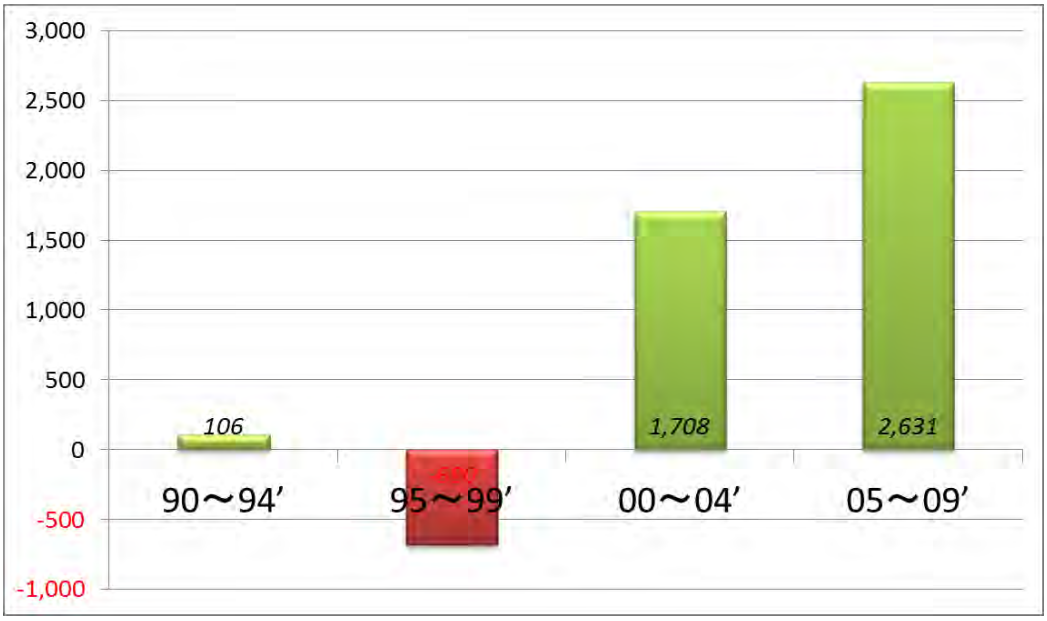


Figure 2.9 Change of carbon stock by total stock change (unit: CO2t)

The above chart illustrates the carbon stock change based on the total stock. It is found that net emission turned into net removal around the period from 2000 through 2005. Carbon stock of the forests developed under Program 661 is included in this carbon stock and removing this amount makes it possible to set baseline without 661 programs. This is regarded as incorporation of the national circumstances.

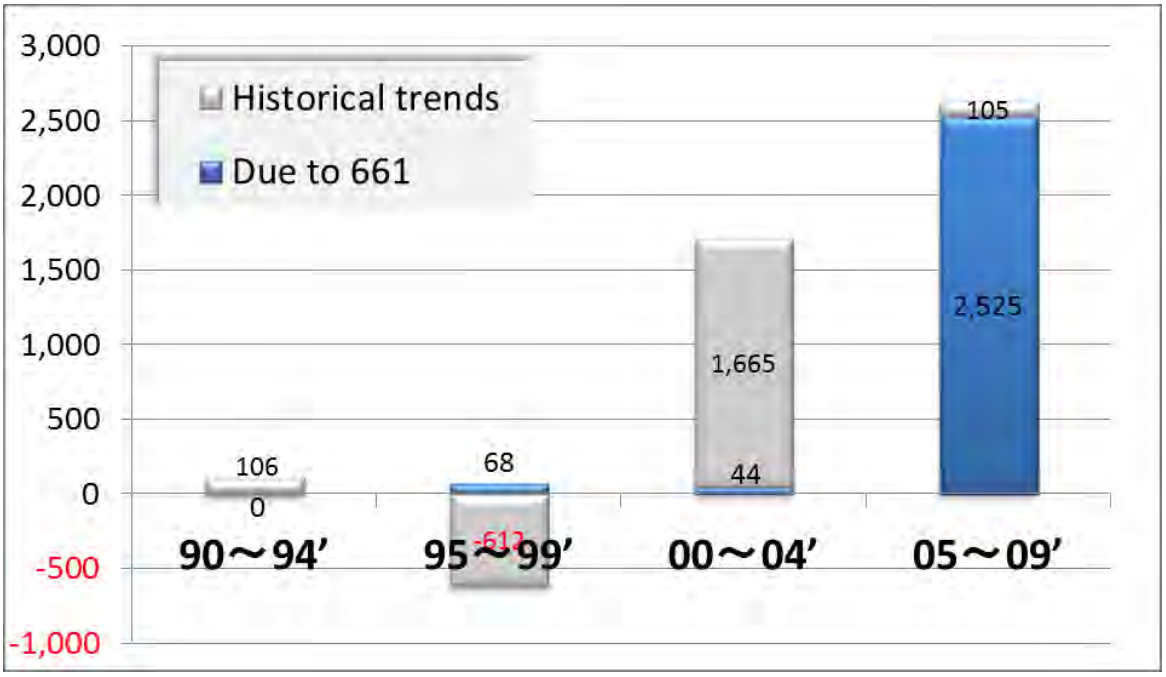


Figure 2.10 Past carbon stock change due to Program 661 (unit: 1,000 CO_2t)

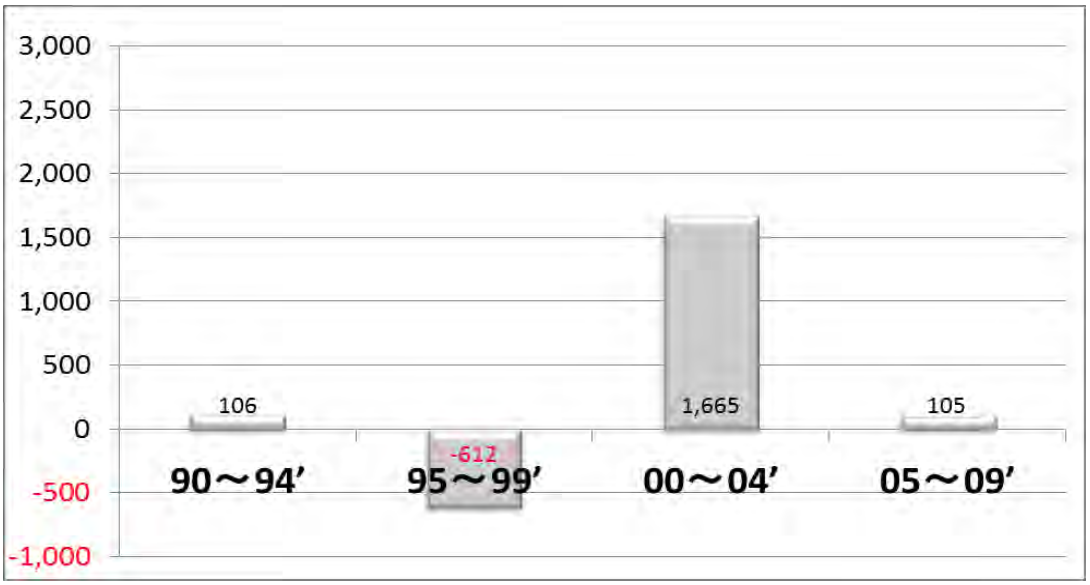


Figure 2.11 Carbon stock change in Dien Bien after removing the carbon stock changed due to Program 661 (unit: 1,000 CO_2t)

Although various methods have been recommended for estimating forest change in the future, the details of these methods are still not clear. Preceding projects in several countries extrapolated the past trends of forest change into the future. Furthermore, the inclusion of socio-economic factors has been suggested, but the model for implementing this inclusion lacks robustness. Consequently, it was assumed that the past trend will continue in the future. Additionally, as shown on Figure 2.12, no consistent trend was found in the forest change data. Thus, the model for future extrapolation is based on averaging the past forest change trends. The FRLs set according to this method are shown below. Consequently, FRLs is estimated as 316,000 CO2t for five years and 63,200 CO2t for one year.

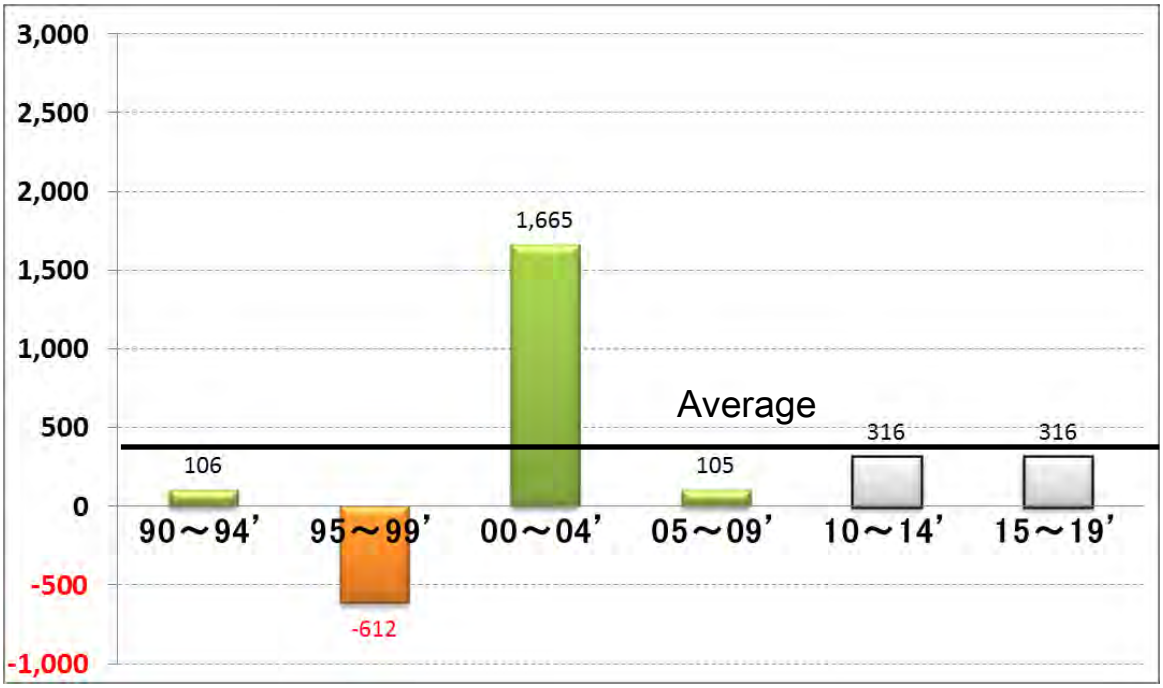


Figure 2.12 FRLs of Dien Bien Province taking into account the national circumstances (Unit; 1000 CO2t)

(5) Result of reviewing FRELs

Regeneration and afforestation under Program 661 that is taken into account as the national circumstances is realized by subtracting the amount of forest increase from the past change of forest carbon stock and the result is represented as FRLs. However, FRELs deal with the emission and it makes difficult for regeneration and afforestation of Program 661 to be considered as the national circumstances. Consequently, the Business As Usual (hereafter "BAU") model to extrapolate the average of the past emission into the future was adopted. Trends of emission increase from 1995 to 2005 but it turn to decrease recently and we could not identify these drivers. As a result, it has been estimated that about 6.8 million CO2t / 5-year based on average through forest carbon emission trend in the past. In other words, this amount is potential for emission reduction of REDD+.

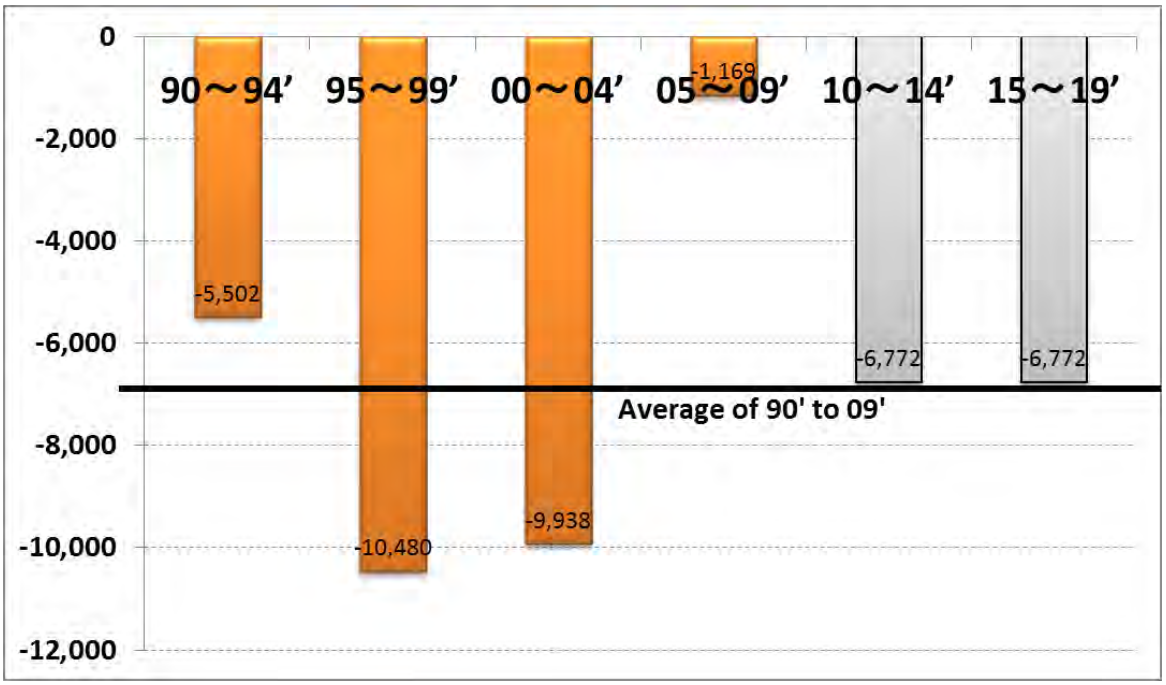


Figure 2.13 FRELs of Dien Bien Province taking into account the national circumstances(Unit; 1000 CO2t)

Various options have been discussed many times, regarding whether to adopt either FRELs or FRLs. One option examined thus far in the Vietnam context has been (1) to compare construction of FRLs taking into account the results of Program 661 program as an "Early action", and (2) only considering data on deforestation for the construction of FRELs. It should be noted however that, with the exception of a few countries such as China and India, there are limited or no possibilities for construction of FRLs based on trends showing an increase of forest area. Therefore, in pursuing a methodology for considering national circumstances and the development of FRLs, it is necessary to promote the development of robust theories that can be confidently applied during international negotiations in the future. If such theories are developed., it will then be feasible to develop FRLs that take into account of the results of programs such as 661 and express these results quantitatively as "Early action ".

[12] Improvement of MRV including Monitoring of Policies and Measures (PaMs)

In order to modify the provincial Measuring, Report and Verification (MRV) system proposed by the JICA REDD+ Study in 2012, the Project conducted reviews of 1) the existing system; and 2) the present conditions of Policies and Measures (PaMs). Concurrently the present monitoring methods were studied in accordance with the scales, targets, and relation to the Benefit Distribution Systesm (BDS), and capacity. As a result, a Provincial Forest Monitoring System (PFMS) was developed and procedures for contributing to the National Forest Monitoring System (NFMS) were proposed. Moreover, a forest information database system (prototype) was developed to collect and save as evidences (if and when needed) important information in respect of PaMs, PFES (i.e. Payment for Forest Environment Services, forest change and other relevant data. In this connection, two (2) Manuals were produced: (1) PFMS manual and (2) Manual of Operations for the forest information database. The parameters of these activities are discussed below.

(1) Review of existing MRV system

- The Project clarified relation and compatibility among the existing national forest inventory related program (NFI, NFI&S and Forest Monitoring Information System (hereafter "FORMIS") as well as forest change monitoring system at provincial level. The designing next NFI has been tried under support of FAO. Regarding National Forest Inventory & Statistics (NFI&S), the implementation in the all province until 2015 is planned, but the progress is not smooth. Therefore, it is still unclear how the NFI at national level is unified and implemented. Consequently, on certain assumptions, the Project proposed system organically complementing NFI and PFMS each other. Meanwhile, regarding the database, FORMIS as core project has been working on the development of system which accumulates information and data on forest change to be provided from local area, but it is still on the way. Due to the situation mentioned above, the database system to be developed in the Dien Bien Province cannot be completely connected to the database system at the national level. Therefore, the Project determined the system that has compatibility with the database system at national level properly accumulating the data, as lowest requirement for the development of database system.
- The Project analyzed gaps in between the implementation of national and provincial MRV and proposed suitable institutional framework. This is activity in anticipation of maturation of mutual understanding among the stakeholders, clarifying relation between the PFMS which is concrete measure for provincial MRV and NFI which is a part of national MRV clarified mentioned above.
- The Project clarified technical issues on MRV and other relevant matters, especially, from point of views of the target of measurement regarding M of MRV (which target should be selected, area, volume or carbon stock). As a result, the Project clarified forest change area as the target to be measured in the field based on the existing PFMS. In addition, regarding R of MRV, the Project concluded that enriching function of reporting for forest change monitoring implemented every year is solution of the issue. Regarding V of MRV, the Project clarified that system that internal verification can be implemented should be established taking into the account of improvement of forest governance. These ideas mentioned above were incorporated

into the revised system of PFMS.

- The Project found the present maps of all the administrative level in the province and examined how to update the maps. Some maps such as FPDP planning map and DONRE map exist as maps of the province and lower level. FPDP map was prepared based on the field information but some accuracy problem is pointed out. The problems is overcome in the revised PFMS by the grasping forest information using satellite imageries
- The Project clarified how to utilize present forest change monitoring system. Through the review work mentioned above, the Project clarified that forest change monitoring system should not be utilized for only REDD+, and the Project concluded that it is reasonable that the system is utilized to strengthen and complement the existing PFMS from the viewpoints of capacity and budget of Dien Bien Province.

(2) Review on the present condition of Policies and Measures (PaMs) and monitoring method

The Project carefully studied the institutional arrangements and technical issues relevant to implementation of Payment for Environmental Services (PFES) at the provincial level. Based on results of these studies, the Project proposed a system in which Forest Rangers will implement monitoring of REDD+ activities at the village level in combination with the monitoring of FPDP and PFES implementation. This would be consistent with the institutional framework for provincial MRV implementation since FPDP and PFES are the major policies influencing implementation of the PRAP. In addition, the Project concluded that proposing BDS options for the province was premature, and that BDS options should be treated separately from MRV. This is proposed because, at present the national government has not yet formulated the policies and mechanisms for BDS .

Based on a study and review of the existing system, the Project identified opportunities for improvement of the MRV system including monitoring of PaMs, in conjunction with development of the monitoring system as discussed below in section [13].

- ☑ Regarding the linkage between the national MRV and the provincial MRV, the Project concluded that the both MRV would be complemented each other by providing satellite imageries and forest status maps from national level and providing data of renewal maps and results of field survey from provincial level.
- ☑ Basis of the provincial MRV is the existing PFMS, and the PFMS should be strengthened and complemented from point of views of MRV.
- ☑ The system which can monitor FPDP and PFMS in the provincial MRV is needed.

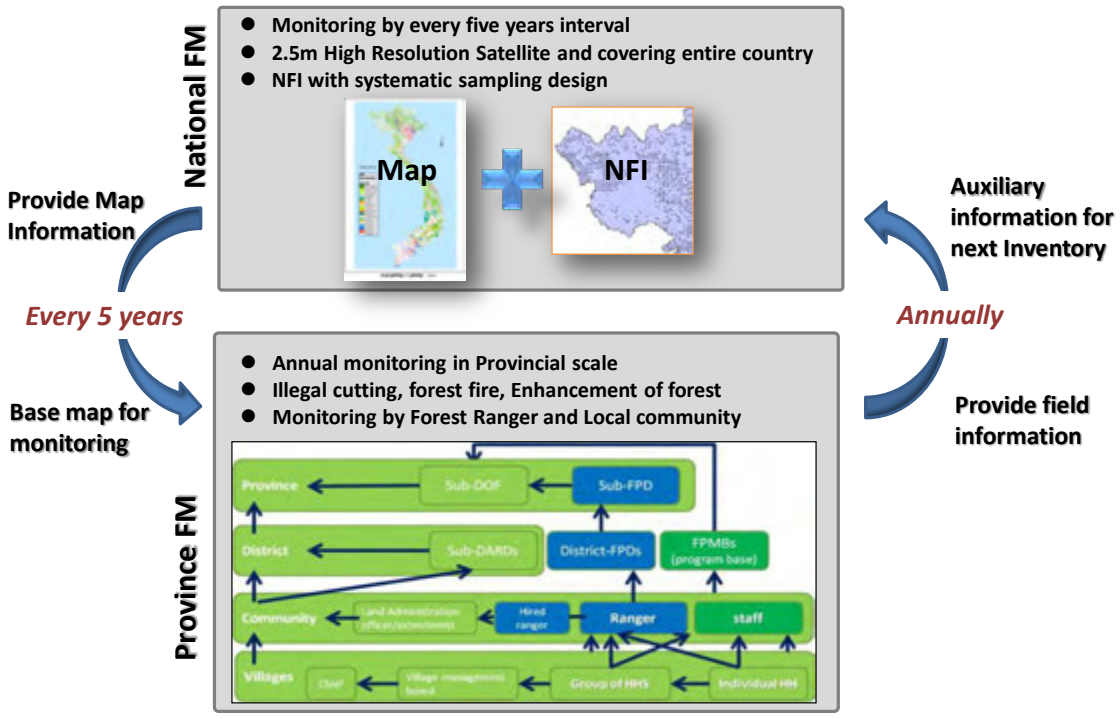


Figure 2.14 Mutual complement of NFI implemented in national level and the PFMS

[13] Development of output monitoring system for Five REDD+ activities

When the performance of forest conservation activities related to REDD+ is measured, different monitoring indicators should be considered for the five (5) key activities: (i) Reduction of deforestation, (ii) Reduction of forest degradation, (iii) Forest conservation, (iv) Sustainable forest management, and (v) enhancement of forest carbon stock. The output monitoring system should be linked to BDS through monitoring of the outputs of activities. However, the Project decided not to design BDS options at this time for two reasons. First, as noted earlier, the appropriate policies of mechanisms for BDS are not yet in place. Secondly, if the BDS of REDD+ is discussed at this time, despite the uncertainty of future funding resources and mechanisms, it might increase excessive expectations of all parties concerned about benefit distribution. The rationale for this decision is further explained later in section [17] of this report (Improve BDS option). In this context, it is important to note the absence of any linking mechanisms between results of the MRV and the BDS. At present, MRV only focuses on monitoring of any increases and decreases of forest resources. Based on the proposed improvement of the provincial MRV as discussed in paragraph [12] above, the provincial MRV would be significantly strengthened, complementarity with the existing PFMS would be achieved, and all five (5) key activities would be monitored. In addition, the Project established a forest information database in which all the data will be stored.

(1) Processes for improvement of the PFMS

By conducting a thorough study of the existing PFMS, the Project identified the organizations involved and sorted out their respective roles in relation to the collection of forest information at the provincial, district, commune and village levels.

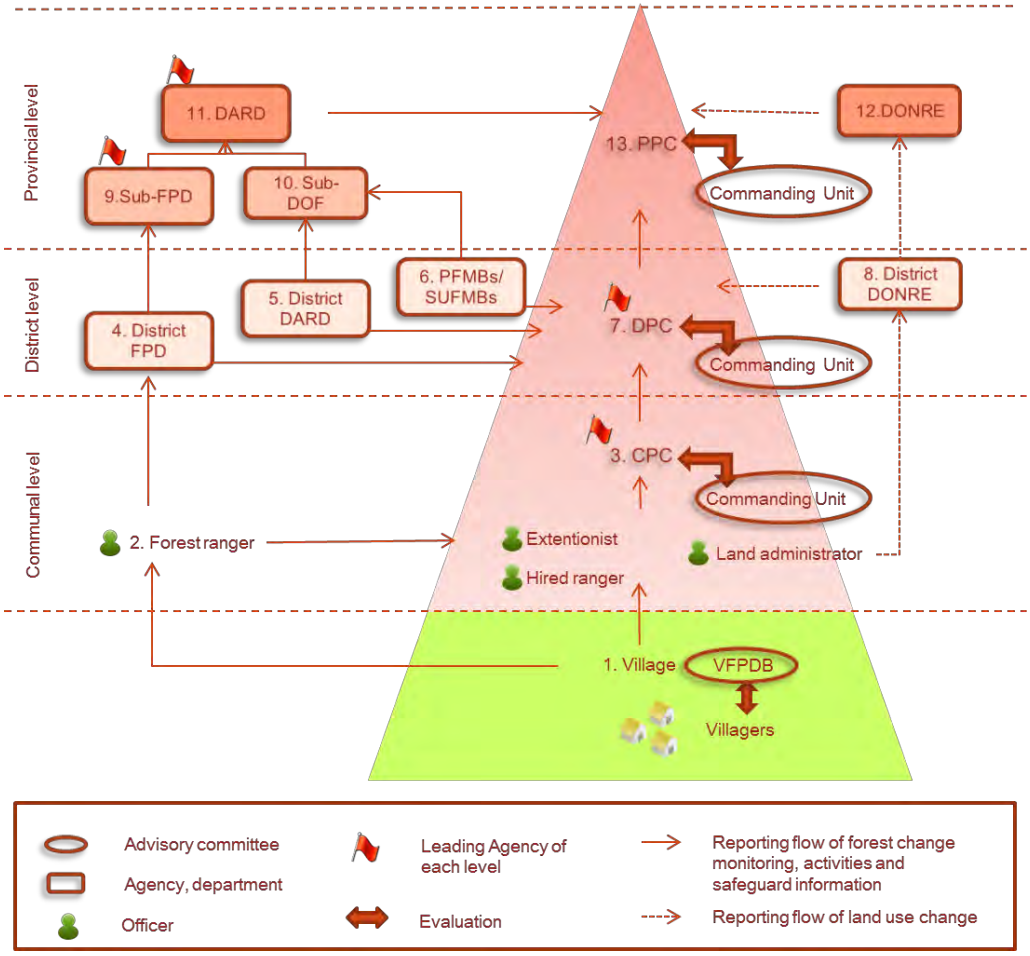


Figure 2.15 Relations among stakeholder on existing PFMS

It is clear from information obtained by the project that the role of the Forest Ranger assigned in each commune is significant. However, the Forest Rangers have never implemented field surveys with high accuracy maps. The Project noted that this problem can be addressed by providing the Forest Rangers with GPS receivers and data from the interpretation of satellite imagery. In addition, the Forest Rangers will need to grapple with the procedures for taking photos of field conditions, while concurrently documenting location of the photos by incorporating coordinates determined through utilization of GPS technology. Relatedly, the existing PFMS also requires reports from villagers on forest change issues. However, this requirement is not being properly implemented due to the low level of knowledge at the village level regarding the necessary techniques. To help alleviate this problem, the Project proposed that reports measuring forest change would be properly prepared by linking the Village Management Board for Forest Management and Livelihood Development (hereafter "VMBFMLD") with the Forest Rangers. This proposal is illustrated in the figure hereunder.

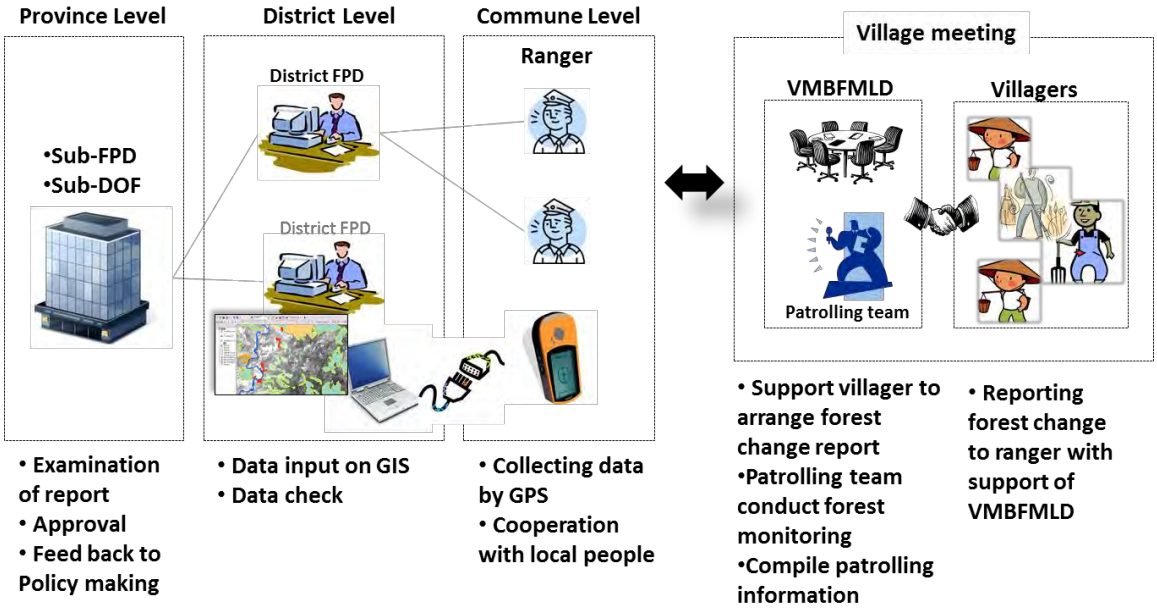


Figure 2.16 Flow of forest information in the improved PFMS

As shown on the figure above, reports on changes (increase/decrease) in forest status, and the approximate location of the changes would be reported by the villagers through the VMBFMLD to the Forest Rangers. Thereafter, using the recommended equipment and procedures, the Forest Rangers would measure the area of change (i.e. no. of hectares) by conducting field surveys. In order to enhance information during the field surveys, the Forest Rangers would utilize maps overlaid on satellite imagery. The forest status map thus derived will show measurements of forest change at the points where change has occurred. This will be accomplished through utilization of GPS equipment and photographic documentation of forest change taken by cameras that incorporate GPS data. All of this information will be accumulated, stored and archived in an improved PFMS. Moreover, the Project will establish a system ensuring that the information is compiled in the District FPD and it is reported to the relevant organizations.

(2) Output of the PFMS

Cooperation methods among the relevant organizations for collecting forest information have been discussed above. Next, the Project focused on outputs the PFMS should produce by using the methods. While taking into account the course of action for the PFMS clarified above, it is important to note that requirements of the PFMS are to (i) follow the existing forest information system, (ii) be able to monitor policies on REDD+ and (iii) have a system of verification. Therefore, the following three (3) points comprise key outputs of the PFMS:

1) Direct support to forest statistics surveys that the FPD implements every year
2) Documentation and in-depth understanding of the results of FPDP and PFES implementation
3) Verification surveys by random sampling

(3) Development of Prototype Forest Information System (Pro-FIS)

The PFMS means the system collecting forest information. Meanwhile, the database of the information under centralized control is needed. As reviewing in section [12], the database system at the national level is still under discussion for the development. Therefore, it is impossible to develop the database system at the provincial level fitting into the system at the national level. In these contexts, the database system in Dien Bien Province was developed as prototype until the system at national level would be developed, and the database for Dien Bien Province was designed as data to be accumulated in the database would be able to be utilized for the standardization of database systems at national and provincial level. The other concepts for the development of the database are as follows,

- The system shall be prepared for every level of officers of relevant organization who are able to operate it in a sustainable manner.
- The system shall be simple and practical for the Forest Rangers to operate in their daily work.
- The way of data collection and the level of uncertainty are clearly shown case-by-case.
- The results of the collected data are evidence to be stored with the updated map and the pictures by the Forest Rangers.
- Forest monitoring is based on the latest satellite imagery and the map. The latest satellite imagery is expected to be given from NFI.

The whole structure of Pro-FIS based on the concepts mentioned above is shown in the below figures.

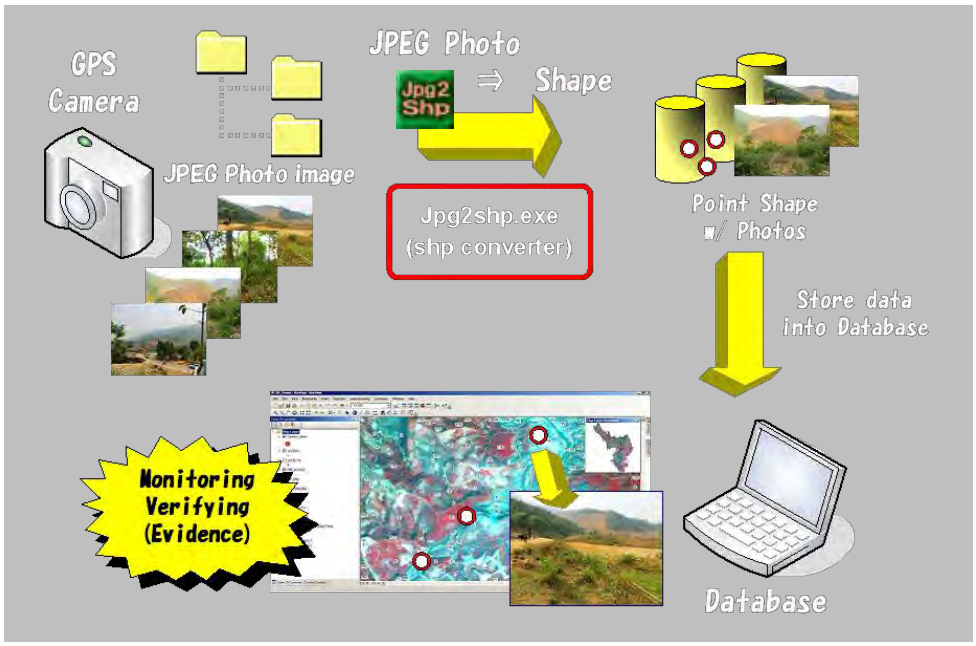


Figure 2.17 Whole structure of Pro-FIS

Next, it is described what functions the database system possess in each outputs mentioned above. At first, the direct support to forest statistic survey that the FPD implements every year as the output 1 has a structure as shown in Figure 2.18. The forest change information to be collected through the Forest Rangers by use of GPS and satellite imageries will be accumulated in district FPD and stored in GIS. At the same time, the information can be automatically transferred to the Statistical Survey Sheet by the conversion program, and is reported through the DBR.

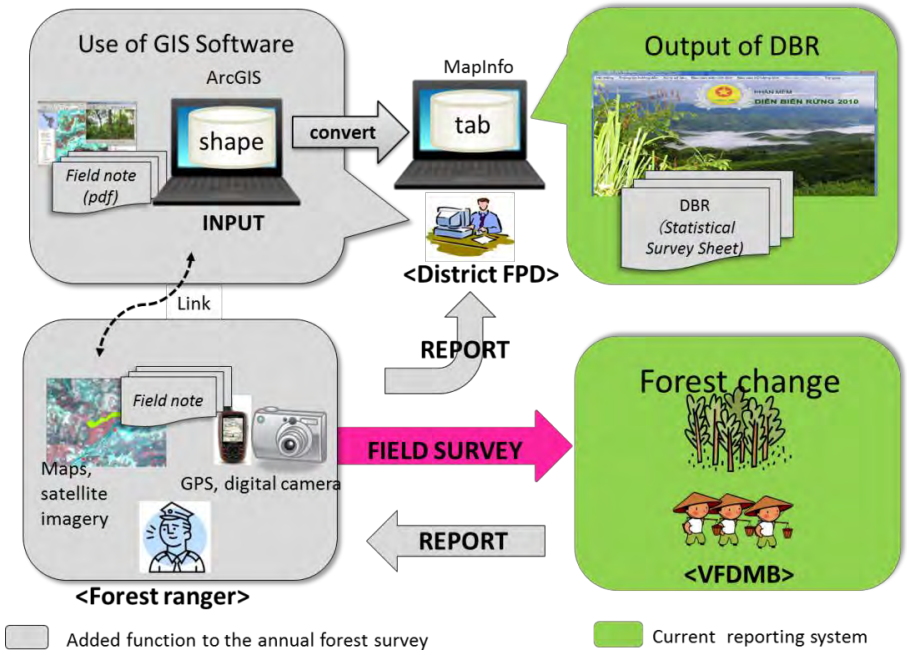


Figure 2.18 Whole structure of output 1

Grasping results of implementation of FPDP and PFES as the output 2 has a structure as shown in Figure 2.19. The step shown in left side in the figure shows process to obtain information to be accumulated through process of the output 1. Meanwhile, The step shown in the right side shows accumulation of data on the planned area for PFES and/or forestland allocation and grasping progress rate of forestland allocation. Furthermore, whether or not the forest conservation in the planned area of PFES is properly implemented can be confirmed through combining these two data mentioned ab above.

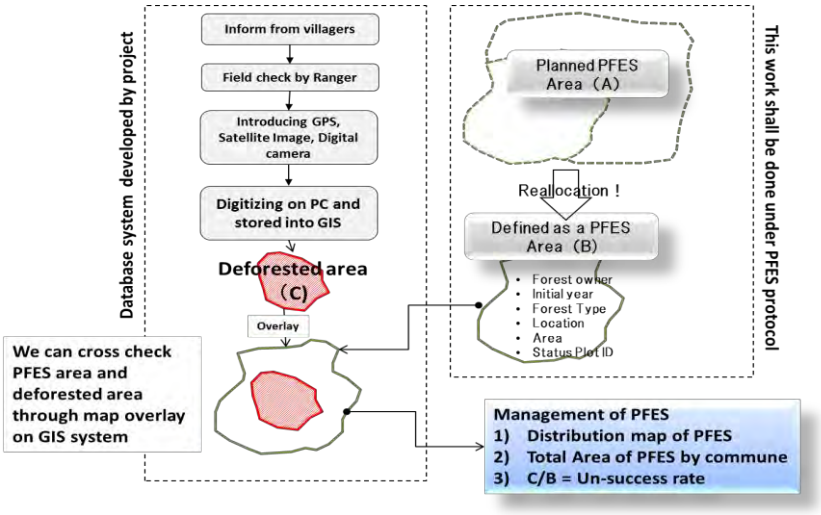


Figure 2.19 Whole structure of output 2

Output 3 consists of the verification survey by random sampling. This survey should be implemented in order to verify the level of accuracy of forest information and prevent leakage of reporting in the forest change information obtained from villagers. Moreover, improvement of forest governance is also expected through the verification activity. The verification function contains three special features:

- Strengthen the one way (i.e. direct) reporting system from the community to the Forest Ranger in order to improve the accuracy of forest change information.
- Obtain forest change information at random sampling grids from various locations within the province. This will facilitate quantitative assessment of the accuracy of forest change. (The number of samples should be discussed, considering the issues of scale and capacity)
- Provide efficient Forest Monitoring to the Forest Rangers.

The Project incorporated into the improved PFMS, the results obtained through a third-party survey done by Forest Rangers at field points using a systematic sampling approach. This process took into consideration the three points mentioned above. Objectives of the third-party survey were to verify at the field points whether or not reports from villagers are erroneous or accurate and to quantitatively determine leakages or excesses of the reports (See the Figure 2.20).

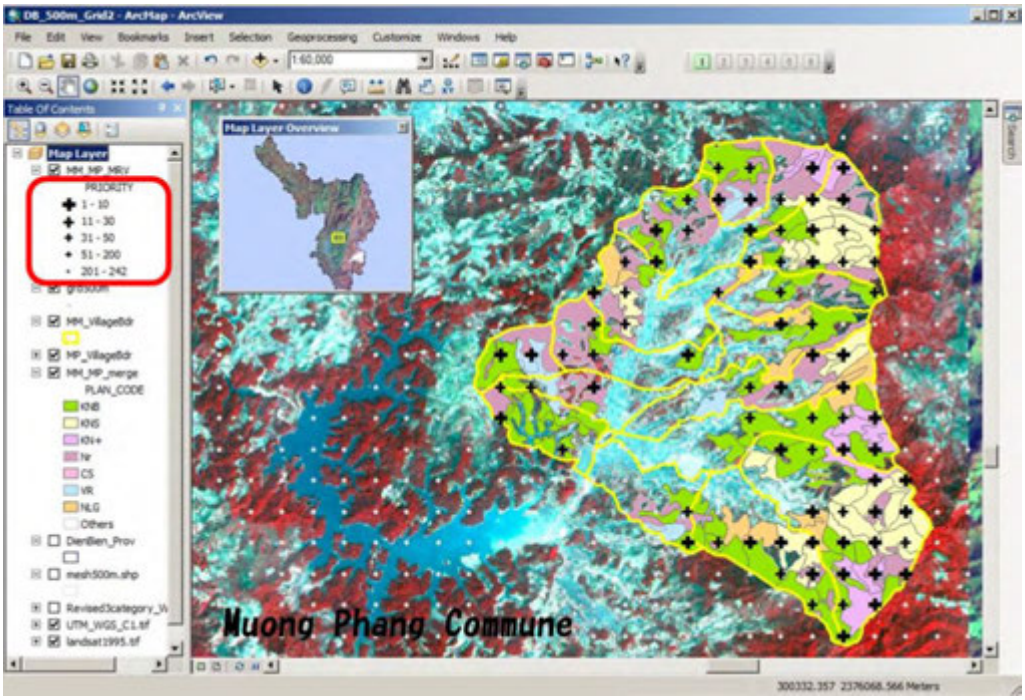


Figure 2.20 Example of the verification points of output 3

Forest information to be obtained by the improved PFMS equipping the three outputs mentioned above is summarized as following Table 2.16 in terms of the Five REDD+ activities.

Table 2.16 Information collected by the PFMS in terms of Five REDD+ activities

Five REDD+ activities	Information collected
Reduction of deforestation	● Disappearance of forest by forest fire ● Disappearance of forest by forest disease and harmful insect ● Changes in land use purpose (Conversion of forest to farmland by shifting cultivation)
Reduction of forest degradation	(monitoring cannot be implemented in the current improved PFMS)
Forest conservation	● Increase of forest area in the protection and production forest area by newly-planted (afforestation) and natural regeneration ● Increase of the area of remained forest zoned for PFES
Sustainable forest management	● Formulation of forest fire prevention and fighting team at village level ● Formulation and implementation of FMP ● Changes in land use purpose (conversion to forestry land from agricultural land) ● Newly-planted in production forest area
Increase of forest carbon stock	● Increase of forest in forestry land by the above activities

(4) Issues of the improved PFMS

As noted on the table above, forest degradation cannot be implemented at the present time in the improved PFMS. To understand the reason for this, it is important to note that forest degradation in Dien Bien Province is expected to occur principally due to the collection of firewood for conversion into charcoal. The firewood will be produced by selective cutting in high-volume evergreen forests. In order to determine the extent of forest degradation caused by the cutting, it is indispensable to evaluate conditions in the forests that remain after the cutting is completed. Evaluation by conducting plot sampling surveys would be needed in order to establish the extent or degree of forest degradation. After noting these factors, and assessing the local capacities, the Project decided not to incorporate evaluation into the improved PFMS at the present stage. Given the lack of staff with knowledge of the appropriate techniques, the feasibility to accomplish effective monitoring by conducting plot sampling surveys.is doubtful.. However, the Project plans to revise the improved PFMS after 2015 as the need arises on the basis of experience derived from implementation of the improved PFMS in the pilot communes.

Another issue central to an improved PFMS is the need for a defined and homogenous standard of technical skills that will be applied in the collection of information. Appropriate standards of such

skills will make to possible to attain an acceptable level of accuracy when implementing the improved PFMS and scaling up results in the whole province. These considerations highlight the indispensable need to train many Forest Rangers. In this connection a cost-benefit analysis will assess the feasibility to purchase satellite imageries with high resolution. This issue is discussed in Chapter (3) of this report "Comprehensive Recommendations" which, among others, discusses issues and options for improving PFMS methods.

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[14] Development of the System for providing information on how the Safeguards are addressed and respected

(1) REDD+ Safeguards

The REDD+ action plans and their implementations have to take the Safeguards against possible negative effects of their implementation on social, economic and environmental conditions in accordance with the following 7 Safeguards in the Cancun Agreements (Decision 1/CP.16). Therefore, the plans and their implementations are needed assessing on whether they take Safeguards. 7 Safeguards in the Cancun agreements are illustrated in the following.

(a) That actions complement or are consistent with the objectives of national forest programs and relevant international conventions and agreements
(b) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty
(c) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples
(d) The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities
(e) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits
(f)Actions to address the risks of reversals
(g)Actions to reduce displacement of emissions

According to the Guidance in the Decision 12/CP.17 of COP.17 based on 7 Safeguards in the above Cancun agreements, developing a system to provide information on how Safeguards are considered and taken (hereafter, "Safeguard Information System") is needed in the REDD + scheme. Moreover, in accordance with the Guidance in the Decision 12/CP.17 of COP.17, Safeguards Information System is developed at the National level.

On the other hand, in Vietnam, it is agreed on the principle to develop REDD+ Safeguards by the utilization of existing policies and international conventions approved. In the NRAP (Decision

799/QD-TTg of 27/6/2012), it is mentioned that a pilot system would be developed until 2015 and this information system would be improved between 2016 and 2020. A sub-technical working group for REDD+ Safeguards was set up for a dialogue with the stakeholders regarding REDD+ in Vietnam. This working group is managed by VNFOREST and SNV. At present, a draft for the road map to develop REDD+ Safeguards in Vietnam is made in process of creation through this working group. In this way, developing the Safeguard Information System is considered at the National level and the system involving monitoring Safeguard in discussion in the UNFCCC is not also concluded.

According to these situations, it is hard to develop Safeguard Information System at provincial level through the Project. Then how Safeguards given in Cancun Agreement are addressed at the REDD+ preparation stage in Dien Bien are described in the PRAP.

However, there is a need to cope with at the provincial level at the time of Safeguard Information System at the National level being developed. In consideration of these circumstances、the following (2) was considered as an option of the system in the province of Dien Bien based on developing Safeguard Information System at the National level.

(2) Consideration of an option of the Safeguard Information System for the future in the province of Dien Bien

It is assumed that the system to be developed as an option to take Safeguards at province level should provide transparent and consistent information that is accessible by all relevant stakeholders. In consideration of these conditions, an option of the system was designed experimentally in the province of Dien Bien. In this system, in order to provide the information of Safeguards, the importance of monitoring the status of Safeguards was considered through the implementation of PRAP.

According to the Figure 2.21, this system consists of three administrative levels such as commune, district, and province. The plans and their implementations are assessed in each administrative level and those results are transferred in a process that proceeds from communal level to provincial level.

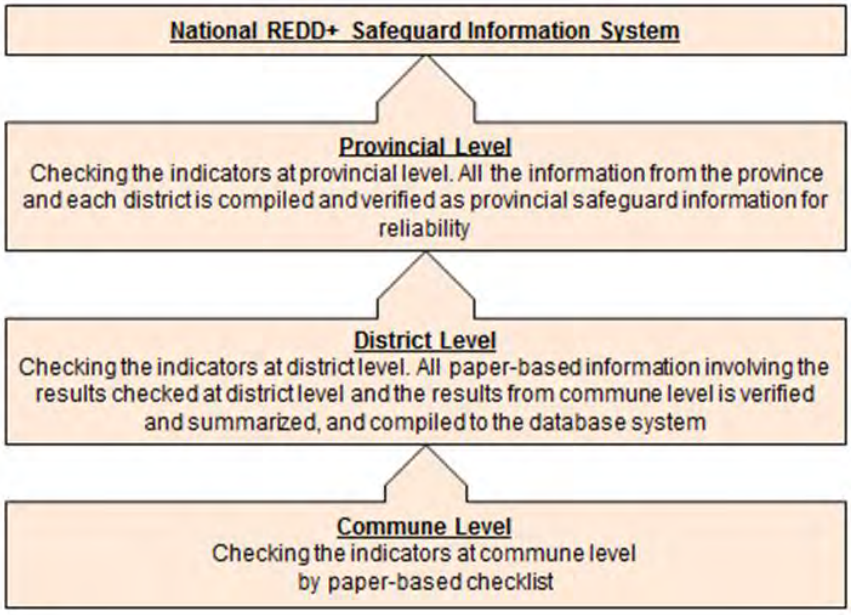

Figure 2.21 Example of Safeguards Information System in the province

At communal level, the Communal Commanding Unit for Emergency Matters on Forest Protection, Forest Fire Fighting and Management of Forest Products that consists of CPC officials, Forest Rangers, officials for PFMB and SUFMB and the leader of each village check the C-RAP and its implementation by using a checklist (Appendix 9). They record the results and report them to the administrative organizations at district level.
At district level, the District-FPD mainly checks the completed check sheet for Safeguards at communal level and checks the checking items needed at district level by using the same check sheet. Furthermore, these results are integrated with the results reported from communal level and all the results are installed in the database system and then they are transferred to the provincial level. .

At provincial level, administrative organizations at provincial level check all the results combined until the district level and check the checking items needed at provincial level. These results are integrated and they are installed in the database system and then they are transferred to the provincial level.

The results at provincial level are verified through the consultation with the NRAP Steering Committee and input to Safeguards Information System at the National level. All grounded information used for checking the plans and their implementation on Safeguards is filed and stored at each administrative office.

One of the tools to realize the system is the checklist in the following Appendix 9. In this checklist, the criterion are set in each item based on 7 Safeguards of Cancun agreements and then the indicators are set as checking items based on each criteria. The indicators are to identify the impact of the REDD+ plan and its activities. The indicators should be considered with the national and regional

circumstances for each country so that they may be different in each region and country.

Also, it is important to build a consensus with local communities in consideration with the feasibility of the monitoring. In this case, it is important to input the concept of FPIC into the methodology. The implementation of FPIC is one of the possible indicators to check the Safeguards.

Finally, Safeguard Information System is still in discussion under the UNFCCC. Safeguards Information System will be made available at the 39th session of SBSTA in 2014. The above system will be elaborated in accordance with further guidance of the UNFCCC.

2.3.3 Output 3: Development of Options of Benefit Distribution System (BDS) for Dien Bien Province

[15] Calculation of the Potential Benefits of REDD+ Program Implementation (Activity 3-1)

The Project calculated potential benefits up to 2020 expected from implementation of the PRAP. In carrying out these calculations, it was assumed that implementation would be consistent with the three key activities defined in the FPDP for the period 2012 – 2020. These activities are (i) forest protection, (ii) regeneration and (iii) afforestation. The areas in each district that are planned for each of these three activities under FPDP are provided in Table 2.17 below.

Table 2.17 Areas by district planned for forest protection, regeneration and afforestation under the FPDP

Unit: ha

		2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Protection	Dien Bien	0	5,483	5,100	5,200	5,100	1,000	2,200	3,700	2,700	30,483
	Dien Bien Dong	0	6,000	6,000	6,500	5,791	600	2,000	2,600	2,600	32,091
	Dien Bien Phu	0	595	600	618	369	60	170	70	70	2,552
	Muong Ang	347	11,247	77	27	0	258	227	220	117	12,520
	Muong Cha	42,573	68	49	0	87	220	1,340	1,290	1,080	46,707
	Muong Lay	4,441	0	0	0	0	100	100	100	200	4,941
	Muong Nhe	82,288	0	0	0	0	80	350	190	210	83,118
	Tua Chua	27,076	0	0	21	0	60	60	60	120	27,397
	Tuan Giao	28,488	3,942	4,078	141	71	210	1,245	210	250	38,635
	Total	**185,213**	**27,335**	**15,904**	**12,507**	**11,418**	**2,588**	**7,692**	**8,440**	**7,347**	**278,444**
Regeneration	Dien Bien	0	1,000	1,500	1,500	1,000	1,000	1,000	600	400	8,000
	Dien Bien Dong	0	1,200	1,800	1,800	1,800	1,200	1,000	900	600	10,300

		2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
	Dien Bien Phu	0	100	0	0	0	0	0	0	0	100
	Muong Ang	0	5,078	0	0	0	0	0	0	0	5,078
	Muong Cha	0	1,400	1,400	1,000	4,131	1,442	0	0	0	9,373
	Muong Lay	0	690	0	0	0	0	0	0	0	690
	Muong Nhe	0	7,097	0	0	0	0	0	0	0	7,097
	Tua Chua	0	750	728	600	633	567	509	462	263	4,512
	Tuan Giao	0	1,025	1,069	2,026	4,200	0	0	0	0	8,320
	Total	**0**	**18,340**	**6,497**	**6,926**	**11,764**	**4,209**	**2,509**	**1,962**	**1,263**	**53,470**
Afforestation	Dien Bien	70	1,000	1,000	1,000	1,000	800	600	300	300	6,070
	Dien Bien Dong	0	600	800	800	800	700	700	500	300	5,200
	Dien Bien Phu	0	60	70	70	70	60	50	40	30	450
	Muong Ang	0	650	627	657	497	380	250	50	50	3,161
	Muong Cha	87	420	260	290	420	360	330	400	390	2,957
	Muong Lay	0	100	100	150	150	100	0	0	0	600
	Muong Nhe	0	410	790	725	540	305	120	80	30	3,000
	Tua Chua	0	120	180	180	240	240	290	300	300	1,850
	Tuan Giao	71	517	685	975	550	690	435	380	530	4,833
	Total	**228**	**3,877**	**4,512**	**4,847**	**4,267**	**3,635**	**2,775**	**2,050**	**1,930**	**28,121**

Source: FPDP for Period 2012 – 2020 in Dien Bien Province

The expected results shown on Table 2.17 above are based on the following assumptions:

- Successful implementation of forest protection under FPDP makes no change of land cover types (from forests to forests).
- Successful implementation of regeneration under FPDP would convert bare lands to regrowth forests after 5 years. Referring to Table 2.17: The area of bare land planned for regeneration (31,763 ha) between 2013 and 2015 is expected to become the regrowth forest by 2020.
- Successful implementation of afforestation under FPDP would convert bare lands to plantation forest after 4 years. Referring to Table 2.17: The area of bare land planned for afforestation (17,731 ha) between 2012 and 2016 is expected to become plantation forest by 2020.

Assuming that all of the planned activities will be implemented successfully, the amount of carbon emission and removal to be gained through accomplishment of targets defined in the FPDP are quantified in Table 2.18 below, based on the following:

- Emission factors of the regrowth forest and the plantation forest for the 4th cycle of the NFI are 93 CO_2t/ha and 102 CO_2t/ha respectively.

- Emission factors of the forests are calculated by the weighted average of the emission factors of each forest class and respective areas in 2010. This factor is estimated to be 116 CO_2t/ha.
- The Emission factor of bare land is 0 CO_2t/ha.

Note that forest protection is planned to be carried out for only 5 years outside of the area covered by PFES. However, the calculation is made on assumption that the forest for which the protection activity under the FPDP ends before 2020 will remain until 2020.

Table 2.18 the amount of carbon stock to be gained

Unit: CO_2t

		EF*	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Protection	Dien Bien	116										0
	Dien Bien Dong	116										0
	Dien Bien Phu	116										0
	Muong Ang	116										0
	Muong Cha	116										0
	Muong Lay	116										0
	Muong Nhe	116										0
	Tua Chua	116										0
	Tuan Giao	116										0
	Total											**0**
Regeneration	Dien Bien	93						0	93,000	139,500	139,500	372,000
	Dien Bien Dong	93						0	111,600	167,400	167,400	446,400
	Dien Bien Phu	93						0	9,300	0	0	9,300
	Muong Ang	93						0	472,254	0	0	472,254
	Muong Cha	93						0	130,200	130,200	93,000	353,400
	Muong Lay	93						0	64,170	0	0	64,170
	Muong Nhe	93						0	660,021	0	0	660,021
	Tua Chua	93						0	69,750	67,704	55,800	193,254
	Tuan	93						0	95,325	99,417	188,41	383,160

	Giao										8	
	Total							**0**	**1,705,620**	**604,221**	**644,118**	**2,953,959**
Afforestation	Dien Bien	102					7,140	102,000	102,000	102,000	102,000	415,140
	Dien Bien Dong	102					0	61,200	81,600	81,600	81,600	306,000
	Dien Bien Phu	102					0	6,120	7,140	7,140	7,140	27,540
	Muong Ang	102					0	66,300	63,954	67,014	50,694	247,962
	Muong Cha	102					8,874	42,840	26,520	29,580	42,840	150,654
	Muong Lay	102					0	10,200	10,200	15,300	15,300	51,000
	Muong Nhe	102					0	41,820	80,580	73,950	55,080	251,430
	Tua Chua	102					0	12,240	18,360	18,360	24,480	73,440
	Tuan Giao	102					7,242	52,734	69,870	99,450	56,100	285,396
	Total						**23,256**	**395,454**	**460,224**	**494,394**	**435,234**	**1,808,562**
Grand Total												**4,762,521**

*EF: emission factors

The forested area of Dien Bien Province in 2010 is estimated as 339,825 ha according to the result of analysis of ALOS satellite imageries. On the other hand, area of the forests protected under the FPDP is 278,444 ha. Area of the forests that are not protected under the FPDP is 61,381 ha. It is estimated that the forests not protected under the FPDP will be deforested from year 2015 to 2020 with the rate of deforestation for the period between 2000 and 2010, which is 36 %[3]. As a result, assuming 22,097 ha of the forests will be deforested, the amount of emission would be 2,563,271 CO_2t. Subtracting the gross sequestration by the emission, net sequestration would be:
4,762,521 – 2,563,271 = 2,199,250 CO_2t.

FRLs is 316,000 CO_2t for five years during the period between 2016 and 2020, the amount of carbon increase against the FRLs for the five years would be:
2,199,250 – 316,000 = 1,883,250 CO_2t (for five years)
This in turn is 376,650 CO_2t/year.
Assuming the carbon credit is sold at 5 US dollars for 1 CO_2 ton, the benefit would be 1,883,250 US dollars per year. The described above can be summarized as the table below.

[3] Area deforested between 2000 and 2010 (92,723 ha) / forest area in 2000 (260,037 ha) x 100 = 36 %

	Calculation bases	Carbon stock
(1) removal by regeneration (change between 2017 and 2020 by the activities carried out between 2012 and 2016)	31,763ha x 93CO2t/ha =	2,953,959
(2) removal by planation (change between 2016 and 2020 by the activities carried out between 2012 and 2017)	17,731ha x 102CO2t/ha =	1,808,562
(3) removal of CO2 (change until 2020 by the activities carried out from 2012)	(1) + (2)	4,762,521
(4) emission by deforestation (change between 2010 and 2020)	22097ha x 116CO2t/ha =	2,563,271
(5) net removal (change appears from 2016 for the activities carried out from 2012)	(3) – (4)	2,199,250
(6) FRLs (for 5 years)	Effect of Program 661 is deducted from the removal between 1990 and 2009	316,000
(7) Net removal in comparison with FRLs	(5) – (6)	1,883,250

Furthermore, regarding the assumption that deforestation rate from 2015 to 2020 of the forest not under FPDP is 36 %, the rate of 36 % was applied under the following way of thinking. At first, it was concluded that a method of future estimation by use of a socio-economic model is not taken base on the unreliable method and results of review of examples in other countries. Based on the conclusion, the BAU model is basically used for the estimation of FRELs/FRLs. In the same way as the estimation method of FRELs/FRLs, the project scenario was estimated on the assumption of benefits to be obtained by additional policies and measures without adding socio-economic conditions in the past and future. The rate of 36 % which is same rate of deforestation from 2000 to 2010 was applied because of the assumption. Please see the 2.3.2 [11] for the FRLs.

In addition, in the forest not protected under FPDP, it can be considered that forest degradation occurs in forest remain forest other than deforested forest. However, since it is difficult to estimate amount of the forest degradation, it is not included in the estimation of the potential benefits of REDD+. Furthermore, the estimation of amount of forest increase such as forest change from poor forest to medium forest is also not included in the estimation of the potential benefit, some amount can be offset between the forest degradation and the forest increase. Therefore, gross amount of forest degradation is not simply linked with decrease of the estimation of the potential benefits. Moreover,

since the actual benefit will be grasped through the implementation of the monitoring, more accurate amount of benefit can be grasped in the future. Therefore, that the potential benefit in this section is the estimation under the certain assumption has to be kept in mind.

[16] Survey and Identification of Funding Sources (payment and support) (Activity 3-2)

The Project tried to explore potential funding sources for REDD+ implementation in Dien Bien Province. The Project tried to analyse funding sources for two aspects which are participation-based payment[4] and performance-based payment[5]. However, the funding source cannot be identified distinguishing participation-based payment and performance-based payment without existence of real REDD+ credit and fund. Therefore, the funding sources which can be utilized for implementation of REDD+ activities as well were identified taking into considering of participation-based payment and performance-based payment.

At first, the funding sources would be the PFES fund which is used for forest protection. Additionally, the state budget for implementing the FPDP is also available for forest protection, enhancing natural regeneration and afforestation; the budget for 30A Program can also be used for forest protection, enhancing natural regeneration and afforestation as well as livelihood support. Second Northern Mountains Poverty Reduction Project (hereafter "NMPRP2") of the World Bank is implemented and its budget can also complement the finance for livelihood support activities. In addition, as mentioned in next section **[17]**, in case that REDD+ credit can be generated by proper implementation of forest management through incentives of support of livelihood development by SUSFORM-NOW which are functional, the option that budget by the credits are used for the incentive of support of livelihood development in other areas can be considered as participation-based payment for other areas. Moreover, there is a Japanese private company which financially supports REDD+ activities in Muong Phang Commune.

Regarding the REDD+ fund, the NRAP describes about establishment of the national and provincial REDD+ fund. Furthermore, it is mentioned in the NRAP to set REDD+ fund in the Forest Protection Development Fund (hereafter "FPDF") which manage and distribute the PFES budget. Financial sources for the provincial REDD+ fund are disbursement from the national REDD+ fund, investment of the private companies, contribution by the foreign donors, etc. During the project implementation period, National REDD+ fund has been under discussion, consequently the national and provincial REDD+ fund is not established yet and the financial sources of the provincial REDD+ fund is not identified.

Meanwhile, possibility of utilization of various fund including the Green Climate Fund (hereafter "GCF") already established was discussed in COP 19. Since especially GCF is recognized as an important fund source for the performance-based payment, it can be expected that the

[4] In the Report, the participation-based payment is defined as a method that some kind of benefit is distributed to the participants of REDD+ activities when the activities is commenced.
[5] In the Report, the performance-based payment is defined as a method that some kind of benefit is distributed to the participants of REDD+ activities in case that outcomes of emission reduction and/or removal increase are realized against FRELs/FRLs based on the results of implementation of the activities.

performance-based payment is promoted when the especially the operation GCF is commenced. It is expected that various funds including the GCF will be managed by use of the national and/or provincial REDD+ fund in Vietnam. As mentioned above, the REDD+ fund is currently under discussion. The points of consideration and the options are summarized as follows,

Points of consideration	The options
The level of establishment of fund	➢ Only national level or both of national and provincial level
↓	
Funding sources	➢ Which funds are utilized: either international funds, domestic funds or private funds; or all of funds ➢ In case that establishment of provincial REDD+ fund is accepted, is it possible for the provincial REDD+ fund to independently collect funds?
↓	
Management organization	➢ Governmental fund or independent council fund

As the results of the discussion, if provincial REDD+ fund will be established, it is necessary to formulate the system that the REDD+ fund is functional. For the building the system, it is necessary for the staff of the REDD+ fund to conduct capacity building through clarifying fund management rule and fund operation rule.

[17] Improved BDS option

Before discussing about the options proposed in the JICA REDD+ Study which are performance-based payment, participation-based payment and mixed way of both payments, the Project discussed the linkage between PFMS and BDS. As a result, the Project came to the conclusion that planning BDS in the PRAP is not appropriate at this moment based on the followings reasons as well.

- National policy of BDS is not made yet
- The Project cannot explain about the BDS as an incentive to villagers since the credit obtained from the REDD+ is too difficult to be calculated how much budget would be.

On the other hand, taking into account of the REDD+ activities under PRAP and C-RAP is going to be implemented by SUSFORM-NOW Project which support livelihood activities as an incentive of villagers to protect forest by themselves, the new system is proposed that the credit obtained from the REDD+ activities will not be distributed directly toward the villagers but used to the implementation budget for the other areas (See Figure 2.22). When implementing this system, FPDF, which manage and distribute the PFES budget, shall be the organization to be responsible of this task for managing REDD+ activity funds.

Furthermore, SUSFORM-NOW is aiming at establishment of system that can manage and operate PFES payment in the village fund in case of allocation of forest to village not to individual, and

request the FPDF of the establishment. If the system can be established, linkage between the FPDF and the village fund through PFES payment can be made. Therefore, experiences for the distribution of REDD+ credit in the future can be gained and it may be expected that the system can be utilized as good practice for management and operation rule.

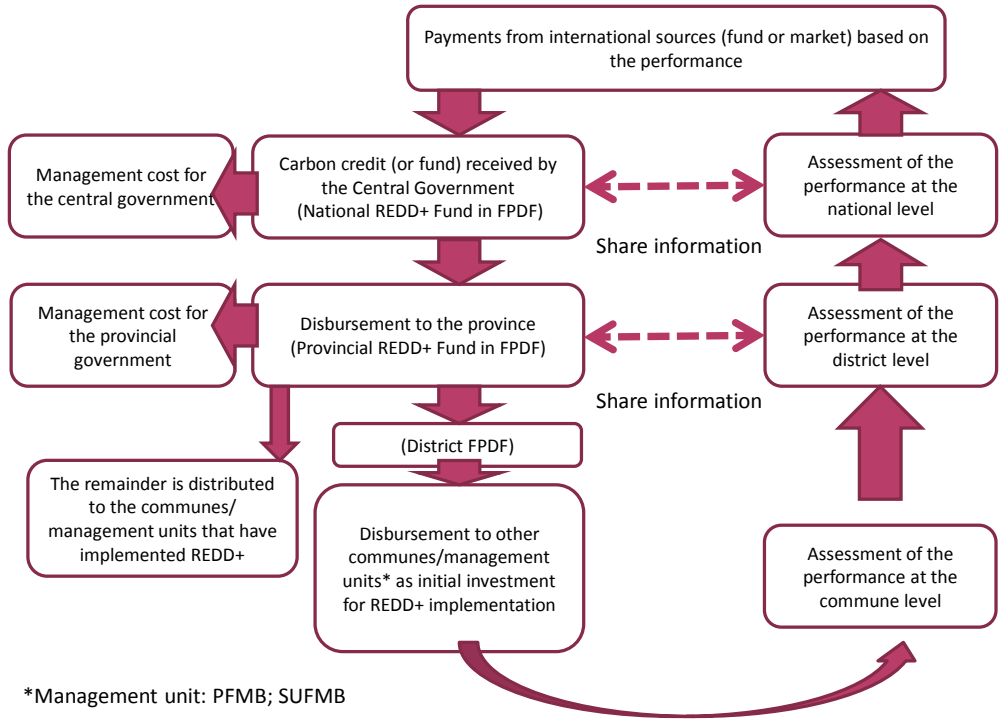

Figure 2.22 Flow-chart of BDS

2.3.4 Output 4: Lessons Learned from the Project are Shared for the Purpose of Formulation and Implementation of NRAP and REDD+ Implementation in Other Province

[18] Feedback to NRAP through Participation in Technical Working Group and Sub-technical Working Group

In Vietnam, they, for the purpose of assisting the Vietnamese government in relation to REDD+ policies/framework, have established technical working group (hereafter "TWG") and five sub-technical working groups (hereafter "STWG": MRV, Local Implementation, BDS, Governance, Safeguards and Private Sector Engagement) that are to carry out/give/make technical investigation/advise/proposal as well as encourage information sharing among relevant parties. The progress, outputs, and lessons of the Project were fed-back through appropriate opportunities.

In the STWG for MRV held on 31st August 2012, the Project presented MRV at national level based on the NFI and methodology of forest monitoring in the Dien Bien Province utilizing the NFI data. Since these meetings are often held in an ad-hoc manner and there were many cases that the date of

meetings of the Project held in Dien Bien Province were overlaps with the date of STWG, the Project participated in only the STWG on 31st August 2012. However, it is considered that there is a room for improvement by effectively using the local consultants and having them report the project outputs in case where the Japanese experts cannot participate. On the other hand, the Project promoted the discussion and the information shearing on how forest monitoring in the provinces can be utilized for the national MRV through the workshop organized on 5th September 2012. In addition, as shown in the output index 2 of the Project, the comprehensive recommendation through the implementation of the Project is described in this Report.

[19] Holding the Progress Workshop and Final Workshop

Although it was originally planned to hold the regional workshop twice in Vietnam for the purpose of sharing the progress, outputs, lessens, etc. of the Project among relevant parties inside Vietnam as well as in surrounding countries (Laos, Cambodia, etc.), due to conditions of the surrounding countries, the first workshop was replaced by the progress workshop that is mainly intended for the domestic participants and the surrounding countries are regarded as guests.

The Progress Workshop was held on December 13, 2012. The purpose of holding the workshop was to share the update, interim outputs, issues and lessons learned of the implementation of REDD+ related projects among the relevant parties of Vietnam and enhance discussion to exchange ideas/information to lead to solutions of the issues that confront implementation of REDD+. It was aimed to give technical and operational feedback to implementation of NRAP and pilot activities in other provinces. Furthermore, upon having participation of the neighboring countries such as Laos and Cambodia, sharing the ideas/information on approaches to REDD+ implementation was also encouraged.

The participants of the workshop include: Vietnamese administrative organizations: Dien Bien Province – Sub-Department of Forestry, Sub-Department of Forest Protection; the provincial government of the pilot provinces; VNFOREST / MARD ; Forest Information and Planning Institute (FIPI); foreign donors – UN-REDD; GIZ; SNV; RECOFTC; FFI; WWF; neighboring countries – Laos; Cambodia; private companies.

The second workshop was held on January 10, 2014 as Final Workshop for the purpose of presenting the final outputs. Final Workshop encouraged participation of Vietnamese participants (provincial administrative personnel in particular) for the purpose of disseminating the project outputs such as PRAP and PRAP Preparation Handbook to the provinces where REDD+ pilot activities are implemented. In order to encourage Vietnamese participants to actively participate in the discussion, the project outputs were mainly presented by the Vietnamese counterpart (working group members). Since most of them were not used to presenting in such workshop, it took time to prepare for the workshop by having the local consultant train them on presentation skills.

Objective of Final Workshop was to present the outputs of the Project and discuss how the knowledge and experiences gained through the activities in Dien Bien Province can be applied to other provinces. For the latter, the participants were divided into two groups; one group discussed the issues related to

PRAP and another discussed the issues on PFMS. In each group, several topics to discuss were given and a facilitator was assigned to promote discussion along the given topics. Some of the comments are given below.

- There is no difference seen between PRAP and FPDP.
- REDD+ action plan in the district level is necessary.
- How the fund for implementing the PRAP can be obtained.
- The PRAP of Dien Bien is the first one in the country. It's quality is satisfactory and can be a reference for other provinces.

Details of the discussion are described in Report on Final Workshop (Appendix 14).

2.3.5 Preparation of reports and outputs for technical cooperation and cooperation with the JICA missions

[20] Preparation of Progress Report

The Progress Report was prepared and presented at the second JCC held on October 19, 2012. Contents of the Progress Report are as follows:

(A) Outline of the Project
(B) Details of activities
(C) Challenges/ideas/lessons related to the project operation

[Attached documents]
(1) PDM (most recent version; history of revision)
(2) Operational flow chart
(3) Revised PO
(4) Record of experts dispatch (personnel plan)
(5) Minutes of the 1st JCC
(6) Outline of the draft PRAP
(7) Outline of the draft action plan for the pilot areas

[21] Preparation of the Outputs for Technical Cooperation

The Project prepared the following products of technical cooperation along with the implementation of the Project and submitted them to JICA.

(1) Final draft of the REDD+ Action Plan for Dien Bien Province (PRAP)
(2) Draft REDD+ action plan for the pilot area (C-RAP for Muong Phang Commune and Muong Muon Commune)
(3) Report concerning the implementation of training (OFF-JT)
(4) Report on the outcome of the regional workshop

(5) PRAP Preparation Handbook
(6) Manual of setting the village boundary in the forested area
(7) Manual for operating the forest information database

[22] Cooperation with the JICA Mission for Operational Instruction

When JICA dispatched the midterm evaluation mission for SUSFORM-NOW Project and operational instruction mission for the Project in January 2013, the Project summarized and provided the work plan for the Project, information on the progress based on the work plan and issues for the implementation of the Project. Moreover, the Project participated in the discussion on the handing over from the Project to SUSFORM-NOW Project and explained the situation of the Project at the point of time. The Project also accompanied with the mission to the pilot areas that are Muong Phang Commune and Muong Muon Commune and explained about the local conditions in the pilot areas.
Additionally, the operational instruction mission was also dispatched in September 2013. For this time, progress and outputs of the Project were reported in the final JCC and arrangement of completing the project implementation was made along with discussion on the woks to be transferred to SUSFORM-NOW.

3. Benefit, impact and sustainability of the project implementation

3.1 Benefit directly brought by the Project

(1) Preparation of the PRAP and C-RAP

Foundation of implementing REDD+ by Dien Bien Province has been built in accordance with the PRAP and C-RAP which have been prepared by the Project and under process of getting approved.

(2) Providing trainings and holding workshops

Trainings have been provided by the Project to transfer the technology necessary for the REDD+ implementation (details are described in 2.3.1 [10]). The participants of the trainings and workshops can apply the skills they acquired to REDD+ implementation. However, it is also necessary to maintain their skills by continuing to train them by the OJT.

On the other hand, holding the progress workshop and final workshop and having the counterpart personnel of the Project present and discuss the project outputs and lessons learned could promote their understanding of REDD+ and their presentation skills (details are descried in 2.3.4 [19]).

(3) Preparation of manuals

Manuals of setting the village boundary in the forested area and operating the forest information database can provide the project participants with useful method that can be applied to setting the village boundary and operating the forest information manual. Furthermore, PRAP Preparation Handbook can also be applied to reviewing and revising the PRAP by the project participants.

3.2 Impact of the Project

(1) Establishment of REDD+ with application of the existing policies

By treating the existing policies relevant with REDD+ such as FPDP, PFES, etc. as PaMs, arrangement to apply their budget to REDD+ implementation as well as their original purposes has been designed. This arrangement can mitigate financial issues that all of the implementation costs have to be otherwise covered by only the REDD+ benefit and it is considered to lower the hurdle of implementing REDD+ in Vietnam. Moreover, it is considered a large impact to promote REDD+ in Vietnam to build a basic idea to implement REDD+ by properly applying such existing policies through preparation of the PRAP, etc. However, this is not the solution to the all issues and recommendations in this regard are described in sections 4.1.1, 4.1.2, 4.1.3, etc.

(2) Preparation of the first provincial REDD+ action plan in Vietnam

Relating to the described above, under the situation where pilot activities are planned in the province

level for implementing REDD+, the first provincial REDD+ action plan has been prepared and in the process of approval. It is considered the PRAP for Dien Bien Province contributes to preparation of the PRAP in other province, which is supported by other foreign donors. Moreover, process of preparing the PRAP, points to be considered, cases of Dien Bien Province and the lessons learned have been compiled as PRAP Preparation Handbook on the basis of experiences to prepare the PRAP and it can be applied as a reference to preparation of the PRAP by other provinces. Furthermore, the PRAP Preparation Handbook can contribute to preparation of the official guideline for preparation of the PRAP that is to be prepared in the future.

(3) Dissemination of information to the central and provincial government and associated foreign donors

In the final workshop held before completion of the project, the PRAP of Dien Bien Province and experience of its preparation were presented for relevant personnel of the central and provincial government, participants from foreign donors, etc. It is considered that this information can be applied as reference to planning and implementation of REDD+ by other provinces.

3.3 Sustainability of the Project

(1) Institutional aspect

1) Development of REDD+ implementation to the province level based on the PRAP

The PRAP sets the period up to 2015 as the pilot phase and the period from 2016 to 2020 as the scale-up phase and describes what are to be done in each phase. In order for Dien Bien Province to implement REDD+ in the province level according to the PRAP, it is necessary to address the recommendations and other points to consider on REDD+ implementation given from various aspects in the third chapter. In particular, what is described in section 4.2 through section 4.5 of this report is important for Dien Bien Province to implement REDD+. Addressing the recommendations given in the 3rd chapter makes sustainability of the Project higher.

2) Arrangement of REDD+ implementation

The PRAP and C-RAP show implementation arrangement and roles of the province, districts, communes and villages to implement the PRAP and C-RAP. In order to make this arrangement work, the Project tried to improve the capacity of each level for REDD+ implementation through providing trainings, holding workshops (details are described in 2.3.1 [10] and 2.3.4 [19]) and discussing with the working group. However, it is not considered that the capacity of each level has reached the level where REDD+ can be implemented by itself. Therefore, capacity building of the stakeholders to be involved in REDD+ implementation as described in the third chapter (section 4.2.1 in particular) is indispensable for maintaining the sustainability of the Project. Such capacity building will continue to be promoted by SUSFORM-NOW after completion of the Project and the sustainability is expected to increase.

3) PFMS by application of the forest information database

PFMS to monitor forest change and to manage the information has been designed and the

implementation arrangement of the PFMS is shown in the PRAP. Dien Bien Province is to clarify the forest conditions in the province by implementing the PFMS in accordance with the PRAP. In order to do so, it is necessary to implement the required activities, taking into account the recommendations provided in section 4.4. Financial arrangement as well as the technical aspects is necessary in order to implement the PFMS. Operational arrangement by DARD is expected for implementation of the PFMS. Sustainability on implementation of the PFMS can depend on this arrangement.

(2) Technical aspect

1) Implementation of PFMS by forest rangers and associated organizations
Trainings to transfer the technique necessary for implementation of the PFMS such as method of measuring the forest change, input and management of the measured data, etc. have been provided by the Project and contributed to maintenance of the sustainability. However, the sustainability is considered to further increase by having forest rangers and associated personnel apply the technique they acquired to practice of PFMS by OJC.

2) Continuation of technical advising by SUSFORM-NOW
A part of the training plan provided in the PRAP will be implemented by with support of SUSFORM-NOW, contributing to improvement of technique to implement the PRAP. Sustainability is expected to further increase by this.

(3) Financial aspect

1) Support by SUSFORM-NOW
During the pilot period by 2015, SUSFORM-NOW will support the implementation of livelihood development activities, etc. in the pilot areas (Muong Phang and Muong Muon Communes) and it is considered to contribute to building the model for REDD+ development to the province level on the financial aspect. However, envisaging the financial situation after completion of SUSFORM-NOW, it is necessary to examine the various financial sources for REDD+ and maintain the financial sustainability during the implementation of SUSFORM-NOW.

2) Application of the existing policies and development of financial sources
As described earlier, implementation of the PRAP is based on application of the existing policies and possibility to be able to secure the budget to implement the policies is expected to be high. In this sense, the sustainability is also high. In order to implement the PRAP, however, deficit of 428,148 million VND (about 2.1 billion Japanese Yen) is expected by 2020 besides the state budget of the relevant policies and input of the projects by foreign donors. Therefore, securing the fund for implementation of the PRAP is necessary. Since it is expected to be difficult for Dien Bien Province to secure the fund by itself, support of the central government is necessary. In order to do so, it is important to examine various fund sources. Such effort will assist maintaining the sustainability on finance.

(4) Human aspect

Involving the working group members in preparation of the PRAP assisted to improve their skills. However, REDD+ is still explained in conceptual words to a large extend and it is essential to improve their understanding through process of practicing. Having the human resources developed in the working group work for solutions of the issues through OJC is expected to maintain sustainability of the Project in Dien Bien Province.

Moreover, the human resources that will assume an advising role in implementation of the PFMS, etc. have been developed in the Project. It is expected that the sustainability will further increase and consolidate the REDD+ implementation by having such human resources lead the activities and improving entire capacity of the province.

4. The Comprehensive Recommendation – based on the issues, means and lessons learnt -

NRAP (Decision 799/QD-TTg of 27/6/2012） indicated that REDD+ action plan would be made in each province. The corresponding to this order is PRAP. The Project aimed at first preparation and approval of the PRAP in Vietnam. Therefore, this challenge will be well contributed to the preparation of PRAPs in cooperation with other donors in other provinces The expectation of PRAP is to clarify the needs to fill in the gap as the interim scale between NRAP addressed REDD+ approach at the national level and the activities involving forest management and livelihood development at the village level (e.g. the activities by SUSFORM-NOW). As the answer, in the Project, the PRAP to carry out REDD+ at the province level (sub-national level) has been made with a combination of the top-down approach with the bottom-up approach. Then the PRAP does not have any plans with specific activities to implement REDD+ and the PRAP only indicates the approach of the policy which should be tackled by the province.

During the work process to prepare the PRAP, it was required to incorporate various complicated factors such as national and international circumstance regarding REDD+ and forest policies in Vietnam into the PRAP and then there is a remaining of further considerations and utilization of the project output. From this background, regarding knowledge and future approach through the project implementation, comprehensive recommendation is illustrated in line with the order of the chapter of PRAP in the following. This recommendation includes knowledge obtained from not only the output of the Project but also the JICA REDD+ Study. Hopefully, this recommendation will contribute to forest policies and implementation of REDD+ in Vietnam.

4.1 Overall Goal

4.1.1 Background of target formulation based on FPDP and the target formulation for quantity of emission reduction.

“PRAP” is indicative of the actions regarding REDD+. Therefore, the target of the PRAP should show quantity of emission reduction and the target of year 2020 also should be described by carbon

emission/accumulation. However, status of REDD+ after 2020 is under consideration in the UNFCCC, benefit from target of emission reduction is not still clear at present time. Therefore, it is risky for the policy development to set the target of emission reduction and predict benefits from the target.

On the other hand, regardless of REDD+ framework, implementation of sustainable forest management is a global agreement matter in accordance with the Declaration of Forest Principle. Considering such current situation, it was suitable to set the target of PRAP in line with FPDP as a master plan of forest policy in Vietnam（Expected result of GHG emission reduction through PRAP implementation is noted for a reference.） While confirming the progress of REDD + mechanism formation, it is necessary to continue to consider setting the goals that focus on greenhouse gas emission reduction in some cases in the future.

4.1.2 Adjustment between national target and provincial target

PRAP is an important factor to realize NRAP and it is necessary in terms of policy development. Vietnamese government did not adopt the approach to assign the target of emission reduction with each province based on the national target of emission reduction[6]. Therefore, PRAP declares that first priority of policy target is FPDP and the contribution of quantity of emission reduction is indicated as the secondary target. There is no consideration of the consistency between PRAP and the target of emission reduction set by national policy.

However, basically, in terms of policy consistency, it is necessary for the approach whether breaking down from targeted values at the national level or piling up from targeted value of province. Ideally, it is necessary for Vietnam REDD+ Office (hereafter “VRO”) or some organizations to analyze each provincial FPDP and they compare each provincial RLs from output of the JICA REDD+ Study and to predict and pile up quantity of emission reduction of each province. Furthermore, the Forest Use Promotion Division in the Forestry Agency in Japan has a system to grasp an implementation rate of forest management by each prefecture and the amounts of carbon emission/absorption based on the rate to contribute to policy making.

4.1.3 Approaching of FRELs/FRLs

In terms of the performance-based payment, the benchmark for evaluating a certain activity result is required and the creation of FRELs/FRLs is indispensable. Although the country, province, and ecological areas are considered as geographical boundary which is used for FRELs/FRLs, suggestions on the importance for making robust model in the consideration with the characteristic of the situation of forest resources and the driver of deforestation have been obtained from the JICA REDD+ Study. Moreover, in terms of policy development, the administration unit should be placed as a fixed unit. If these two are considered, it can be said that estimating FRELs/FRLs in each province has an advantages. Then it is concluded that FRELs/FRLs made through the Project covers the trend of the increase of the forests, and the result which supports the above-mentioned view was obtained.

[6] It is mentioned that accumulation target is 702mill CO2e by afforestation etc. and emission reduction target is 669mill CO2e by forest protection and sustainable forest management regarding forest sector in the「MARD Decision 3119/QD-BNN-kHCN, Dec. 16, 2011.

On the other hand, by setting the FRELs/FRLs in province level, the outcome of REDD+ implementation will be evaluated for the province as a whole, equalizing difference of the outcome between communes. For example, communes that perform well on emission reduction may not be able to receive benefit they deserve due to other communes which do not perform well on emission reduction or increase emission. Conversely, communes that do not perform well may be able to reach the benefit in case where the province as a whole performs well due to other communes which perform well. Setting the FRELs/FRLs in commune level can be a solution to this problem, but it is not feasible technically and financially. There is no clear answer to this problem at this moment. At least, having many communes participate in REDD+ can reduce this effect.

For these reasons, it will be effective that FRELs/FRLs to report UNFCCC should be the accumulation of FRELs/FRLs made in each province in consideration with the accordance with provincial policies, addition to the driver of the deforestation, the evaluation of the approach of each province, and the benefits distribution in the future.

Regarding to adopt either FRELs or FRLs, which has been discussed many times, it is suitable that FRLs should be adopted in considering of forest situation with the trend of the increase in Vietnam and easiness of adding Program 661 as the early action of the national circumstance. Like these developing countries with the trend of the increase of forest area are very few except China and India. Therefore, regarding methodology of considering national circumstance and development of FRLs establishment methodology, it is necessary to promote developing the robust theory to insist it to international negotiation in the future.

In addition, the existence value of FRLs is not only the importance as a benchmark to determine the emission reduction target but also indicator in the case of the performance-based payment by each province. The indication of the quantity of emission reduction in the BUR to be submitted to UNFCCC is required. It is also concluded to secure the consistency with the report of FRELs/FRLs in the COP19 agreement. In other words, it is projected to specify how to calculate the FRELs / FRLs in response to a request from the BUR side even if self-report of FRELs / FRLs is not conducted. It is considered that national forest cover mapping by 2015 data and forest monitoring work at the national level are necessary because data preparation until 2010 was finished so far. It should be also considered that the cooperation and coordination between the BUR and National Communication is needed because reporting of BUR is every two years, on the other hand, reporting of National Communication is every four years. Furthermore, regarding the interval of collection of forest information which is a basis for the reporting, the NFI is implemented every five years, on the other hand, forest census is implemented every year. Therefore, it is necessary to improve the status of data arrangement in the future, which is not consistent and coordinated at the present.

4.2 Arrangement of the policy and institutional frameworks and the safeguards

4.2.1 Institutional framework

It is planned to utilize the policies such as FPDP, PFES, 30A, and Production Forest Development

Policy, and donor projects to carry out REDD+ activities in the PRAP. On the other hand, it is linked to the movement of the international negotiation of REDD+, based on the principle of promoting a synthetic forest policy without specialization on REDD+, not only REDD+ which focuses on only the carbon accumulation, it is also important to undertake the combination of the suitable policies and funds for sustainable forest management by the utilization of other polices than forests sector in the future taking into consideration of how local development should be promoted by the utilization of forest.

Furthermore, there is a lack of resource person (government official) who has REDD+ knowledge at a local level because REDD+ knowledge is not spread in the local level due to that REDD+ is complicated with international framework. However, there is the situation that the effects do not increase even if capacity building is carried out without the understanding of benefits and opportunities of REDD+. In order to overcome this situation, it is really necessary to start a trial of REDD+ implementation and to recognize not only the advantages in terms of the credit payment and but also the benefits of the forest protection, the increase of afforestation, and the regeneration of the slash and burnt field. In addition, there is a situation that only few staffs of local government know the existence of NRAP as the national policy and REDD+ is still not completely placed under the governments at district and under level. Therefore, the government at the national and provincial level should recognize their own responsibilities for REDD+ implementation, which indicated in the NRAP and should place REDD+ as a working duty for the local governments appropriately in the future. Moreover, it is necessary to infiltrate the working duty into the local government staffs with the capacity building.

In addition, the capacity development of those who have forest usufruct is necessary for the REDD+ activity at the field level because those who have forest usufruct are the main actors in the REDD+ implementations. Forest allocation to villages is recommended for the preparation of PFES in the progress in Dien Bien Province. Therefore, it is necessary to strengthen villages and the village management board for forest management in case that the actual forest protection activities as REDD+ activity are mainly operated by the villages as those who have forest usufruct. For the realization, it is important to appropriately execute instruction and monitoring for the forest management activities by the governments of province, district, and the commune as the improved village development can be fulfilled utilizing facilitators raised by the Project based on the planning, implementation and management of the village development plan, and evaluation of the results of the activities. Moreover, it is important to secure the budget for the monitoring and its capacity building.

The establishment of the institutional framework including capacity building mentioned above will be promoted by SUSFORM-NOW.

4.2.2 Development of C-RAP

The C-RAP is recognized as the need as the implementation arrangement to promote the PRAP. On the other hand, it is necessary to examine whether or not it is necessary to make the C-RAP in other communes taking into account of the possibility for the preparation of the C-RAP to become a

bottleneck of the REDD+ implementations in other commune because a process of making is complicated through many working process. There is value of the examination that the unified parts become guidelines as one of the methods in making C-RAP for other communes. The parts which seem to become guidelines are concretely listed below.

However, some parts are different in every commune as mentioned in the brackets below. Then regarding these parts, it is necessary to make the documents of plan for each commune by making the Decisions. In any case, it is important to simplify the C-RAP and minimize the volume as much as possible.

- Establishment and operation of forest monitoring system
- Capacity development of forest management and the livelihood development for the CPC staff and the villager
- Establishment and strengthening of the institutional framework for the implementation of the forest management and livelihood development activity (as for the CPC level, the institutional framework for the implementation is different by the main component of the forest, for example, existence of the special use forest is mentioned.)
- Implementation of the forest management activity plan（The content of the plan is various according to conditions of the forest in the commune, depending on whether PFES can be applied and the contents of FPDP, etc.）
- Implementation of the livelihood development activity plan（The selected livelihood development activities are different by socio-economic conditions in the commune）

In addition, regarding lessons learned in C-RAP making process, although the socio-economic condition survey was conducted to present conditions of the natural and socio-economic conditions of the commune in C-RAP, this survey for making C-RAP is possible to be unnecessary or simplified in the process of reviewing the needs of C-RAP. It is realistic to simplify C-RAP based on the existing materials (information and data) even though there are some accuracy errors because the content is not a core part in the C-RAP.

Regarding lessons learned of the setting village boundary, there is possibility to draw a wrong boundary because of the poor reading ability of a satellite image and the topographical map even if the topography, landmark, ridges, and valleys of mountain are discussed at only a meeting. Therefore, it is important to carry out the survey in the fields by the attendance of villagers to demarcate forest areas along boundary between two villages in order to develop the village development plan.

It is expected that the discussion for the promotion of recommendation on the preparation of C-RAP mentioned above will be made in SUSFORM-NOW.

4.2.3 Safeguards

Regarding the Safeguards, as mentioned in 2.3.2【14】in this report, Vietnamese government decided that the REDD+ Safeguard would be developed by utilizing the existing domestic policies and the international conventions approved. In addition, through sub-technical working group of the REDD+ Safeguard, the draft for the road map to develop the REDD+ Safeguard in Vietnam is currently under preparation and the pilot system for providing Safeguards information at the national level will be developed by 2015 according to the NRAP.

In this situation, it is considered that the trial survey for the gap analysis in line with a road map should be carried out under the provincial level to contribute to develop the Safeguard information system at the national level.

In addition, it is important to adopt the feasible methodology for the implementations of FPIC for the villagers. For the realization, it is worthy that various methodologies, by which consensus can be actually built, can be applied through trials in the field instead of building the nationally-standardized methodology easily. As an example, the village meeting to formulate the village development plan by SUSFORM-NOW seems to be conducted based on the concept of FPIC. Therefore, it is necessary to provide these methodologies to the public and to contribute to the establishment of methodology on FPIC in Vietnam.

4.3 Building a model of REDD+ activities

To evenly extend the approach for REDD+ for the whole province is difficult due to the difficulty of human resources and budgets. There is also difference of the potential to implement REDD+ in the Province due mainly to natural conditions. For these reasons, the methodology for the selection of the prioritized communes was adopted.

The methodology to select the prioritized communes with potential of large benefit by REDD+ and to extend REDD+ on a step-by-step basis should be applied to improve the feasibility of REDD+ activities model and to link to the full implementation at the province level. Accordingly, it is necessary to consider REDD+ implementations with putting the priority in the other provinces and this procedure should be adopted if necessary.

Although it is essential to take measures with the livelihood development to realize control of deforestation and forest degradation and rehabilitation of forest, there are various measures in accordance with the drivers of deforestation and forest degradation. Furthermore, since the livelihood developments are influenced by all forms of social life and the natural conditions in each region, this is at risk to extend these measures on a large-scale area without careful consideration. Also, it is difficult to secure a large amount of fund at once to implement livelihood activities. Therefore, it was concluded to implement the REDD+ pilot activities in the model area and to scale up after developing the feasibility. This “modelization” approach is considered to be effective in other provinces to implement REDD+. The trial implementation in the model area is planned in the framework of

SUSFOM-NOW

Regarding the difficulties in developing the models, it is hard to quantify how much the livelihood development measures contribute to the control of deforestation and forest degradation, and rehabilitation of forest when livelihood development measure is identified as a means of PaMs. For example, it is difficult to indicate whether the increase of the income by livelihood development linearly affects the amount of the deforestation as regression line.

Principally, sub-national official (such as province) receiving economic incentives and corroborative work with local community and this activity result in reduce deforestation and forest degradation is the basic concept of REDD+. Therefore, it is not necessary to quantify relationship between economic incentives and its effect of reduce deforestation and forest degradation. On the other hands, when we examine REDD+ strategy, it is important to calculate amount of economic input and output (result of GHG emission reduction=CO2 equivalent) in advance. Therefore, "modelization" approach is indispensable.

It is important to verify the effectiveness of model in the consideration of these points when model of REDD+ activities are developed in each province in the future.

4.4 Modifications of the provincial forest monitoring system

4.4.1 Recommendation on NFI

Although it is still opaque for the technical methodology adopted by NFI, recommendations regarding NFI are in the following according to the knowledge obtained by the JICA REDD+ Study as well as the Project.

- ☑ Circular-shaped plots are recommended because square-shaped 40Sub-Plots are susceptible to error.
- ☑ Cluster sampling is recommended in terms of cost-effectiveness.
- ☑ In consideration of the degree of contribution for statistical data, the amount of ground survey will be likely reduced by adopting stratified sampling[7] based on forest distribution.
- ☑ Budget allocation in satellite image analysis will be prioritized and changing points will be monitored by using past forest distribution maps. Consequently, workloads will be reduced and the consistency of the amounts of change will be ensured.
- ☑ The discussions regarding use of the satellite data which other ministries such as MONRE maintain will be accelerated.

NFI is operated at intervals of five years and the PFMS is operated every year. Then they will be cooperated organically and the accuracy enhancement of the analysis of NFI is indicated in the improvement of PFMS in the PRAP, The satellite information specifically collected as a part of NFI

[7] Method to extract sampling points by each forest type

and its analysis result will be provided to the province every five years and then province will feed back an updating result to the national governments while annual monitoring based on the data is conducted by the province. There is an advantage on which the consistency of the map and the basic information to be used by both the national and local governments is ensured.
Local governments are able to acquire clearly land-cover information by using satellite data although the uncertainty of maps used for a field survey had become a problem. On the other hand, since a field survey for the forest distribution map to be prepared by the national government cannot be densely conducted, it is suggested that classification accuracy will be improved by the image analysis referring to the annual updating data offered from local governments. In order to promote the concrete cooperation scheme, it is indispensable that the national governments and local governments cooperate closely. Based on the promotion of the common understanding through the future workshop etc., there is a need to verify the merits for both national and local governments through the pilot activities in the pilot areas for the future.

4.4.2 Recommendations on reviewing PFMS

Although forest monitoring system in the province and under level are already developed as the existing framework in Vietnam, the system is actually not enough to act as the functional role due to insufficient map information and the shortage of technical skills. Also, there is a lack of cooperation with forest monitoring system at national level (e.g. NFI). Then utilization of satellite image data, GPS trainings, and the installation of the forests information database are indicated in the PRAP and the improved PFMS was designed to fill the gap with the existing system. However, it is insufficient to deal with monitoring status involving the improvement of the forest quality and the forest degradation in the present legal frameworks and then the improved PFMS has fastened at the stage to understand the present status of deforestation and the increase of the forests. In the future, this improved PFMS will be piloted in the two pilot communes by SUSFROM-NOW and needed modifications will be clarified. There is a need to consider whether or not it is necessary to understand the status of degradation of forest and the qualitative increase of the forests in terms of cost-effectiveness and the policies. Then modification will be applied if needed.

If the improved PFMS is feasible, it is indispensable to 1) establish village group, 2) arrange the rangers and build capacities for them 3) install PCs, assign technicians and build capacities for technicians at district level to scale up for the whole of Dien Bien Province (and prioritized communes). Main operations for reviewing is to cross-check forest distribution map to be prepared by using high-resolution satellite imageries as of 2015 and forest change information gained from the PFMS.

If it is concluded that monitoring by high-resolution satellite is effective for cost-benefit performance and quality control as a result of verification, forest monitoring team will be established in the DARD. For the establishment of this monitoring team, 1) the placement of remote sensing analysis personnel and 2) the ground survey team for verification are essential. On the other hand, in case that the monitoring by high-resolution satellite is not effective as the result of verification, the capacity development for the people and the structure of the present improved PFMS should be focused.

Furthermore, the ground survey team should have high-technical technology involving skills for identifying the boundary. It is expected that this verification work will be implemented by SUSFORM-NOW.

Moreover, it is very important to consider the balance between the cost and the ground resolution in terms of the introduction of high-resolution satellite. For example, it is expected that high-resolution satellite with the resolution of over 1m may cause a problem in terms of cost. Therefore, it is realistic to utilize high–resolution satellite with the resolution around 2 m in terms of observed object and the cost. Then it is expected that cost-effectiveness will be promoted by the utilization of VNREDSat （panchromatic style with 2.5m resolution）.

On the other hand, there is a mention of the lagged approach in terms of cooperation with other departments and agencies regarding collecting forests information. For example, regarding the survey about the land rights, the internal-affairs office (hereafter "DOHA") which controls over land registration entrusts the land survey unit of DONRE to collect the data. GIS department of DONRE has made a ready for the relevant skills, therefore, it is likely reasonable to entrust the related mapping works from DARD to DONRE.

4.4.3 Recommendations on Forests Information Database

Suggestions on the duty and the future improvements of PFMS were described in the section of 4.4.2. Under the suggestion, it is indispensable to prepare the tool which manages the information acquired from the system on the PFMS in an integrated fashion. By using the tool, not only collection of information but also the analysis and feedback to the policies is also available and it is necessary for the structure for PDCA. Furthermore, sharing information with the relevant organizations at the national level through this tool is also expected. Therefore, the forest information database was developed.

On the other hand, depending on the trend of the development for forest information database at the national level, testing operation as a prototype is performed for the time being, and the accumulation of original data should be promoted. Although the operation for database is mainly conducted by District-FPD, it is identified that the operational skills for these officials are very poor in the three trainings conducted in the Project so far. There is no way except for building the capacity through OJT in gathering real data in the proto-type database. Also, it is recommended to promote the transition to Ver2.0 consider hearing the usability of the interface for improving the operability.

4.5 Formulation of the financial management mechanism

4.5.1 BDS (Benefit Distribution System)

Although PRAP indicates the idea of BDS options, it is necessary to carefully watch the decision of national policy since policy and system of BDS is to be constructed at the national level. The BDS option indicated by PRAP is a system that REDD+ implementing villages can initially receive the

support of the livelihood development as the incentive for forest protection by utilizing the funds of government and/or donors and then the credits gained by the implementation of REDD+ will be paid to the next villages to utilize this budget for livelihood development support. However, there is the possibility not to adopt the BDS option indicated by PRAP according to the decision by the national government mentioned above.

Under any circumstances, it is necessary to confirm whether REDD+ fund with managing the BDS's financial resource is practically functional. In order to do that, it is important to input the certain amount of money in the fund and test the operation of fund itself. It is needed that capacity building on the rules of the fund management and its operation is implemented at the same time through the testing. Regarding the BDS, it is necessary to wait for the decision by the central government as mentioned above, It is, however, expected that SUSFORM-NOW will be involved to implement the capacity building if the operation of the BDS fund is commenced within the implementation period of SUSFORM-NOW.

Moreover, it is necessary to carefully watch which financial option or source is available for REDD+ fund. Regarding the financial options or its sources, it is also necessary to confirm whether there is only the mechanism that the financial source first received by the national level is transmitted to the province level or whether developing the own financial sources of the province can be feasible.

It is important to develop the BDS which can refrain from the transaction cost as low as possible and can be utilized as much as possible by the local people and field organizations implementing the REDD+ activities towards the BDS management. In order to do that, it is considered that the BDS should be as simple as possible. It should be noted for the simple BDS that the number of organizations involved in the process should become small. However, it is considered that it is difficult to manage this system by skipping some of organizations in Vietnam where the hierarchy of nation, province, district, and commune exists in a top-down system basis. Therefore, whether this mechanism in Vietnam can be broken through may be the key factor of refraining from transaction cost. Finally, in terms of the necessary and minimum cost for the management of BDS, it can be considered that the national government has to collect the necessary and minimum transaction cost as appropriate amounts unless other budgets for management are available. However, it should be also considered to prepare such transaction cost by central and/or local government as the basic cost of administrative bodies.

4.6 Necessary measures in Vietnam responding to the current international negotiations

In the negotiation of COP 19 in Warsaw, the great result derived from the discussion on REDD+ was gained as the form of "Warsaw REDD+ Framework". The notable points are that the discussion on the series of technical subjects such as MRV, FRELs/FRLs, and NFMS was finished and then guidelines on these subjects were also completed. Therefore, from now, there is an urgent need to formulate a national guidance to execute the NRAP and the PRAP and it is important to sum up Vietnam domestic policies implemented and the results of projects conducted by the donors so far and then to formulate the future measures.

Another notable aspect is that the agreement on financial matters on REDD+ was reached. Since the designation of the national entity for the acceptance of result-based support is addressed in this session, it is necessary to establish National REDD+ Fund at an early point. Taking into consideration of various forms of REDD+ financial resources not only from UNFCCC, bilateral, and multilateral but also national budgets and private sources including national private fund as well as of overseas private fund, the REDD+ fund should have flexible function to get access to the various financial sources.

Appendix 1 Project Design Matrix (ver. 1)

DRAFT Project Design Matrix (PDM) Version 1.0

Version1.0 (05/04/2012)

Project title: Dien Bien REDD+ Pilot Project
Project Period: April 2012 to October 2013 (1.5 years)
Project Area: Dien Bien Province (Pilot Areas to be decided)
Target Group: DARD (Dien Bien Province) and the key stakeholders

NARRATIVE SUMMARY	OBJECTIVEY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTION
Overall Goal Findings and experiences obtained through Dien Bien REDD+ Pilot Project implementation will be reflected into National REDD+ Program (NRP) and other related policies, and applied to REDD+ implementation in other provinces.	Experiences and findings obtained through the REDD+ piloting are reflected in NRP formulation.	Government documents Interview to stakeholders, etc.	
Project Purpose Technical and institutional capability for REDD+ implementation in Dien Bien Province, under the framework of NRP is strengthened through preparation of the provincial REDD+ program.	1. Provincial DARD Officers and the key stakeholders have capability to implement Provincial REDD+ Program. 2. Comprehensive recommendation is made for NRP based on the experiences from implementing Dien Bien REDD+ Pilot Project.	Interview to the stakeholders Project Reports Government documents	1. Vietnamese policies on REDD+ do not change greatly. 2. Resources to implement REDD+ activities are available.
Outputs 1. Implementation plan for the pilot areas is designed.	1. Provincial REDD+ Program is approved. 2. REDD+ action plans for the pilot areas are agreed on by the stakeholders. 3. Institutional arrangement is set up.	Interview to the stakeholders Project Reports Government documents	
2. Measurement, Reporting and Verification (MRV) system for Dien Bien Province is developed.	1. Provincial MRV system is proposed in line with NRP and/or other applicable guidelines.	Interview to the stakeholders Project Reports Government documents	
3. Benefit Distribution System (BDS) options for Dien Bien Province are developed.	1. Provincial BDS options are proposed in line with NRP and/or other applicable guidelines.	Interview to the stakeholders Project Reports Government documents	

4. Lessons are shared to develop and implement NRP, and the REDD+ implementation in other provinces.	1. Feedbacks are shared in regular meetings with the attendance of key stakeholders. 2. Two workshops (midterm and final) are held to share experiences of the Pilot Project.	Interview to the stakeholders Project Reports Government documents	
ACTIVITIES	**INPUTS**		
1-1. Modify and update the provincial REDD+ Program, which is one of outputs of the JICA REDD+ Study according to the National REDD+ Program (NRP), the current relevant policies of the Government of Vietnam and regulations and conditions of the province, and international negotiation. 1-2. Formulate a REDD+ action plan for pilot areas. 1-3. Conduct training (e.g. OJT, Off-JT) for the key stakeholders 2-1. Review and modify FREL/FRL by using available data, and additional field biomass survey, etc. 2-2. Modify MRV system including monitoring of Policies and Measures (PaMs). 2-3. Develop a performance monitoring system for the different REDD+ activities[ii]. 2-4. Design system of safeguard information. 3-1. Estimate potential benefit from the implementation of the REDD+ activities. 3-2. Explore the financial sources of payment/support. 3-3. Modify provincial BDS options. 4-1. Feedback to Nation REDD+ program through TWG and STWG meetings. 4-2. Hold regional workshops.	Japanese Side 1) Allocation of Experts -Chief Advisor -Administrative Manager -Experts in the relevant fields 2) Provision of equipment/facilities 3) Training in Japan /Third country Training 4)Local Cost	Vietnamese Side 1) Counterpart personnel -Project Director -Project Vice Director -Project Coordinator -Other project counterpart Personnel and administrative staff 2) Buildings and Facilities 3)Counterpart Budget	**Preconditions**

Appendix 2 Detailed Plan of Operation

				4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	Note
Output 1 Implementation plan for the pilot areas is designed.																									
1.1	**Modify and update the provincial REDD+ Program, which is one of outputs of JICA REDD Study according to the National REDD+ Program (NRP), the current relevant policies of the Government of Vietnam and regulations and conditions of the province, and international negotiation.**																								
	1.1.1	**Clarify objectives and orientation of Provincial REDD+ Action Plan (PRAP) under the framework of National REDD+ Action Program (NRAP) and design an outline of PRAP**	**Plan**																						An outline of PRAP is provided in Progress Report.
			Actual						done																
		Clarify objectives and orientation of PRAP under the framework of NRAP	Plan																						
			Actual			done																			
		Design a draft outline of PRAP	Plan																						
			Actual						done																
		Gain a consensus on orientation and an outline of PRAP with relevant personnel of VNFOREST and Dien Bien Province	Plan																						
			Actual						done																
	1.1.2	**Establish the working group (WG) to work with the JICA Project Team to prepare PRAP and Action Plan of pilot areas**	**Plan**																						Involvement of the WG in preparation of PRAP and C-RAP has been improved since March 4, 2013.
			Actual																						
		Clarify the function and roles of WG and identify the organizations to be involved	Plan																						
			Actual					done																	
		Gain a consensus on establishing WG among the member organizations	Plan																						
			Actual						done																
		Appoint WG members (by each member organization)	Plan																						Description of the WG and its members are provided in Progress Report.
			Actual						done																
		Hold meetings among the JICA Project Team and the WG members	Plan																						The WG meetings have been held every two weeks or so since the meeting held on March 4.
			Actual																						
	1.1.3	**Prepare draft PRAP on the basis of "1.1.1" and "1.1.2".**	**Plan**																						1st draft was discussed among the related personnel early in April. 2nd draft is under preparation in collaboration with the WG.
			Actual																						
		Confirm process of preparing PRAP among the JICA Project Team and WG	Plan																						Process of preparation of PRAP has been recognized in the meeting held on March 4.
			Actual												done										
		Review natural and socio-economic conditions of Dien Bien Province	Plan																						Results (tentative) are provided in the 1st draft of PRAP.
			Actual						done																
		Collect and analyze information on the existing policies that can be associated with REDD+.	Plan																						Results (tentative) are provided in the 1st draft of PRAP.
			Actual						done																
		Determine RELs/RLs according to the Output 2.1	Plan																						FRLs are provided in the 4th draft of the PRAP.
			Actual																						
		Design MRV methods according to the Output 2.2	Plan																						PFMS is described in the 4th draft of the PRAP.
			Actual																						
		Design the performance monitoring system according to the Output 2.3	Plan																						PFMS is described in the 4th draft of the PRAP.
			Actual																						
		Design the safeguard information system according to the Output 2.4	Plan																						Assessment of the activities on Safeguards is described in the 4th draft of the PRAP
			Actual																						
		Clarify BDS options according to the Output 3	Plan																						BDS options are provided in the 4th draft of the PRAP.
			Actual																						
		Provide the potential REDD+ measures and prioritized areas for each measure	Plan																						The 4th draft of the PRAP describes prioritized communes and measures to enhance forest protectio and development.
			Actual																						
		Clarify the framework of implementing REDD+	Plan																						Framework of implementing REDD+ is described in the 4th draft of the PRAP.
			Actual																						
		Incorporate findings from preparation of Action Plan for the pilot areas into draft PRAP	Plan																						Communal information is reflected on the 4th draft of the PRAP.
			Actual																						
	1.1.4	**Explain draft PRAP to the relevant personnel of VNFOREST and Dien Bien Province.**	**Plan**																						Provincial consultation meetings have been completed. PRAP will be finalized on the basis of the inspection by VNFOREST.
			Actual																						
		Hold workshops to discuss draft PRAP	Plan																						Provincial consultation meetings have been held 3 times.
			Actual																						
		Revise draft PRAP on the basis of discussions made in the workshops	Plan																						The 4th draft of the PRAP is prepared taking into acount the comments given at the consultation meetings.
			Actual																						
	1.1.5	**Make PRAP approved.**	**Plan**																						If it takes time for PRAP to be officially approved, it needs considering to take two steps: (1) approval within the project framework; (2) offical approval (if its process is not completed by January 2014, this item will be transferred to SUSFORM-NOW).
			Actual																						
		Clarify how PRAP should be approved through discussion with the relevant personnel of VNFOREST and Dien Bien Province	Plan																						Process of making the PRAP approved is confirmed at the final JCC meeting.
			Actual																		done				
		Make PRAP approved.	Plan																						The 1st consultation on the PRAP draft was held on April 5.
			Actual																						

				2012									2013												
				4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	Note
Output 1 Implementation plan for the pilot areas is designed.																									
1.2 Formulate a REDD+ action plan for pilot areas.																									
	1.2.1	**Clarify the criteria to select the pilot areas.**	**Plan**																						Process of selection of the pilot areas is described in Progress Report.
			Actual							done															
		Clarify the areas where deforestation and forest degradation occur and their causes.	Plan																						
			Actual							done															
		Clarify the natural and socio-eoconomic conditions considered to affect REDD+ implementation.	Plan																						
			Actual							done															
		Clarify the administrative and institutional conditions considered to affect REDD+ implementation.	Plan																						
			Actual							done															
	1.2.2	**Select the pilot areas**	**Plan**																						Selection of the pilot areas is approved by PPC Decision 1168
			Actual								done														
		Select the district to be prioritized on the basis of "1.2.1".	Plan																						
			Actual							done															
		Select the pilot areas (communes).	Plan																						
			Actual								done														
	1.2.3	**Design an outline of draft Action Plan for the pilot areas (PAAP)**	**Plan**																						An outline of PAAP (commune level) is described in Progress Report
			Actual							done															
		Design an outline of draft PAAP (commune level)	Plan																						
			Actual							done															
	1.2.4	**Identify boundary of the forests to be protected and owners of the forests**	**Plan**																						The village boundary was set in the pilot areas (two communes)..
			Actual																done						
		Identify boundary of the forests to be protected and villages on the maps (based on FPDP map and ALOS image)	Plan																						
			Actual																done						
		Verify the boundary on the field	Plan																						
			Actual											done											
	1.2.5	**Clarify socio-economic conditions of the pilot areas (communes)**	**Plan**																						
			Actual													done									
		Carry out socio-economic survey in the pilot areas	Plan																						
			Actual												done										
		Analyze socio-economic conditions of each village in the pilot areas	Plan																						
			Actual													done									
	1.2.6	**Prepare draft PAAP (commune level)**	**Plan**																						5th draft of the C-RAP has been distributed to the relevant personnel of the province.
			Actual																						
		Identify the areas and activities to be carried out to protect the forests, enhance regeneration and develop plantation based on 1.2.4	Plan																						The item has been described in the 5th draft of C-RAP.
			Actual																						
		Identify the livelihood-support measures	Plan																						The item has been described in the 5th draft of C-RAP.
			Actual																						
		Identify the fund sources to carry out forest protection, regeneration and plantation	Plan																						The item has been described in the 5th draft of C-RAP.
			Actual																						
		Develop a management system for implementation of the forest management plan/land use plan	Plan																						The item has been described in the 5th draft of C-RAP.
			Actual																						
		Prepare schedule of implementing the forest management/land use plan (including monitoring – forest, PaMs, livelihood and safeguard)	Plan																						The item has been described in the 5th draft of C-RAP.
			Actual																						
		~~Prepare BDS plan~~	Plan																						BDS has been excluded from the PAAP.
			Actual																						

				2012									2013											Note
				4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Output 1 Implementation plan for the pilot areas is designed.																								
1.2 Formulate a REDD+ action plan for pilot areas.																								
	1.2.7	**Hold workshops in the pilot areas (communes)**	**Plan**																						The workshop has been held in Muong Phang and Muong Muon Communes.
			Actual														done								
		Provide the facilitators lecture on PAAP and decide roles of the facilitators in the workshops	Plan																						
			Actual													done									
		Make logistical arrangements to hold the workshops	Plan																						
			Actual													done									
		hold workshops in the pilot areas (communes) and explain PAAP (commune level) and process to prepare the village level plan to leaders of the all villages.	Plan																						
			Actual														done								
	1.2.8	**Provide consultation in the villages of the pilot areas (cooperation with SUSFORM-NOW)**	**Plan**																						
			Actual															done	done						
		Provide consultation in 3 villages and prepare the village-level forest management and livelihood development plans for trial	Plan																						
			Actual															done	done						
		Finalize method of providing village consulatation and preparing the village-level forest management and livelihood development plans.	Plan																						
			Actual															done	done						
		~~Provide consultation for the remaining villages and prepare the village-level forest management and livelihood development plans~~	Plan																						
			Actual																						
	1.2.9	**~~Finalize the REDD+ Action Plan for the pilot areas~~**	**Plan**																						
			Actual																						
		~~Incorporate the result of 1.2.8 into 1.2.6~~	Plan																						
			Actual																						
	1.2.10	**Make the PAAP (commune level) approved**	**Plan**																						
			Actual																						
		Clarify the authority, process and duration required to approve the Action Plan	Plan																						
			Actual																			done			
		Submit the REDD+ Action Plan to the relevant authority (transferred to SUSFORM-NOW)	Plan																						
			Actual																						
		Make the REDD+ Action Plan for the pilot areas approved (transferred to SUSFORM-NOW)	Plan																						
			Actual																						
1.3 Conduct training (e.g. OJT, Off-JT) for the key stakeholders.																								
	1.3.1	**Examine the needs of capacity building**	**Plan**																						
			Actual												done										
		Hold a meeting between the JICA Project Team and the WG members and discuss the needs of capacity building.	Plan																						
			Actual						done																
		On the basis of the discussion, clarify the gap on the technical aspects that need to be filled for preparation of PRP and action plan.	Plan																						Training plan has been discussed in the WG meeting in March 2013.
			Actual												done										
	1.3.2	**Prepare the training plan on the basis of "1.3.1".**	**Plan**																						
			Actual																						
		Identify the subjects of trainings	Plan																						
			Actual																						
		Identify the trainers	Plan																						
			Actual																						
		Prepare schedule of the trainings	Plan																						Training plan has been discussed in the WG meeting in March 2013.
			Actual																						
	1.3.3	**provide the training courses (in the workshop style).**	**Plan**																						Besides workshops, OJT has been provided through preparation of PRAP and C-RAP.
			Actual																						
		Provide trainings (workshops) for the administrative staff (province, district, commune levels)	Plan																						Trainings on facilitation skills (preparation of the village forest management and livelihood development plans), remote sensing/GIS/GPS, FPD system, safeguards and database were provided.
			Actual																						
		Provide trainings (workshops) for the stakeholders of the pilot areas.	Plan																						Commune workshops were held in Muong Phang and Muong Muon Communes.
			Actual																						

			2012									2013												
			4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	Note
Output 2 Measurement, Reporting and Verification (MRV) system for Dien Bien Province is developed.																								
2.1 Review and modify REL/RL by using available data and additional field biomass survey, etc.																								
2.1.1	Update the forest distribution map for 2010 by analyzing latest satellite data	Plan																						done
		Actual						done																
	Make an arrangment of sub-contract on updating the forest distribution map for 2010	Plan																						done
		Actual	done																					
	Make sub-contract	Plan																						done
		Actual	done																					
	Supervise the operation (internal report)	Plan																						done
		Actual			done																			
	Verify the output of sub-contract work	Plan																						done
		Actual				done																		
	Revise the output (if needed)	Plan																						done
		Actual					done																	
	Update the FCM (2000/2010)	Plan																						done
		Actual						done																
2.1.2	Based on the forest distribution map prepared in "2.1.1" and the other maps prepared in the REDD Study, analyze forest change and effect of the policies such as Program 661	Plan																						
		Actual																done						
	Obtain the data of the areas planned for Program 661	Plan																						done
		Actual		done																				
	arrange and examine the data collected	Plan				ext.																		done
		Actual						done																
	Estimate success rate of Program 661 implementation based on the data collected	Plan																						done
		Actual						done																
	Estimate total area implemented by Program 661 based on the historical data	Plan																						done
		Actual						done																
	Estimate effects of Program 661 on RELs/RLs	Plan																						Estimation of effects of Program 661 is described in the 4th draft of PRAP.
		Actual																done						
2.1.3	In the area identified in "2.1.2" as the forests are decreasing or degradaing, carry out survey to analyze their causes	Plan																						done
		Actual							done															
	Implement the field survey	Plan																						Survey to identify driving forces of deforestation was carried out.
		Actual				done																		
2.1.4	Along with development of the MRV system, examine whether additional biomass data should be collected in the	Plan																						done
		Actual													done									
	Examine whether another classes of the emission factor should be developed besides the 17 classes already	Plan																						Concluded the additional survey is not necessary (July 2012)
		Actual				done																		
	Consult the Vietnamese side	Plan																						Proposal on the provincial forest monitoring system has been presented to the Vietnamese
		Actual													done									
2.1.5	Based on the results of "2.1.2" through "2.1.4", develop RELs/RLs.	Plan																						RELs/ RLs are provided in the 4th draft of PRAP.
		Actual																done						
	Develop the FCM of the whole province	Plan																						done
		Actual							done															
	Verify the revised FCM by comparing it with the FCM already developed	Plan																						done
		Actual							done															
	Check consistency with existing data such as those of Program 661, etc.	Plan																						done
		Actual																done						
	Estimate future carbon emission	Plan																						done
		Actual																done						

			2012									2013												
			4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	Note
Output 2 Measurement, Reporting and Verification (MRV) system for Dien Bien Province is developed.																								
2.2 Modify MRV system including monitoring of Policies and Measures (PaMs)																								
2.2.1	Review the MRV system proposed by the REDD Study, taking into account circumstances of Dien Bien Province and trend of the internaional negotiation.	Plan																						
		Actual																						
	Clarify relation and compatibility among the existing forest maps prepared by various organizations (of national as well as local levels) to examine how to incorporate provincial data into National MRV	Plan																						done
		Actual						done																
	Clarify technical issues on MRV and other relevant matters (capacity, manpower, equipment, etc.)	Plan																						done
		Actual						done																
	Analyze gaps to implement national and provincial MRV and propose suitable framework (holding a WS among the relevant stakeholders)	Plan																						done
		Actual						done																
	Examine necessity of making annual revision to the map in the province or lower levels	Plan																						done
		Actual						done																
	Review monitoring method of Program 661 in the province and lower levels and examine its applicability	Plan																						done (It was found the monitoring was not carried out for Program 661.)
		Actual						done																
	Make recommendations for the National MRV system	Plan																						done
		Actual							done															(recommendations are made in the progress
	Designing the database for the province and lower levels	Plan																						This item is added in the modified contract.
		Actual																						
	Provide training on GPS operation (based on the existing training record, levels of the target and TOT are	Plan																						Training on database is scheduled in December 2013.
		Actual																						
2.2.2	Clarify PaMs associated with NRAP. Analyze the legal documents related to REDD+ measures to be applied in Dien Bien Province	Plan																						
		Actual									done													
	Clarify the current administrative system.	Plan																						
		Actual									done													
	Clarify PaMs associated with NRAP	Plan																						
		Actual									done													
	Clarify the existing policies associated with REDD+: Program 661; FPDP; PFES, etc.	Plan																						
		Actual									done													
	Clarify the measures to be applied to REDD+ implementation in Dien Bien Province	Plan																						Potential REDD+ measures for Dien Bien Province are provided in the 1st draft of PRAP.
		Actual									done													
2.2.3	Examine method of monitoring PaMs ~~in association with the activities in the pilot area~~	Plan																						Monitoring PaMs is described in the 1st draft of PRAP.
		Actual													done									
	Identify indicators for monitoring (implementation area; participation; increase/decrease of forests; budget, etc.)	Plan																						
		Actual													done									
	Clarify the information system (how to collect, update and open the information)	Plan																						
		Actual													done									
2.2.4	Based on the "2.2.1" through "2.2.3", develop the provincial MRV system and how to incorporate it into the	Plan																						
		Actual													done									

		2012									2013												
		4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	Note
Output 2 Measurement, Reporting and Verification (MRV) system for Dien Bien Province is developed.																							
2.3 Develop a performance monitoring system for the different REDD+ activities										×		×											
2.3.1	Clarify what is to be monitored (clarification of indicators)	Plan																					In association with 2.2.3, what is to be monitored is described in the 1st draft of PRAP.
		Actual												done									
	Clarify the PaMs to be applied: ~~Program 661;~~ FPDP; PFES, etc.	Plan																					PaMs for REDD+ implementation to be applied are described in the 1st draft of PRAP
		Actual												done									
	Identify the indicators ~~(R-coefficient, etc.)~~	Plan																					~~clarify contribution of database to R-coef.~~
		Actual												done									
	Clarify methods of monitoring for each activity (PaMs)	Plan																					In association with 2.2.3, the monitoring methods are described in the 1st draft of PRAP.
		Actual												done									
2.3.2	Develop the monitoring system ~~(testing)~~	Plan																					Performance monitoring system will be designed by March 2013.
		Actual												done									
	Collect existing guidelines (current monitoring system, etc.)	Plan																					
		Actual					done																
	Modify the collected guidelines to draft the monitoring system	Plan																					
		Actual												done									
	~~Test the monitoring system in the field~~	Plan																					
		Actual																					
	~~Provide recommendations based on results of the test~~	Plan																					
		Actual																					
2.3.3	Clarify relation of the monitoring system with BDS	Plan																					
		Actual											done										
	Clarify applicability of the monitoring system for the BDS methods and draft recommendations.	Plan																					
		Actual											done										
2.4 Design system of safeguard information																							
2.4.1	Identify the existing domestic policies related with REDD+.	Plan																					
		Actual											done										
	Check the PaMs identified in 2.2.2 on their relevance with safeguards (to support or not); if a policy does not support the safeguards, it may not be applied to REDD+.	Plan																					The policies related to the safeguards are described in Progress Report. It is found the PaMs identified in 2.2.2 do not contradict the
		Actual								done													
	Identify safeguard items that don't have relation with any of the PaMs identified in 2.2.2; identify additional domestic policies that support such safeguard items.	Plan																					
		Actual											done										
2.4.2	Implement demonstration activities ~~(in the pilot area) for 2.4.1.~~	Plan																					Demonstration on how to monitor the activities on the safeguards using the check-sheet was provided in July 2013.
		Actual																done					
	Identify indicators for monitoring the activies on the safeguards ~~implementation of the policies clarified in 2.4.1.~~	Plan																					
		Actual																done					
	Identify methods of monitoring the indicators (who monitors, etc.).	Plan																					
		Actual																done					
	Implement field demonstration to monitor the activiites on the safeguards ~~confirm the local people agree on the~~	Plan																					
		Actual																done					
2.4.3	Develop a provincial safeguard inoformation system on the basis of the inoformation obtained in 2.4.1 and 2.4.2.	Plan																					
		Actual																done					
	Identify indicators for monitoring each safeguard item.	Plan																					Indicators for monitoring the safeguards are provided in the draft final report.
		Actual																done					
	Identify methods of monitoring safeguard items (who monitors, etc.).	Plan																					Methods of monitoring the safeguards are described in the draft final report.
		Actual																done					
	Develop a process of "incorporating the monitored information into the central system" (who will manage the	Plan																					Idea on the incorporation is described in the draft final report.
		Actual																done					

			2012									2013												
			4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	Note
Output 3 Benefit Distribution System (BDS) options for Dien Bien Province are developed																								
3.1 Estimate potential benefit from the implementation of REDD+ activities																								
3.1.1	**Estimate benefit to be earned from implementing REDD+ in Dien Bien Province**	**Plan**																						Potential benefit of the REDD+ implementation is described in the 4th draft of PRAP.
		Actual																						
	Estimate amount of the carbon emission and removal during the period bewteen a base year and a benchmark year by implementing each potential measure of REDD+ (project scenario)	Plan																						
		Actual																						
	Estimate total amount of the carbon emission and removal in the province during the period bewteen a base year and a benchmark year under the project scenario	Plan																						
		Actual																						
	Estimate amount of the carbon emission reduced and removal increased in the province during the period between a base year and a benchmark year as compared to RELs/RLs	Plan																						
		Actual																						
	Esimate the carbon credit to be earned from implementing REDD+ by the province	Plan																						
		Actual																						
	Estimate the cost of implementing each potential measure of REDD+	Plan																						
		Actual																						
	Estimate the total cost of implementing REDD+ in the province	Plan																						
		Actual																						
	Estimate net potential benefit of implementing REDD+ in the province	Plan																						
		Actual																						
3.2 Explore the financial sources of payment/support																								
3.2.1	**Identify potential financial sources of payment/support**	**Plan**																						Existing domestic fund is the only potential financial source found so far. It is not considered enough to cover the all costs expected for REDD+ implementation.
		Actual																						
	Identify the existing and to-be-established finanicial sources (domestic funds, international funds - bilateral, multi-lateral, private sectors, etc.).	Plan																						
		Actual																						
	Evaluate each financial source on the aspects of its purpose, use, function, procedures, availability, accessibility, etc.	Plan																						
		Actual																						
	Identify the financial sources that can be applicable to REDD+ pilot implementation in Dien Bien Province	Plan																						One Japanese company is identified as a potential financial contributor for REDD+ implementation in Dien Bien
		Actual																						
3.3 Develop provincial BDS options																								
3.3.1	**Clarify the national BDS policy**	**Plan**																						Natinal BDS Policy has not been established yet.
		Actual									done													
	Clarify the national BDS policy through discussion with the relevant personel of VNFOREST	Plan																						
		Actual									done													
3.3.2	**Clarify the payment flow**	**Plan**																						Idea on mechanism of the payment flow is described in the 4th draft of PRAP.
		Actual													done									
	Clarify local institutions/stakeholders associated with distributing the benefit	Plan																						
		Actual													done									
	Design mechanism of the payment flow of the financial sources identified in 3.2.1 through relevant local stake institutions/stakeholders	Plan																						
		Actual													done									
3.3.3	**Identify methods of payment**	**Plan**																						The 4th draft of PRAP describes methods of payment to be proposed.
		Actual													done									
	analyze each option on the timing of the payment and related payment base to be applied: participation-based payment; result-based payment; combination of participation- and result-based payments	Plan																						
		Actual													done									
	Identify the appropriate option on the timing of the payment and related payment base to be applied																							
															done									
	~~Analyze each option on the method of calculating the amount of payment to be applied: fixed amount; based on emission reduced and removal increased against RELs/RLs~~																							
	~~Identify the appropriate option on the method of calculating the amount of payment to be applied~~	Plan																						
		Actual																						
3.3.4	**Design the provinicial BDS options based on 3.2.1, 3.3.1, 3.3.2 and 3.3.3**	**Plan**																						
		Actual													done									
	Design the provinicial BDS combining the available options identified in 3.2.1, 3.3.1, 3.3.2 and 3.3.3	Plan																						
		Actual													done									

				2012										2013												2014	
				4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9	10	11	12	1	Note
Output 4 Lessons are shared to develop and implement NRAP and the REDD+ implementation in other provinces																											
4.1 Feedback to NRAP through technical working group and sub-technical working group meetings																											
	4.1.1	**Participate in technical working group (TWG) and sub-technical working group (STWG) meetings**	**Plan**																								Reporting was made at STWG meeting on MRV in August 2012, MRV workshop in September 2012, REDD+ retreat in April 2013 and PRAP donor consulation in October 2013.
			Actual																								
		Report progress, outputs of the project implementation	Plan																								
			Actual																								
		Provide inputs to the discussions based on lessons learned from implementation of the project	Plan																								
			Actual																								
4.2 Hold regional workshops																											
	4.2.1	**Prepare for the regional workshops**	**Plan**																								1st regional workshop was held in December 2012. 2nd regional workshop is scheduled in January 2014.
			Actual																								
		Clarify the contents to be presented and discussed at the workshop	Plan																								
			Actual																								
		Identify domestic and internatinal invitees	Plan																								
			Actual																								
		Prepare the presentation materials	Plan																								
			Actual																								
		make logistical arrangements to hold the workshop	Plan																								
			Actual																								
	4.2.2	**Hold the regional workshops**	**Plan**																								1st workshop was held as "Progress Workshop" in December 2012. 2nd workshop (final) is scheduled in
			Actual																								
		Hold the regional workshops	Plan																								
			Actual																								
	4.2.3	**Feedback results of the regional workshops**	**Plan**																								Presentation materials and notes on discussion will be open through VN REDD website.
			Actual																								
		Prepare minutes of the workshops and distribute them to the participants and other relevant parties	Plan																								
			Actual																								
		Accept additional comments and questions on the discussions made during the workshops	Plan																								
			Actual																								

Appendix 3 Record of Dispatching the Experts

Tentative Schedule of Dispatching the Japanese Experts

	Portfolio	Name	Organization			Schedule (2012: 3–12; 2013: 1–12; 2014: 1)	Total Local	Total Japan	Total Own
Local operation	Coordinator	Hiroki China	JOFCA	3	Plan	4/9–6/9 (62); 7/18–9/15 (60); 10/8–12/22 (76); 1/6–2/7 (33); 2/18–4/28 (70); 5/19–(7/14); (8/28)–(9/27); 8/28 9/27	11.50		
					Actual	4/9–6/9 (62); 7/18–9/15 (60); 10/8–12/22 (76); 1/6–2/7 (33); 2/18–4/28 (70); 5/19–7/7 (7, 43); 7/28–8/18 (8, 14); (8, 23); 10/6–11/2 (28)	10.80		2.72
	Sub-coordinator / Reference Emission Level (REL) (1) / Measurement･Reporting･Verification (MRV) System (1)	Kei Suzuki	JAFTA	2	Plan	4/18–4/27 (10); 5/17–5/25 (9); 7/8–7/13 (6); 8/30–9/7 (9); 10/17–10/21 (5); 12/12–12/15 (4); 3/6–3/9 (4); 4/3–4/7 (5); 4/21–4/24 (4); (58)	3.80		
					Actual	4/18–4/27 (10); 5/17–5/25 (9); 7/8–7/13 (6); 8/30–9/7 (9); 10/17–10/21 (5); 12/12–12/15 (4); 3/6–3/9 (4); 4/3–4/7 (5); 4/21–4/24 (4); 6/5–6/14 (10); 7/2–7/4 (3); 9/8–9/12; 9/16–9/21 (5, 6); 10/2–10/8 (7); 10/14–10/26 (13)	2.87		0.46
	Provincial REDD + Plan (1)	Yoji Ishii	JOFCA	3	Plan	4/9–4/29 (21); 5/30–7/7 (39); 9/19–11/3 (46); 3/3–4/7 (36); 5/2–6/8 (38); (30)	7.00		
					Actual	4/9–4/29 (21); 5/30–7/7 (39); 9/19–11/3 (46); 3/3–4/7 (36); 5/2–6/8 (38); 7/9–8/4 (7, 20); 9/7–9/25 (8, 11); 10/8–11/2 (26)	6.50		1.89
	Provincial REDD + Plan (2)	Wataru Yamamoto	JOFCA	3	Plan	4/15–5/5 (21); 8/8–9/9 (33); 10/29–12/6 (39); 3/20–4/30 (42); 4/30–5/7 (7)	4.73		0.23
					Actual	4/15–5/5 (21); 8/8–9/9 (33); 10/29–12/6 (39); 3/20–4/30 (42); 4/30–5/7 (7)	4.73		0.23
	Reference Emission Level (REL) (2) / Date Base (DB) (1)	Takashi Nanaumi	JAFTA	3	Plan	9/11–9/22 (12); 4/14–4/20 (7); (3)	0.73		
					Actual	9/11–9/22 (12); 4/14–4/20 (7); 6/8–6/22 (15)	1.46		
	Measurement･Reporting･ Verification (MRV) System (2) / Benefits Distribution System (BDS)	Megumi Saito	JAFTA	3	Plan	4/9–5/9 (31); 6/26–9/27 (94); 1/6–2/4 (30); 2/25–4/20 (55); 6/2–6/16	7.50		
					Actual	4/9–5/9 (31); 6/26–9/27 (94); 1/6–2/4 (30); 2/25–4/20 (55); 5/25–7/8 (45)	8.50		
	Satellite Image Analysis	Haruyoshi Hayashi	JAFTA	3	Plan	4/18–4/27 (10); 7/2–7/15 (14); 1/12–2/4 (24); 3/24–4/12 (20)	2.27		
					Actual	4/18–4/27 (10); 7/2–7/15 (14); 1/12–2/4 (24); 3/24–4/12 (20); 6/2–6/14 (13)	2.70		
	Coordination / Project management	Sachiko Takinaga	JOFCA	4	Plan	4/9–5/7 (29); 4/17–5/6 (20)	2.00		2.00
					Actual	4/9–5/7 (29); 4/17–5/6 (20)	2.00		2.00
	Provincial REDD + Plan (3)	Kazuhisa Kato	JOFCA	2	Plan	11/19–11/25 (7); 3/2–3/11 (10)	0.57		0.57
					Actual	11/19–11/25 (7); 3/2–3/11 (10); 10/6–10/19 (14)	1.03		1.03
	Reference Emission Level (REL) (3) / Date Base (DB) (2)	JinLiang Mi	JAFTA	3	Plan				
					Actual	6/8–6/22 (15); 10/20–10/25 (6)	0.50		0.20
					Plan	※ Local Operation Total (Coordinated Operatins not include)	37.30		2.80
					Actual	※ Local Operation Total (Coordinated Operatins not include)	37.83		7.87
Operation in Japan	Coordinator	Hiroki China	JOFCA	3	Plan	3/16–3/28 (5); (5); (5)		0.50	
					Actual	3/16–3/28 (5); 7/18 – 7/24 (5); (5)		0.50	
	Sub-coodinator / Reference Emission Level (REL) (1) / Measurement･Reporting･ Verification (MRV) System (1)	Kei Suzuki	JAFTA	2	Plan	4/10–4/16 (3); (3)		0.20	
					Actual	4/10–4/16 (3); 8/6–8/23 (3); 9/3–9/13 (3); 10/30–10/31 (2)		0.37	
	Reference Emission Level (REL) (2)	Takashi Nanaumi	JAFTA	3	Plan	12/3–2/7 (16); 4/9–4/11 (2); (42)		2.00	
					Actual	12/3–2/7 (16); 3/25–3/27 (3); 4/9–4/11 (2); 6/24–6/27 (4); 7/8–7/24 (10); 8/27–8/30 (3); 9/2–9/27 (14)		1.77	
	Reference Emission Level (REL) (3) / Date Base (DB) (2)	JinLiang Mi	JAFTA	3	Plan				
					Actual	6/24–6/28 (3); 7/1–7/29 (15); 8/15–8/27 (7); 9/3–9/30 (16); 10/1–10/28 (10)		1.00	0.70
	Measurement･Reporting･ Verification (MRV) System (2) / Benefits Distribution System (BDS)	Megumi Saito	JAFTA	3	Plan				
					Actual	8/7–8/28 (10)		0.33	
					Plan	※ Operation in Japan Total (Coordinated Operatins not include)		2.70	
					Actual	※ Operation in Japan Total (Coordinated Operatins not include)		3.97	
	Report					△ IC/R (2012/4); △ PG/R (2012/11); △ DF/R (2013/7); △ F/R (2013/9)			

	Lacal	Japan	Own
Plan	37.30	2.70	2.80
	Local	Japan	Own
Actual	37.83	3.97	7.87

Legend: ■ Local Operation; □ Operation in Japan; ▨ On Our Own Expense

Appendix 4 Minutes of Joint Coordinating Committee Meetings

1. 1st Joint Coordination Committee (24th April, 2012)

MINUTES OF MEETING
ON
1st JOINT COORDINATING COMMITTEE MEETING
OF
"THE DIEN BIEN REDD+ PILOT PROJECT"

Pursuant to the agreement on Technical Cooperation Project for the DIEN BIEN REDD+ PILOT PROJECT (hereinafter referred to as "the Project"), agreed on 1st February 2012 between the Japan International Cooperation Agency (hereinafter referred to as "JICA") and the People's Committee of Dien Bien Province, the Vietnam Administration of Forestry under the Ministry of Agriculture and Rural Development (hereinafter referred to as VNFOREST) and the authorities concerned in the Socialist Republic of Vietnam, the 1st meeting for Joint Coordinating Committee (hereinafter referred to as "JCC") was held on 24th April 2012 in Dien Bien Phu City. Draft inception report was presented by the JICA Project Team and a series of discussions regarding the outline of the project implementation and technical issues associated with the project implementation has been made in order to gain mutual understanding among the JCC members and relevant parties. The JICA Project Team, the JCC members and relevant parties agreed that the suggestions and recommendations on the activities and associated methodologies, which were provided by the participants during the meeting, to be important matters and need be examined during the Project implementation. These REDD+ activities and methodologies shall be consistent with the UNFCCC COP Decisions, national policies, provincial circumstances and capabilities. The main issues discussed in relation to the Project are shown in the document attached hereto.

Dien Bien Phu
24th April 2012

Mr. Hiroyuki Chiba
Chief Advisor
JICA Project Team

Dr. Pham Manh Cuong
Deputy Director
Department of Science, Technology and International Cooperation, VNFOREST
Ministry of Agriculture and Rural Development

Mr. Akira Shimizu
Senior Representative
JICA Vietnam Office
Japan International Cooperation Agency

Mr. Pham Duc Hien
Director
Department of Agriculture and Rural Development
Dien Bien Province

Attached Document -1

The outline of the Project based on the draft inception report was presented by the JICA Project Team, and was accepted by the members of JCC. The JCC approved the work plan and the participants agreed to collaboratively engage in the Project. Methodology to be applied should be clarified in the course of the implementation on the basis of the discussion among the members of JCC. As a result of the discussion on a procedure how the project will be implemented, the members of JCC agreed the following points should be taken into consideration to conduct the Project.

(1) Pilot sites selection

- Pilot sites should be properly selected based on thorough analysis of the conditions of the potential pilot sites, a set of criteria and on the consensus of the stakeholders.
- Setting the size of the pilot sites should consider balance between practical implementation, potential amount of emission reduction and details covered in the action plan. Setting the pilot sites in the district level can cover larger areas, but the action plan is likely to become less detailed. Setting the pilot sites in the commune level can describe more detailed action plan, but smaller areas can be covered.

(2) JCC meeting

- The JCC meeting is held every six months to decide strategic issues of the Project implementation (e.g. work plan). However, ad-hoc JCC meetings will be convened if the necessity arises.
- The day-to-day operation of the project should be delegated to the Project Management Unit (PMU), which will be established as soon as the Project is approved by the Ministry of Agriculture and Rural Development (MARD).
- The first JCC only invited VNFOREST and the provincial agencies. However, once the pilot sites are selected, the stakeholders in such pilot sites should be also invited to the JCC.

(3) Coordination mechanism among implementation structures

- The modality of the coordination mechanism among project partners and implementation structures should be clarified.
- The role and responsibility of the related parties should be defined more in details, so that each party will have clear understanding on what they are expected to do. Such clarification can be made, for example, by adding such information into the work plan.
- Both central and provincial agencies and the JICA Project Team should commit to closely cooperate together. Each party should provide an appropriate number of qualified staff to ensure the effective implementation of the project.
- Working Group (hereinafter referred to as WG) that facilitates collaboration among VNFOREST, DARD and other sector agencies in Dien Bien Province is to be established. The function of WG and roles of each body in WG will be proposed by the Project Team. The progress of WG will be reported to JCC.
- Close collaboration with the local stakeholders and the forestry sector partners are crucial for

effective implementation of REDD+.

(4) Provincial MRV

- A robust and transparency MRV system is essential for the provincial REDD+ programme and should be developed by the Project.
- Key relevant participating organizations and their responsibilities in development and implementation of the provincial MRV shall be identified; the coordination mechanism among the participating agencies should be developed.
- Comprehensive and reliable database on forest resources could be a good benchmark for the provincial measurement, reporting and verification (MRV) system, and is essential for development of provincial REDD+ programme.
- Capacity building for local officers on forest monitoring methodology involving data analysis and field measurement is required to enhance ability to maintain provincial database and implement REDD+ programme.

(5) Provincial Benefits Distribution System (hereinafter referred to as "BDS")

- The provincial BDS should be developed in accordance with national policies and guidance, and provincial circumstances and capabilities.
- Method of BDS will be determined by analysing advantages and disadvantages of each option.
- Regarding options of provincial BDS, there were comments supporting the participation-based payment and the combination of result-based and participation-based payments.
- A simple, cost-efficient and practical method on operating the BDS will be developed.

(6) Livelihood development

- The implementation of the REDD+ programme should bring co-benefits and contribute to the livelihood improvement of Dien Bien province.

Attached document - 2: Agenda of the JCC Meeting

Venue: DARD meeting room, Dien Bien Phu

Purpose: to gain mutual recognition among the JCC members and relevant parties about contents of the Dien Bien REDD+ Pilot Project; final outputs of the project; approaches to be applied and activities to be carried out to develop the final outputs.

Time	Contents	Responsible by
08:00 – 08:15	Registration	JICA Project Team
08:15 – 08:20	Introduction of the meeting	JCC Secretariat
08:20 – 08:25	Opening remark	Co-chair of JCC
08:25 – 08:30	Opening remark	Representative of JICA
08:30 – 08:50	Presentation 1: - Progress of REDD+ Development in Vietnam - Outline of National REDD Program	VNFOREST - Pham Quoc Hung
08:50 – 09:30	Presentation 2: Outline of the project implementation - Developing the provincial REDD+ program for Dien Bien and designing the REDD+ implementation plan for the pilot area - Developing the MRV system for Dien Bien Province - Developing BDS options for Dien Bien Province - Sharing the information (lessons learnt)	JICA Project Team - Hiroyuki Chiba
09:30 – 10:10	Discussion; Q/A	Plenary
10:10 – 10:25	Break	
10:25 – 10:45	Presentation 2: Technical issues associated with the project implementation - Setting RELs/RLs (taking into account the national circumstances) - MRV methodology contributing to the national and provincial MRV - Advantages/disadvantages of BDS options - Etc.	JICA Project Team - Kei Suzuki
10:45 – 11:15	Discussion; Q/A	Plenary
11:15 – 11:30	Wrap up of the meeting	Co-chair of JCC

Attached document - 3: Participants of the JCC Meeting

Name	Organization
PHAM DUC HIEN: Co-chairman	Director of DARD
PHAM MANH CUONG: Co-chairman	VNFOREST
LO VAN HOA	Vice Director of FPD
DUONG THI THU HUONG	Vice Director of Admin Section, FPD
PHAN HIEN	Vice Director of DONRE
LE VAN QUANG	Vice Director of DOST
NGUYEN VAN HOAN	Vice Director of Department of Financial
TRAN MINH NAM	Expert of Department of Planning and Investment
NGUYEN DINH KY	Director of Sub-DoF
TRAN KHOA PHUONG	Expert of Sub-DoF
PHAM QUOC HUNG	VNFOREST
TRAN QUANG BAO	VFU
EIJI EGASHIRA	JICA Vietnam
DO THI THU THUY	JICA Vietnam
NORIYOSHI KITAMURA	JICA Expert
KAZUHIRO GOSEKI	SUSFORM-NOW
HIROYUKI CHIBA	REDD+ Pilot Project
KEI SUZUKI	REDD+ Pilot Project
YOJI ISHII	REDD+ Pilot Project
WATARU YAMAMOTO	REDD+ Pilot Project
HARUYOSHI HAYASHI	REDD+ Pilot Project
MEGUMI SAITO	REDD+ Pilot Project
SACHIKO TAKINAGA	REDD+ Pilot Project
NGUYEN VAN THANH	REDD+ Pilot Project
PHAM QUANG VINH	REDD+ Pilot Project

2. 2nd Joint Coordination Committee (19th October, 2012)

MINUTES OF MEETING
ON
2nd JOINT COORDINATING COMMITTEE MEETING
OF
"THE DIEN BIEN REDD+ PILOT PROJECT"

Pursuant to the agreement on Technical Cooperation Project for the DIEN BIEN REDD+ PILOT PROJECT (hereinafter referred to as "the Project"), agreed on February 1, 2012 between the Japan International Cooperation Agency (hereinafter referred to as "JICA") and the People's Committee of Dien Bien Province, the Vietnam Administration of Forestry under the Ministry of Agriculture and Rural Development (hereinafter referred to as VNFOREST) and the authorities concerned in the Socialist Republic of Vietnam, the 2nd meeting for Joint Coordinating Committee (hereinafter referred to as "JCC") was held on October 19, 2012 and a series of discussion regarding the progress of the project implementation and significant issues associated with the project implementation was made in order to gain mutual recognition among the JCC members and relevant parties. The main issues discussed in relation to the Project are shown in the document attached hereto.

Dien Bien Phu
October 19, 2012

Mr. Hiroyuki Chiba
Chief Advisor
JICA Project Team

Dr. Pham Manh Cuong
Deputy Director
Department of Science, Technology and International Cooperation, VNFOREST
Ministry of Agriculture and Rural Development

Mr. Fumihiko Okuura
Senior Representative
JICA Vietnam Office
Japan International Cooperation Agency

Mr. Pham Duc Hien
Director
Department of Agriculture and Rural Development
Dien Bien Province

Attached Document -1

Contents of the meeting include: report on the progress of the project implementation; revised work-plan; designing provincial MRV system; and selection of the pilot area. The members of JCC agreed the following points should be taken into consideration to carry forward the Project implementation.

(1) Selection of the pilot areas

- Muong Tung Commune of Muong Cha District was proposed in the progress report as the first priority to be the pilot area for developing the approach with main focus on reducing deforestation and forest degradation in accordance with the analysis made by the JICA Project Team. However, it was found that "Northwest Region Rural Development Project (NORRD)" as another JICA project has been implemented in the same commune. In order to avoid the conflict over counterpart resources, it was recommended that other communes should be examined to be pilot areas. The JICA Project Team will analyse the forest and socio-economic conditions of the other areas using the satellite imagery and other related data in order to identify the alternative pilot area. It will be followed by the field observation in order to check the feasibility. The result of the analysis will be reported to the relevant parties of Vietnamese side and JICA. The discussion came into agreement that the selection should be completed by the end of October 2012 with authorization of the Vietnamese side and JICA.

- Muong Phang Commune of Dien Bien District was selected as the pilot area for developing the approach with main focus on afforesting/reforesting or rehabilitating the bare lands or degraded areas, which should be regarded as the "plus" activities under REDD+. It was reported that PFES based on small-scale hydropower dams and eco-tourism will be introduced in this commune in the future.

- There was inquiry on what possible REDD+ implementation can be done in the outside of PFES areas. Progress Report proposes four types of the potential REDD+ activities. The potential REDD+ activity by application of PFES is only one of them. The other three potential REDD+ activities can be applied in the areas not covered by PFES.

- The landscape approach was proposed as a measure to cope with displacement of emission, and thereby, PRAP should include a perspective to prevent this problem on its surrounding areas as well as the area covered by the REDD+ implementation.

(2) Capacity development for provincial MRV system

- Building capacity for the rangers of Sub-FPD to improve monitoring quality, for example to report accurate geographical information by using GPS, will be needed. The project will support this issue as part of MRV capacity development.

(3) Potential REDD+ pilot activity: plantation with sustainable forest management

- While the JICA Project Team presented one of the potential REDD+ activities "Plantation with sustainable forest management", it explained that Protection Forests will be converted into Production Forests in Dien Bien Province in order to encourage private investment for forest plantation. However, there was a comment such action may be against the Safeguard. DARD answered there is no such policy to convert Protection Forests into

Production forests.

- It is not decided whether plantation is included as a measure of carbon stock enhancement under UNFCCC and the project should take this into consideration when it comes to its incorporation into REDD+ implementations.

(4) Change of the purpose of the regional workshop

- The regional workshop was planned to be held in December, with its initial purpose to share the experiences and knowledge acquired from implementing activities associated with REDD+ among the neighbouring countries (Vietnam, Laos and Cambodia) and exchange ideas on solutions to the issues that confront each country. However, instead, it was agreed more practical and useful that the workshop serves as an opportunity for the various REDD-related projects implemented in Vietnam, to report progress of their activities and discuss the issues common to REDD+ implementation in Vietnam. Participants of Laos and Cambodia may be invited as guests.

(5) Revised work-plan,

- This will be decided in the mature consideration with Technical Working Group.

Attached Document -2: For the Agenda

AGENDA

The second meeting of Joint Coordinating Committee of Dien Bien REDD+ Pilot Project

Date : Friday, October 19th, 2012
Time : From 13:30 to 17:00
Venue : 3rd floor meeting room, Department of Agriculture and Rural Development of Dien Bien.
Purpose : To discuss on the progress of project implementation, to approve the work plan and to approve the selection of the pilot area.

TIME	CONTENTS	Responsible by
13:30 - 13:45	Registration	
13:45 - 14:00	Opening Remarks	Dien Bien DARD JICA Vietnam
14:00 – 14:30	Overview and the progress of the project - Selection of the pilot area - PRAP - ACTION PLAN	Mr. Hiroyuki Chiba (Chief Advisor of the project) // //
14:30 – 15:00	National & Provincial Forest monitoring Information System Applicable provincial MRV methodology	Mr. Kei Suzuki (JICA Expert)
15:00 – 15:45	Discussion	Plenary
15:45 – 16:00	Tea-break	
16:00 – 16:15	Revised work plan for the project	Mr. Hiroyuki Chiba (Chief Advisor of the project)
16:15 – 16:45	Discussion	Plenary
16:45 – 17:00	Conclusion & Closing	VNFOREST

NOTE: Dinner party will be held at 17:30 at Muong Thanh Hotel's restaurant

Address: Provincial Department of Agriculture & Rural Development, No. 672, 7/5 Road, Dien Bien Phu City, Dien Bien Province
Tel/Fax: (0230) 383-6565

Attached Document -3: For the participant lis

PARTICIPANT LIST FOR 2nd JCC MEETING ON OCTOBER 19th, 2012

No.	Full name	Organization	Signature	Remarks
1	Mr. Pham Duc Hien	Director of Dien Bien DARD		
2	Mr. Nguyen Dinh Ky	Director of Dien Bien Sub-DoF		
3	Mr. Phaam Tien Dung	Chief of Admin. Dept. of Dien Bien DONRE		
4	Ms. Nguyen Thi Thinh	Vice Director of Financial Dept.		
5	Mr. Lo Van Hoa	Dien Bien Sub-FPD		
6	Mr. Le Van Quang	Vice Director of DOSTE		
7	Mr. Pham Quoc Hung	VNFOREST		
8	Mrs. Do Thi Thu Thuy	JICA Vietnam Office		
9	Mr. Nori Kitamura	JICA Expert		
10	Mr. Eiji Egashira	JICA Vietnam Office		
11	Mr. Tran Khoa Phuong	Dien Bien Sub-DoF		
12	Mr. Hiroyuki Chiba	Dien Bien REDD+ Pilot Project		
13	Mr. Kei Suzuki	Dien Bien REDD+ Pilot Project		
14	Mr. Yoji Ishii	Dien Bien REDD+ Pilot Project		
15	Mr. Nguyen Tuan Hien	SUSFORM-NOW		
16	Mr. Tran Xuan Dao	Dien Bien Sub-DoF		
17	Mr. Nguyen Van Thanh	Dien Bien REDD+ Pilot Project		
18	Mr. Pham Quang Vinh	Dien Bien REDD+ Pilot Project		
19	Ms. Mai Huong	Dien Bien Sub-DoF		
20	Mr. Nguyen Quang Sang	Vice Director of Dept. of Planning and Investment		
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3. 3rd Joint Coordination Committee (19th September, 2013)

MINUTES OF MEETING BETWEEN JAPAN INTERNATIONAL COOPERATION AGENCY AND AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIET NAM ON JAPANESE TECHNICAL COOPERATION PROJECT FOR THE DIEN BIEN REDD+ PILOT PROJECT

The Japan International Cooperation Agency (hereinafter referred to as "JICA") had a series of discussions on the implementation of the Technical Cooperation Project· "Dien Bien REDD+ Pilot Project" (hereinafter referred to as "REDD+PP") with the People's Committee of Dien Bien Province, the Vietnam Administration of Forestry under the Ministry of Agriculture and Rural Development (hereinafter referred to as "VNFOREST"), and the authorities concerned in the Socialist Republic of Vietnam.
As a result of the discussions, JICA, Dien Bien Provincial People's Committee, VNFOREST, and the authorities concerned agreed to summarize the matters referred to in the document attached hereto.

Dien Bien, September 19th 2013

Mr. Kenichi Shishido
Deputy Director General
Global Environment Department
Japan International Cooperation Agency
Japan

Dr. Vo Dai Hai
Deputy Director General
Viet Nam Administration of Forestry
Viet Nam

Mr. Lo Van Tien
Vice Chairman
Dien Bien Provincial People's Committee
Viet Nam

1. REDD+PP is scheduled to terminate in October 2013. However, there are still several points to be discussed and several issues to be cleared. In that context, it was agreed among the VNFOREST, the Dien Bien Provincial People's Committee and JICA that REDD+PP should be extended until the end of December 2013 to achieve the project purpose. The REDD+PP team consisting of the Provincial Project Management Unit of Dien Bien Province and the JICA Experts Team will continue to pay their maximum efforts to finalize the Provincial REDD+ Action Plan (hereinafter referred to as "PRAP") during the rest period. The schedule to finalize the PRAP is shown in Appendix 1.

2. The Dien Bien Provincial People's Committee will approve the PRAP after the official consultation with MARD/VNFOREST. VNFOREST will guide/support Dien Bien Provincial People's Committee in terms of technical aspects and policy context.

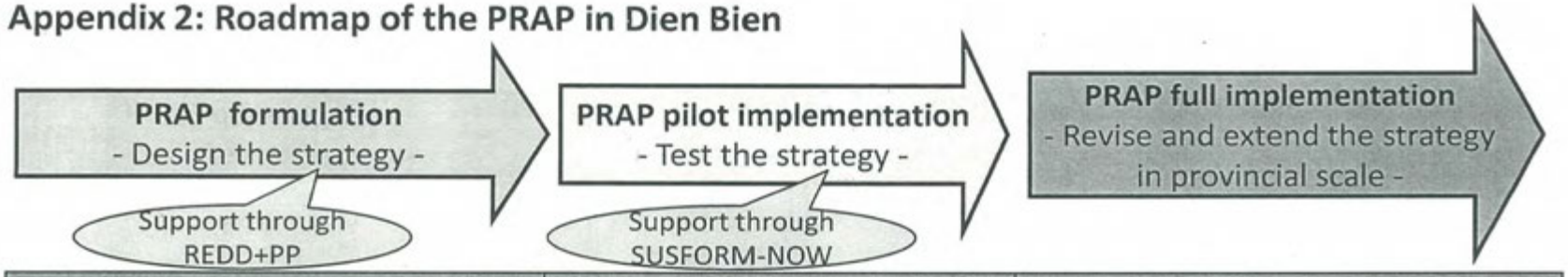
3. VNFOREST and the Dien Bien Provincial People's Committee (hereinafter collectively referred as "Vietnamese side") will continue to take initiative to realize REDD+ implementation in Dien Bien Province toward 2020. JICA will continue to support the implementation of the PRAP to be approved through the on-going technical cooperation project "The Project for Sustainable Forest Management in the Northwest Watershed Area of the Socialist Republic of Viet Nam" (hereinafter referred to as "SUSFORM-NOW") after the termination of REDD+PP although some part of the activities at village level have already been initiated and supported by SUSFORM-NOW since February of 2013. The Roadmap of the PRAP in Dien Bien is shown in Appendix 2.

4. Vietnamese side and JICA will conduct terminal evaluation by a simple method after the completion of REDD+PP as follows:
   - Vietnamese side and JICA examine achievements and implementation process based on the project completion report prepared and submitted by the REDD+PP team when the project completes.
   - Vietnamese side and JICA conduct evaluation from the viewpoint of relevance, effectiveness, efficiency, impact and sustainability.
   - JICA shall draft the Terminal Evaluation Form.
   - JICA requests Vietnamese side to provide comments on the contents of the Form to finalize the Form.

Appendix 1 Schedule to finalize the PRAP
Appendix 2 Roadmap of the PRAP in Dien Bien

Appendix 1: Schedule to Finalize the PRAP

Appendix 2: Roadmap of the PRAP in Dien Bien



2012 – 2013	2014 – 2015	2016 – 2020
Policy framework/Institutional framework designed	Review and rearrange	Review and rearrange
Capacity building plan proposed	Pilot CB and rearrange	CB for entire province
Setting FRELs/FRLs based on the historical data	Review and rearrange Reflect latest data	Review and rearrange
Establishment of the PFMS based on the prototype database system	Pilot PFMS and modify Harmonize PFMS with NFI	Implement PFMS in entire province and link it with NFI
Safeguard information system proposed	Pilot Safeguard info. system and modify	Implement the system and link with national system
Concept of the Provincial REDD+ fund is provided.	Pilot the PRF fund operation (if any fund for implementation and/or carbon credit available)	Fund (for implementation and/or carbon credit) flow to PRF fund and link with BDS (depending on National policy)
BDS options provided	Complete the initial BDS design	Operationalize BDS (depending on National policy) Link BDS with PRF fund
Cost estimated Funding sources proposed	Continue to explore funding sources	Acquire carbon credit through PRAP implementation (depending on National policy)

Appendix 5 Selection of pilot commune (Extract from the Progress Report)

2.1.2 Preparation of Action Plan

(1) Selection of the pilot area

Objective of the pilot implementation in pilot areas is to establish a model of REDD+ implementation (how REDD+ can be implemented in the field) that can be referred to when REDD+ activities are planned and implemented in other areas of Dien Bien Province. In this project, the action plans will be prepared for given pilot areas so that REDD+ activities can be implemented in accordance with them. Forest conditions in Dien Bien Province are complicated and dynamic; forests are increasing in some areas while forests are decreasing in other areas. Consequently, the project considers setting two pilot areas: (1) one for developing methodology that mainly focuses on afforesting/reforesting or restoring the bare lands or degraded areas; and, (2) another for developing methodology that mainly focuses on reducing deforestation and forest degradation.

In Muong Phang Commune of Dien Bien District, a group of Japanese private companies plans demonstration activities, rehabilitating the degraded areas surrounding an irrigation dam. The project expects cooperation with these companies on planning and implementing pilot activities and it is reasonable to set one of the pilot areas in Muong Phang Commune. Forest change of Muong Phang Commune between 2000 and 2010 is summarized in the table below. Both forest area and carbon stock are increasing in this period. Consequently, Muong Phang Commune has been selected as the pilot area to develop methodology for afforesting/reforesting or restoring the bare lands or degraded area as main focus[8].

Year	Unit	Rich F	Med F	Poor F	Regrowth F	Plantation	Total
2000	Area (ha)	0	41	181	550	620	1,393
	Carbon (CO2t)	0	12,264	26,996	51,195	63,252	153,708
2010	Area (ha)	0	28	39	2,987	6	3,060
	Carbon (CO2t)	0	8,317	5,845	277,816	594	292,572
EF (CO2t/ha)		549	296	149	93	102	

For the pilot area where methodology on reducing deforestation and forest degradation is to be developed as its main focus, the selection followed the procedures described below.

First, conditions of each district were analyzed according to the criteria that support applicability of the pilot activity to the district. A prioritized district is selected in this way. Within the prioritized

[8] Muong Phang Commune was selected as the pilot area on this aspect at the time of preparing Progress Report. Starting the activities in Muong Commune, it was found that large portion of the bare land was in Special Use Forest that makes it difficult to promote afforestation.

district, conditions of each commune were analyzed in the same way as the analysis of the districts in order to select a prioritized commune.

(1) Analysis of districts to select the pilot area

Characteristics of the nine districts/city/town of Dien Bien Province were analyzed for selecting the pilot areas (prioritized districts). As criteria for the selection, forest change patterns, causes of deforestation and forest increases, policies, conditions on land allocation and management system were analyzed. The result is summarized in Table 2.7

Forest change patterns

On the basis of outputs of the REDD+ Study, area and carbon stock of various forest types in 2000 and 2010, and the amount changed in the 10 years were analyzed (Table 2.8). As a result, it is found that Muong Nhe District stocked the most carbon in 2010 (15 million CO2t). Muong Cha District, Dien Bien District and Tuan Giao District follow (5 – 6 million CO2t).

As for the amount changed in the 10 years between 2000 and 2010, Only Muong Nhe District shows slight decrease (Δ-0.003CO2t/ha/yr) and the carbon stock increased in all of the other districts. Among the districts where carbon stock increased, Muong Cha District showed the smallest increase (Δ0.04CO2t/ha/yr). Carbon stock is increasing in the range of 1 – 3 CO2t/ha/yr in other districts.

Focusing on decrease of the carbon stock in the rich, medium and poor forests in the 10 years, Muong Nhe District experienced the largest decrease (-1.79 million CO2t or – 27 CO2t/ha/yr). Muong Cha District and Tuan Giao Districts follow at -1.29 million CO2t or -23 CO2t/ha/yr and -0.55 million CO2t or – 25 CO2t/ha/yr. The figures indicated here are not those based on the forest change matrix; they are simply the difference of the carbon stock between two points in time.

After updating the forest distribution map of 2010, the forest change matrix will be prepared for each district and trend of decease and increase will be analyzed.

Table 2.7 Characteristics of each district on the basis of the forest-related criteria

	Dien Bien	Dien Bien Dong	Dien Bien Phu	Muong Ang	Muong Cha	Muong Lay	Muong Nhe	Tua Chua	Tuan Giao
Forest/carbon Change					○		○		△
Driving Force – DD	Upland cultivation, forest fire	No data	No data	No data	Upland cultivation, forest fire	No data	Upland cultivation, forest fire; migration of H'Mong	No data	No data
Driving Force – A/R	661 – restoration/ plantation	Cultivation land in fallow	No data	327 – plantation	661 – restoration, cultivation land in fallow	661 - restoration	661 – restoration/ plantation, cultivation land in fallow, MNNR	No data	Plantation by community after land allocation
Policies									
30A		○		○			○	○	
FPDP	△				△				△
PFES	△				○	○	○	○	△
Decision 79							△		
Land Allocation	HH	HH	HH, CPC	HH, CPC	HH, CPC, G, Company	HH, CPC, G	HH, CPC, G	HH, CPC	HH, CPC, G
Institution	PFMB	DPC		DPC	PFMB	DPC	DPC, NRMB	DPC	PFMB
Evaluation					○		○		

Table 2.8 Area and carbon stock by forest types for each district at 2000 and 2010

District	Area (ha)	Year	Unit	Rich F	Med F	Poor F	Regrowth	Bamboo	Mix tim-bb	Lime F	Plantation	Total area	Area change	Total CO2	CO2 change	CO2 change/ha/yr*
Dien Bien	163,446	2000	Area (ha)	0	76	1,022	3,058	0	339	0	0	4,494		498,933		
			Carbon (CO2t)	0	22,357	152,219	284,412	0	39,945	0	0		54,128		5,326,217	3.26
		2010	Area (ha)	29	870	1,897	50,963	0	2,093	0	2,769	58,622		5,825,150		
			Carbon (CO2t)	15,995	257,465	282,664	4,739,522	13	247,020	0	282,471					
Dien Bien Dong	120,467	2000	Area (ha)	0	1,004	1,101	12,760	18	314	0	69	15,266		1,693,076		
			Carbon (CO2t)	0	297,074	164,104	1,186,655	1,152	37,036	0	7,054		15,518		1,347,674	1.12
		2010	Area (ha)	0	663	650	29,083	0	212	0	176	30,784		3,040,750		
			Carbon (CO2t)	0	196,251	96,860	2,704,708	0	24,967	0	17,963					
Dien Bien Phu	6,406	2000	Area (ha)	0	0	0	76	0	0	0	667	743		75,119		
			Carbon (CO2t)	0	0	0	7,077	0	0	0	68,042		1,425		132,703	2.07
		2010	Area (ha)	0	0	0	1,480	0	0	0	688	2,168		207,822		
			Carbon (CO2t)	0	0	0	137,667	0	0	0	70,155					
Muong Ang	44,289	2000	Area (ha)	2	3	484	2,945	0	0	301	498	4,234		448,091		
			Carbon (CO2t)	1,006	752	72,173	273,915	0	18	49,409	50,818		5,662		499,594	1.13
		2010	Area (ha)	2	1	0	9,061	4	0	307	521	9,896		947,685		
			Carbon (CO2t)	1,006	290	0	842,699	267	0	50,316	53,107					
Muong Cha	176,468	2000	Area (ha)	737	4,712	4,193	30,204	3,896	1,435	183	2,087	47,447		5,894,811		
			Carbon (CO2t)	404,749	1,394,850	624,700	2,809,008	249,322	169,360	29,933	212,891		8,127		68,975	**0.04**
		2010	Area (ha)	273	2,977	714	46,026	1,769	1,894	217	1,705	55,574		**5,963,786**		
			Carbon (CO2t)	149,679	881,103	106,377	4,280,458	113,205	223,435	35,644	173,885					
Muong Lay	11,260	2000	Area (ha)	0	110	235	2,105	0	0	0	1,010	3,461		366,518		
			Carbon (CO2t)	0	32,669	35,069	195,777	0	0	0	103,004		1,952		150,205	1.33
		2010	Area (ha)	0	0	60	4,245	0	0	0	1,108	5,413		516,723		
			Carbon (CO2t)	0	0	8,870	394,797	0	0	0	113,057					
Muong Nhe	249,321	2000	Area (ha)	634	16,096	13,135	61,840	660	18,262	8	0	110,633		15,019,038		
			Carbon (CO2t)	348,025	4,764,543	1,957,057	5,751,103	42,210	2,154,868	1,233	0		13,285		-7,538	**-0.003**
		2010	Area (ha)	367	11,466	11,270	85,860	0	14,073	18	864	123,919		**15,011,501**		
			Carbon (CO2t)	201,580	3,393,962	1,679,229	7,985,017	0	1,660,557	2,995	88,161					
Tua Chua	68,272	2000	Area (ha)	0	471	1,870	4,873	0	0	8,818	629	16,660		2,381,429		
			Carbon (CO2t)	0	139,342	278,581	453,158	0	0	1,446,177	64,171		6,592		556,691	0.82
		2010	Area (ha)	0	505	1,449	12,635	0	0	8,293	371	23,252		2,938,120		
			Carbon (CO2t)	0	149,357	215,895	1,175,032	0	0	1,359,976	37,860					
Tuan Giao	113,580	2000	Area (ha)	762	3,723	2,821	11,777	298	5,844	3,978	1,704	30,906		4,570,634		
			Carbon (CO2t)	418,402	1,101,900	420,262	1,095,247	19,072	689,582	652,324	173,844		9,436		513,721	0.45
		2010	Area (ha)	637	2,515	1,967	24,284	2	4,586	4,028	2,324	40,342		5,084,354		
			Carbon (CO2t)	349,478	744,450	293,121	2,258,388	100	541,140	660,629	237,049					
			EF (CO2t/ha)	549	296	149	93	64	118	164	102					

* CO2 change in 10 yrs. / total district area / 10

Causes of deforestation and forest increase

Deforestation drivers

Drivers of deforestation taking place between 2000 and 2010 were analyzed. Since fairly large deforestation clusters (> 100 ha) were only found in Dien Bien District, Muong Cha District and Muong Nhe District, the survey were carried out in only these three districts.

Conversion of the land use from forestry into agriculture (upland cultivation) is the largest direct cause regardless of the surveyed location and it accounts for 90 % of the total deforested area. Regardless of pre-deforestation conditions, moreover, medium forests, poor forests and rehabilitation forests are converted into upland cultivation land. This direct cause is combined with population increase as indirect cause. Particularly, increase of H'Mong population due to its migration has large impact in Muong Nhe District (contributing to deforestation in 6 out of 12 clusters surveyed). Although its scale is decreasing, the migration still continues and it needs coping with this situation in order to implement REDD+ in Muong Nhe District.

Causes of forest increase

Forest increases of Dien Bien District, Dien Bien Dong District, Muong Ang District, Muong Cha District, Muong Lay Town Muong Nhe District and Tuan Giao District were surveyed. According to result of the interview, the restoration carried out under Program 661 is the largest cause of this change (from non-forest to forest) and that accounts for nearly 60 % of the total area surveyed. The next major cause is fallowing of the shifting cultivation and this accounts for nearly 30 % of the total surveyed area.

Policies

Resolution 30A

Dien Bien Dong District, Muong Ang District, Muong Nhe District and Tua Chua District are covered by this program. Main activities include forest protection contract for Rich and Medium forests (200,000 VND/ha/yr), providing seedlings (2,000,000 – 5,000,000 VND/ha), food support (15 kg of rice/HH/month; maximum 7 years) and assisting reclamation of the food production land (5,000,000 VND/ha/HH).

Forest Protection and Development Plan

FPDP is succeeding Program 661 and covers the entire province. Provincial budget for 2012 is 40 billion VND (Decision 581/QD-UBND). Moreover, plantation (1 year), tending (3 years) and plantation forest protection are major activities of the implementation plan for 2012 in the province; natural forest protection or restoration which were carried out under Program 661 are not included in the plan for 2012. The budget of 2012 allocates large amount in Dien Bien District, Muong Cha District and Tuan Giao District.

The amount of the payment to be made for forest protection contract has not been changed from that of Program 661 (although it is not included in the plan for 2010 in Dien Bien Province).

Payment for Forest and Environmental Services (PFES)

PFES covers Muong Cha District, Muong Lay Town, Muong Nhe District, Tua Chua District and a part of Tuan Giao District and Dien Bien District[9].

Due to relatively large amount of input (48 billion VND/yr = 2.4 million US Dollars/yr), it is expected to be effective for REDD+ implementation. Although reallocation process of the forests covered by PFES seems troublesome, PFES can be led to REDD implementation by providing assistance to implementation of PFES to protect the forests.

Decision 79

This only covers Moung Nhe District. All communes of Muong Nhe District are covered by this decision during the period from 2011 to 2015. The budget for the five years is about 1.5 trillion dong (approximately 75 million US dollars) and expected to have a large impact. Primary contents of the decision include stabilization of the local people, building infrastructures, providing food, etc. Moreover, plantation activities are also recommended. Although this decision is to aim at mitigation of deforestation, road construction of 75 km and 51 irrigation facilities may affect the forest. Establishment of new villages and corresponding migration of the local people may affect REDD+ activities.

According to Decision 128 which was promulgated according to Decision 79, plan on the villages is described as below.

- 6 villages are to be moved: villages located in the flood-prone areas or areas planned to build road will move to designated areas not far from the original place; the villagers to be moved shall use the same production land as before (no new production land will be provided to them).
- 23 villages are to be newly established: local people who are scattered throughout Muong Nhe District without forming villages are gathered into villages.
- Two villages located inside of MNNR were planned to move to the outside of MNNR according to Decision 79. Instead of moving the villages, however, the boundary of the nature reserve was shifted inside so that the villages will lie outside of the boundary. On the other hand, the north end of the nature reserve is extended outward. As its result, area of the nature reserve increases to 48,579 ha from 45,581 ha.

Center for Agriculture and Forestry Designing and Planning (CAFDP) has prepared a map in MapInfo format to show distribution of the existing villages and the villages to be established. The number of villages by counting them on the map is shown in the Table 2.9 below.

Table 2.9 The number of villages by counting on the map

[9] PFES for the watershed of Son La Dam was only identified at the time of preparing Progress Report. At present, PFES for other watersheds are also planned.

Commune	# villages existing	# villages to be established
Sin Thau	6	1
Sen Thuong	5	1
Leng Su Sin	4	3
Chung Chai	10	4
Muong Nhe	13	6
Nam Vi	7	0
Muong Toong	20	7
Nam Ke	11	4
Quang Lam	6	2
Pa My	7	1
Total	89	29

communes covering MNNR and the buffer zone

communes covering MNNR

communes covering the buffer zone

Schedule of moving/establishing villages is not found out except for the overall plan of completing them by 2015. Moreover, besides Decision 128, establishment of additional villages is also planned in Sin Thau Commune and Sen Thuan Commune.

Most of the villages to be moved or newly established lie in the buffer zone of MNNR (although exact boundary of the buffer zone is not identified, most of the villages to be moved or newly established lie near the boundary of MNNR.).

Land allocation

Owners of the allocated forest land are summarized in Table 2.10. According to the interviews carried out in the REDD+ Study, it seems people are more motivated to protect the forest if the forest land is allocated to households or communities. Therefore, it can give the local people incentive to implement REDD+ in the forest land that is allocated to households or communities. On the other hand, it can be easier to get support of the local government if REDD+ is implemented in the forest land managed by CPC. It is found from Table 2.10 that percentage of the forest land allocated to households or communities is high in Dien Bien District and Dien Bien Dong District. On the other hand, percentage of the forest land allocated to CPC is high in Muong Cha District and Muong Nhe District.

Table 2.10 Forest land allocation

District		Total	Company	Government agencies	CPC	Community	Household	Others
Dien Bien	Area	110,768	-	923	12,257	4,238	93,351	-
	%	100	-	1	11	4	84	-
Dien Bien	Area	69,490	-	-	9,708	136	59,646	-

Don	%	100	-	-	14	0	86	-
Dien Bien Phu	Area	2,268	-	-	2,268	-	-	-
	%	100	-	-	100	-	-	-
Muong Ang	Area	23,888	-	-	7,109	-	16,779	-
	%	100	-	-	30	-	70	-
Muong Cha	Area	209,639	3,604	16,315	61,955	886	126,877	1
	%	100	2	8	30	0	61	0
Muong Lay	Area	7,551	-	2,103	2,351	-	3,097	-
	%	100	-	28	31	-	41	-
Muong Nhe	Area	207,315	-	45,506	34,399	-	127,410	-
	%	100	-	22	17	-	61	-
Tua Chua	Area	36,818	-	-	14,377	-	22,441	-
	%	100	-	-	39	-	61	-
Tuan Giao	Area	65,072	145	8,151	10,143	443	46,191	-
	%	100	0	13	16	1	71	-
Total	Area	732,811	3,749	72,998	154,568	5,703	495,792	1
	%	100	1	10	21	1	68	0

Source: Land inventory data in 2010 –DONRE of Dien Bien

Management system

Main body to plan and manage implementation of Forest Protection and Development Plan (FPDP) is Protection Forest Management Board（PFMB）in Dien Bien District, Muong Cha District and Tuan Giao District where the PFMB is established. In other districts, DPC takes this role. However, DPC lacks capability to make the plan and hence Center for Agriculture and Forestry Designing and Planning (CAFDP) is employed to make the plan in such districts.

Regarding selection of the pilot areas, facility of management can depend on who (or which organization) is in charge of the management. It can be considered easy to implement REDD+ activities in the district where PFMB is established because of its capability.

Conclusion

In the aspect of forest conditions (large carbon stock with high deforestation rate), Muong Nhe District and Muong Cha District are considered highly potential. Muong Nhe District has much more carbon stock and it is reasonable to consider Muong Nhe District has more potential for carbon credit while. However, resettlement of the local people by Decision 79 is considered to cause instability of the areas and affect planning and implementation of REDD+ pilot activities. Since this is the first pilot implementation and the system of REDD+ implementation to be designed can be a model to which other provinces can refer to implement REDD+, it is considered reasonable to set the pilot area in areas with more average social conditions rather than unique conditions. Consequently, it is considered more appropriate to set the pilot area in Muong Cha District and therefore, the project proposes to prioritize Muong Cha District to set the pilot area.

(2) Analysis of communes in Muong Cha District for selection of the pilot areas

Concluding Muong Cha District to be prioritized to select the pilot areas, communes of Muong Cha District has been analyzed to select the pilot area (commune).

Forest change patterns:

Similar to analysis of the districts, area and carbon stock of various forest types in the communes of Muong Cha District at 2000 and 2010 and the amount changed in the 10 years were analyzed (See Table 2.12). As its result, carbon stock as of 2010 was the highest in Hua Ngai Commune (1.55 million CO2t) which is followed by Muong Tung Commune (0.68 million CO2t). On the other hand, Muong Tung Commune experienced the severest deforestation in 10 years between 2000 and 2010 (Δ-3.36 CO2t/ha/yr). Net deforestation also occurred in Pa Ham Commune (Δ-0.94 CO2t/ha/yr). Carbon stock net-increased in all of the other communes in the same period.

According to the survey on the deforestation drivers, two deforestation clusters were surveyed in Muong Tung Commune. In both clusters, deforestation was caused by land-use conversion from forestry to upland cultivation in combination with population increase (due to migration). Moreover, a hydro-electric power dam that was built in Huoi Cha Village and Muong Tung Village is also considered a cause of deforestation.

Other socio-economic conditions

According to "Basic Plan for REDD+ Development in Dien Bien", criteria of forest protection activity include area of protection forest, population density, area of paddy field per person, area of upland field per person and area of Program 661 implemented. Communes were analyzed for these criteria and Hua Ngai Commune and Muong Tung Commune earned the highest score (See Table 2.13).

On the other hand, Hua Ngai Commune is planned to split into two communes. Moreover, accessibility to Hua Ngai Commune is difficult and it is expected difficult to carry out pilot activities in this commune. Therefore, Muong Tung Commune is considered the highest priority to be the pilot area.

(3) **Feasibility Study on REDD+ implementation by a Japanese private firm**

Besides the pilot area selected by the Dien Bien REDD+ Pilot Project, a Japanese private firm (Sumitomo Forestry Company) is implementing feasibility study on REDD+ implementation in Muong Phang, Na Tau and Na Nhan Communes of Dien Bien District. The company is also planning a pilot activity in Muong Phang Commune for reforesting and rehabilitating surrounding areas of an irrigation dam which is now under construction. The company is designing methodology that mainly involves carbon enhancement activities and expects collaborative work with Dien REDD+ Pilot

Project. Both of the pilot activities in Muong Tung Commune, Muong Cha District designed by Dien Bien REDD+ Pilot Project and Muong Phang Commune, Dien Bien District by Sumitomo Forestry Company are under Provincial REDD+ Pilot Program.

Table 2.12 Area and carbon stock by forest types for each commune in Muong Cha District at 2000 and 2010

Commune	Area (ha)	Year	Unit	Rich F	Med F	Poor F	Regrowth	Bamboo	Mix tim-bb	Lime F	Plantation	Total area	Area change	Total CO2	CO2 change	CO2 change/ha/yr
Muong Mon	14,417	2000	Area (ha)	0	49	240	2,863	2,711	371	0	160	6,393		549,934		
			Carbon (CO2t)	0	14,422	35,766	266,235	173,477	43,729	0	16,303		-172		15,211	0.11
		2010	Area (ha)	0	6	114	4,257	1,149	375	0	319	6,220		565,145		
			Carbon (CO2t)	0	1,912	17,054	395,865	73,532	44,295	0	32,488					
Muong Cha	2,257	2000	Area (ha)	0	81	38	142	27	12	0	35	335		49,545		
			Carbon (CO2t)	0	23,966	5,728	13,225	1,725	1,382	0	3,520		643		40,143	1.78
		2010	Area (ha)	0	0	0	768	83	0	0	128	978		89,688		
			Carbon (CO2t)	0	0	0	71,388	5,288	0	0	13,012					
Na Sang	10,240	2000	Area (ha)	1	63	420	1,759	1,100	203	0	36	3,582		343,206		
			Carbon (CO2t)	285	18,750	62,554	163,598	70,427	23,953	0	3,640		539		44,345	0.43
		2010	Area (ha)	1	0	197	2,795	536	201	0	391	4,121		387,551		
			Carbon (CO2t)	285	5	29,390	259,961	34,304	23,698	0	39,908					
Sa Long	9,252	2000	Area (ha)	0	700	185	1,684	0	0	0	521	3,090		444,621		
			Carbon (CO2t)	73	207,197	27,610	156,577	0	0	0	53,164		1,291		23,049	0.25
		2010	Area (ha)	0	294	0	4,050	0	0	0	37	4,382		467,670		
			Carbon (CO2t)	73	87,141	63	376,632	0	0	0	3,761					
Ma Thi Ho	14,402	2000	Area (ha)	0	29	172	1,283	16	0	0		1,501		154,776		
			Carbon (CO2t)	0	8,717	25,676	119,350	1,032	0	0	0		910		69,432	0.48
		2010	Area (ha)	0	0	0	2,410	1	0	0		2,411		224,208		
			Carbon (CO2t)	0	0	0	224,127	80	0	0	0					
Pa Ham	6,842	2000	Area (ha)	0	106	341	1,639	0	0	72	84	2,242		254,944		
			Carbon (CO2t)	0	31,303	50,764	152,428	0	0	11,864	8,586		-268		**-64,472**	**-0.94**
		2010	Area (ha)	0	1	0	1,742	0	0	73	158	1,974		190,472		
			Carbon (CO2t)	0	418	11	161,999	0	0	11,934	16,108					
Huoi Leng	9,821	2000	Area (ha)	0	60	28	1,059	0	0	0	374	1,521		158,492		
			Carbon (CO2t)	0	17,677	4,221	98,478	0	0	0	38,116		796		66,299	0.97
		2010	Area (ha)	0	23	27	1,911	0	0	0	356	2,317		224,791		
			Carbon (CO2t)	0	6,733	4,076	177,687	0	0	0	36,296					
Hua Ngai	24,301	2000	Area (ha)	343	2,988	112	3,567	30	0	5	65	7,110		1,430,637		
			Carbon (CO2t)	188,299	884,507	16,732	331,721	1,914	0	850	6,613		2,408		117,728	0.48
		2010	Area (ha)	272	2,652	8	6,581	0	0	5	0	9,518		**1,548,365**		
			Carbon (CO2t)	149,321	784,894	1,266	612,018	0	0	850	16					
Muong Tung	17,042	2000	Area (ha)	393	375	2,191	6,153	12	74	0	173	9,370		1,252,556		
			Carbon (CO2t)	215,900	110,870	326,390	572,253	747	8,770	0	17,626		-2,262		**-572,008**	**-3.36**
		2010	Area (ha)	0	0	316	6,646	0	27	0	120	7,109		**680,549**		
			Carbon (CO2t)	0	0	47,102	618,078	0	3,136	0	12,233					
Xa Tong	11,042	2020	Area (ha)	0	0	365	1,136	0	0	105	132	1,738		190,676		
			Carbon (CO2t)	0	0	54,323	105,621	0	0	17,218	13,514		622		39,931	0.36
		2030	Area (ha)	0	0	0	2,077	0	0	139	143	2,359		230,607		
			Carbon (CO2t)	0	0	0	193,124	0	0	22,860	14,624					
			EF (CO2t/ha)	549	296	149	93	64	118	164	102					

Hilighted communes are planned to be divided under Resolution 80/NQ-CP dated August 25, 2012..

Table2. 13 Socio-economic conditions for each commune in Muong Cha District

Commnne	Protection Forest (ha)	Population Density (man/km2)	Paddy Field Area/Person (ha)	Upland field Area/Person (ha)	Forest Protected under the 661 (ha)	Forest Restored under the 661 (ha)	Score
Muong Mon	5,558	**11.07**	**0.0862**	0.358	481.20	0	**2**
Muong Cha	825	150.47	0.0120	**0.030**	0.00	0	**1**
Na Sang	1,866	25.73	0.0476	0.154	687.50	0	**0**
Sa Long	4,115	42.38	0.0356	**0.082**	**1,091.40**	208	**2**
Ma Thi Ho	**7,017**	24.15	0.0471	0.117	0.00	**226**	**2**
Pa Ham	2,773	61.72	**0.0702**	0.271	0.00	0	**1**
Huoi Leng	1,316	24.63	0.0495	0.150	0.00	**671**	**1**
Hua Ngai	**12,472**	**20.57**	0.0191	0.156	**2,745.50**	**591**	**4**
Muong Tung	**9,266**	**12.81**	**0.0734**	0.376	**1,500.00**	159	**4**
Xa Tong	2,454	23.14	0.0381	0.217	762.70	0	**0**
	Hilighted communes are planned to be divided under Resolution 80/NQ-CP dated August 25, 2012..						

＊To extract the following sections from the Progress Report as an item regarding the selection of the pilot commune

2.1.1 Preparation of Provincial REDD+ Action Program (PRAP) in Dien Bien province

(4) Analysis of the driving forces of deforestation and reforestation/regeneration

Driving forces of deforestation and reforestation/regeneration should be clarified in order to identify measures to be applied to REDD+ implementation. For this purpose, the field survey was carried out for around 6 weeks in cooperating with Dien Bien Sub-DoF and VFU. The main objective of this survey is to identify the factors which affect deforestation as well as forest development by afforestation/reforestation and forest regeneration in various locations of Dien Bien province.

1) Method of the survey

Preparation of the maps:

The forest distribution maps for 2000 and 2010 that were developed in the Study on Potential Forests and Land Related to "Climate Change and Forests" (hereinafter referred to as the "REDD+ Study") were used. These maps were overlaid to identify the deforestation clusters (the areas where the forests became non-forests during this period; hereinafter referred to as the "DD cluster") and the afforestation/ reforestation/regeneration clusters (the areas where non-forests became the forests in the same period; hereinafter referred to as the "A/R cluster"). Among these clusters, this survey focused on those larger than 100 ha in size. The forest distribution maps were then overlaid with other layers: roads (national, provincial and local roads); terrain; rivers; administrative boundaries (districts and communes). The maps developed through this process were printed out for every commune having DD or A/R clusters (Figure 2.1).

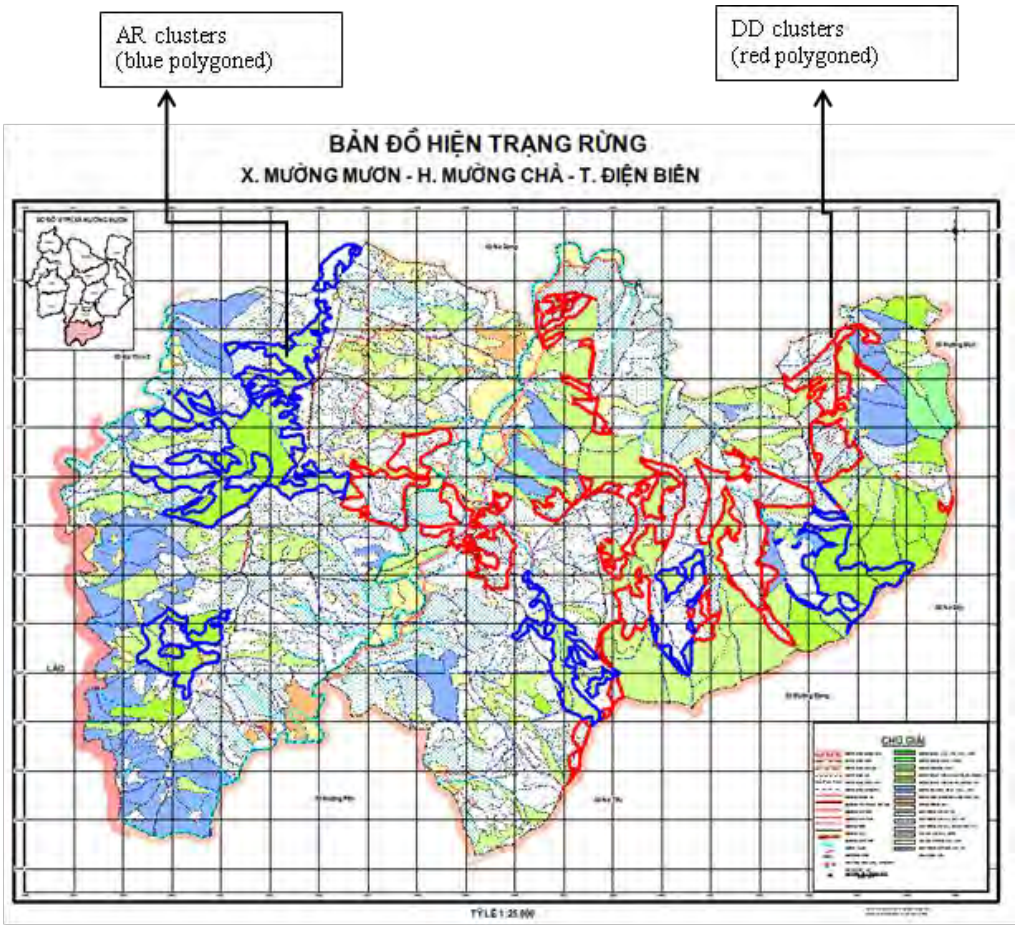


Figure 2.1 Forest change map that shows AR and DD clusters at the commune level

Selection of the clusters to be surveyed:

Among the clusters larger than 100 ha, 20 DD clusters and 20 A/R clusters were selected to carry out the field survey. Distribution of the selected clusters is shown in Figure 2.2. The selection was made, taking into consideration the following points.

- Distribution of the clusters: the clusters to be surveyed should be scattered in as many districts as possible. For the analysis of deforestation driver, however, more clusters should be selected from Muong Nhe District as the larger portion of the deforestation clusters is identified in Muong Nhe District. A set of the deforestation cluster and reforestation/regeneration cluster located adjacent to each other should also be taken into consideration for the selection. Clusters lying across the boundary of districts or communes should also be taken into consideration because these areas are difficult for administration in general and forest management in particular.
- Size of the clusters: Selected clusters should include small clusters (100 – 300 ha), medium clusters (300 – 800 ha) and large clusters (>800 ha).
- Access to the clusters: Priority was given to the clusters that locate near the roads for easier access.

Selection of the clusters was finalized with consultation of Dien Bien Sub-DoF.

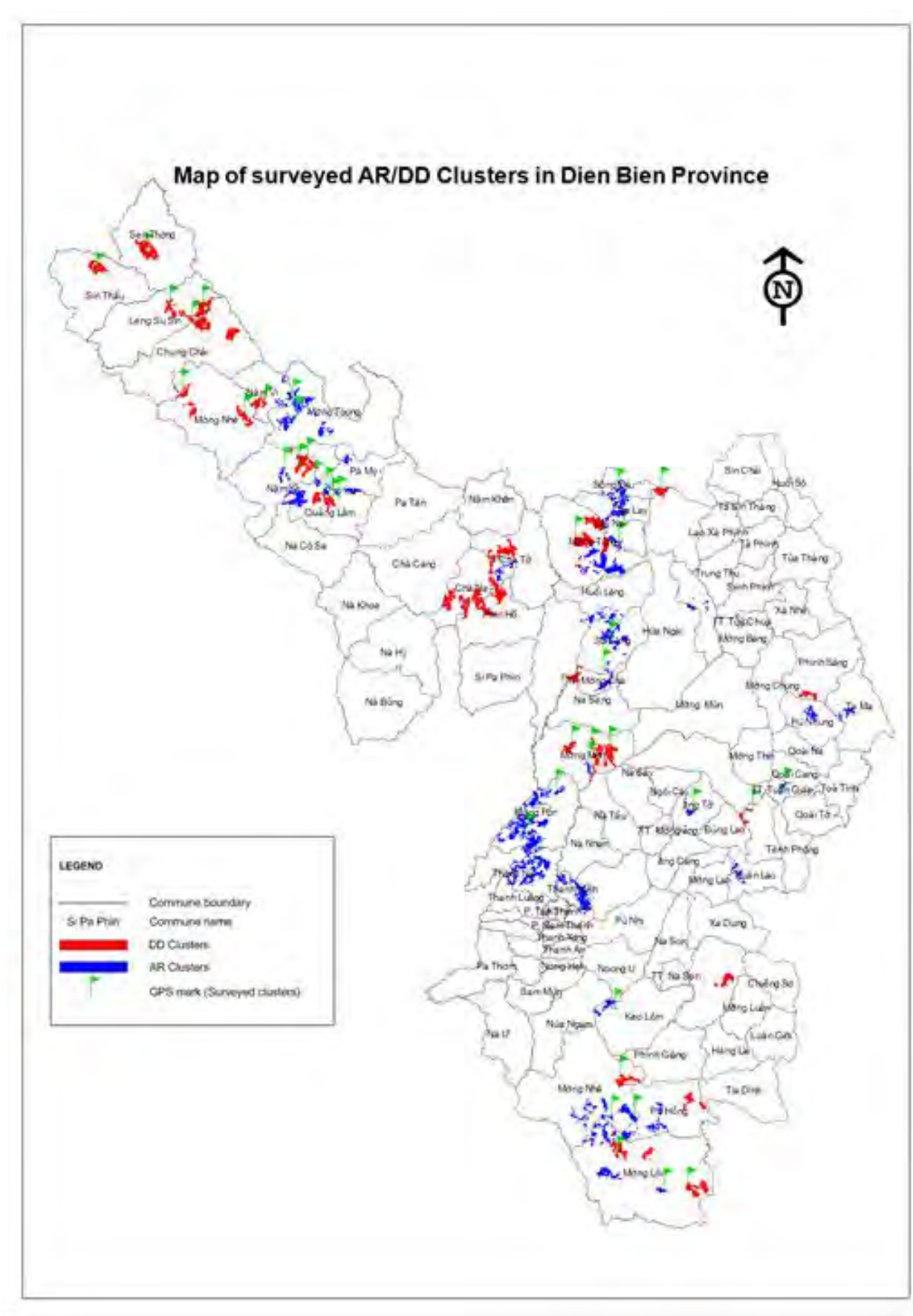


Figure 2.2 Distribution of the selected clusters

Implementation of the survey:

In order to understand the causes of deforestation and forest development in the selected clusters, the survey interviewed two main groups: commune staff (3 people); and local residences (5 to 7 people).

Interviewees among the commune staff could be CPC Chairman or Vice-chairman who is responsible for forestry, a cadastral officer and a forest ranger. For the communes where the relevant staff was newly positioned or recruited, retired staff or seniors who have more knowledge and experience in the area were also interviewed. The following information was collected though the interview.

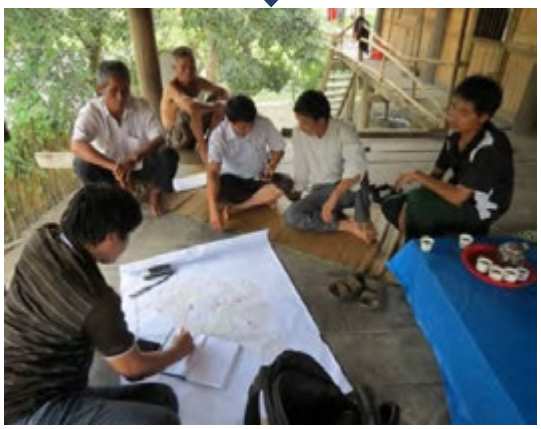
- General information of the commune: name; year of establishment; general social-economic status, etc.
- Location of the cluster: location of the cluster on the field (using the map); the village managing the area, etc.
- Specific information on the clusters: current status (cultivation land, grass land or forest types, etc.); land cover/use at several points in time (before 1990, 2000, 2008 and present); causes of changes taking place between those points in time (e.g. direct causes: burning for upland cultivation; forest fires, livestock grazing, plantation, regeneration, etc. and underlying causes: poverty; population increase – natural increase or due to migration from other places, etc.); causes of deforestation for different forest types (rich forests, medium forests, poor forests, regrowth forests, etc.).
- Socio-economic status of the villages where the clusters lie (e.g. supporting policies of the state and local authorities in economic development, forest and land resources management, forest development, etc.) in order to analyze the reasons why local people continue or stop upland cultivation.

Interviewees among the local residents include village chiefs, senior villagers, forest protector (if any) and other people who live on the forest. Commune staff or forest rangers accompanied the interview for the purpose of translating the local language and describing the clusters on the map so that local residents can identify them on the field. The following information was collected though the interview (some of the information is identical to that collected from the commune staff).

- General information of the commune: year of establishment; composition of the ethnic minorities, etc.
- Location and description of the clusters: location of the clusters identified on the map is adjusted on the field.
- Specific information on the clusters: current status (cultivation land, grass land or forest types, etc.); land cover/use at several points in time (before 1990, 2000, 2008 and present); causes of changes taking place between those points in time (e.g. direct causes: burning for upland cultivation; forest fires, livestock grazing, plantation, regeneration, etc. and underlying causes: poverty; population increase – natural increase or due to migration from other places, etc.); causes of deforestation for different forest types (rich forests, medium forests, poor forests, regrowth forests, etc.).
- Socio-economic conditions at several points in time (before 1990, 2000, 2008 and present): population; cultivation practices; area of each land use type (agricultural practices including upland cultivation, paddy field cultivation, production of other crops, etc. and forestry practices including plantation, natural forest protection, forest rehabilitation, etc.); income (revenue from upland cultivation, paddy field cultivation, livestock grazing and other sources), etc.
- Supporting policies of the state and local authorities and their effectiveness: support on economic and infrastructure development, forest and agriculture development, resettlement programs, etc.

Following the interviews, each cluster was visited and observed with local residents. Whether the right cluster is visited is checked, using GPS. Actual field conditions in the field were compared with those identified from the map. Additional information was also collected on the field if needed. Procedure of the survey can be summarized as Figure 2.3.

Working with commune staff (locating clusters, interview)



Working with local residents (locating clusters, interview)

Field survey with local residents

Identify GPS coordinate and check if the right cluster is visited

Take pictures and compare information on the map with that on the field

Figure 2.3 Basic implementation steps for each cluster

2) Results of the survey

Analysis of the causes of deforestation:

Information related to change of the land cover between 2000 and 2010 and causes of the change is summarized for each cluster in Table 2.1. In order to identify major causes of deforestation, each cause was quantified by counting the number of clusters affected by each cause and estimating the total area lost due to each cause. Table 2.2 shows results of the quantification.

Table 2.2 shows that causes of deforestation identified in the surveyed clusters include direct causes (shifting cultivation, mass flowering of the bamboo forests causing their death, forest fire and livestock grazing) and indirect causes (natural growth of population, free migration or resettlement, insufficient cultivation land and planning for land use change to cultivation land by the local authorities). The analysis found that shifting cultivation is by far the most serious cause among the direct causes of deforestation both in terms of proportion by cluster count (79.16 %) and proportion by area (89.22%). Other causes are relatively minor; deforestation due to forest fires, mass flowering of the bamboo forests and livestock grazing is 9.17%, 6.67% and 5.00% respectively in terms of their proportion to the entire causes by cluster count and 3.66%, 5.93% and 1.19% respectively in terms of their proportion to the entire causes by area.

In order to estimate impact of each deforestation cause in the province, total area of the DD clusters in the entire province identified from the map was divided according to the proportion of each deforestation cause by area. The result is shown in Table 2.3. It is estimated that 24.862,53 hectares of the forests were lost in Dien Bien Province between 2000 and 2010. Out of this figure, estimated loss of 22.183,10 ha of the forests can be attributed to shifting cultivation.

Some of the causes may not directly cause deforestation but can somehow indirectly affect deforestation. Such underlying causes of deforestation were identified through the survey; those include population growth and subsequent deficiency of cultivation land, and plan of land use change. These indirect causes are related with each other and combined with the direct causes to accelerate deforestation. Population growth by both natural growth and migration (spontaneous migration and resettlement policy) increases food demand, leading to exploitation for additional cultivation land by clearing forests. Moreover, some old upland fields of the local people became the areas planed for forest protection and development; then the local people were not allowed to cultivate these areas. This leads to deficiency of the cultivation land and therefore the local authority plans to convert other forested areas to the cultivation land. As for the specific surveyed clusters, plan of land use change (from forestry to cultivation) is considered as an indirect cause of deforestation. The underlying causes that gave impact on the direct causes of deforestation are shown in Figure 2.4.

Table 2.1 Land cover change between 2000 and 2010 and causes of deforestation in the surveyed clusters

Cluster number	Area of the cluster	District	Commune	Land cover type in 2000	Land cover type in 2010	Direct causes of deforestation (from forest in 2000 to non-forest in 2010	Indirect causes of deforestation (from forest in 2000 to non-forest in 2010)
1	243.85	Dien Bien	Muong Nha	Poor forest	Bareland	Upland cultivation; Forest fires	
2	187.44	Dien Bien	Muong Loi	Rehabilitated forest	Bareland	Upland cultivation	
3	157.67	Dien Bien	Muong Loi	Poor forest	Bareland	Upland cultivation; Forest fires	
4	169.11	Muong Cha	Xa Tong	Poor forest	Bareland	Upland cultivation	Population growth (natural increase)
5	173.28	Muong Cha	Muong Tung	Poor forest	Bareland	Upland cultivation	
6	477.08	Muong Cha	Muong Tung	Rehabilitated forest	Bareland	Upland cultivation	Population growth (migration)
7	287.57	Muong Cha	Muong Muon	Rehabilitated forest	Bareland	Upland cultivation	
8	173.74	Muong Cha	Muong Muon	Bamboo	Bareland	Mass flowering of bamboo in 2007; Forest fire by animal hunters; Upland cultivation	
9	288.37	Muong Cha	Muong Muon	Bamboo	Bareland	Mass flowering of bamboo in 2006	
10	259.76	Muong Nhe	Sin Thau	Poor forest	Bareland	Upland cultivation	Population growth (natural increase)
11	503.86	Muong Nhe	Sen Thuong	Poor forest	Bareland	Upland cultivation; Livestock grazing	.

Cluster number	Area of the cluster	District	Commune	Land cover type in 2000	Land cover type in 2010	Direct causes of deforestation (from forest in 2000 to non-forest in 2010	Indirect causes of deforestation (from forest in 2000 to non-forest in 2010)
12	252.67	Muong Nhe	Nam Ke	Rehabilitated forest	Bareland	Upland cultivation	Population growth (migration of the H'Mong in 2002); Land use change plan for upland cultivation in 2008;
13	153.31	Muong Nhe	Leng Su Sin	Rehabilitated forest	Bareland	Upland cultivation; Forest fire in 2008	Land use change plan for cultivation land in 2008
14	239.58	Muong Nhe	Muong Nhe	Rehabilitated forest	Bareland	Upland cultivation	Population growth (resettlement by Son La hydroelectric power dam)
15	873.93	Muong Nhe	Leng Su Sin	Rehabilitated forest	Bareland	Upland cultivation	Population growth (natural increase/migration)
16	143.81	Muong Nhe	Nam Vi, Muong Nhe	Rehabilitated forest	Bareland	Upland cultivation; Livestock grazing	Population growth (migration)
17	240.17	Muong Nhe	Quang Lam	Rehabilitated forest	Bareland	Upland cultivation;	Population growth (migration)
18	282.97	Muong Nhe	Chung Chai	Medium forest	Other	Upland cultivation;	Land use change plan for upland cultivation in 2007; Population growth (migration of H'Mong)
19	143.36	Muong Nhe	Nam Ke	Rehabilitated forest	Other	Upland cultivation;	Land use change plan for upland cultivation in 2008
20	198.36	Muong Nhe	Muong Nhe	Mixed Wood-bamboo	Bareland	Upland cultivation;	Population growth (migration of H'Mong)

Table 2.2 Quantification of the causes of deforestation in the surveyed clusters

Causes of DD	**Direct causes**				**Underlying causes**			
	Upland cultivation	Mass flowering (causing death of bamboo)	Forest fire	Livestock grazing	Natural growth of population	Migration	Lack of cultivation land	Plan of land use change
Proportion by cluster (%)	79.16	6.67	9.17	5.00	No quantification for underlying causes because these causes are related with each other and cannot be separated.			
Proportion by area (%)	89.22	5.93	3.66	1.19				

Table 2.3 Estimation of forest area lost by various causes for the entire province

Causes of deforestation	Upland cultivation	Mass flowering (causing death of bamboo)	Forest fire	Livestock grazing
Area (ha)	22,183.10	1,474.09	909.87	295.47

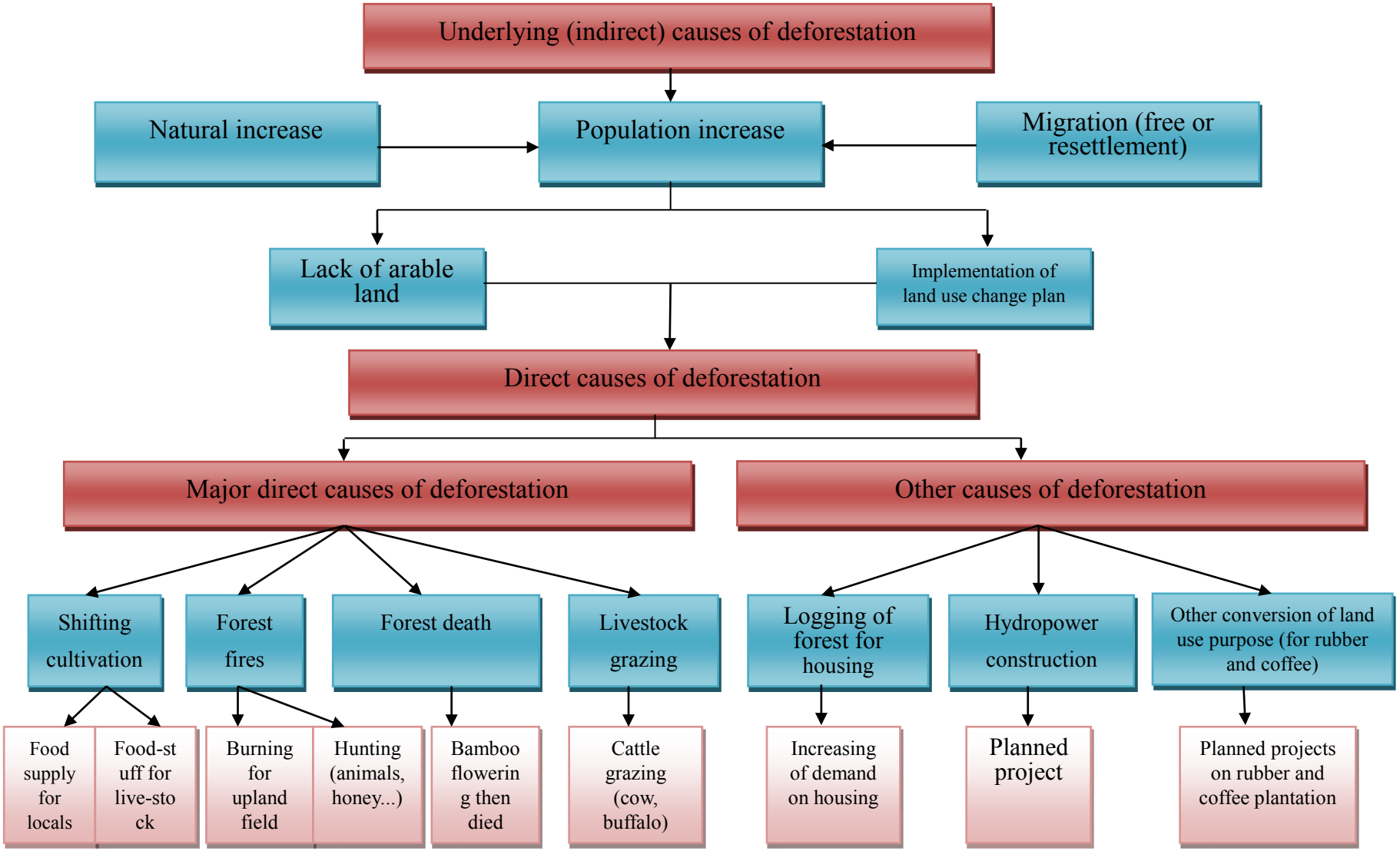


Figure 2.4 Description of the impact of underlying causes of deforestation

Analysis of the causes of afforestation/reforestation/regeneration:

Information related to change of the land cover between 2000 and 2010 and causes of the change is summarized for each cluster in Table 2.4. In one of the 20 clusters surveyed, actual field condition was different from that estimated by the map. According to the forest distribution maps for 2000 and 2010, land cover of the cluster number 5 located in Muong Nha Commune of Dien Bien District changed from non-forests in 2000 to forests in 2010. However, it has been found from the field observation and interview with the local people that the same area has been under upland cultivation at the time of 2008, 2010 and present. In 19 clusters out of 20 surveyed clusters, the field conditions identified in the survey are consistent with information obtained from the map; the areas were not forested in 2000 but forested in 2008, 2010 and present. Therefore, the survey analyzed causes of afforestation/reforestation/regeneration of 19 the clusters the cluster number 5 was excluded from the analysis.

In order to identify major causes of afforestation/reforestation/regeneration, each cause was quantified by counting the number of clusters affected by each cause and estimating the total area forested due to each cause. Table 2.5 shows results of the quantification.

Table 2.5 shows that main causes of forest increase in the surveyed clusters are forest restoration under Program 661 which was implemented in various locations of the province during 2002 – 2006. The analysis found that the implementation of forest restoration under Program 661 had the most impact on forest increase, accounting for 65.79% to the entire surveyed clusters in terms of the cluster count. Other causes of the forest increase are field fallowing (13.64%), rubber plantation (5.26%), plantation under Program 661 (5.26%), plantation under Program 327 (2.64%) and implementation of Muong Nhe Nature Reserve management plan (5.26%) in terms of the cluster count.

In relation to proportion by area, implementation of forest restoration under Program 661 also remains as the main driver of forest increase (58.25%). This is followed by termination of upland cultivation (26.31%) and implementation of Muong Nhe Nature Reserve management plan (7.24%). Other causes of forest increase include afforestation under Program 661 (4.11%), development of rubber plantation (3.18%) and plantation under Program 327 (0.91%).

Therefore, it can be concluded that implementation of forest restoration under Program 661 and fallowing of the upland cultivation significantly contribute to forest increase in the surveyed clusters. In order to estimate impact of each cause of forest increase in the province, total area of the AR clusters in the entire province identified from the map was divided according to the proportion of each cause of forest increase by area. The result is shown in Table 2.6.

Table 2.4 Land cover change between 2000 and 2010 and causes of afforestation/reforestation/regeneration in the surveyed clusters

Cluster number	Area of the cluster (ha)	District	Commune	Land cover type in 2000	Land cover type in 2010	Main causes of forest increasing (from non-forest in 2000 to forest in 2010)
1	3.845,77	Dien Bien	Muong Pon	Bare land	Rehabilitated forest	Upland cultivation has been terminated since 2003; Implemented for forest regeneration under 661 program
2	114,34	Dien Bien	Muong Pon	Bare land	Plantation	*Pinus* and *Magnolia fordiana* plantation under 661 program in 2002; *Rubber* plantation in 2007
3	109,39	Dien Bien	Muong Loi	Bare land	Rehabilitated forest	Implemented for forest regeneration under 661 program
4	307,58	Dien Bien	Muong Nha	Bare land	Rehabilitated forest	Implemented for forest regeneration under 661 program
5	1.111,63	Dien Bien	Muong Nha	Bare land	Rehabilitated forest	In reality, the current status of the cluster is non-forest (upland fields).
6	259,79	Dien Bien Dong	Keo Lom	Bare land	Rehabilitated forest	Upland cultivation has been terminated since 2002
7	125,49	Muong Ang	Ang To	Other	Plantation	*Vernicia montana* plantation under 327 program; Rubber plantation in 2008.
8	135,00	Muong Cha	Muong Muon	Bare land	Rehabilitated forest	Upland cultivation has been terminated; Implemented for forest regeneration under 661 program
9	1.075,60	Muong Cha	Sa Long	Bare land	Rehabilitated forest	Implemented for forest regeneration under 661 program;
10	288,48	Muong Cha	Sa Long	Bare land	Rehabilitated forest	Implemented for forest regeneration under 661 program;

Cluster number	Area of the cluster (ha)	District	Commune	Land cover type in 2000	Land cover type in 2010	Main causes of forest increasing (from non-forest in 2000 to forest in 2010)
11	1.039,21	Muong Lay	Na Lay	Bare land	Rehabilitated forest	Implemented for forest regeneration under 661 program
12	131,47	Muong Lay	Lay Nua	Bare land	Rehabilitated forest	Implemented for forest regeneration under 661 program
13	325,27	Muong Nhe	Quang Lam	Bare land	Rehabilitated forest	Implemented for forest regeneration under 661 program
14	793,93	Muong Nhe	Nam Ke	Bare land	Rehabilitated forest	This cluster was planned as core zone of MNNR in 2008, so the forest is protected and developed
15	387,81	Muong Nhe	Muong Toong	Bare land	Rehabilitated forest	Implemented for forest regeneration under 661 program
16	102,98	Muong Nhe	Nam Ke	Bare land	Rehabilitated forest	Implemented for forest regeneration under 661 program
17	1.200,17	Muong Nhe	Muong Toong	Bare land	Rehabilitated forest	*Acacia* and *Cassia siamea* plantation under 661 program; Implemented for forest regeneration under 661 program in 2006;
18	101,38	Muong Nhe	Quang Lam	Bare land	Rehabilitated forest	Implemented for forest regeneration under 661 program
19	523,16	Tuan giao	Chieng Sinh	Bare land	Rehabilitated forest	Upland cultivation has been terminated.
20	116,00	Tuan Giao	TT. Tuan Giao	Bare land	Plantation	Implemented for forest regeneration under 661 program. Forest is now protected by local community and groups of households

Table 2.5 Quantification of the causes of forest increase in the surveyed clusters

Causes of forest increase	Forest restoration under Program 661	Plantation under Program 661	Rubber plantation	Termination of upland cultivation	Plantation under Program 327	Implementation of MNNR management plan
Proportion by cluster (%)	65.79	5.26	5.26	15.79	2.64	5.26
Proportion by area (%)	58.25	4.11	3.18	26.31	0.91	7.24

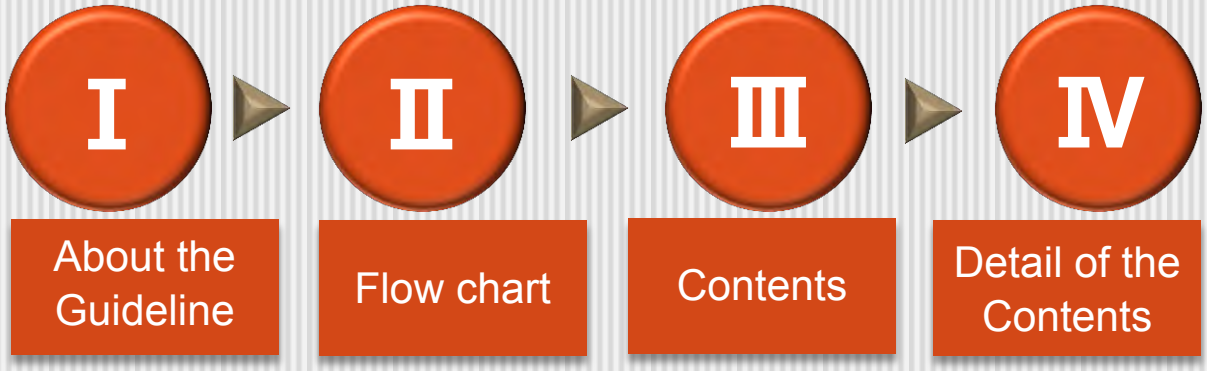
Table 2.6 Estimation of forest area increased by various causes for the entire Dien Bien Province

Causes of forest increase	Forest restoration under Program 661	Plantation under Program 661	Rubber plantation	Termination of upland cultivation	Plantation under Program 327	Implementation of MNNR management plan
Area (ha)	53.665,23	3,787.31	2,932.63	24,235.29	842.08	6,659.38

It is estimated from the forest distribution maps for 2000 and 2010 that 92,121.92 hectares of the forests were increased in Dien Bien Province during this period. Out of this figure, estimated increase of 53,665.23 ha of the forests can be attributed to forest restoration under Program 661. Likewise, increase of 24,235.29 ha can be estimated to be caused by termination of upland cultivation by the locals.

Guideline of Formulating C-RAP

JICA Dien Bien REDD+ Pilot Project



Draft ver.0

Nov. 2013

I About the Guideline

Objectives

This guideline is providing the procedure on how to formulate Commune REDD+ Action Plan (C-RAP) under National REDD+ Action Program (NRAP) and Provincial REDD+ Action Plan (PRAP).

Target of the reader

Readers of this guideline are:
- Policy makers (DPC, MB, CPC);
- Managers of the relevant organizations under DARD and DONRE;
- Consultants of international and local donors.

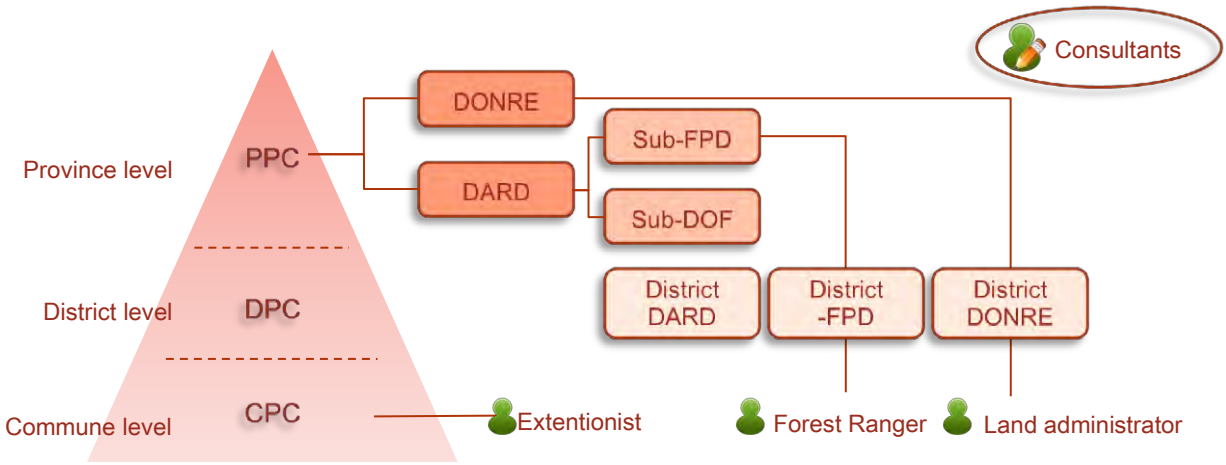


Figure 1 Name of the organization and the position

How to Use

There are three REDD+ action plans at national, provincial and commune level as NRAP, PRAP, and C-RAP.
Use this guideline when reader is required to make C-RAP.

i. The flowchart section will provide the step by step tasks of formulating C-RAP from the beginning to the end.
ii. The contents section will provide the contents of each task linked to the flowchart.
iii. The detail of the contents will provide the detailed work of each content.
iv. The terminology section will provide the definition of the terms and abbreviations which are used in the contents.

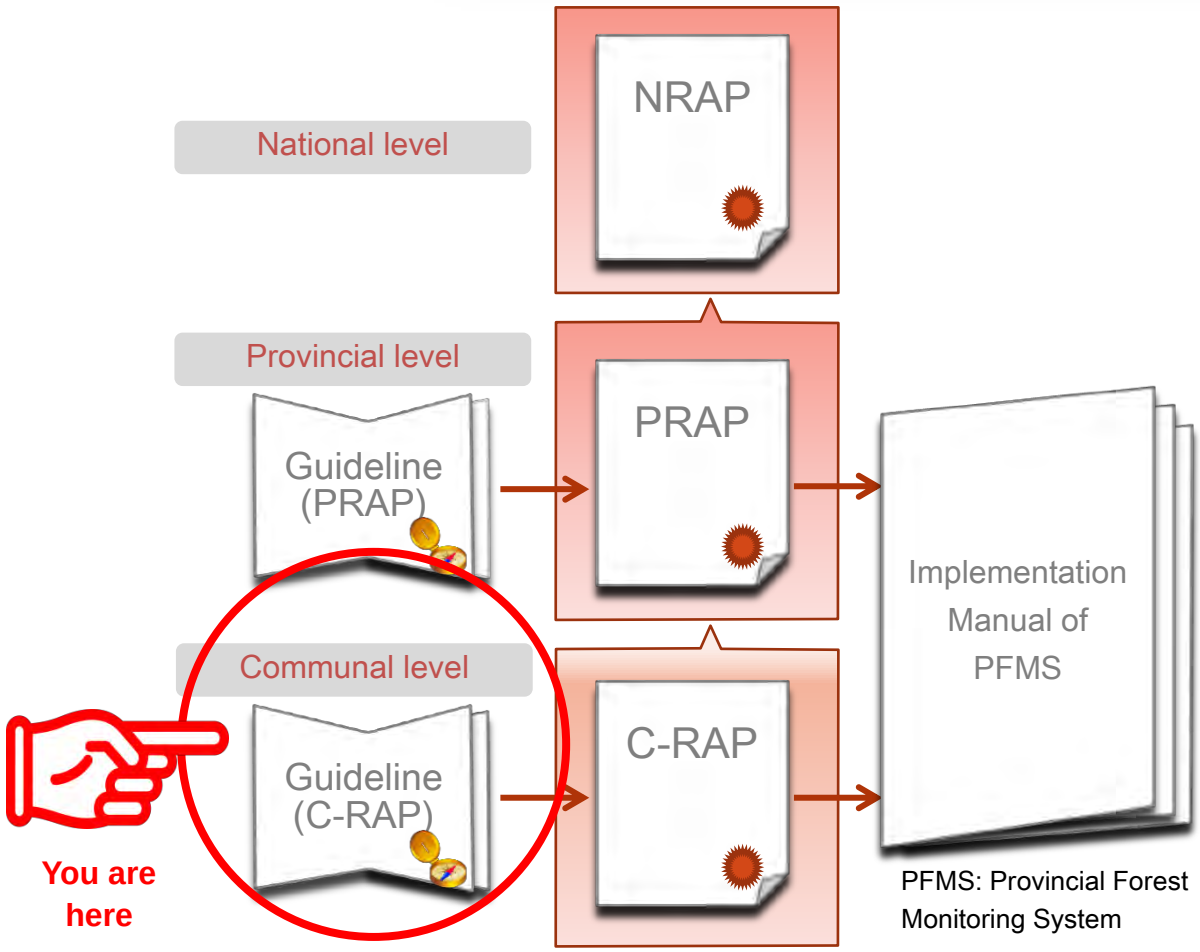
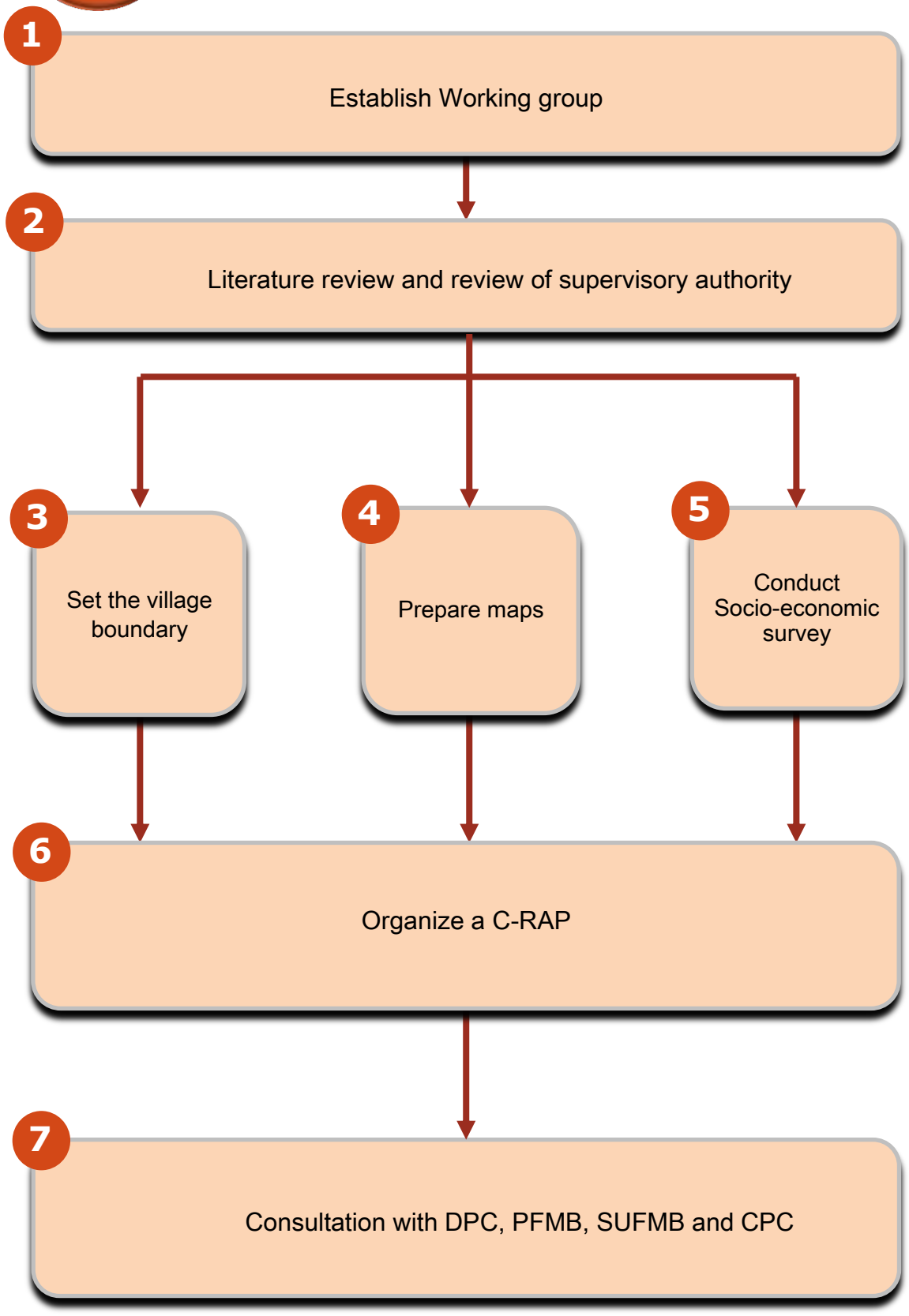


Figure 2 Relevant documents of making and implementing PRAP and C-RAP

II Flow chart



III Contents

1. Establish a working group at commune level with technical supports from district and provincial levels in order to manage the works of formulating C-RAP.

2. Collect the documents of existing policies, programs and projects for the literature review. Institutional framework of the province shall be reviewed as well.

3. Identify the village boundaries between the villages in the commune based on consultation among the representatives of the villages.

4. Prepare the commune maps which involve: village boundaries, revised planned activities of FPDP planning, revised forest cover, distribution of 3 forest types, based on results of consultations with the villagers, existing policies and the latest satellite imagery. The maps shall be digitized properly for the calculation of the areas of each REDD+ activities.

5. Conduct a forest and socio-economic survey to identify forest status, forest changes and its drivers, natural and socio-economic conditions such as demography and agriculture & forestry production.

6. Develop the draft for C-RAP in accordance with the framework of PRAP. Summarize the draft contents in consideration of the characteristics of socio-economic, existing policies, programs and projects; Setting overall goal, specific objectives, tasks and solutions to implement C-RAP.

7. Hold consultation meetings with DPC, PFMB, SUFMB and CPC to explain and gain the agreement with the draft for C-RAP

Ⅳ Detail of the Contents

1 Establish working group

Points

- Technical supports from provincial and district levels:
  - Provincial level (DARD):

    Advises and supervises the entire process of planning of C-RAP.

    Provide data and documents at provincial level.
  - District level (DPC; district-FPD, district-DARD, PFMB,etc.) are main supporters in setting tasks and solutions of draft of C-RAP.

Example of Dien Bien Province

- CPC officials and staffs (CPC (vice) chairman, land administrators and agricultural extensionists) are core members of the working group. Forest Ranger is also valuable assistant.

Objective

To take a pivotal role in the implementation, coordination, and supervision for drafting C-RAP.

Procedure

1. Decide the core members of the working group.
2. Decide the objectives and activities to be assigned for working group.
3. Decide the roles and responsibilities of the working group.
   (1) Decide which organization to advise and supervise the entire process of preparation of C-RAP;
   (2) Decide which organization to become a leading agency to draft the C-RAP.
4. Decide regulations and codes for the operation of working group.
5. Issue the official decision on establishment of working group.

Output

Working group is established and its official decision, specifying its tasks, leaders, and members are clarified.

2 Literature review and review of supervisory authority

Points

- Following legal documents are examples for a review:
  - The legal documents on forest protection and development, forest monitoring and Forest Rangers;
  - The legal documents on special-use forests and biodiversity conservation;
  - The legal documents on land allocation and land use;
  - The legal documents on poverty, migrant, ethnic minority and border affairs.
- Consult with the legal expert if domestic legal frameworks are complicated to grasp.

Example of Dien Bien Province

- Over 20 legal documents (Policies, Laws, Regulations) were reviewed to make a draft for C-RAP

Objective

1. To search existing policies, laws, programs, plans, regulations and information on present and past projects, reports, and statistical data to be useful to connect basic information to step 3, step 4, step 5 and step 6 of this guideline.
2. To search supervisory authority in-charge of each existing policy to implement C-RAP.

Procedure

1. Literature review:
   (1) Collect and analyze useful information to draft C-RAP by reviewing policies, programs, plans, regulations and reports, which covers a wide range of fields including forests, land, environment, and socio-economy for the commune and province;
   (2) Analyze the statistical data involving socio-economic and environmental factors in the province;
   (3) Confirm the website of UNFCCC.
2. Review of organizations and supervisory authority.
   (1) Analyze the present administrative system in the province.
   (2) Analyze the existing implementation structure that can support C-RAP implementations.

Output

1. Organizing the policies, programs, plans, reports, academic papers, and projects to be applied for C-RAP.
2. Grasp of the present roles and responsibility for each organization to draft for and implement C-RAP.

3 Set the village boundary in the commune

Example of Dien Bien Province

A meeting for defining village boundary is organized at CPC office.

- Participants are:
  - From all village chiefs, village-communist party chiefs and at least one villager who know very well about land and territory of the village.
  - From a leader of CPC and the land administrative staff of the commune.
  - From Forest Rangers for checking forest and forest land boundary.
  - From staff of PFMB and/or SUFMB for checking boundary of 3 forest types.
  - From the WG members to help participants from the villages to define the boundaries.

Objective

For designing the forest management plans and livelihood development plans for each village.

Procedure

1. Prepare a commune map by using high resolution satellite images with detailed grid, commune boundary and contour layers overlaid.
2. Hold a meeting to define all village boundaries in the commune.
   (1) Support the village chiefs and village's representatives to identify the boundaries of their village, based on the land-marks in the satellite image and on the field.
   (2) Discuss with the village's representatives of the neighboring villages. In case of satellite image is not clear enough and/or the participants cannot identify the landmarks based on satellite image, on-the-field discussions will be required.
   (3) Draw the lines by hand with inerasable pen on paper based map to reflect the boundaries which agreed through discussions.
   (4) Require signatures of all village's representatives and CPC leader and staffs to put on paper based map after hand-drawing lines of boundaries, in order to avoid any conflict or dispute latter.
3. Digitize village boundary layer on the map.

Output

Completion of digital shape files of village boundary, by using GIS software to digitize the lines from paper based map.

4 Prepare the commune maps

Points

- Maps must be fixed as a presentation material with PPT slide and PNG format.
- For the village meeting, paper based maps (A0 or B0) must be made for the

  remote villages without electricity to use projector
- All the data layers should be within the same coordinate system.

Example of Dien Bien Province

- Pleiades (date of data: February 27, 2013, PAN=0.5m) satellite images were used
- All maps have been developed in ArcGIS.
- All maps were made for village level, which can be merged together for commune level at lower scale.
- All map data have been stored in 4 formats (digital; PPT; PNG and TIFF).

Objective

To set the target of forest area by each village in the commune in the design of forest management plan.

Procedure

Data prepared:

1. Prepare planning map of FPDP 2012-2020 of district level: Digital format must be converted to the suitable files depending on the mapping software);
2. Prepare 3 forest types map (special-use forest; protection forest and production forest);
3. Prepare satellite images with NIR-band, latest data and highest resolution possible (Pleiades satellite images with 50cm resolution is recommended);
4. Prepare digitized shape files of village boundary of the satellite images;
5. Prepare digitized shape files of administrative commune boundary.

Output

Development of the following 6 maps based on the above input data

1. FPDP planning map (2012-2020);
2. Forestry land planned for forest protection and regeneration;
3. Forestry land planned for afforestation;
4. Forestry land and other land use types (planned);
5. Planning of 3 forest types;
6. Satellite image made in false color to be easier to identify vegetation and non-vegetation areas.

5 Socio-economic survey

Objective

1. To collect detail information about natural and socio-economic conditions in order to build up a suitable C-RAP;
2. To gain the baseline information to monitor and analyze changes occurring during and after the activities.

Procedure

1. Prepare baseline of survey plan;
2. Consider necessary information and data;
3. Decide items of the survey;
4. Prepare information sheets or questionnaires;
5. Identify targets of survey location;
6. Decide persons/organizations to be the surveyors;
7. Train information collectors or interviewers;
8. Decide survey schedule;
9. Collect information in the field;
10. Sort out the results of survey, and analyze the results considering how to be mentioned in the C-RAP;
11. Draft a report of the results of socioecomic survey;
12. Gain the official approval of the result of the survey report

Output

Necessary information and data on forest and socio-economic condition for the communes to draft C-RAP.

Points

- Natural condition includes geographical location, topographical feature, climate condition, land and forests;
- Socio-economic conditions include demographical features, livelihood activities, household economy;
- Q&A sheets for questionnaires should be prepared for the villagers to understand easily;
- Information collectors should be given a training course on interview skills;
- Approaches to collect information and data by group discussions, Key informants interview, and Household

Example of Dien Bien Province

Centre for Agriculture and Forestry Planning and Designing under Department of Agriculture and Rural Development carried out socioeconomic surveys in Muong Phang and Muong Muon commune in the province.

Reference

- Statistical report in Dien Bien Province
- Data on forest status such as area of each forest type prepraed The JICA REDD+ Study on Potential Forest and Land Related to Climate Change and Forests

6 Organize a C-RAP

References

Main documents used:

- Plan No. 388/KH-UBND of Dien Bien PPC on reviewing and completion of the procedure for forestland allocation and granting certificate of forestland use right in Dien Bien province in the period of 2013 - 2015;
- Project on Planning of New Rural Development of the commune in the period of 2011 – 2020, approved by Dien Bien PPC;
- District FPDP 2012 – 2020;
- Other documents of the existing policies, programs and projects which related to the forest protection and development and livelihood development in the commune;

Example of Dien Bien Province

C-RAPs are made in the following two pilot communes in the Province of Dien Bien

Muong Phang commune in the Dien Bien district;

Muong Muon commune in the Muong cha district

Objective

To formulate the structures and ideas of C-RAP

Procedure

1. Develop the logical framework for C-RAP in accordance with PRAP.
2. Set overall goal and specific objectives for C-RAP on forest management and livelihood development.
3. Build tasks and solutions for:

(1) Forest management

a. Identification of the targets (area) and analysis the gaps on forest management.

b. Analysis the current resources (natural and social) of the commune.

c. Analysis the procedures on forest protection, regeneration and afforestation in the existing policies, programs and projects (PFES, FPDP, private investments, etc…), evaluate the merits and demerits of each procedure.

d. Address the solutions for every activity, which can be succeeding the merits and resolving the demerits of the existing policies, programs and projects.

(2) Forest monitoring

a. Identification of the gaps (limitations on technical, institutional, technologies, human resource, …) of the current forest monitoring system.

b. Proposal of the solutions on forest monitoring, including clarification of roles and responsibilities of all relevant administrative levels; capacity building; technical trainings; application of advanced technologies, etc.

(3) Livehood development

a. Analysis on natural and socio-economic resources of the commune; clarification of the advantages and disadvantages of the existing policies, programs and projects on liveihood development in the commune.

b. Proposal of the solutions on increasing productivity of the cultivation and husbandry, sustainable NTFPs production, development of productions and services in order to increase cash income;

c. Based on proposed solutions, make the list of the activities to be implemented, implementation

planning, needs of supports (on technical, seedlings, material).

(4) Strengthening institutional framework

a. Analysis on the current institutional framework in order to identify the tasks;

b. Proposal of the solution on completion of institutional framework for REDD+ implementation at commune and village levels.

(5) Capacity building

a. Analysis on the current capacity, clarification of the gaps;

b. Proposal of the solutions on capacity building for the stakeholders involved in forest management, forest monitoring and livelihood development activities in the commune;

c. Based on proposed solution, developing an implementation plan on capacity building;

d. Identification of the needs of supports on capacity building from higher levels.

4. Develop the financial plan

(1) Based on the solutions and needs of supports proposed (in “3. Building tasks and solutions for” above), making an estimation of necessary fund for implementation of the solutions and fulfil the needs of supports;

(2) Analysis on the fund of the existing policies, programs and projects in the commune to identify available funds

(3) Identification of the shortage of the fund.

(4) Proposal of the potential funding sources to fulfill the shortage.

5. Develop the implementation arrangement

(1) Proposal of arrangements for implementation of C-RAP, clarify the roles and responsibilities of each organizations and individual in the implementing system;

(2) Identification of the needs of supports on institutional and organizational aspects from higher levels.

Output

Completion of the draft for C-RAP

7 Consultation with DPC, PFMB, SUFMB and CPC

Points

- A copy of the draft of C-RAP must be delivered to the DPC, PFMB, SUFMB and CPC at least one week prior to the consultation meeting, so that they will have adequate time to study the contents and prepare comments;
- Participations of the technical staff at provincial level (DARD) and proper district staffs (District DARD, Agricultural Extension Center, District FPD) are required;
- Focus on assessing on feasibilities of the solutions proposed in the draft of C-RAP;
- Consultation meeting should be held in CPC office, with participations of the representatives of the mass organization at commune level.

Objective

To gain the consensus of the relevant sectors and administrative levels on the contents of the C-RAP and agreements on implementation of the C-RAP.

Procedure

1. Delivering the draft of C-RAP to the relevant organizations;
2. The relevant organizations study the contents of the draft of C-RAP and prepare their comments;
3. Consultation meeting is to be held in the CPC office with participations of the relevant organizations at relevant levels.
   a. Summarize the main contents of the C-RAP;
   b. Evaluate feasibility of the solutions proposed in the C-RAP;
   c. Confirmation data and figures mentioned in the C-RAP.
4. Collection of comments, ideas and opinions of the participators in the meeting;
5. Consideration of the comments, ideas, opinions and reflect on the revision of the C-RAP;
6. Feed-back to the CPC for approval procedure.

Output

The C-RAP is revised with reflection of the comments, ideas and opinions of the relevant organizations and ready to be approved.

Terminology

Terms	Definition
C-RAP	Commune REDD+ Action Plan is so-called “C-RAP”. This action plan is to implement REDD+ for the commune level. The framework of this plan is consistent with PRAP to contribute to successful implementation of PRAP. This plan is illustrated on the basis of each commune characteristic to be focused on practical implementations.
CPC	Communal People’s Committee
DARD	Department of Agriculture and Rural Development
District sub-FPD	Sub-Department of Forest Protection of Dien Bien Province
DPC	District People’s Committee
FPDP	Forest Protection and Development Plan (Decision 57/QD-TTg) is so-called “FPDP”. It is a comprehensive plan on forest covering the period from 2011 to 2020, which is succeeding Program 661. The objectives include effectively managing the existing forests, increasing the forest cover and improving the living conditions.
NRAP	National Action Program on “Reducing Emissions from Deforestation and Forest Degradation, Sustainable Management of Forests, Conservation and Enhancement Forest Carbon Stocks” is so-called “NRAP”. The enforcement period of this program is 2011 to 2020. The decision was issued by the No: 799/QD-TTg by the Prime Minister on June 2012.
PFES	Payment for Forest Environmental Services (PFES) is a program to give forest owners incentives to protect their forests in exchange for managing their forests to provide the environmental services. In Vietnam, the Decision 99/2010/ND-CP has been issued to define the modality of implementing the PFES.
PFMB	Protection Forest Management Board
PRAP	Provincial REDD+ Action Plan is so called “PRAP” which is designed to contribute to defining strategy of the province to develop REDD+, preparation of the implementation plan and enhancing the implementation of REDD+.

REDD+	Reduction of emission from deforestation and forest degradation
SUFMB	Special Use Forest Management Board
UNFCCC	United Nations Framework Convention on Climate Change

Memo

Name	
Position	
Organization	
Province	

Appendix 7 Questionnaire on conditions of the village

Questionnaire on conditions of the village

Name of the village/commune: _____ / _____

1. Basic data of the village (information to be collected from interview to the village chief and/or representatives of the village; supplemental information shall be collected from CPC)

(1) History: Describe the events that took place in the village in the past. These events include at least but not limited to establishment of the village, migration, split of the village, merging with other villages, disasters, construction of infrastructures (road, school, electricity, etc.), and so on.

Events	Year	Description of the events (as much in detail as possible)

(2) Access:

Distance to the village center (location of the village meeting house or the house of the village chief) from the road on which a car can go: _____ km

Time to take to the village center from the road on which a car can go:

_____ min. / hr. by bike ; _____ min. / hr. by walk

Distance to the nearest market from the village center: _____ km

Time to take to the nearest market from the village center:

_____ min. / hr. by bike ; _____ min. / hr. by walk

(3) Distribution of the residents in the village:

If the residential areas in the village are scattered in clusters, provide the following information.

Cluster	Number of HH	Population	Major ethnicity	Distance to the village center
1				
2				
3				
4				

5				
6				
7				
8				
9				
10				

(4) Population: _____ people at present

(5) Age structure at present:
Youth (under 18) _____ %; Matured (18 – 60) _____; Senior (above 60) _____

(6) Sex structure at present:
Male _____ %; Female _____ %

(7) In the last 10 years, the population is **Increasing** / **Decreasing**.

If the answer is "**Increasing**", it is due to **Natural Growth** / **Immigration**.

If the answer is "**Decreasing**", it is due to **Natural Decline** / **Emigration** / **Disastrous events** (**Specify**: _____) / **Other Causes** (**Specify**: _____).

(8) Households economy (local classification)
Better off HH: _____; # Medium HH: _____; # Near-poor HH _____; # Poor HH _____ at present
_____ HHs own only paddy field, _____ HHs own only upland field, _____ HHs own both paddy and upland fields.
_____ HHs are loaned. Major creditors (organization or individual):
_____ ; _____ ; _____ ; _____

(9) Population by ethnicity: Thai _____ (%); H'Mong _____ (%); Kho Mu _____ (%); other (specify: _____) _____ (%); other (specify: _____) _____ (%)

(10)Rate of the matured with education:
Elementary school: _____ %
Jr. High School: _____ %
Sr. High School: _____%

(11)Rate of literacy (Kinh language): _____ %

(12)Rate of the villagers employed by organizations or other individuals: _____ %

Describe conditions of employment below.

Employers	Business category	Works assigned to employees	Salary of an average employee

(13)Crimes in the last 3 years:
Homicide: _____ cases
Assault: _____ cases
Robbery: _____ cases

(14)# Drug addicts: _____ people

2. Village structure (information to be collected from interview to the village chief and/or representatives of the village; supplemental information shall be collected from CPC)

(1) Name of Village Chief at present: _____ Age: _____ yr. old
Ethnicity: _____ Educational background: _____
Term: From _____ month _____ year To _____ month _____ year

Way of selecting Village Chief: **Election by the villagers** / **Nomination by the Communal Authority** / **Other Method** (**Specify**: _____)

Duration of 1 term is _____ years.
One can serve as Village Chief for _____ terms maximum.

(2) Name of Party Chief at present: _____ Age: _____ yr. old
Ethnicity: _____ Educational background: _____
Term: From _____ month _____ year To _____ month _____ year

Way of selecting Party Chief: **Election by the villagers** / **Nomination by the Communal Authority** / **Other Method** (**Specify**: _____)

Duration of 1 term is _____ years.
One can serve as Party Chief for _____ terms maximum.

(3) Name of the Elder at present: _____ Age: _____ yr. old
Ethnicity: _____ Educational background: **Elementary school** / **Jr. High School** / **Sr. High School** / **College**

(4) The village meeting is held **Regularly** / **When the village confronts serious issues** / **By the order of CPC or other authorities** / **Others** (Specify: _____)

If the village meeting is held "Regularly", describe what topics are discussed in the meeting:

_____
_____
_____
_____

(5) Way of settling conflicts between the villagers: **Intervention by leaders or elders of the village** / **Intervention by CPC** / **Putting the cases on village trial** / **Other Measures** (Specify: _____)

*Multiple answers accepted

(6) Village organizations (e.g. agricultural and other producer's union, women's union, youth union, organizations and/or funds established for programs/projects implemented by the government and/or foreign donors, etc.)

Name of organization	Name of the leader	Actual activities (what the organization does)	Critical feature	# members

(7) Rule of the village: if the village set its rule that the villagers have to follow (e.g. agricultural land use, social and cultural issues, security, etc.), obtain its copy. Briefly describe contents of the rule below:

_____
_____
_____
_____

3. Production activities (information to be collected from interview to the village chief and/or representatives of the village; supplemental information shall be collected from CPC)

(1) Area of the cultivation lands owned by an average HH:

Paddy field: _____ ha

Upland field: _____ ha, out of which _____ ha is in fallow

(2) Proportion of HHs practicing burning agriculture: _____ %

Among the "**burning agriculture**", ratio between **shifting cultivation** and **non-shifting cultivation** is _____ :_____.

Among the "**shifting cultivation**", ratio between **rotational shifting cultivation** and **pioneering shifting cultivation** is _____ : _____.

Describe major patterns of the rotational shifting cultivation.

Example	Activity	burn forest /fallow	Rice	corn	cassava	fallow
	Duration		2 yr	2 yr	2 yr	5 yr
Pattern 1	Activity					
	Duration					
Pattern 2	Activity					
	Duration					
Pattern 3	Activity					
	Duration					

(3) List of the major crops in the village (figures are the village total)

Name of Crops	Cultivated area (ha)	Amount harvested (ton/yr)	Amount consumed by HH (ton/yr)	Amount sold (ton/yr)	Sales revenue (VND/yr)

(4) List of the major livestock (fish) in the village

Livestock	# HH with the livestock (fishpond)	# Head (Total in the village)	
		Matured	Not matured
Cattle			
Buffalo			
Pig			
Goat			
Chicken			
Duck			
Fish (fishpond)		kg	kg

(5) Event calendar (annual cycle of lifestyle based on solar calendar)

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.
Winter-Spring wet rice cultivation												
Summer-auturm wet rice cultivation												
Hill paddy												
Upland corn												
Upland cassava												
Home garden												
Cattle raising												
Pig raising												
Goat raising												
Chicken raising												
Duck raising												
Fish raising												
Timber harvest												
NTFP collect: Bamboo shoot												
Honey												
Wild bird												
Orchid												
Medicinal plants												

4. Conditions of forest use (information to be collected from interview to the village chief and/or representatives of the village; supplemental information shall be collected from CPC)

(1) Past and present activities related to forest

Activities practiced in the forests	Past (_____ years ago)				At Present			
	YES /NO	Amount (If YES)	Major buyer	Revenue	YES /NO	Amount (If YES)	Major buyer	Revenue
Logging for sales								
		m3/yr				m3/yr		
		m3/yr				m3/yr		
		m3/yr				m3/yr		
		m3/yr				m3/yr		
		m3/yr				m3/yr		
Logging for home use								
		m3/yr				m3/yr		
		m3/yr				m3/yr		
		m3/yr				m3/yr		
		m3/yr				m3/yr		
		m3/yr				m3/yr		
Fuel wood collection*		kg/day/HH				kg/day/HH		
NTFP collection								
Bamboo		trees/yr				trees/yr		
Bamboo shoots		kg/yr/HH				kg/yr/HH		
Fruits		kg/yr/HH				kg/yr/HH		
Medicinal plants		kg/yr/HH				kg/yr/HH		
Furniture making								
		items/yr				items/yr		
		items/yr				items/yr		
		items/yr				items/yr		
		items/yr				items/yr		
		items/yr				items/yr		
Handicraft								

making								
		items/yr				items/yr		
		items/yr				items/yr		
		items/yr				items/yr		
		items/yr				items/yr		
		items/yr				items/yr		
Hunting								
		heads/yr				heads/yr		
		heads/yr				heads/yr		
		heads/yr				heads/yr		
		heads/yr				heads/yr		
		heads/yr				heads/yr		

*Way to estimate the amount should be clarified.

(2) The forested area in the village is **Increasing** / **Decreasing** in the last 10 years.

Describe on which aspects the village leader thinks the forested area is increasing or decreasing: _____
_____
_____
_____

a. If the answer to **(2)** is "Increasing", its causes are:

Natural regeneration by Program 661 / **Plantation by Program 661** / **Termination of shifting cultivation** / **Own efforts (plantation/regeneration) made by the village** / **Others** (Specify: _____)

*Multiple answers accepted

b. If the answer to **a.** is "**Plantation by Program 661**" and/or "**Own efforts (plantation) made by the village**", describe the followings:

Purpose of plantation: _____
Species planted: _____
Status of growth: _____
Tending technique applied: _____
Fertilizer applied: _____

c. If the answer to **(2)** is "**Decreasing**", its causes are:

Logging (legal) / **Logging (illegal)** / **Forest Fire** / **Conversion to Other Land Use** (specifically to, **Cultivation**; **Rubber Plantation**; **Coffee Plantation**; **Grazing**) / **Others** (Specify: _____)

*Multiple answers accepted

d. If the answer to **c.** is **"Conversion to Other Land Use (Cultivation)"**, what drives the villagers

convert forests to cultivation land is:

Lack of the Cultivation Land / **The land the villagers cultivate is no longer productive** / **Seeking for extra income** / **Others** (Specify: _____)

*Multiple answers accepted

(3) Does the village leader feel the forest has to be protected? **YES** / **NO**

a. If the answer to **(3)** is "**YES**", why does the village leader think the forests have to be protected?

_____

b. If the answer to **(3)** is "**YES**", has the village carried out activities to protect the forest? **YES** / **NO**

c. If the answer to **b.** is "**YES**", what has the village been doing to protect the forest?

_____

d. If the answer to **b.** is "**NO**", does the village have a plan to do something to project the forest? **YES** / **NO**

e. If the answer to **d.** is "**YES**", what does the village plan to do to protect the forest?

_____

(4) Does the village leader want to plant trees in the village? **YES** / **NO**

a. If the answer to **(4)** is "**YES**", why does the village leader want to plant trees?

_____

b. If the answer to **(4)** is "**YES**", has the village planted trees in the village? **YES** / **NO**

c. If the answer to **b.** is "**NO**", does the village plan to plant trees? **YES** / **NO**

d. If the answer to **(4)** is "**YES**", where does the village leader think trees can be planted?

Cultivation Land (with low productivity) / **Abandoned Areas** / **Residential Areas** / **Degraded Areas that were used to be the forests** / **Others** (Specify:

_____)

*Multiple answers accepted

e. If the answer to **(4)** is "**YES**", for what purpose does the village leader want to plant trees?

Timber Production for Sale / **Timber Production for Domestic Use (housing material)** / **Fuel Wood** / **Environmental conservation** / **Other Purposes** (Specify:

_____)

*Multiple answers accepted

f. If the answer to **(4)** is "**YES**", what tree species does the village leader want to plant?

_____; _____; _____

g. How large is the total area where trees can be planted? _____ ha

h. Explain how the area is calculated. _____

i. If the answer to **(4)** is "**NO**", what makes the village leader not want to plant trees?
No Land for Plantation / **Long time required to get benefit** / **Other reasons** (Specify:
_____)
*Multiple answers accepted

j. If the answer to **(4)** is "**NO**", under what conditions can the village leader accept planting trees?
Compensation / **Technical support** / **Livelihood support** / **Others** (Specify:
_____)
*Multiple answers accepted

(5) Is there rule on forest use in the village? **YES** / **NO**
If the answer is "**YES**", describe the rule on forest use (if the rule is in a written format, obtain its copy.):
Logging: _____
Fuel wood collection: _____
NTFP collection: _____
Hunting: _____
Fire management: _____

(6) Is there the forest that the villagers share within the village? **YES** / **NO**

a. If the answer to **(6)** is "**YES**", what is legal status of the forest? **Allocated to the village** / **Under contract with the Protection Forest Management Board or other authorities for protection** / **Traditionally shared among the villagers** / **Others** (Specify:
_____
*Multiple answers accepted

b. Is there regulation on use of the shared forest? **YES** / **NO**

c. If the answer to **b.** is "**YES**", describe the regulation (if the regulation is in a written format, obtain its copy.):
_____
_____
_____
_____

d. Describe how the shared forest is actually managed:
_____

_____
_____
_____

(7) Is there the forest that the village shares with other villages? **YES** / **NO**

a. If the answer to **(7)** is "**YES**", what is legal status of the forest? **Allocated to the group of villages** / **Under contract with the Protection Forest Management Board or other authorities for protection by the group of villages** / **Traditionally shared among the villages** / **Others** (Specify: _____)

*Multiple answers accepted

b. If the answer to **(7)** is "**YES**", is there common regulation on forest use with other villages? **YES** / **NO**

c. If the answer to **(7)** is "**YES**", describe the regulation (if the regulation is in a written format, obtain its copy.):

_____
_____
_____
_____

d. Describe how the shared forest is actually managed:

_____
_____
_____
_____

(8) Ratio between the forests owned by the households, forests owned by the village, forests owned by companies and forests owned by CPC or other authorities:

HHs _____ : Village _____ : Companies _____ : CPC/authorities _____

5. Support on village development (information to be collected from interview to the village chief and/or representatives of the village; supplemental information shall be collected from CPC)

(1) The agriculture extension staff of CPC:

Frequency of the visit: **every week** / **every 2 weeks** / **every month** / **other** (specify: _____)

Describe what the extension staff does:

_____
_____
_____
_____

(2) On-going or planned village development program/project by the government
e.g. livelihood improvement, construction of infrastructure, etc.

Program/project	Implementation period	Description of program
	From: To:	
	From: To:	
	From: To:	
	From: To:	
	From: To:	

(3) On-going and planned village development program/project by the foreign donors:

Program/project	Implementation period	Description of program
	From: To:	
	From: To:	
	From: To:	
	From: To:	
	From: To:	

(4) Past village development program/project by the government or foreign donors

Program/project	Implementation period	Description of program	Description of result (Reason of success/failure)
	From: To:		
	From: To:		

	From: To:		
	From: To:		
	From: To:		

6. Household survey (information to be collected from interview to the village chief and/or representatives of the village)

Pick one household in each class and interview the members of the household to obtain the following information.

Assets, production, income and characteristics of a household (Medium/near-poor/poor)

Item		Medium HH		Near-poor HH		Poor HH	
		Past (__ yr)	Present	Past (__ yr)	Present	Past (__ yr)	Present
Name of representative of HH							
Members of HH							
Ethnicity							
Wet paddy	Area (ha)						
	Production (kg/harvest)						
	Productivity (kg/ha/harvest)						
	#Harvest/year						
	Production cost (VND/harvest cycle)						
	Amount sold (kg/harvest)						
	Cash income						

	from sold rice (VND/harvest)						
Hill paddy	Area (ha)						
	Production (kg/yr)						
	Productivity (kg/ha/yr)						
	Production cost (VND/yr)						
	Amount sold (kg/yr)						
	Cash income from sold rice (VND/yr)						
Corn	Area (ha)						
	Production (kg/yr)						
	Productivity (kg/ha/yr)						
	Production cost (VND/yr)						
	Amount sold (kg/yr)						
	Cash income form sold corn (VND/yr)						
cassava	Area (ha)						
	Production (kg/yr)						
	Productivity (kg/ha/yr)						
	Production cost (VND/yr)						
	Amount sold (kg/yr)						
	Cash income form sold cassava (VND/yr)						
Other crop _____	Area (ha)						
	Production (kg/yr)						
	Productivity						

	(kg/ha/yr)						
	Production cost (VND/yr)						
	Amount sold (kg/yr)						
	Cash income form sold ____________ (VND/yr)						
Home garden	Total area (ha)						
____________ (home garden)	Production (kg/yr)						
	Amount sold (kg/yr)						
	Cash income (VND/yr)						
____________ (home garden)	Production (kg/yr)						
	Amount sold (kg/yr)						
	Cash income (VND/yr)						
____________ (home garden)	Production (kg/yr)						
	Amount sold (kg/yr)						
	Cash income (VND/yr)						
____________ (home garden)	Production (kg/yr)						
	Amount sold (kg/yr)						
	Cash income (VND/yr)						
____________ (home garden)	Production (kg/yr)						
	Amount sold (kg/yr)						
	Cash income (VND/yr)						
Livestock production							
Cattle	Production for sales (heads/yr)						

	Cash income (VND/yr)						
Goat	Production for sales (heads/yr)						
	Cash income (VND/yr)						
Pig	Production for sales (heads/yr)						
	Cash income (VND/yr)						
Chicken	Production for sales (heads/yr)						
	Cash income (VND/yr)						
Duck	Production for sales (heads/yr)						
	Cash income (VND/yr)						
Fish	Production for sales (kg/yr)						
	Cash income (VND/yr)						
	Production for sales (__/yr)						
	Cash income (VND/yr)						
Timber production							
	Production for sales (kg/yr)						
	Cash income (VND/yr)						
	Production for sales (kg/yr)						
	Cash income (VND/yr)						
	Production for sales (kg/yr)						
	Cash income (VND/yr)						
NTFP production							
Bamboo	Production for sales (trees/yr)						
	Cash income						

	(VND/yr)						
Bamboo shoot	Production for sales (kg/yr)						
	Cash income (VND/yr)						
Fruits	Production for sales (kg/yr)						
	Cash income (VND/yr)						
Medicinal plants	Production for sales (kg/yr)						
	Cash income (VND/yr)						
Other _____	Production for sales (kg/yr)						
	Cash income (VND/yr)						
Annual income	Wet paddy						
	Upland crops						
	Home garden						
	Livestock						
	Timber						
	NTFP						
	Total (VND)						
Asset - Livestock	Cattle (head)						
	Goat (head)						
	Pig (head)						
	Chicken (head)						
	Duck (head)						
	Fish pond						
	Fish (kg)						
	Other ( )						
	Other ( )						
Other assets	Household goods						

	Agricultural equipment						
	Others						
Liabilities	Loan						
Membership of organizations							
Intention to plant trees (YES / NO) If the answer is "YES", what is the purpose of planting trees?	Fuel wood for house use	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
	Fuel wood for sales	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
	Timber for house use	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
	Timber for sales	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
	NTFPs (specify) for house use	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
	NTFPs (specify) for	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO

	sales						
	Environmental protection	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
	Others (specify)						
Interesting livelihood activities							
Other characteristics to note							

Appendix 8 Manual for Setting the Village Boundary

Manual of setting the village boundary in the forested area (ver.10)

1. Objective

In order to bring REDD+ implementation in the village level to design forest management plan for each village, geographical boundary of the village in the forested area needs to be clarified. This manual clarifies the operational procedure of setting the village boundary in the forested area for allocation.

2. For whom this manual is prepared

Target of this manual is the administrative personnel relevant to village-level planning and setting the village boundary in the forested area associated with it, specifically, CPC, land administration officer, commune-based forest rangers and FMB staff.

3. Meaning of the village boundary

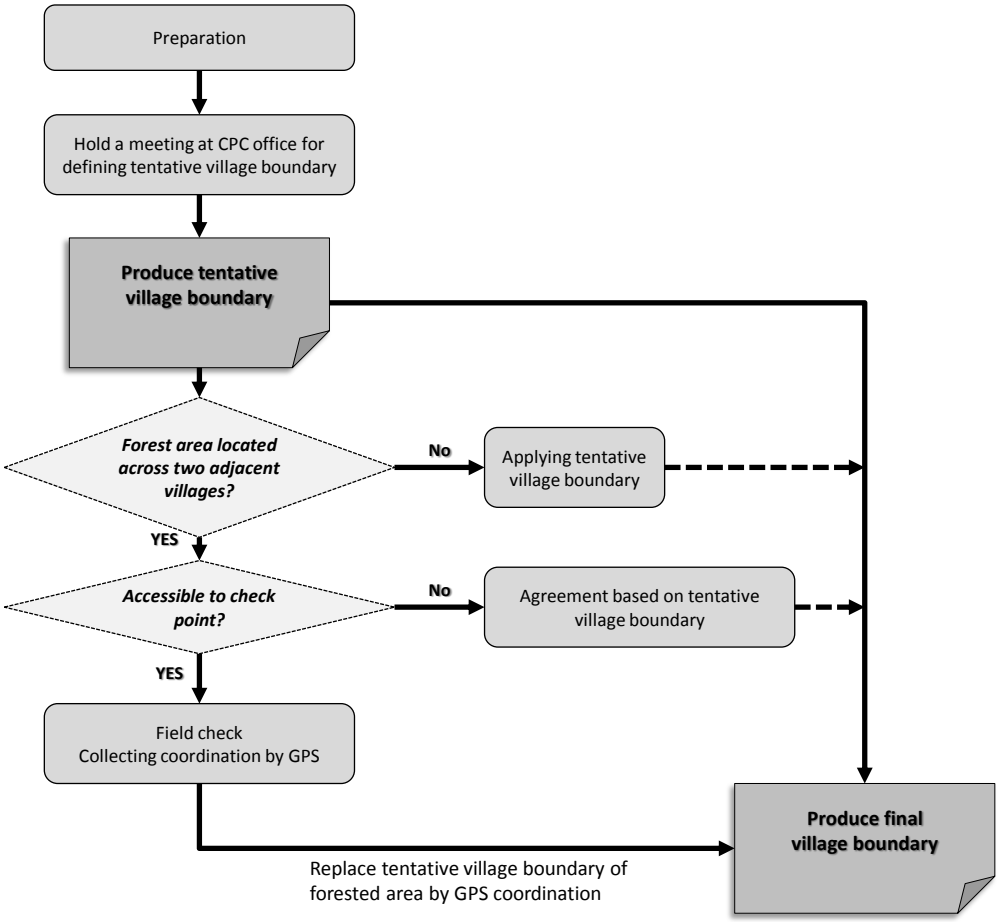
The village boundary to be delineated through the manual is not official boundary. The village boundary in the forested area is boundary to be agreed between the adjacent villages and other boundary such as boundary in the crop land is tentative boundary for clarifying forests inside village.

4. Pre-condition of setting the village boundary (Commune boundary)

The commune boundary has to be identified before setting the village boundary. The official commune boundary is provided in the dossier of the administration boundary developed according to Direction 364. Since the commune boundary provided in the dossier is in manuscript format, the description given in the dossier has to be illustrated in a visual format (map). The satellite image (finer resolution – the pixel size should be finer than 2.5 meter – is preferable) and/or the topographic map (base maps) to facilitate drawing the commune boundary.

5. Procedure of setting the village boundary

Overall procedure of setting the village boundary is shown in the following follow chart. Based on the follow chart, detailed procedures are mentioned.

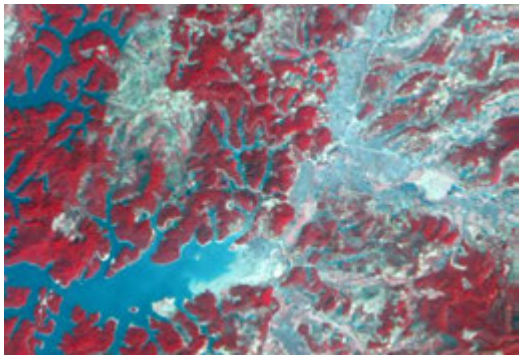


(1) Preparation:

a. Prepare a map to show the entire commune, which consists of:

- Satellite image – latest data (within 3 year from the date of setting the village boundary) and finest resolution (pixel size of 2.5-meter or finer recommendable) possible;

The following satellite images are examples[10].



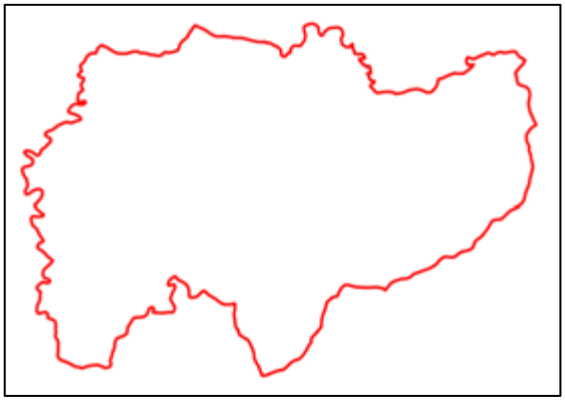
ALOS satellite image (pixel size: 2.5-meter)

Pleiades satellite image (pixel size: 0.5-meter)

[10] Panchromatic resolution of VNREDSat is also 2.5m.

- Layer of the commune boundary;

Commune boundary is a pre-condition for setting the village boundary in the forested areas. The data will be obtained in the digital format and used to output the map to be used for field survey. The commune boundary consists of the points approved by CPC and assumed points that connect them. The points approved by CPC are treated as the truth values.



Example of layer of the commune boundary

- Layer of the topographic information (contour line);

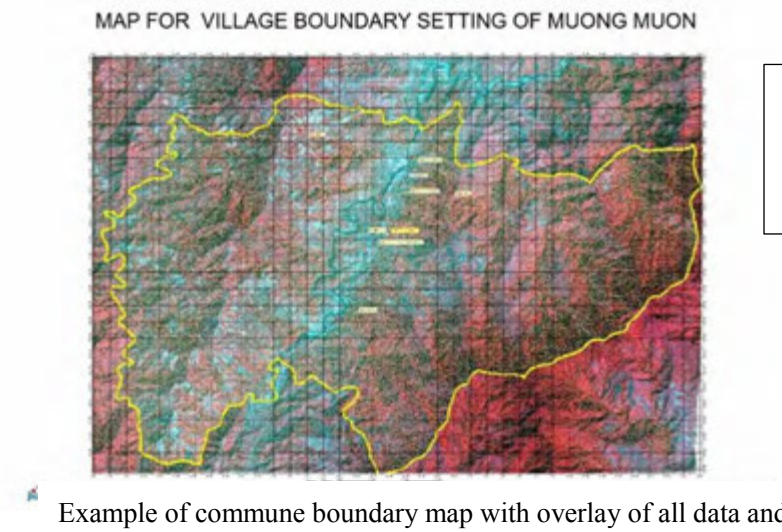
Information on topographic features such as hills, valleys, etc. is useful when the villagers try to identify the village boundary on the map. Therefore, contour line should be arranged in the map. The information on the contour can be obtained from websites as well as the relevant organizations.

Example of layer of the contour line

- Layer of the landmarks – as many well-known landmarks (CPC office, schools, settlements, roads, dams, rivers, etc…) as possible.

The map should be developed in paper-based format (the lines to be drawn on this map) and digital format which can be zoomed in/out using simple image reader and projector. The map also shows the date and sources of the input data.

Example of layer of the landmarks



Grid. = 100m Sub-grid.
= 500m main grid
VN2000 – 6 degree

Example of commune boundary map with overlay of all data and information

b. Other equipment and materials:
- Projector and screen;
- Laptop PC;
- GIS software (ArcGIS is recommended);
- GPS (+ data recording sheet)
- Camera
- Printer
- Inerasable pens;
- Pencils and eraser;
- Others materials for a meeting.

c. Arrangement of participation for the meetings:
To coordinate with CPC leaders to arrange the meetings for villager boundary setting purpose. Each meeting will involve the following participants:

- CPC (vice) chairman
- Party Secretary
- Land administrative staff
- Commune-based forest rangers
- FMB

- Three representatives from each village, who know clearly on the territory of the village, but one of them must be the village chief, in other words, village chief and two people. The number of villages to participate in a meeting is limited to 10. In case of more than 10 villages in a given commune, divide all villages into more than two group considering the area of village location.
- Optional: District DONRE/DARD/FPD

(2) Hold a meeting at CPC office for defining village boundary.

1) Show the map to the participants, brief explanation of satellite image, land-marks, contours and interval of the grid.
2) Support villagers to identify the main land-marks and commune boundary on the map with visualizing them.
3) Villagers from every two adjacent villages discuss together to identify the tentative village boundary with supports from facilitators (other villagers should wait for their turn);
4) Draw tentative lines on the paper-based map, in accordance with discussing progress; Lines are often drawn along the ridges, ravines or borders of the fields or forests;
5) Confirm the boundary with unanimous recognition among the villagers, land administrator staff, forest rangers, and CPC (vice) chairman;
6) Adjust the line of boundary in accordance with the confirmation and draw a bold line. Erase all draft and unnecessary lines;
7) Confirm the forested areas which come across village boundary, which will be checked in the field.
8) Proceed with the steps from 2) to 7) for other couple of the adjacent villages.
9) The villages participating in one meeting that share the border with the village(s) participating in another meeting are required to attend the both meetings.


Villages trying to identify the village boundary with assistance of facilitators

(3) Prepare tentative boundary

1) Digitize the tentative village boundary which is results of commune consultation. Along with this work, an attribute table with the waypoints will be arranged. An attribute is based on the field defined in the table below.

Field Name	Type	Legend
Unique ID	Integer	1,2,3,4..
Level	Text	commune/village
Authorization	Text	364/sub364/VM/GT※
Remarks	Text	

※ "364" is the point defined by the decision. "sub364" is the point tentatively set to connect the points of "364". "VM" is the point agreed on in the village meeting. "GT" is the point confirmed in the field survey.

2) Then, overlay the boundary on satellite image to produce a new map. Lastly, show checking points in the field on the map. Checking points are those to be pre-checked before setting the boundary in the field. Specifically, those include entrance to the forested area, points where the forest type changes, points where the entire forests can be observed, etc.

(4) Field check and confirmation with GPS

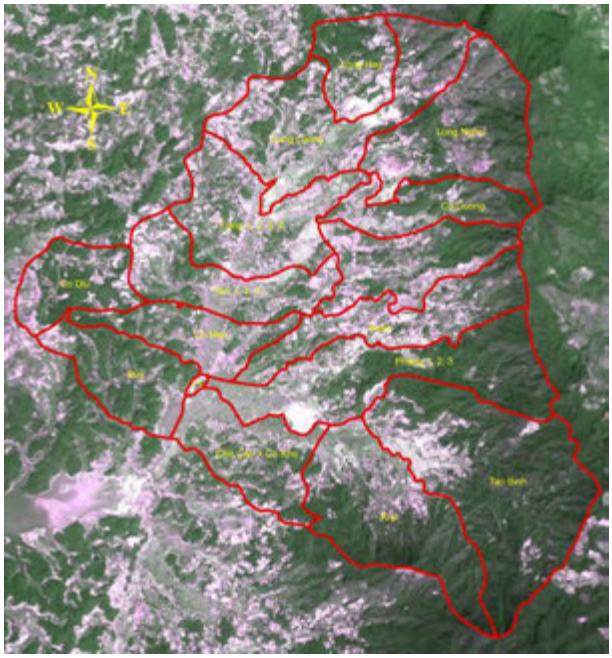
In any cases of village boundary in the forested area between two adjacent villages, field check and confirmation with GPS are necessary.

1) Digitize the tentative village boundary which is results of commune consultation. Then, overlay the boundary on satellite image to produce a new map. Lastly, show checking points in the field on the map.
2) Establish a team consisting of the villagers (five each per village) of adjacent coupled-villages in the meeting; technical staff (forest rangers) with GPS; and land administrative staff to check the village boundary in the forested area on the field;
3) Indicate checking points on the field to the villagers and agree on schedule for field work in a day;
4) The team will go to each boundary location and checking points to get waypoints (information on the coordinate and elevation), using GPS.
5) In case where the forested area on the boundary is inaccessible, try to make agreement between two adjacent villages based on the boundary decided in the commune consultation meeting.
6) Proceed with the steps from 1) to 4) for other adjacent villages.

Field check for village boundary in the forested area

(5) In-room final confirmation

1) Transfer all waypoints in the GPSs, which is results of field check, to GIS
2) Overlay 1) on the map prepared for the field check and adjust village boundary in the forested area in accordance with the waypoints;
3) Number every waypoints location.
4) Print a paper-based map for final confirmation and save digital (shape format) layers.



Example of the village boundary map

(6) Procedure for resolution on disputed areas to set the boundary

The forested area (or areas) along the boundary that cannot be agreed between two adjacent villages identified will be put in "un-agrees area" and refer to other policies (e.g. 388/KH-UBND, etc…) for further resolutions. Un-agreed area cannot be allocated until resolved.

(7) Endorsement of the village boundary by CPC

The boundary of each village is registered as cadastral information such as forest plots list and coordinates of the plots, and agreed document. The document to identify the boundary is signed by

village head of all adjacent villages and CPC, and is issued for every village and provides the information on coordinates of the critical points and the map to identify the boundary.

Appendix 9 Safeguard Checklist

Checklist for the commune level

			Name of a Responsible Person (_____)						
Safeguards in the UNFCCC	Criteria	Indicator	Results Safeguard is supported (✔)	Information source to be used (Example)	Results Safeguard is not supported	Measures to support safeguard	Timing of checking	Checking date (D/M/Y)	Remarks
(b)Transparent and effective national forest governance structures, taking into account national legislation and sovereignty	Responsibilities of the working-level person in the forest monitoring system are clear	The responsibilities of the rangers are clear and they are actually working under the action plan		Document use (the REDD+ Action Plan for the commune) and on-site review			First edition and at every updated opportunity and during implementation (An annual basis)		
	Forest monitoring data is recorded	Forest monitoring data is recorded on a regular basis		On-site review			During implementation (An annual basis)		
		Forest monitoring data is organized and recorded on the monitoring sheet by monitoring technology illustrated in PRAP		On-site review			During implementation (An annual basis)		

(c) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples	The villagers are involved in preparation of the REDD+ Action Plan for the Commune.	The villagers are given opportunities to express their opinion, idea, preference, requests, and complaints in preparing the REDD+ Action Plan for the Commune		The minutes of the village meeting, the list of the attendees, and the REDD+ Action Plan for the commune			At planning of the REDD+ Action Plan for the Commune		
		Consensus is formed with the stakeholders on the REDD+ Action Plan for the Commune		Document use (the REDD+ Action Plan for the Commune)			First edition and at every updated opportunity		
	The knowledge of the villagers is respected	The traditional knowledge of indigenous peoples and local communities is utilized in the REDD+ implementations based on the mutual consensus		Interview with the villagers			During implementation (An annual basis)		
		When alternative livelihood measure is introduced, the knowledge of the villagers on their livelihood is taken into consideration.		Drawing up the brief reports on what knowledge is utilized in the measure			During implementation (An annual basis)		
	The right of the villagers is respected	The sharing rights of common forests is decided in the implementations of REDD+ through the		The minutes of the village meeting and the list of			During implementation (An annual basis)		

		community participation		the attendees					
		The sharing rights of NTFPs in the implementations of REDD+ is decided through the community participation		The minutes of the village meeting and the list of the attendees			During implementation (An annual basis)		
		The rights of land holders and their land boundaries are identified		Document use (the REDD+ Action Plan for the Commune)			At planning of the REDD+ Action Plan for the Commune		
(d) The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities	The REDD+ Action Plan for the Commune is formulated by villagers through the village meeting	Villagers are given an opportunity to express their idea, opinion, knowledge, preference and/or requests in the process of formulating the village FMP.		The minutes of the village meeting, the list of attendees, and the REDD+ Action Plan for the commune			At planning of the REDD+ Action Plan for the Commune		
		Villagers are given an opportunity to express their idea, opinion, knowledge, preference and/or requests in the process of formulating the village livelihood development plan.		The minutes of the village meeting, the list of attendees, and the REDD+ Action Plan for the commune			At planning of the REDD+ Action Plan for the Commune		

(e) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions such as reducing emissions from deforestation, reducing emissions from forest degradation, conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits	Natural forests and biological diversity are not disturbed by the REDD+ activities.	Exotic species are not planted at a large scale (1,000 ha or larger) around natural forests according to the Decision No. 29/2011/ND-CP.		On-site review			During implementation (An annual basis)		
		The conversion of natural forest to plantation is not planned in the REDD+ Action Plan for the Commune		Document use (the REDD+ Action Plan for the Commune)			First edition and at every updated opportunity		
		The conversion of natural forest to plantation is not conducted in the REDD+ implementations		On-site review			During implementation (An annual basis)		
		Large-scale clear-cutting of the forests is not conducted in the following (Areas of exploitation of a forest area are not beyond 10 ha or larger for natural protection forests according to No. 29/2011/ND-CP)		On-site review			During implementation (An annual basis)		

(f) Actions to address the risks of reversals	Measures to maintain the villager's income are applied.	Alternative livelihood support is provided for the villagers in case of afforesting their cultivation lands		Document use (the REDD+ Action Plan for the Commune)			First edition and at every updated opportunity		
		The villagers acknowledge that they have received benefits from participation in the REDD+ implementations		On-site review (Interview with villagers)			During implementation (An annual basis)		
		Livelihood development plan is included in the REDD+ Action Plan for the Commune		Document use (the REDD+ Action Plan for the Commune)			First edition and at every updated opportunity		
	Environmental awareness education is provided to the villagers	The environmental awareness education to understand the importance of the forests conservation is provided on a regular basis		On-site review			During implementation (An annual basis)		
		Environmental awareness education to conserve forests is included in the REDD+ Action Plan for the Commune		Document use (the REDD+ Action Plan for the Commune)			First edition and at every updated opportunity		
	Appropriate forest managemnet technologies are taken	Suitability for the soil condition of the land site is considered in the afforestation		On-site review			During implementation (An annual basis)		

		Suitability for the climate condition of the land site is considered in the afforestation		On-site review			During implementation (An annual basis)		
(g) Actions to reduce displacement of emissions	Measures to cope with lack of the cultivation and/or grazing lands are applied.	Livelihood supports (that do not cause the emission of the greenhouse gases) are provided for the villagers when their cultivated lands or grazing lands are to be afforested/reforested according to the REDD+ Action Plan for the Commune.		On-site review (Interview with villagers)			During implementation (An annual basis)		
		Land use plan with clear boundary of agriculture lands and forestlands is developed.		Document use (the REDD+ Action Plan for the Commune)			First edition and at every updated opportunity		
	The forest management activities which cause the displacement of the emissions are not taken	The consensus with the villagers is built in the case of the afforestation of the cultivated lands.		On-site review (Interview with villagers)			During implementation (An annual basis)		

Checklist for the District level

			Name of a Responsible Person (_____)						
Safeguards in the UNFCCC	Criteria	Indicator	Results Safeguard is supported (✔)	Information source to be used (Example)	Results Safeguard is not supported	Measures to support safeguard	Timing of checking	Checking date (D/M/Y)	Remarks
(b) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty	Safeguard monitoring is developed	District-FPD checks and verifies all the completed check lists for Safeguard at communal level		Completed checklist at the commune level			During implementation (An annual basis)		

Checklist for the Province level

		Name of a Responsible Person (_____)							
Safeguards in the UNFCCC	Criteria	Indicator	Results Safeguard is supported (✔)	Information source to be used (Example)	Results Safeguard is not supported	Measures to support safeguard	Timing of checking	Checking date (D/M/Y)	Remarks

(a) That actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements	The Objectives of Provincial REDD+ Action Plan (PRAP) are consistent with National REDD+ Action Program (NRAP)	Key tasks of Provincial REDD+ Action Plan (PRAP) are consistent with key tasks in National REDD+ Action Program (NRAP)		Document use (Decision No. 799/QD-TTg) The description of document number and article number as the quoted parts is needed			First edition and at every updated opportunity		
		Solutions of Provincial REDD+ Action Plan (PRAP) are consistent with solutions in National REDD+ Action Program (NRAP)		Document use (Decision No. 799/QD-TTg) The description of document number and article number as the quoted parts is needed			First edition and at every updated opportunity		

	The Provincial REDD+ Action Plan (PRAP) is related to national forest policies and programs.	PFES is utilized as a reference in the PRAP		Existing policies, strategies, and plans at Province and other relevant levels			First edition and at every updated opportunity		
		FPDP is utilized as a reference in the PRAP		Existing policies, strategies, and plans at Province and other relevant levels			First edition and at every updated opportunity		
(b)Transparent and effective national forest governance structures, taking into account national legislation and sovereignty	Forest monitoring system is developed	The monitoring data are recorded and stored in database on a regular basis		Database			During implementation (An annual basis)		
		It is not easy to falsify the data in the monitoring system		On-site review			During implementation (An annual basis)		
	The financial flow of the revenue and expenditure is clear in the REDD+ implementation	The revenue and expenditure from the budget of PFES program in the REDD+ implementations are recorded in the account ledgers		Audit of the accounting books			During implementation (An annual basis)		

	s	The revenue and expenditure from the budget of FPDP program in the REDD+ implementations are recorded in the account ledgers		Audit of the accounting books			During implementation (An annual basis)		
(d) The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities	Coordination mechanism is developed	Coordinating organization is established to manage REDD+ implementations and it practically works under the plan		Document use (PRAP)			First edition and at every updated opportunity		
	The entry barriers for private sector is removed	PRAP permits participation by private sectors		Document use (PRAP)			First edition and at every updated opportunity		
(g) Actions to reduce displacement of emissions	Activities that can cause displacement of emissions are monitored.	Conditions of the natural forests accessible by the newly developed road under construction and after construction are monitored		On-site review			During implementation (An annual basis)		
		Forest cnditions of the communes and villages around the communes and villages where REDD+ activities are implemented are monitored.		On-site review			During implementation (An annual basis)		

How to record the result of monitoring for Safeguards on the checklist

The checklist is used to record the result of monitoring for Safeguards by each administrative level of communes, districts and province. The left column of the checklist lists the seven Safeguards given in the Cancun Agreements (Decision 1/CP.16). These seven Safeguards are broken down into criteria as a standard by which the availability of Safeguards is judged. Criteria are broke down into indicators. The indicators based on which whether the PRAP, REDD+ Action Plan for the Commune and their implementation support the Safeguards is assessed are set for each Safeguard. The indicators describe the conditions that support the Safeguards. If the actual conditions given in the PRAP, the REDD+ Action Plan for the Commune or their implementation are same as the conditions described in the indicator, the Safeguard is considered to be supported and the corresponding box in the column of "results" is checked with "✔". On the other hand, if the actual conditions are different from the conditions described in the indicator, the corresponding box is left blank. The information source used to identify the actual conditions needs describing. For example, if legal documents as the information source are referred to, the titles of the documents and each chapter of the documents used as a reference are illustrated. Also, if the information is gained from public hearing such as a village meeting, where, when, and from whom the information is obtained need describing. Furthermore, if the information is collected in the field, what is confirmed and when and where it is confirmed need describing. "Timing of checking" is to describe when the actual conditions are assessed on the indicator. Conceivable timing of assessing the actual conditions on each indicator is tentatively illustrated in the checklist. Date and the name of a responsible person are to be entered in the checklist as well. In addition, corrections and additions to this checklist are to be made as appropriate in the course of conducting the assessment.

Appendix 10 PRAP Consultation

1st PRAP Draft Consultation

Agenda of the 1st Consultation Meeting on 1st Draft of the Provincial REDD+ Action Plan (PRAP)

Time/Date: 14:00 – 17:10 / April 5, 2013
Venue: Meeting Hall, Department of Agriculture and Rural Development

Purpose: First draft of the provincial REDD+ action plan (PRAP) has been prepared. However, the draft PRAP is expected to be improved to be a better guidance to implement REDD+ in Dien Bien and ultimately to be approved by the relevant authority. In order to do so, the meeting aims at receiving comments from the associated parties based on their knowledge and experience in Dien Bien Province, which can be incorporated into revision of the draft PRAP and preparation of the second draft.

How the meeting proceeds: the meeting will proceed in accordance with the order of topics arranged in the PRAP. For each topic, brief explanation will be provided by the JICA Project Team. Then, the floor will be open to the questions and comments.

Topics covered and points to be discussed:

Time	Topic	Details/points to be considered
13:30 – 14:00	Registration	Secretariat of the JICA Project Team
14:00 – 14:10	Opening Remark Introduction	Mr. Nguyen Dinh Ky, Deputy Director of DARD Mr. Hiroyuki Chiba, Dien Bien REDD+ Pilot Project
14:10 – 14:35	Overall structure of the PRAP	- Is overall structure of the draft PRAP appropriate in order to be approved as the official document? - If modification is necessary, which parts of the draft should be modified and how? - Are there any inappropriate words, phrases or sentences and how they should be changed to make them more appropriate? - Are there any inappropriate or unnecessary figures and/or charts as the contents of the PRAP and how they should be changed?
	I. Background	- Are there wrong information or statements? - Is there information to be added?
	II. Objectives and Scope of the Action Plan	- Is the goal setting practical? - Does the scope cover the all elements necessary for REDD implementation? - Is the phasing and elements covered in each phase appropriate?
14:35 – 15:00	I. Strategy of REDD+ Development in Dien Bien 1. Target of the Action Plan	This part is not described in the draft PRAP. Presentation on how to think about setting RELs/RLs, project scenario and target for the emission reduction will be provided.

15:00 – 15:15	2. Approach to REDD+ Implementation	Is the approach to REDD+ implementation appropriate?
15:15 – 15:40	3. Policies and Measures to be applied to REDD+ Implementation	- Are there any wrong descriptions or misunderstanding about the policies/programs provided in the draft PRAP? - Are there any policies/programs that are not described in the draft PRAP but necessary to be considered to implement REDD+ in Dien Bien? - Are the measures provided in the PRAP appropriate for REDD+ development in Dien Bien Province? - Are there different aspects to consider REDD+ measures for Dien Bien?
15:40 – 15:50	Break	
15:50 – 16:05	II. Arrangement of REDD+ Implementation 1. Development of Institutional Framework	- Is the idea on the parties to be involved in REDD+ implementation and roles of each party appropriate? - Are there any parties and/or their roles that are not described in the draft PRAP but necessary for REDD+ implementation? - Is there any deviation between what the draft PRAP describes on the roles of an organization and what the organization actually do at this moment? - Are there any responsibilities of an organization, which should be added to what are given in the draft PRAP?
16:05 – 16:20	2. Development of Financial Mechanism	- Is the idea on utilizing available fund sources appropriate? - Are there any potential financial sources not provided in the draft PRAP? - Is the idea on how the provincial REDD+ fund works appropriate? - Is the idea on flow of distributing REDD+ carbon benefit appropriate?
16:20 – 16:45	3. Establishment and Operation of Monitoring System	- Is the idea on provincial forest monitoring system appropriate taking into account practicability? - Is the idea on safeguard monitoring system appropriate taking into account practicability?
16:45 – 17:00	4. Capacity Building	- Is the capacity building plan expected to be effective to implementation of REDD+ - Are there other fields on which the capacity building should be provided?
17:00 – 17:10	Closing Remark	Dr. Pham Manh Cuong, Director of Vietnam REDD+ Office

Minutes of Meeting on 1st PRAP Draft Consultation

Venue: 3rd floor DARD meeting room
Time: 2-5 pm, 5th April 2013

Mr.Chiba (Project Chief Advisor)

Today's meeting aims at receiving comments for the first draft of the provincial REDD+ action plan (PRAP) from the associated parties to be incorporated into the revision of the draft PRAP and preparation of the second draft.

Mr.Ky (Project Director)

The Dien Bien REDD+ Pilot Project's overall objectives are to reflect findings and experiences gained through the pilot implementation of REDD+ in Dien Bien province in the National REDD+ Program (NRAP) and other related policies and to apply them in REDD+ implementation in other provinces.

The project's short-term objectives are to strengthen technical and institutional capacity in implementing REDD+ in Dien Bien province under the framework of the NRP by preparing the Provincial REDD+ Program (PRP).

The project has 4 outputs:

Output 1: Implementation plans for pilot areas developed

Output 2: A provincial Monitoring, Reporting and Verification (MRV) system developed

Output 3: A Benefit Distribution System (BDS) developed

Output 4: Lessons learnt shared; NRP and REDD+ implemented in other provinces

I agreed with the structure of PRAP.

Regarding the statement "The PRAP in Dien Bien province has two phases Phase 1 (2012-2015) and Phase (2016-2020), I wonder if Phase 1 from 2012-2015 is correct or if it should be from 2013 – 2015.

Regarding the statement "On the other hand, increase of forested lands in Dien Bien province is largely influenced by the implementation of forest regeneration under Program 661 and forest restoration by fallow of upland cultivation", it is not correct that forest restoration is done by fallow of upland cultivation.

Regarding the statement "Other causes of forest increase include afforestation under Program 661 (4.1%), development of rubber plantation (3.2%) and plantation under Program 327 (0.9%)", it is incorrect to take into account rubber plantation when it comes to calculating forest cover.

Regarding the statement "Dien Bien Province has received 48 billion VND in PFES", it is not correct, the figure is more than that.

Mr. Cuong (VNFOREST)

REDD+ has been one of the measures to implement the Prime Minister's Decision 57 on Forest Protection and Development Plan (FPDP) for the period 2011 – 2020, so it cannot be separated from FPDP. PRAP should follow Circular 05 on How to Make Forest Protection and Development Plans. The procedure should be like this: Objectives -> Activities -> Measures (including: 1) Institutional, 2) Scientific-Technological, 3) Resources (Human and Financial) and 4) International cooperation -> Arrangement for Implementation.

In "Policies and measures to be applied to REDD+ implementation in Dien Bien province", measures should be separated.

Regarding "Part IV: Arrangement for REDD+ Implementation", there should be a focal agency appointed by PPC.

Regarding the establishment of REDD+ funds, they will be set up at both central and provincial levels.

The reason why REDD+ funds are placed under Forest Protection and Development Funds is that the Government does not want too many funds in existence. Furthermore, REDD+ is a measure, among others, to implement FPDP. There is difference between FPD funds and REDD+ funds in that the former is 100% Vietnamese while the latter is mostly international. The government can control the former, not the latter. There will be painstaking preparation and test operation before the REDD+ funds start.

The concern is that a forest owner might receive payment from different sources such as 30a, PFES and REDD+ while his fellows who also protect forest in other areas cannot get that much.

Dien Bien is one of the first 8 provinces to implement REDD+, together with Lao Cai, Bac Can, Ha Tinh, Quang Binh, Binh Thuan, Lam Dong and Ca Mau. However, the Government has recently been able to get around 150 million USD committed to REDD+ implementation. Therefore, the list of pilot provinces might extend.

Mr. Hiep (Vice Chairman of Muong Ang DPC):

There should be a part on legal basis for preparing PRAP.

Clear tasks should be set for Period 2012 – 2015 and Period 2013 and based on which, there should be specific measures to fulfill them. There is mentioning of involved agencies but no focal agency or no agency assuming prime responsibility for REDD+ implementation or no agency assisting the decision-making authority.

In the institutional framework part, there is mentioning of District REDD+ Program Management Unit (DRPMU) but no mentioning of its tasks.

Mr. Cuong (VNFOREST)

The targets must be clear for each Phase. For example, what are the targets of forest cover for the province or districts or how many tons of C02 equipment to be reduced in each of the phases and how much REDD+ can contribute to the national implementation of FPDP through what measures or activities.

Regarding the arrangement for REDD+ implementation, the provincial REDD+ Steering Committee can be integrated into the provincial FPDP Steering Committee if there is the latter. There is no need to set up the steering committee for REDD+ if there is no money to feed it.

The development of financial mechanism should be considered a measure to implement REDD+ and because the REDD+ finance is unknown and decided by donors. In the PRAP, it should be written that PPC shall assign an agency to decide on a BDS because after 2 years of studying BDS, we have found that we cannot know how much we will get from international donors and apply the national law to them. This part should be attached to the PRAP as an appendix only.

Regarding REDD+ measures, the PRAP needs to first identify the targets and financial sources, based on which activities are developed. Also, what are the benefits brought about by the activities, be it social, security or political. This is the same as the way to develop the commune plan.

The risk of leakage to other communes nearby or even to villages within a commune should also be taken into consideration.

It is confirmed that FPDP 2012 – 2020 must be the basis, on which the project should identify how

much money is needed and what additional targets should be set.

Mr. Ky

REDD+ must be mainstreamed into the provincial plan. Otherwise, it is difficult to implement. All districts have been implementing their 2012-2020 FPDPs with provincial budget and PFES. We are embarking on forest and forestland allocation.

It is necessary to set the clear target of how many tons of CO2 to be reduced or sequestrated, in where from when to when, with how much money needed. Then, PRAP should identify how much area needs protecting or afforesting.

Among the measures of implementing institutions, technology, human resources and money, human resources are now below expectation, at even provincial level, not to mention commune level, to implement until 2020. Therefore, it is necessary to make use of PFES human power for REDD+.

Mr. Long (Deputy Director of Department of Finance)

Under Prime Minister Decision 57, the national forest cover is targeted at 45%.

In Dien Bien, the forested area is 362,000 ha, including 45,000 ha already allocated to Muong Nhe Nature Reserve, with 317,000 ha being planned to be allocated to individuals and organizations as forest owners. Plus 285,000 ha of agricultural production, the agricultural land total is 647,000 ha, which the forested area accounts for 55.9%. However, "it is estimated that 89% of deforestation between 2000-2010 was caused by expansion of upland cultivation". I wonder if this statement is true.

The question now is how to protect the existing 362,000 ha of forest. I agree with the PRAP measures.

It takes 4 years from now to 2017 to complete forestland allocation and grant of land use right certificates, costing 67 billion VND totally.

Recently, during a working visit to Dien Bien province, the Minister of Agriculture and Rural Development has agreed to use 10% of the FPDF funds to allocate forest and forestland.

Department of Natural Resources and Environment (DONRE) estimates that for 317,000 ha to be allocated, it is necessary to issue 31,700 land-use right certificates, averaging 10 ha for a forest owner. The cost of making a certificate is 500,000 VND.

The project's support for people in the project areas should not different from people protecting forest in other areas.

Mr. Ky

I request the project to support forestland allocation and grant of land use right certificates for Muong Phang and Muong Muon. With the cost of 200,000 VND per ha, it takes 2 billion VND to allocate 10,000 ha in these two communes. Only when forest owners are identified will REDD+ be implemented.

PRAP does not mention the support of 100,000 VND/ha allocated into commune budget for protection of forested area managed by Commune People's Committee (CPC) under Prime Minister Decision 07 of February 2012. DARD requests that from this year, Department of Finance disburses this money for CPCs.

FPDP was developed at a time when the national economy was robust and then, the disbursement for forest protection and development for the province every year was estimated at 40 billion VND. Now the money has reduced to just 6 – 10 billion VND. However, we have obtained PFES money, which amounts to 100 billion VND, but PFES money cannot be used for areas uncovered by PFES.

REDD+ should focus on areas uncovered by PFES to make its activities more meaningful.

Mr. Cuong

As the vice director of finance has said the province is short of money to fund forestland allocation, the REDD+ project should make a rough estimate for the funding of this effort.

Regarding financial sources, PFES should not be considered private funding. It is off-budget (off-State budget) or additional budget.

The project needs to estimate the total amount the province needs for forest protection and development, of which how much Japan can provide, so that the policy makers will know what they have to do to encourage funding from partners other than Japan.

Mr. Phan Hien (Vice Director of DONRE)

The REDD+ project has the same objectives as the provincial FPDP, which are to protect and develop forest. We are facing the problem of lacking money. We hope that keeping forest can generate REDD+ credit to offset our initial investment. It is best if someone places an order with us to protect some area for credit and advance us some initial money. Then, we will have money to combine with other projects and programs to protect forests. I would like to make it clear on this point with the project.

Mr. Cuong

There exists no credit market yet. For REDD+ implementation, it will go through different phases, from preparation to experimentation and then implementation. About the REDD+ money, there are now 3 channels:

Multilateral: Carbon Partnership Fund (World Bank), UN-REDD Program, REDD+ Partnership and Green Carbon Fund (GCF)

Bilateral: Japan

and Private

We are making a proposal on an REDD+ credit payment project and expect to submit it to USAID in the coming September. The idea is as follows:

It is assumed that the project's life is from 2004 to 2009. Every three years, there is an evaluation and a progress report is made every year. The two sides agree on the activities and how much money needed, including how much in advance. By 2006, there will be an evaluation of how many tons of CO2 sequestrated or reduced as committed. This kind of cooperation is highly secure because it is assured at government level.

Ms. Ha (Dien Bien Province's Forest Protection and Development Fund – DB.PFPDF)

The province has received 100 billion VND, not 48 billion VND in PFES, from Son La and Hoa Binh hydropower plants, not only Son La, for 2011 and 2012.

According to MARD Decision 3003, the PFES area of these plants in Dien Bien province is 242,000 ha, not 240,000 ha or 235,000 ha as written in PRAP.

Mr. Chiba

All comments are welcomed and sent to phamquangvinh2006@gmail.com on 19th April, 2013 at the latest.

Mr. Ky (conclusion)

REDD+ is part of FPDP. Without REDD+, we still have to implement FPDP.

PRAP needs revising in accordance with the provincial FPDP in terms of structure. Targets must be set clear. Legal basis for PRAP preparation must be included. Financial sources need clear

identification. Tasks must be set out. REDD+ measures shall include financial one. Responsibilities of implementing agencies must be elaborated.

End

<2nd PRAP Draft Consultation>

Agenda for the 2nd Consultation Meeting on 2nd Draft of the Provincial REDD+ Action Plan (PRAP)

Time/Date: 13:30 – 17:00 / August 15, 2013

Venue: Meeting Hall, Muong Thanh Hotel, Dien Bien Phu

Purpose: The first draft of the provincial REDD+ action plan (PRAP) has been revised taking into account the comments given during the 1st PRAP consultation meeting and subsequent internal meetings among the working group and with VNFOREST. The PRAP will become a strategic guidance for Dien Bien Province to develop REDD+ implementation after it is officially approved in the province. In this regard, the meeting aims at presenting the second draft of the PRAP; all the participants are encouraged to provide comments so that the 2nd draft of the PRAP will be further refined and improved as the final draft of the PRAP.

Agenda of the Meeting:

Time	Contents	Presenter
13:30 – 14:00	Registration	Secretariat of the Dien Bien REDD+ Pilot Project
14:00 – 14:10	Opening Remark Introduction	Mr. Nguyen Dinh Ky (Deputy Director of Dien Bien DARD) Mr. Hiroyuki Chiba (Chief Advisor of Dien Bien REDD+ Pilot Project)
14:10 – 14:40	Presentation on the 2nd draft of the PRAP - Outlines (structure) of the PRAP - Summary of each section - Change from the 1st draft - Comparison of the comments given by different parties	Mr. Hiroyuki Chiba (Chief Advisor of Dien Bien REDD+ Pilot Project)
14:40 – 15:40	Q&A and discussion - Outlines (structure) - PART I Legal Basis - PART II Assessment of forest protection and development in Period 2006 - 2012 - PART III REDD+ Action Plan	Plenary
15:40 – 15:50	Break	
15:50 – 16:50	Q&A and discussion (continuation) - PART III REDD+ Action Plan (continuation) - PART IV Funding for implementation - PART V Arrangement for implementation - PART VI Conclusion and recommendation	Plenary
16:50 – 17:00	Closing Remark	Mr. Nguyen Dinh Ky (Deputy Director of Dien Bien DARD)

Minutes of Meeting on the 2nd PRAP Draft Consultation

Mr. Pham Duc Hien, Director of DARD:

Basically, I agree on the contents of 2nd PRAP Draft. However, there are some presumptions that are not correct, say (Page 7 – Subjective causes):

+ "There is no policy on forest use". In fact, there is Guideline 35 on this even though it might not proper to implement in practice.

+ The same is with the saying that "the forest owners as PFMB and SUFMB have not received investment for management and protection of allocated forest. " Saying "none" is wrong. It should be revised that there is policy about this but it has not been realized in a full and synchronized manner in reality.

+ It is not the main reason "Forest Protection Service is thinly spread and has no clearly defined legal status" that forest is deforested but the main reason must be the non-identification of forest owners. Actually where forest is well protected by community, forest rangers are not needed, vice versa, as long as a forest is of no one, how many rangers dispatched cannot do anything to protect it.

Because of limited time for discussion, today's discussion should focus on the things that seem to be difficult to work out or that remains uncertain, needing further discussion to figure it out. For instance, it is not that funding is provided to SUFMB but SUFMB acts only as the distributor of money to villagers, allowed to retain a little sum for itself. About the use of forest in SUF, technically, an SUF cannot be impacted at all. What can be done is to develop livelihoods for villagers, afforest in the buffer zone and pay villagers to protect forest. The main solution must be improved livelihoods. Management boards or rangers even coming in force cannot help to reduce deforestation if nearby villagers do not have a decent living.

Mr. Nguyen Dinh Ky, Vice Director of DARD:

Forest management boards (FMBs) are state salary earners; 10% is the maximum they can get off the payment to villagers. What can be the basic unit of implementation? Whereas it is the commune, what about special use forest covering several communes? And as to DPCs, what is the role they play and responsibility they assume? Or do they just have the function of aggregation? Let Mr. Chiba explain this.

Regarding monitoring, the statistical survey mentioned by VRO is different from the annual monitoring system which is needed for REDD+ implementation. Let's hear rangers say whether they are capable of monitoring or not up to now or more training is needed.

Regarding mapping, is it feasible to acquire satellite imagery on annual basis? If it takes billions of VND annually to purchase satellite imagery just for one commune, then it is not feasible financially. It is best to take advantage of available satellite imagery for comparison year on year. This question is put to Mr. Bui Minh Hai from DONRE.

Mr. Bui Minh Hai, Vice Director of DONRE:

I agree to what Mr. Hien has commented. The plan makers should refer to Provincial Party's Resolution 07 and PPC Decision 583, which define solutions and orientations for agriculture and forestry development in the province.

On Page 17 about institutional arrangement, the Climate Change Steering Committee will assist DPCs and CPCs in making commune REDD+ action plans (CRAPs). To do so, there should be formats as guidance for them to base on.

On Page 18, at district level (4) and commune level (4), DPC and CPC do the same thing of making CRAPs. My suggestion is that there is also DRAP at district level and DPC should have the functions of assisting, appraising and approving CRAPs submitted by CPCs. PPCs shall approve DRAPs and DPCs do CRAPs.

At CPC level, at (3) it is said that CPC has the function of solving problems arising at villages. It should be re-written like this: CPC will solve the problems arising at villages within their capacity and suggest solutions to DPC for those problems beyond their capacity. The same should be applied to DPC.

Page 39 is about the responsibility of DONRE, which, in my view, cannot assume the role of leading as suggested in the first hyphen.

Regarding satellite images mentioned about by Mr. Ky, it could be expensive to purchase annually updated satellite imagery. I will report this to the DONRE management and we'll discuss on whether to ask MONRE to consider sorting this out.

Mr. Chiba:

Using fine satellite images is the idea that PRAP proposes for PFMS. Why don't we utilize the 5-year NFI imagery?

Another thing I still wonder is how to handle conflicts or disputes. The 2nd draft mentions about what agencies do what but does not touch upon the connection between agencies, e.g., those under the same Climate Change Steering Committee. I want to improve this in the draft.

Mr. Egashira:

This is the first PRAP for Vietnam. It should be good, understandable and easy to use – this itself represents a challenge. Other provinces are waiting for Dien Bien's experience. We should not worry too much about making mistakes, instead, we should be more active in clearing out any confusion. The project is expected to end in September 2013 but JICA will proceed till 2015. Thus, there is no need to rush to meet the deadline. The following is my comments to the draft:

1. About the structure, I found that solutions do not correspond to tasks. The project should review and make sure that all solutions are reflected in the tasks.
2. Lots of data on carbon stocks of districts acquired by the project could be useful as background information. The project should use maps to illustrate these data with analysis.
3. I have a question whether there is FPDP at provincial level. If yes, it should be harmonized with PRAP.
4. Capacity building is a key task and should be detailed and comprehensive. The question is how much of capacity building provided by the project should be put into PRAP. The project needs to access the results of capacity training up to now so that SUSFORM-NOW can succeed therefrom.
5. PFES as one of the solutions is not fully described in the draft, so more detail is needed.
6. Is it possible to merge the formulation of village rule and village plan into one to make it simpler as described in Page 28?
7. Page 24 shows the recommendations up to 2015, why not for the period 2015 – 2020?

Mr. Ky:

Mr. Egashira is the first to have introduced the idea of REDD+ implementation in Dien Bien

province and has granted much support to the project. My question is if the project is feasible and if there is anything that needs revision in the draft. Therefore, I would like Ms. Le Thi Thao (DPI's Division of Agriculture) to give comments to the relationship between PFES and REDD+, forest rangers to give comments to Monitoring and Evaluation and DPC to comment on their role in REDD+ implementation.

Mr. Lo Van Hoa, Vice Director of Sub-FPD:

On Page 3, Decision 245/1998/QD-TTg is outdated and should be replaced with Decision 07/QD-TT/2012 and Decree 23 implementing Law on Forest Protection and Development.

The table of areas subject to review and finalization of forest and land allocation at district level contains obsolete data of 2011. The forested area is now 376,000 ha instead of 317,000 ha. There are now 10 administrative units of district level, so Nam Po is missing in the table.

About monitoring by forest rangers, there has been a series of courses but no review has ever been made. It is still unsure to claim at this moment that machines can substitute manuality. Installation is going on at district-FPDs and it is uncertain if we can start monitoring mechanically from 2014 on or not? I would like to hear opinions from district-FPDs.

Mr. Tran Xuan Thang, Director of Centre for Agriculture and Forestry Planning and Designing:

- Decisions 76 and 262 should be added.
- Why the total provincial land area is just 950,000 ha? It should be 956,290 ha.
- Page 27 (support to private-sector businesses) says that private enterprises licensed can participate in village consultations and contribute financially to the Village Forest Management Plan. How can they do it? So far, private companies' interest is restricted to planting for woodwork material. Their engagement in the use of forest eco-services for business was never spotted.
- How to integrate REDD+, forest and forestland allocation and PFES technically and financially?

Ms. Nguyen Thi Duyen, Vice Director of Dien Bien Division of Agriculture and Rural Development:

Page 25 says about compensation to villagers with man-made forest inside SUF. This is difficult to realize. It is necessary to identify where the strictly protected area is, where the protection area is or where the production area is. Recently, our DPC visited 4 Hmong villages in Muong Phang to find just 1 ha for pilot planting but we failed. The area chosen is all shifting cultivation land and villagers refused to plant trees on it for fear that their area with planted trees could be claimed for the planned SUF.

On Page 25, about the tasks of Village Forest Protection and Development Board, it is not practical for the village board to develop a base map for Village Forest Management Plan. In this case, let forest rangers support the board in developing such a map.

In Part V on REDD+ implementation arrangements, the duties of DPCs should be defined as instructing, coordinating and planning.

Mr. Ky:

Annually, there is 40 billion VND for FPDP, 100 billion VND worth of PFES, mainly for Da river catchment area. Under Plan 388, 60% of the forested area will have been identified with forest

owners by the end of 2013, which will be the basis for PFES as well as REDD+ implementation. At the same time, a system of Funds will be set up down to village level.

Mr. Hien, DARD Director:

-Let us agree to each other the following:

+ PPC will instruct agencies to implement REDD+.

+ DARD will be the lead agency in implementing REDD+.

+ An REDD+ office will be set up (MARD intends to group all types of funds into one). We have no idea when MARD will do so, now just go ahead with the setting up until further development from MARD regarding this.

Administratively, there are 3 levels (province, district and commune) but in terms of forest management, there are 4 levels (province, district, commune and village). Village rules on forest management are the ultimate customary law specifically designed for the village on forest management. There are some examples of villages successful in forest protection using their own village rules that I would like to invite experts to come and see in your own eyes. I would like the project to help develop the good models of forest protection using village rules. If forest is well kept by village rules, there is no need for rangers. Rangers should be stationed only at the places where village rules do not work.

In terms of mapping, I don't think it is necessary to acquire costly satellite imagery for the sake of high precision. No need to be highly precise, just a base map is enough. Earlier, we hired consultants (CIFIC) to review the forest status and identify the forest cover in the province. That project cost just 1.8 billion VND and when the outputs were put to professionals for comments, they all agreed. We can use the map, which is 1-2 years old with no problem. Now that Vietnam has launched its own satellite, we will ask that satellite images be shared by MARD and MONRE.

Forest and forestland allocation is critical. Now, the electricity bills have increased on the incorporation of PFES in the price, it is urgent to pay PFES that has been collected from electricity users to pay forest service providers.

In terms of fund raising, it is agreed that the difficult situation is faced by all countries in the world. Negotiations are stalled at international forums because richer countries are reluctant to pay. Despite that, we need to develop convincing strategies of fund raising.

In terms of capacity building, the recent years have seen a series of training provided to the sector's staff. Does the REDD+ project still have money to spend? If yes, try to use it up for training immediately to strive for the target that somehow everyone (of the sector) whenever with a computer can read the satellite images and operate GIS to their like.

In terms of data accuracy, I affirm that Sub-DOF is the sole agency responsible for any piece of data published.

Mr. Dinh Xuan Tien, Muong Cha DPC Vice Chairman:

I am in total agreement with the draft. Here is something to add: PMU does not include members from Muong Cha district. Nam Po district has been set up but data have not been separated for Muong Cha and Nam Po.

Mr. Tran Xuan Tam, Director of Muong Nhe Nature Reserve:

The Muong Nhe Nature Reserve covers more than 45,000 ha sitting on 5 communes. However, it is overlapping in terms of administration. The district forest management plan covers also the area of the MNNR. On the other hand, the NR's forests lie in the administrative territory of communes. The

NR is a wage earner on the state payroll with the task of forest protection and the beneficiaries will be villagers contracted to protect forest. There is a policy of providing each adjacent village in the buffer zone with the support of 40 million VND a year but there are up 10 communes in the buffer zone. Villages tend to be locked in the dispute about which village should get this funding. So, when it comes to BDS, be it for PFES or REDD+ or whatever, it is always a hard nut to crack.

About compensation for man-made forests inside SUF, actually, the Lion's share of man-made forests was formed under the previous programs of 327 and 661, which means that they were formed on State funding, hence no need to compensate as legally regulated.

An SUF consists of 3 sub-zones: the strictly protected sub-zone, ecological sub-zone and administrative sub-zone. Harvest is allowed only in the ecological sub-zone for the purpose of scientific research. MNSUFMB does not manage the buffer zone but is implementing several livelihood development projects there.

Page 24 mentions the improvement of SUF management, which is the matter governed by law.

Mr. Tran Xuan Quang, Director of Muong Cha district-FPD:

Muong Cha district-FPD has benefited from some training courses on GPS, GIS and remote sensing. However, the number of GPS available is so small. There are 4 PCs but they all have low configuration, making it impossible to run GIS.

Muong Muon commune has about 5,000 ha of forest, focused mainly in the 4 Hmong communes of Huoi Nha, Pu Cha, Huoi Meo and Huoi Ket Tinh. Muong Cha Protection Forest Management Board (MCPFMB) has made some forest in this commune.

My suggestion is that much thought should be given to the balance between agricultural production land and the land designed for forest protection.

Mr. Tran Xuan Thai, Director of MCPFMB:

I have participated in several of the project's events and my wish is for the project to get started in the field soon. What matters now is the demarcation of protection and production forests. Disputes between communes and even between districts have already become heated. MCPFMB was set up under PPC decision but has no land.

Page 5 says about the challenges faced by PFMBs, which highlights the existing problem of unclear boundary of land allocated under Decree 163. If forest and forestland is not granted with clear boundary, it will be difficult to implement either REDD+ or PFES or both.

Page 25 (9) only mentions SUFMB as the provider of benefits to villagers but PFMBs are missing. To complete, both SUFMBs and PFMBs should be mentioned here.

Mr. Chiba:

By the way, there will be another training workshop on FMS scheduled for September 9. /.

<3rd PRAP Draft Consultation>

Agenda for 3rd Consultation Meeting on 3rd Draft of the Provincial REDD+ Action Plan

Time/Date: 13:30 - 17:00 / September 18, 2013

Venue: 2nd floor meeting room, Muong Thanh Dien Bien Phu Hotel, Dien Bien Phu

Purpose: The second draft of the provincial REDD+ action plan (PRAP) has been revised taking into account the comments given during the 2nd PRAP consultation meeting. The PRAP will become a strategic guidance for Dien Bien Province to develop REDD+ implementation after it is officially approved in the province. In this regard, the meeting aims at presenting the 3rd draft of the PRAP and clarifying the specific points of the 3rd draft that need improving to become the final draft.

Participants: PPC, DARD, Sub-DoF, Sub-FPD, DONRE, DPI, DF, FPDF, PFMB of Dien Bien, Muong Cha, Tuan Giao, SUFMB of Muong Nhe and Muong Phang, DPC/District DARD/District FPD of Dien Bien and Muong Cha, CPC of Muong Phang and Muong Muon

Topics covered and points to be discussed:

Time	Contents	Presenter
13:00 – 13:30	Registration	Secretariat of the Dien Bien REDD+ Pilot Project
13:30 - 13:35	Opening Remark	Mr. Nguyen Dinh Ky (Deputy Director of Dien Bien DARD)
14:35 - 13:40	Introduction	Mr. Hiroyuki Chiba (Chief Advisor of Dien Bien REDD+ Pilot Project)
13:40 – 14:00	Review of the discussion on the PRAP draft held on September 17 in Hanoi.	Mr. Hiroyuki Chiba (Chief Advisor of Dien Bien REDD+ Pilot Project)
14:00 – 14:15	Overall Structure of PRAP -Logical frame of the PRAP	Working Group for Dien Bien REDD+ Pilot Project
14:15 -14:40	Q & A, discussion	Plenary
14:40 -14:55	Policy and Institutional Arrangement and Capacity building	Working Group for Dien Bien REDD+ Pilot Project
14:55 -15:20	Q & A, discussion	Plenary
15:20- 15:35	Break	
15:35 -15:50	Provincial Forest Monitoring System	Working Group for Dien Bien REDD+ Pilot Project
15:50 -16:15	Q & A, discussion	Plenary
16:15 -16:30	Financial Arrangement	Working Group for Dien Bien REDD+ Pilot Project
16:30 -16:55	Q & A, discussion	Plenary

16:55 -17:00	Conclusion and Closing Remark	Mr. Nguyen Dinh Ky (Deputy Director of Dien Bien DARD)

Dien Bien REDD+ Pilot Project
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Minutes of Meetings on 3rd PRAP Draft Consultation

Dien Bien REDD+ Pilot Project
3rd draft of PRAP Consultation meeting
Date/time: September 18, 2013 (from 01:30 PM to 05:00 PM).
Venue: Muong Thanh Dien Bien Hotel
Contents:

1. Opening remark by Mr. Nguyen Dinh Ky: Today's consultation meeting is for discussion and comment on the 3rd draft of PRAP, revised by the Dien Bien REDD+ Pilot Project taking into account of the comments given from 2nd PRAP meeting. Duration of this meeting is within this afternoon only, so please try to study this draft of PRAP and giving out your comments. If you need more time to study, you can send us your comment later, but tomorrow is at the latest so that we can report to tomorrow's final JCC meeting.
2. Presentation on results of stocktaking meeting in Hanoi (Sept. 17) by Mr. Chiba. (See attached file).
3. Presentation on 3rd draft of PRAP by Mr. Phuong of Sub-DoF.
4. Q&A, discussions.

Discussion notes:

1) Mr. Ky: For PFES, I think that PFES is also a tool to implement FPDP, so FPES Fund should be set outside of the frame (in slide 20) which involve REDD+ Fund, FPDP Fund and PFES Fund.
2) Mr. Egashira: The chart in slide 9, for institutional framework, is very complicated. There are so many direction channels and reporting channels which may make confusing. If it is exactly as in the administration system in the province, it is okay but if you see any unclear part in this chart, you may consider pointing those out. And my idea is that once you start implementations, you will face real issues and you may need to revise this chart. You should keep a room for modify this chart once you start your implementation, even this flow chart is fine at this moment. My second comment, not major issue, is to demarcate the targets of capacity building in forest monitoring (slide 11), between government officers at district and commune levels and the villagers, as required skills on forest monitoring are different between government officers and villagers.
3) Ms. Thuy (JICA): I have a minor comment, as this is a consultation meeting, so all of your comments will be needed and welcomed. There is a small mistake that Mr. Chiba presented the comments of the VNFOREST from yesterday's meeting in Hanoi. The ideas and comments of the VNFOREST may not be absolutely correct, may not be corresponding with the real conditions of the province. The participants may be feeling difficult in giving out their comments after Mr. Chiba's presentation. Therefore, I suggest that, because this PRAP will be approved by the PPC, and it will be implemented after approval. And the implementations will be conducted by you, the Dien Bien province, but not the VNFOREST. Therefore, you must study this PRAP, to understand whether it is feasible or not, able to be implemented or not, as after approval by PPC, all of you

here will be in charged to implement this PRAP. If the PRAP fails, it is not the false of the VNFOREST or the PPC, but it is yours. That's why you must point out which is the gaps, or very difficult to understand, or need more explanations, etc… so the PRAP is clear and deeply understood by you. So, please give out your comments.

4) Mr. Ky: I strongly request all of you to give out your comments, independently with the comments of the others. For example, when REDD+ activities are implemented in your area, how about the feasibility of successful, how to conduct forest monitoring, REDD+ is something like contracting on forest protection or something like others? If we do forest protection like we have been doing so far, is it suitable for REDD+ or in other words, how to implement REDD+? I agreed with Mr. Egashira that this flowchart of institutional arrangement is too complicated, this flowchart is just for study only, but when we implement on the practice, just show each level, from district to village, a focal point, it is enough. The lower level is responsible to report to higher level, and the higher level is responsible for directing, guiding, verifying and checking the implementations of lower level. Everyone here understands like that. It is no necessary to make it worse. Regarding the capacity building plan, it is also too detail, that may not necessary. FPD staffs or forest rangers in REDD+ implementation mostly the same, so just say about the target: government staffs and villagers or, it may be better, that we say: relevant stakeholders, that's enough. Please, all participants here from provincial, district and commune levels, should give out your comments or idea, as the latter, all of you will be responsible to conduct REDD+ implementation in your work area. If you are not clear, or not understanding on any or all parts of the PRAP, please raise your questions, or giving out your idea to make changes of this PRAP. All of your comments and ideas will be referred and considered to be put into the changes of revising of PRAP, so that the PRAP will meet the requirements.
5) Mr. Nguyen Viet Cuong (Muong Phang SUFMB): I agree with the contents that Mr. Phuong presented, and also with the comments of Mr. Ky. I have another comment that in the capacity building plan, we must specify who will be the trainers and who will be the trainees. In this plan, the trainees are down to the commune level only, but not villagers or forest owners. So, my idea is to put the targets to be trained including forest owners (communities or organizations or households, villagers) who will be responsible for forest protection and development. Regarding the institutional framework, I also agreed with Mr. Ky that it is too complicated. At provincial level, we just need to say "relevant provincial departments", same for district level, but we do not need to specify which department, and its name as it make more difficult to be understood.
6) Mr. Thai (Muong Cha PFMB): The institutional is very detailed, from provincial level to village level. Its structure is logically and scientifically. In general, I totally agreed with idea of the project in development of this PRAP in general and this institutional framework in particular.
7) Mr. Hai (Dien Bien PFMB): We are implementing the FPDP. When we have a look at the institutional framework, we do not see any place for Dien Bien PFMB, that's why we think that we are excluded. We are cooperating with the commune for implementation of FPDP as a role of a

very large forest owner, but in this institutional framework, the PFMB is not involved. So far, as my understanding, an organization of Commanding Unit at commune level is not existed.

8) Mr. Cuong (Sub-FPD, member of PMU of REDD+PP): Basically, I agreed with the PRAP, however, I have some further comments, as we are going deeply in this PRAP for discussion, especially on the institutional framework for REDD+ implementation. I agreed with comment from the expert (Mr. Egashira) that this flowchart is so complicated, so that we are analyzing it. First of all, for the Provincial Commanding Unit for Emergency Matters, as we discussed in several previous meeting, that the name of this unit must be changed to "Provincial Commanding Unit for implementation of FPDP of Dien Bien province", but keep in touch at district and commune level. This provincial Commanding Unit involves all relevant provincial departments and sectors, such as DARD, DONRE, DF, DPI, … so that we can put off several boxes in the flowchart. It is same as at district level and commune level, the Unit involves relevant divisions at district and commune levels, so that we can put off several boxes at district and commune levels. The PFMB and SUFMB is belonging to the unit (of district level) so they are certainly involved in the system. We should not draw such details, to make it complicated.
9) Mr. Ky: I would like to say with JICA participants that, it is very difficult for Dien Bien counterparts to understand all the contents of the PRAP after one or two (consultation) meetings. Some of the participants in this today meeting have been participating 2 – 3 meetings, while this is the first meeting for some the others. So, they cannot give out many comments as expected. So, this kind of meeting may be just for more understanding on REDD+ for them, and they need more time to study and give out their comments, because this is very new and challenged scheme of REDD+ for us. To feedback to the comment of Mr. Hai (Dien Bien PFMB), I explain that, you must firstly know what REDD+ is, then your question of where you are in this REDD+ institutional framework will be answered. REDD+, the name itself, is reducing emissions from deforestation and forest degradation, sustainable forest management and enhance forest carbon stock, so every activity that contribute to protection and development of forest will be considered as REDD+ activity. And, I am asking all participants here in this meeting to comment on how the feasibility of this PRAP, and how to implement it. If someone does not understand (such as Mr. Hai), then you can raise your questions so that we can have opportunity to explain.
10) Mr. Chiba: I would like to explain that, in 3rd draft of the PRAP, the safeguard is considered as the matter to be monitored. As I explained previously in today meeting, we have to reconsider how safeguard monitoring system to be developed. Is the safeguard to be monitored in safeguard information system or the system to show that safeguard items provided in the UNFCCC documents are addressed and supported. But, problem is, COP document does not describe how to prove that safeguards are addressed and supported. So it is difficult to elaborate the safeguard information system, and this matter will be examined by project team and will be clarified as soon as possible.

11) Mr. Ky: Please give out your comments on the forest monitoring system. Currently, the DARD assigns to Sub-FPD for monitor the forest changes, then Sub-FPD assigns to district FPD to monitor the forest changes. Every year, district FPD reports to Sub-FPD, and Sub-FPD synthetizes data and reports to DARD for publication of the annually forest change data. The disadvantage of current system is that, it monitors the area only, and cannot monitor the maps, because the forest rangers they are not very well in using maps and not enough power to measure on the field. So the data is not yet accurate, not updated with the changes on the field to the maps. Data on the area and the maps is different. Now the Project want to improve the current system, changing the way of monitoring, by upgrading the capacity for the manpower to conduct the field survey, to update information of changes in annual basis. The way we do (monitoring) is something like I have just said, but the flowchart is very complicated, not easy to understand, so we need to reconsider this flowchart. If we propose some other ways, such ways must follow this direction, starting from the commune level, and the direct in-charge personnel is the forest rangers. Forest rangers collect information, verify it and report to the district FPD, the district FPD verify such data and report to the province. Then Sub-FPD and Sub-DOF have a meeting together to gain the agreement on the data, because Sub-DOF needs to monitor some projects on forest development and some afforestation enterprises. The data, after verification by DARD, will be published. This is the procedure and the way of forest monitoring. In order to improve the current system, first thing we must do is upgrading the capacity of the manpower in relevant organizations, so that they can know how and what to do in appropriate manner, and also we need a system which can process the data we collected. For me, this matter should be discussed more and more.
12) Mr. Quang (Muong Cha district FPD): Basically I agreed with content of the PRAP, especially with forest monitoring system. FPD is a core force in forest protection and management, to assist the government at certain level in protecting and developing the forests. But, FPD is not the only power in forest protection and development, it is the responsibility of a system, involving all sections and organizations, of which villagers are the main target. If we do well the PFES, then only the villagers can be benefitted and only them know how the forest changes, as well as only them know how to protect the forest. If forest rangers do not receive supports or collaborations from the villagers, they cannot update changes. So, village level is the most important in this system of forest protection and development. Regarding to maintain the existing forest, as I suggested and commented in previous meetings, that in order to protect forests by villagers, the first thing we should do is finding a way to on-site stable the food for local people. If local people are poverty, then the result will be zero after we try our best to protect forests or to develop forest. The other important aspect is that, the PRAP should find a way to consume the plantation products when harvesting, to contribute to stabilization of livelihood of villagers, so that the forest will be protected. For the forest monitoring system, at district level, it is necessary that higher technology equipment should be provided to the district FPD (such as strong PC, GPS, camera, satellite image,

GIS,…), along with capacity building, so that we can update the latest information of forest changes.

13) Mr. Cuong (Muong Phang SUFMB): Comment on overview of forest monitoring system. Is it the commanding units in slide 9 and in slide 13 same together, or different? If different, do we need two units? For forest monitoring, the most important level is forest owners, who provide information to the forest rangers, then the forest rangers report to the higher level. But, I afraid that something like in 661, as forest rangers did not grasp the changes (increased by forest formed from plantation). This chart is very good, but very difficult to imagine.
14) Mr. Ky: I would like to remind that, this forest monitoring system is not only for REDD+ but also for FPDP and PFES of the province. And, for the commanding units, it is the same one in two slides (9 and 13). However, it is complicated and so, I suggest to put off some ellipses which show commanding units. It is not necessary, even it makes worse to understand. Regarding the forest owners, I agreed with Mr. Cuong that they are very important, so that the lowest level in this system should be forest owners, then villages (forest owners also). For the participants who cannot give out your comments and need more time to study this PRAP then comment, you can send your comments to the team on tomorrow at the latest.
15) Mr. Van (Vice director of provincial FPDF): The flow of fund and carbon credit. It is relatively corresponding to the current system of FPES and FPDP. I agree with it.
16) Mr. Ky: “Villagers” should be changed to “forest owners” as the beneficiary is forest owners, which may be villager or group of households or organizations.
17) Mr. Egashira: There is a lot of argument at central level as well as international level, that how to distribute REDD+ benefit. There is no fixed regulation on this matter, and it depends on the central and local governments ideas, as the international community agreed to respect the national circumstances on how to use the money from REDD+ benefit. Also, there is a lot of arguments on how PFES is implemented and in some other provinces, they are applying the group approach to manage the fund, and I also understand that Dien Bien province agrees to promote the group approach, as groups (including community or villages) can be more effective management in compare with individuals. As for transaction cost, for group approach, you can save more transaction cost, as well as reducing the cost of managing and disbursement of fund. If Dien Bien thinks that this is principle and concepts, then it will give a seed for discussion and provincial level and national level. Please be confident with the approach you are applying.
18) Mr. Ky. For Dien Bien, we have tried all approach, individuals and groups and organization. For unallocated area, we are focusing on reallocate to the village (community) and the area which being used by individual, we will keep in touch. So, in conclusion, we still use multi-target approach, including individuals, communities, organizations,…
19) Mr. Chiba: We will collect more data and will make change in the financial arrangement of financial sources. If PRAP is difficult to understand and you need more time, then we will give you time for study and we set time for final comments to be sent on next Friday afternoon to our

team. If you have comment, I like you to send it to working group members, by email or direct way.

Appendix 11 Donor Consultation

Agenda of the Donor Consultation Meeting on 4th draft of the PRAP for Dien Bien Province

Date: October 25, 2013
Time: 13:30 – 17:00
Venue: JICA Vietnam Office Meeting Room, 16th Floor, Daeha Business Center, 360 Kim Ma, Hanoi
Prospective participants: UN-REDD/FAO, GIZ, SNV, VRO, Dien Bien DARD, JICA, SUSFORM-NOW, Dien Bien REDD+ Pilot Project
Purpose: To share information on an approach of Dien Bien Province to prepare the Provincial REDD+ Action Plan (PRAP), contents of its 4th draft and lessons learned from its preparation and exchange ideas among the relevant parties

Time	Topic	Presenter
13:30 – 13:35	Introduction	VRO
13:35 – 14:25 Presentation: 20 min. Discussion: 30 min.	Overview of the PRAP 4th draft and lessons learned - Background of preparing the PRAP - Overview of REDD+ implementation - Logical structure of the PRAP - Basic principle for the province level implementation (pilot in the phase 1; scale-up in the phase 2)	Dien Bien REDD+ Pilot Project
14:25 – 15:05 Presentation: 20 min. Discussion: 20 min.	Overview of the "handbook for preparation of the PRAP" Main topics of the PRAP draft and lessons learned Topic 1: Overall goal	Dien Bien REDD+ Pilot Project
15:05 – 15:20	Break	
15:20 – 15:50 Presentation: 10 min. Discussion: 20 min.	Topic 2: Implementation framework and tools for forest protection and development	Dien Bien REDD+ Pilot Project
15:50 – 16:20 Presentation: 10 min. Discussion: 20 min.	Topic 3: Collection and management of forest information	Dien Bien REDD+ Pilot Project
16:20 – 16:50 Presentation: 10 min. Discussion: 20 min.	Topic: 4 Finance for REDD+ implementation	Dien Bien REDD+ Pilot Project

16:50 – 17:00	Wrap-up	VRO

Way of proceeding on the meeting: Dien Bien REDD+ Pilot Project will explain for one topic by one topic mentioned in the above table and Q&A/Discussion (chaired by VRO) will follow for one topic by one topic.

Minutes of Meeting on the Donor Consultation

1: Necessity of intermediate level planning (e.g. commune level) for implementing REDD+

- The necessity of intermediate level planning (i.e. commune level in the case of Dien Bien) was discussed. Developing intermediate level plans may incur extra costs, thus, the role and the necessity need to be well considered. On the other hand, the necessity of an implementation framework (a summary of the field based actions, applying a simpler format than a full-fledged plan for the field level) gained general support.
- It was generally agreed that the implementation unit should be the forest owners (e.g. MBs, SOCs, households) or the groups of forest owners (e.g. communities).
- A number of options for the intermediate level planning are possible (e.g., communes, districts, MBs). In Dien Bien, since many of the forestlands are allocated to households or under the management of the CPCs, the intermediate planning is set at the commune level and developed as a "C-RAP" (Commune REDD+ Action Plan).
- In Dien Bien, under the C-RAP, all participating villages under the pilot commune will develop their village level forest management and livelihood development plans. This is because, although the communes are the lowest administrative unit, most collective interventions are carried out at the smaller unit of the village level. Therefore, the village-level planning is essential in putting REDD+ into implementation in the field; actual activities are in accordance with the forest management and livelihood development plans at the village level.
- It would not seem rational based on the experience in Dien Bien, to disregard the role of the commune, particularly as villages are not official administrative units, thus communes need to play the role of facilitator between the local government policy and the villages implementation. It is also deemed difficult for the villages to plan and implement REDD+ activities without support, therefore, communes would act as the facilitator. Note that gaps are observed between the officially recognized mandate of communes, and their actual role/influence in forest management. Commune staff capacity is often not sufficient, and requires additional input/support. Who should be involved in practice (e.g. forest owners, communes, districts) and to what extent is still for discussion.
- Since the district is not authorized for receiving the fund for the REDD+ implementation, district level plans is considered unnecessary.
- Whether REDD+ is implemented by a top-down approach or a bottom-up approach should be further explored, especially when carrying out the sub-provincial level planning and implementation.

2: Whether FRELs or FRLs are used as a benchmark to estimate emission reduction/removal

- The NRAP stipulates two options of FRELs or FRLs as the benchmark for application at the national level and pilot provinces. The activities to be implemented under the PRAP for Dien Bien are forest protection, regeneration and afforestation, following the direction of the provincial FPDP. Since the "+" activities (regeneration and afforestation) are included, the FRLs are selected.
- Alternatively, if accounting for only the gross emissions and disregarding the gross sequestration gained through the "+" activities should result in greater carbon benefit (which is the case in Dien Bien), then using the FRELs as the benchmark could be a preferred option.
- The methodology of setting FRELs/FRLs is not defined in detail under the UNFCCC, therefore, there is no reason in theory, that the above interpretation should be rejected. As a net-afforesting country, Vietnam should wisely incorporate the national circumstances when developing its FRELs/FRLs, in a way Vietnam will not be penalized for its past efforts in forest protection and development. It is also important to argue this pro-actively in the international negotiation.
- Projection models for the future using socio-economic variables may work at the project level, but difficult to be applied in the macro level because of the high uncertainty level, and data availability.

3: Criteria for selecting the prioritized areas for REDD+ within the province

- The usefulness of prioritizing the target areas within a province was generally agreed. Such areas can be identified, for example, by spatial analysis through overlaying various criteria such as economic analysis, impact analysis, and so on. How to set such criteria needs to be further explored, but as a principle, such criteria should promote low-cost and high benefit REDD+.
- In the case of Dien Bien, criteria for selecting the prioritized communes for REDD+ implementation are selected in consideration with the potential of forest protection and development based on the forest distribution map and FPDP, which means there are more potential for successful generation of carbon benefit.

4: Provincial Forest Monitoring System

- Monitoring for REDD+ should be carried out by the forest owners, as Article 36 of the Law on Forest Protection and Development (2004) clarifies obligation of the forest owners to provide quantitative and qualitative data of their forests. However, where the forest owner is a village or household, it may be difficult to monitor the forest change.
- It could be costly to verify the forest change every year by the village/commune level, thus, this could be better done by the provincial level. The design of the provincial forest monitoring system (PFMS) should be harmonized with the national forest monitoring system (NFMS). PFMS of Dien Bien is in the stage of testing in the pilot communes, and not yet officialized.
- Various options of forest monitoring are developed by different partners, such as SNV, UN-REDD, JICA. These different options should be used as reference to develop the national guideline on forest monitoring.

5: Making REDD+ financially feasible, cost effective, and high-benefit

- It would be useful to have a standard model for a "low cost" and "high benefit" REDD+.
- It may be difficult to offset the opportunity cost of the shifting cultivation only by carbon benefit.

Therefore, in Dien Bien, livelihood support is necessary to compensate for the loss.

- In the case of Dien Bien, the villagers receive up-front support in the form of livelihood support, in exchange for protecting forests. If the carbon revenue is earned in the future, such revenue will be used for expanding REDD+ activities to other prioritized areas, instead of rewarding those who have already received the up-front support.
- Instead of disbursing funds to individual households, like the case of the 661 program and the PFES, setting up and managing funds through a village fund could be more effective, for example, in terms of sustainability, advantage of addressing collective interests, and reducing the transaction costs. Micro-financing models involving revolving funds may work, and is currently being tested in Dien Bien.
- PFES fund can only be used in the PFES watersheds. On the other hand, FPDP also covers non-PFES areas and the FPDP budget can be prioritized for such areas. Under the investment policy for the Sustainable Use Forests, the communes in the buffer zones can receive 40 million VND/commune from the provincial fund, however, no province has actually secured and disbursed such fund yet.

6: PRAP Preparation Handbook

- It is useful to have a simplified guidance on how to prepare the PRAP, like this Handbook is aiming to do. Some of the flowcharts in the Handbook are mixing up the process of preparing the PRAP and the process of REDD+ implementation - this needs to be distinguished.

7. Wrap-up

- The need of the intermediate level is generally agreed, especially when planning and implementing the REDD+ activities at the field level. However, provincial contexts affect the preference on which level and what type of organizations play the role of this intermediate level.
- Vietnam should not be penalized in REDD+ due to the past and present efforts of forest protection and development. Therefore, Vietnam should wisely build its argument on such 'national circumstances', and should pro-actively engage in the international negotiations. The development partners can jointly assist Vietnam to build such strategy and capacity for negotiation.
- The importance of developing low cost, high benefit REDD+ mechanisms, or a "no-regrets approach" is agreed as a common principle. There are multiple aspects for selecting the prioritized areas for field level interventions.
- It is important to continue sharing the progress among the REDD+ partners. For example, in forest monitoring, several partners already have experiences to contribute. It is hoped that such experiences will be utilized for developing the national guideline.

Appendix 12　Development of Forest Distribution Map（From the study on Potential Forests and Land Related to “Climate Change and Forests” REDD+）

2. Development of Forest Distribution Map as Activity Data

In order to develop interim RELs (Reference Emission Levels)/RLs (Reference Levels), it is important to understand the historical changes in the land area by forest type and to understand the carbon stock level per unit area for each forest type. The former data is called “Activity Data (AD).” This chapter explains the collection of past forest distribution maps for obtaining AD in Vietnam, including how they were made and also explains conclusions drawn from the collected data.

2.1 Necessary Conditions for Forest Distribution Map Preparation for REDD+

This section discusses the conditions required for creating forest distribution maps which are currently being discussed regarding the REDD+ mechanism. Since UNFCCC has not defined RELs/RLs., it is not possible to conclude what requirements must be met. Currently, various efforts are being made including demonstration activities by SBSTA and by various countries as well as proposals made by international organizations. The following explains the main discussion points.

2.1.1 Status of International Discussion on UNFCCC

Based on advice from IPCC, UNFCC stipulated five basic principles for reporting the amount of greenhouse gases (GHG) removed and emitted, including transparency, completeness, consistency, comparability and accuracy. The 2003 IPCC Good Practice Guidance (GPG) stipulates the following regarding the GHG emission/removal estimation: deforestation is the conversion of forested land to non-forested land; forest degradation and/or the increase in the forest carbon stock level are occurring on forested land; and the conversion of non-forested land to forested land results in an increase in the carbon stock level. Therefore, these three types of changes in land cover are included in the REDD+ activities. In addition, the GPG says that the data needed for GHG emission/removal inventory includes Activity Data (AD) and Emission Factor (EF). AD is data on the area of land where the above-mentioned activities took place. The unit used for this data is ha/year. The EF is the amount of GHG removed/emitted per unit area. The unit used for this data is CO_2/ha.

Based on the COP resolutions, etc., the following clarifies the conditions needed for AD. When looking at the discussions at UNFCCC on carbon monitoring, the following resolution was adopted at COP15: ”Methodological guidance for activities relating to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (4/CP.15)“. The provisions in Paragraph 1 (d) are particularly important as shown below.

Box.2.1.1 Paragraph 1(d) 4/CP.15

(d) To establish, according to national circumstances and capabilities, robust and transparent national forest monitoring systems and, if appropriate, sub-national systems as part of national monitoring systems that:

(i) Use a **combination of remote sensing and ground-based forest carbon inventory approaches** for estimating, as appropriate, anthropogenic forest-related greenhouse gas emissions by sources and

removals by sinks, forest carbon stocks and forest area changes;
(ii) Provide estimates that are **transparent**, **consistent**, **as far as possible accurate**, and that **reduce uncertainties**, **taking into account national capabilities and capacities**;
(iii) Are transparent and their results are available and suitable for review as agreed by the Conference of the Parties;

The provisions say the following: for GHG estimations, it is appropriate to use the method which combines remote sensing data and ground-based carbon inventory; estimations should be transparent, consistent, as far as possibly accurate, and that reduce uncertainties, while taking into account national capabilities and capacities. Therefore, in the preparation of AD, the following needs to be taken into account when developing methodology: consistency with existing forest maps when creating categories; efforts to reduce uncertainties regarding the forest maps; consistency in the satellite data used for making maps; and setting categories for classification by taking into account the analysis capabilities that Vietnam has.

The requirements suggested by various international organizations are reviewed next. Major reference is the "REDD source book" which are prepared by GOFC-GOLD. This textbook was introduced and its importance was emphasized at SBSTA. The REDD source book recommends that resolution of time and space and availability of historical data be considered in order to estimate carbon stock using satellite imagery. Landsat TM (Thematic Mapper) data contains a full historical data which includes data going back to the 1990s. In order to identify forest degradation, the Landsat TM (with the ground resolution of 30 m) may not be enough; moreover, it needs high level of skills to interpret the data on the forest degradation. Employing the MODIS satellite data to estimate deforestation may bring argument because the methodology may neglect small scale of deforestation. However, the REDD source book mentions that multi-temporal data can detect historical trend of forest change easily. These discussions realize that each kind of the satellite data has advantages and disadvantages on generating RELs/RLs.

2.1.2 Existing Data for Grasping Forest Changing Trends in Vietnam

As mentioned above, it is important to collect data by taking into account the local circumstances including the possibilities of using existing data, the survey systems and the analysis capabilities of each country. In Vietnam, FIPI of MARD and MONRE create forest related maps. Forest distribution maps are mandated to FIPI and have been created through the National Forest Inventory (NFI) every five years since 1991 based on the law. These existing forest distribution maps have been approved by the national government and used for various statistics and policies.

Table 2.1.1 Existing Forest Distribution Map

Project Title	Survey periods	Data Sources
National Forest Resources Inventory program	1989－1992	Field inventory
National forest resource changes inventory and assessment	1991 – 1995	Landsat MSS and Ladsat TM
National forest resource changes inventory and assessment	1996 – 2000	Landsat ETM+ and SPOT4
National forest resource changes inventory and	2001 – 2005	Landsat ETM+

assessment		
National forest resource changes inventory and assessment	2006 – 2010	SPOT4 and SPOT5

Although the first forest distribution maps made in about 1990 use some of the Landsat TM data, many maps have been created through ground-based surveys and kept in the form of hard copy. Therefore, digitalization of the maps and the improvement of accuracy using satellite data are important tasks.
Satellites with different resolutions are being used such as Landsat TM with spatial resolution of 30 m, digital Landsat7-ETM+ with resolution of 15 m, SPOT4 image with resolution of 20 m and SPOT5 images with resolution of 2.5 m. SPOT5 satellite imagery with a resolution of 2.5 m (higher resolution than the satellite imagery used in the past) were used to create the fourth NFI maps. It is effective in terms of improving accuracy, but this change needs to be handled with care in terms of ensuring consistency of methods.

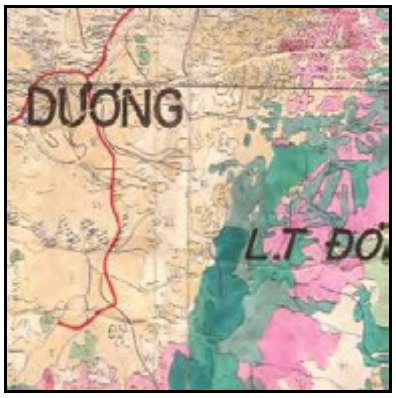

Figure 2.1.1 Existing Forest Distribution Map from 1990 (Hard Copy)

Figure 2.1.2 Landsat TM Image from 1990

2.2 Methodology of Preparation of Forest Distribution Maps

It was decided that the existing maps shown in Table 2.1.1 would be digitalized, their accuracy would be improved as part of efforts to obtain AD and to prepare the basic data needed for the development of RELs/RLs, based on the international requirements reviewed in 2.1 above. The following basic policies were followed when preparing the data.

- 1990 was a turning point after which deforestation was controlled and forestation was promoted through the implementation of the circular 661 policy. Therefore, in order to develop RELs/RLs which accurately reflect the situation in Vietnam, it is essential to include data on changes in forests dating back to 1990.

- Existing forest distribution maps are utilized and maps for the missing parts are created. In order to ensure time consistency, the forest distribution maps from 2010 are used as the benchmark maps based on which past classification results are corrected.

- As Table 2.1.1 shows, each set of forest distribution maps are not created within one year, but they are

created over several years. Therefore, it is necessary to determine the year for each set of forest distribution maps. In the project, the years of forest distribution maps were defined as follows.

1989-1992: Forest distribution maps for 1990
1991-1995: Forest distribution maps for 1995
1996-2000: Forest distribution maps for 2000
2001-2005: Forest distribution maps for 2005
2006-2010: Forest distribution maps for 2010

- Visual interpretation of the Landsat TM, ASTER, ALOS and SPOT satellite data are used to supplement the missing parts of the maps. The visually interpreted items are based on Decree number 01/2008/NĐ-CP dated 03/01/2008.

The diagram below shows the procedures for preparing AD based on the basic policies above.

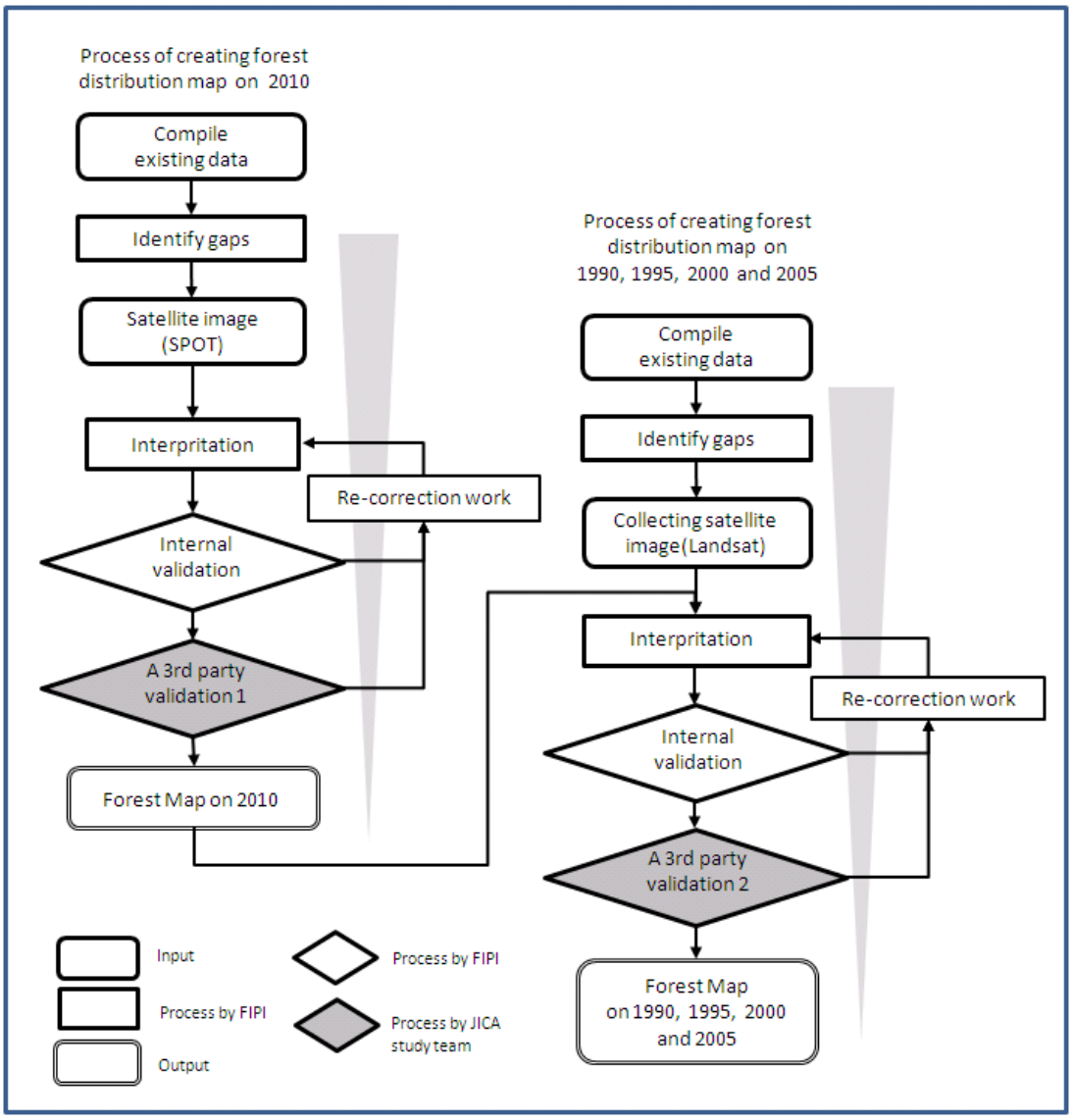

Figure 2.2.1 Flow Chart for the Preparation of Activity Data

2.2.1 Compilation of Existing Data

It is necessary to compile existing data in a database after resolving differences in categories for classification and differences in the projective methods used. Much of the data before year 2000 uses the

UTM (Universal Transverse Mercator) coordinate system and much of the data after year 2000 uses the Vietnamese VN2000 coordinate system. Therefore, the UTM coordinate data was converted to the VN2000 coordinate data.

The definition of forest in Vietnam and 17 classifications of the forest distribution maps are examined as follows. Generally, forest definition in Vietnam changed towards making the definition more details and specific, particularly the definition of forest is in line with the international definition. There are mainly three effective forest definitions and classifications, decision 84, circular 34 which is nearly equal to the forest protection and development law, and DNA. DNA is only used for CDM.

Table 2.2.1 Forest definition regulated in legal documents in Vietnam

Legal document	Description of forest definition
Regulation No. QPN6-84	● Forested land is the area consisting of wood trees, bamboo and non-timber forest product growing with the canopy cover of 0.3 or more
Forest Protection and Development Law 2004	● Forest means an ecological system consisting of the populations of forest fauna and flora, forest microorganisms, forestland and other environmental factors, of which timber trees and bamboo of all kinds or typical flora constitute the major components with the forest canopy cover of 0.1 or more. Forests include planted forests and natural forests on production, protective and special-use forestland. ● Forest canopy cover means the degree of coverage of forest canopy over forestland, which is indicated by the decimal fraction of the forestland covered by the forest canopy to the forestland acreage.
Designated National Authority (DNA)	Forest has to meet the following criteria: ● has a minimum tree crown cover of 30%; ● has a minimum tree height of 3 meter; and ● has a minimum area of 0.5 hectare;
Circular Number 34/2009/TT-BNNPTNT	An object is considered a forest if it meets all 3 following criteria: ● is an ecological system which mainly consists of long term wood trees, coco species with the height of 5.0 m or more (excluding new plantation forest and mangrove forest), bamboo species, where can provide timber, non-timber forest product and direct or indirect value such as biodiversity conservation, landscape conservation. Newly planted forests with woody trees or new regeneration forest after harvesting plantation forest with average height of trees more than 1.5 m for slow growing species and more than 3.0 m for fast growing species and with the density of 1,000 trees per hectare or more is considered a forest. ● Canopy cover of the main tree species of the forest is 0.1 or more. ● Has a minimum block area of 0.5 ha. In case of trees strip, a minimum width of strip is 20 m and there are at least 3 rows of trees in a strip.

Reference: NORDECO (2010), Report on Existing National Forest Resources Data Assess ment

In addition to those regulated in legal documents, there is one more forest classification system, Cycle-4, particularly developed for Forest Inventory by FIPI in 2008. Thus, the forest distribution maps from 1990 to 2010 in Vietnam are made based on three kinds of forest classification systems, Decision 84 approved in 1984, Cycle-4 developed by FIPI in 2008, and Circular 34 approved in 2009 (see below chart). Because forest classification systems are mainly designed for management regime in the context of Vietnam, it is changed over time based on the requirement of management. When those are revised, the maps follow most recent forest classification systems.

(1) Since different indicators are used among Decision 84, Cycle-4 and Circular 34 in each time series, the accuracy of the maps were not consistent. To meet the new requirement for designing for carbon related project, 17 land classification system was developed in 2010 to harmonize them to create land distribution maps with time consistency among three time series (1990, 2000 and 2010) with a cooperation of NORDECO project and FIPI. JICA Study Team follows this 17 land classification system to establish REL of five time series (1990, 1995, 2000, 2005 and 2010) in Vietnam.

(2) To harmonize the classification systems among decision 84, Cycle-4 and Circular 34, following chart is made to harmonize three classification systems.

(3) Modification of the maps from 1990 to 2005 in this year 2011 follows the newest indicator of Cycle-4 based on circular 34. Thus, definition of 17 categories follows circular 34.

Table 2.2.2 Forest distribution maps (1990 to 2010) and forest classification systems

Decision 84
✓ Decision 84 defines the indicators of forest stratification such as basal area, diameter, height of trees and forest structure. ✓ Those were used for making the original maps of 90, 95, 00, and 05 until circular 34 approved in 2009. ✓ See Appendix 16 for more detailed contents.
Cycle-4 of the FIPI system since 2008
✓ The classification between Cycle-4 and Circular 34 are almost equal except bamboo forest, alum forest land, plantation, and bare land in forest area. ✓ The newly indicators are defined in Circular 34, the original (the original vegetation) of the forest and volumes of the trees etc. ✓ Thus, making a map of 2010 follows the indicator of the circular and revising the maps of 90, 95, 00, and 05 after the year 2009 as well. ✓ See Appendix 16 for more detail about circular 34 and its relationship between Cycle-4.

Reference: Hearing from FIPI

2.2.2 Identification of Gaps

The 1990 forest distribution maps need to be digitalized since they are kept in the form of hard copy. In addition, the 1990 forest distribution maps were created based on ground-based surveys without using satellite data. In this situation, the Study team decided to carry out re-interpretation of the forest distribution maps by overlaying them on the Landsat satellite data.

In order to re-correct classification results for the forest distribution maps of year 1995 and the forest distribution maps of year 2000, Landsat satellite data was collected. For the forest distribution maps of year 2005, Landsat satellite data was collected for re-interpretation as well as collecting the ASTER satellite data in order to complement the missing data for the Mekong river basin and the Red river basin.

SPOT satellite data was available for year 2010 in MONRE, but there were missing data for some provinces. Therefore, ASTER satellite imagery was collected to supplement the missing data for the Mekong river basin and the Red river basin. (see Appendix 17 for a list of the satellite data collected).

2.2.3 Visual Interpretation for Filling Gaps

Interpretation of the satellite data is carried out by FIPI because FIPI has enough experience in the visual interpretation of satellite data and is expected to continue playing an important role in creating forest distribution maps. In this regard, it was considered that FIPI is considered as an appropriate institution to conduct the data development work. However, it is necessary to pay attention to the fact that, although FIPI has much experience in visual interpretation, the accuracy of forest distribution maps depends on the skill levels of the experts who conduct the interpretation. Therefore, an interpretation manual was developed and the utilization of interpretation data cards (see Figure2.2.2) was mandated in order to standardize accuracy of interpretation. The most difficult interpretation is to categorize evergreen forests into "Rich," "Medium" and "Poor" in accordance with stem volumes. This is an essential item to interpret because without this interpretation, it will be impossible to identify forest degradation in AD. This suggests that there are many uncertainties in the interpretation results for forest degradation.

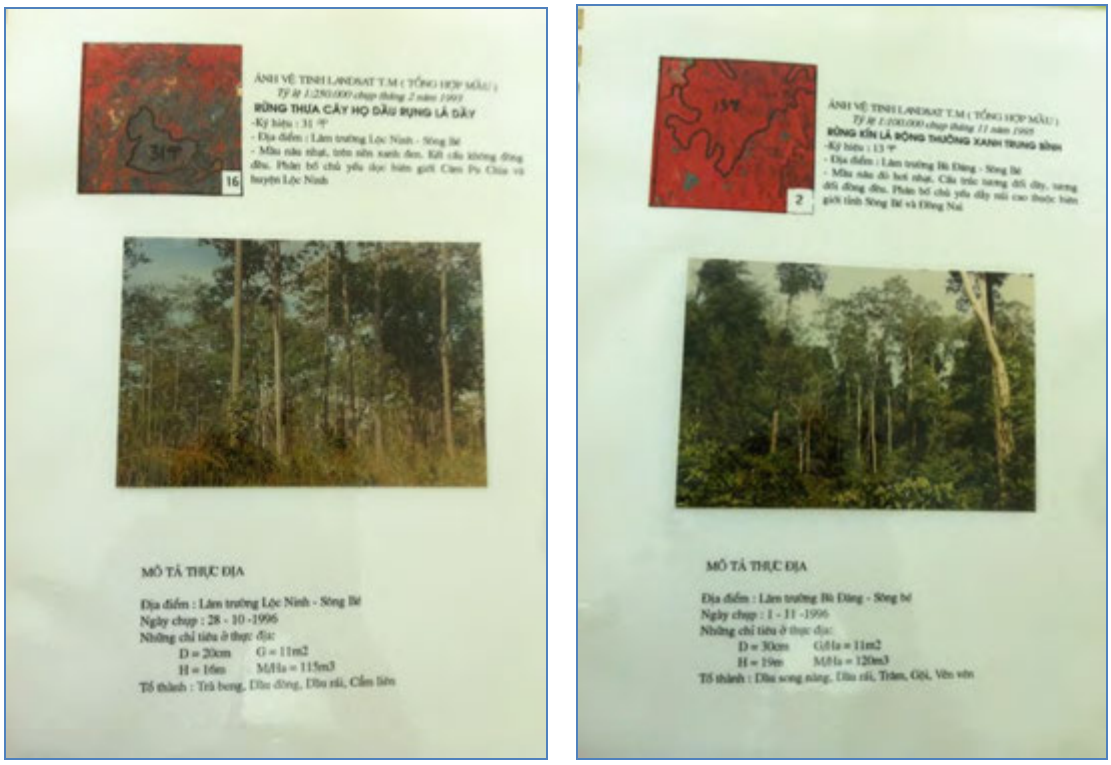

Figure 2.2.2 Example of Textbook about Interpretation Key

2.2.4 Securing Classification Consistency

The forest distribution maps of year 2010 are produced on the basis of satellite data of SPOT as a main and ALOS as a part. Due to its high resolution images (2.5 m), the maps are highly accurate. On the other hand, the forest distribution maps before year 2010 were mainly produced using the Landsat satellite and are less accurate due to the 30 m resolution. It is necessary to take measures to ensure consistency of integrating data when two sets of satellite data which have different resolutions are used as time-series data.

Therefore, after the creation of the forest distribution maps of year 2010, the data and the forest distribution maps of year 2005 were compared and the consistency between the classification results was checked. Similarly, the forest distribution maps of year 2005 and the forest distribution maps of year 2000 were compared and the continuity of the interpretation results was checked. For example, if a certain area that was an evergreen forest in 2000 had changed to non-forested land in 2005 and then changed back to evergreen forest in 2010, it can be considered that there was an interpretation error because such dynamics are unlikely to happen within the parameters of normal forest change. In order to avoid these types of errors, maps were corrected by taking into consideration the continuity of analysis results, using the forest distribution maps of year 2010 as the benchmark maps. The draft forest distribution maps were created through the process explained above.

2.2.5 Verification by a Third Party

On the way producing the forest distribution maps, a third party check is carried out as Quality Control (QC) in order to improve the accuracy and precision of making the maps. A third party check consists of two steps:

(1) Outline check at small scales between 1/500,000 and 1/700,000; and

(2) Detail Check at large scales between 1/100,000 and 1/200,000.

When any errors and problems of the data are found through a third party check, the Study team asked FIPI to re-correct them respectively. This process was repeated several times in order to improve the quality.

A third party check focused on the time-series consistency of classification results conducted through visual interpretation. The scale to be used was decided on based on the results of the following discussions, by taking into account the limited imaging abilities of the Landsat satellite data. According to GOFC-GOLD (Global Observation of Forest and Land Cover Dynamics), satellites with the Landsat TM resolution level are suitable for understanding forest dynamics at the national scale. The appropriate scale of the forest distribution maps are decided by the resolution of satellite imagery which are used to make the maps. In other words, the satellite imagery should not be used to make more detailed maps than the appropriate scale. When looking at the Vietnamese forest distribution maps, it is appropriate to use the maps as national scale or Agro-Eco region scale maps. The resolution level of the Landsat satellite data may not be detailed enough to be used for provincial scale or more detailed maps.

Based on the above discussion, abstract of Outline check at small scale and Detail check at medium scale conducted in the Study are explained below (see more detail in 2.4).

(1) Third Party Verification (Outline)

Outline check was conducted to compare the forest distribution maps of five time series of data in each province at small scales between 1/500,000 and 1/700,000, in order to detect obvious errors focusing on the misidentification of forest types and time consistency.

(2) Third Party Verification (Detail Check)

A detailed check was conducted for the draft forest distribution maps which passed the general check. Further detailed checks were conducted at small scales between 1/100,000 and 1/200,000. The detected errors were compiled in an error report and fed back to the interpreters for confirmation.

2.3 Result of Development of Activity Data

Forest distribution maps were created for five points in time starting with the forest distribution maps of year 1990. Figure2.3.1 and 2.3.2 show those in national scale. The forest distribution maps for each province as the outputs of the Study are stored in the DVDs, which were separately submitted.

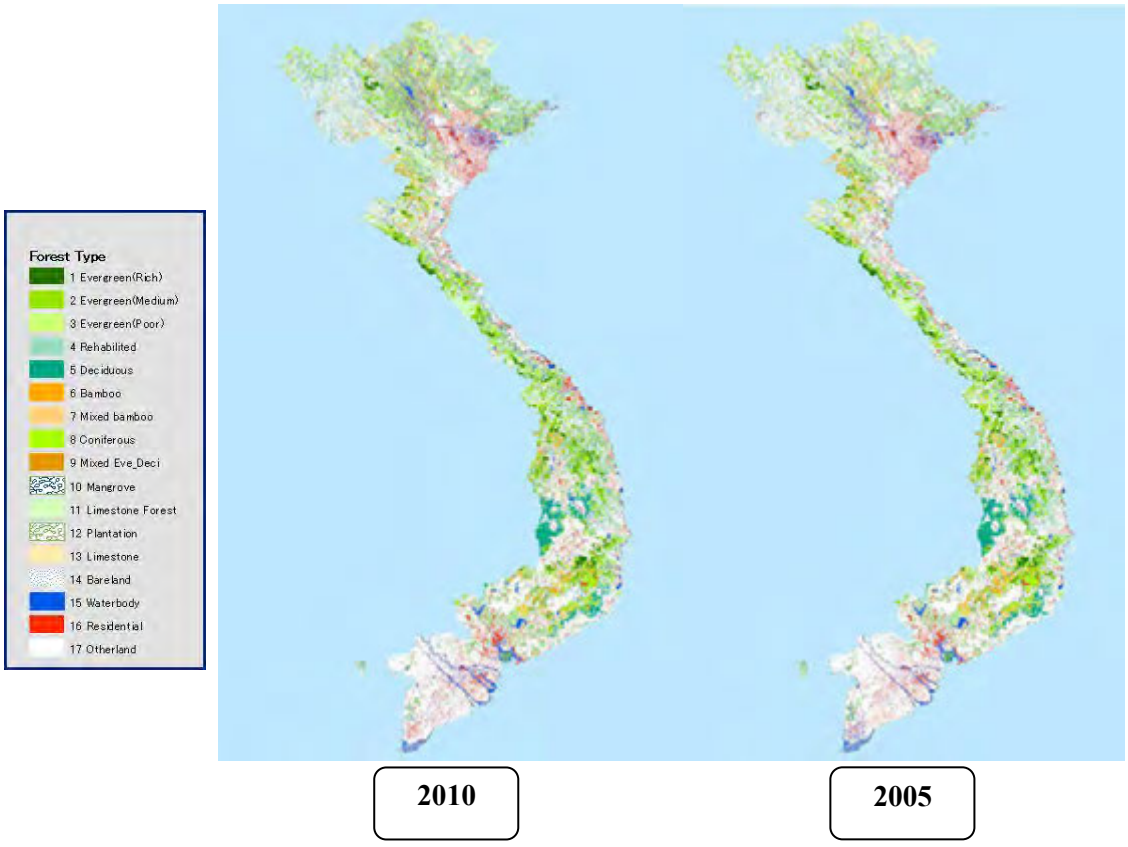

Figure 2.3.1 Forest Distribution Map of year 2010 and 2005

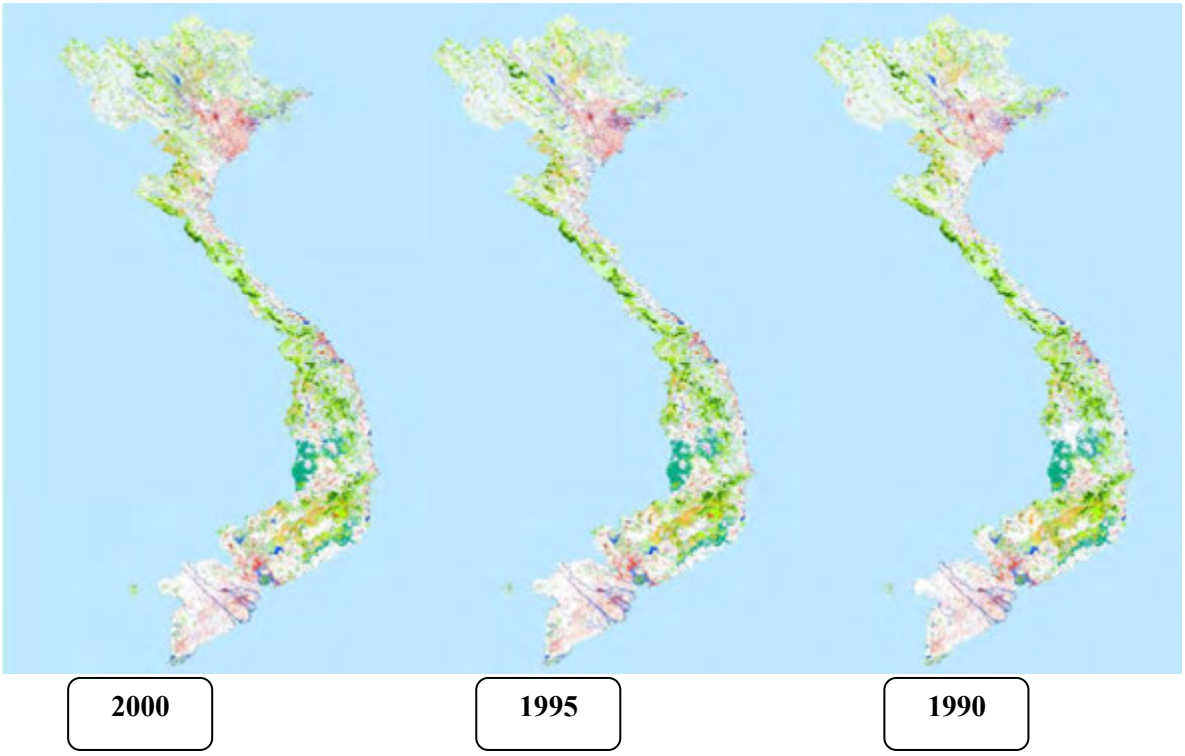

Figure 2.3.2 Forest Distribution Map of year 2000, 1995 and 1990

Figure 2.3.3 and Table 2.3.1 show the aggregation results for forest type 1 to 14 in terms of forest change out of above forest distribution maps.

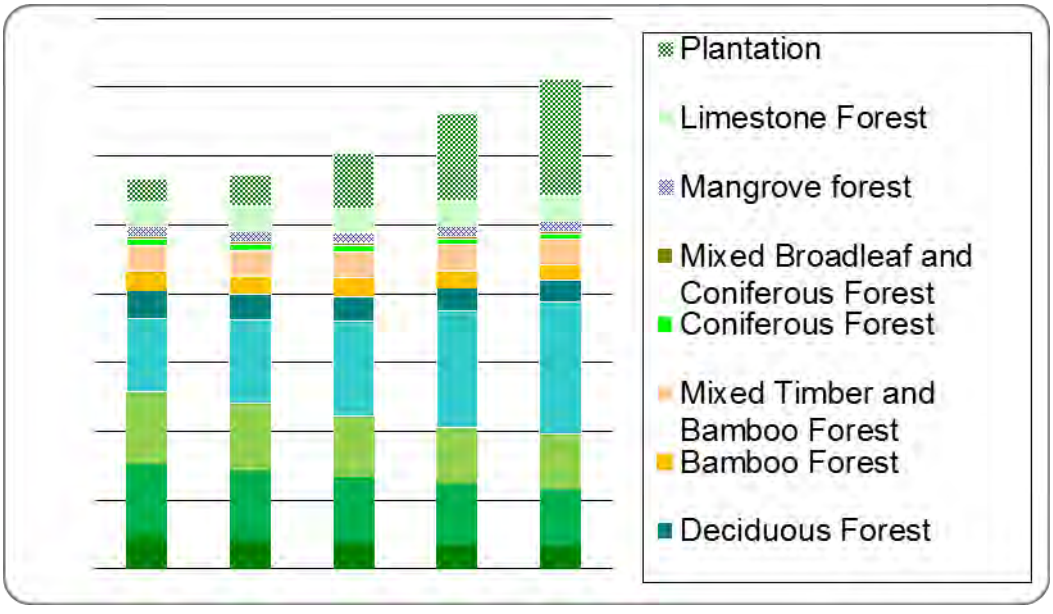

Figure 2.3.3 Dynamics of the Area of Land for Each Forest Type since 1990
(National Aggregation, Unit: 1,000ha)

Table 2.3.1 Forest Area of each forest type since 1990

Forest type \ Year	1990	1995	2000	2005	2010
Evergreen Forest (rich)	928	777	777	691	636
Evergreen Forest (medium)	2,107	1,879	1,879	1,778	1,678
Evergreen Forest (poor)	2,096	1,790	1,787	1,635	1,590
Rehabilitation Forest	2,139	2,740	2,740	3,384	3,849
Deciduous Forest	812	720	720	667	642
Bamboo Forest	552	547	553	502	454
Mixed Timber and Bamboo Forest	761	760	765	754	717
Coniferous Forest	193	176	176	172	172
Mixed Broadleaf and Coniferous Forest	70	56	56	54	53
Mangrove forest	284	295	296	304	296
Limestone Forest	712	727	727	757	762
Plantation	675	1,590	1,591	2,520	3,368
Total	11,329	12,058	12,067	13,218	14,217

Figure 2.3.3 indicates that the total forested land area has generally increased since 1990, while the areas for all the subcategories of Evergreen Forest and Deciduous Forest are decreasing. On the other hand, the area of Rehabilitation Forest keeps growing and has increased by 1.8 times when compared to the value in 1990. The area of Plantation has increased by five times. It is important to pay attention to changes in some areas from one forest category to another at different points in time. For example, Rehabilitation Forest (which is expanding) contains a mixture of degraded evergreen forests and shrubs developed on non-forested land. It is also worth noting that some areas on forest distribution maps remain Rehabilitation Forest five years later while others have changed into non-forested land due to slash-and-burn agriculture, etc. Even if the area of land has increased when comparing figures for two points in time, it is necessary to note that there may have been complex changes in land cover from one category to another.

The following summarizes the forest dynamics for each Agro-Eco region（Figure 2.3.4 ～ Figure 2.3.11). When looking at total forested land in the aggregation results, forested land is generally increasing in the northern part of Vietnam and remains the same or slightly decreased in the southern part of Vietnam. The increase in the forest area in the north mainly comes from the increase in the area of Rehabilitation Forest and Plantation. The area of Evergreen Forest is generally decreasing. Therefore, forest increases and decreases are happening at the same time.

Evergreen Forest (Poor) is the main forest type which is in decline in the high land area which has the largest area of forested land in the southern part of Vietnam. There is no change in the total area of Evergreen Forest (Rich/Medium). However, it is necessary to note that this does not mean that the Evergreen Forest (Rich/Medium) is well preserved. This is because these figures include changes from Evergreen Forest (Rich) to Evergreen Forest (Medium) and vice versa, some of which has been offset with each other. This suggests that it is necessary to analyze local forest dynamics using GIS (geographic information systems) in order to understand the increase/decrease of the area of land covered by each type of forest.

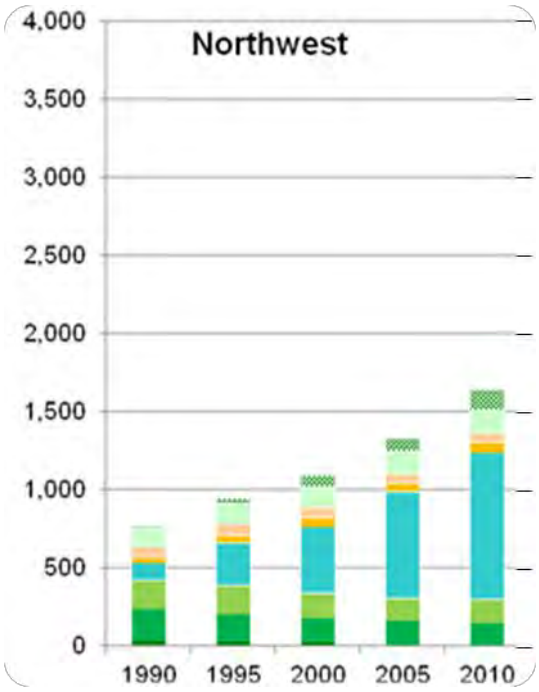

Figure 2.3.4 Forest Dynamics (North West)

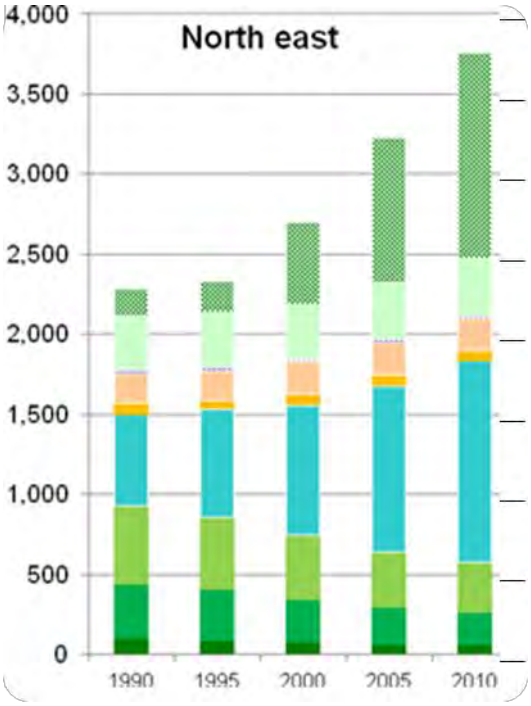

Figure 2.3.5 Forest Dynamics (North East)

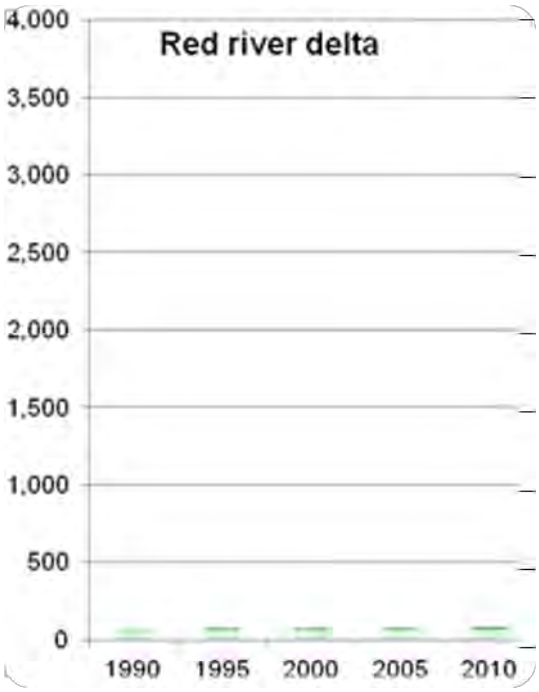

Figure 2.3.6 Forest Dynamics (Red River Delta)

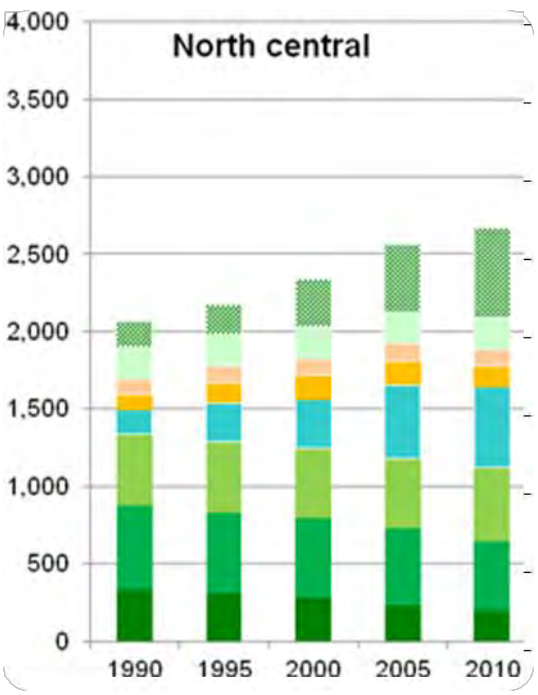

Figure 2.3.7 Forest Dynamics (North Central)

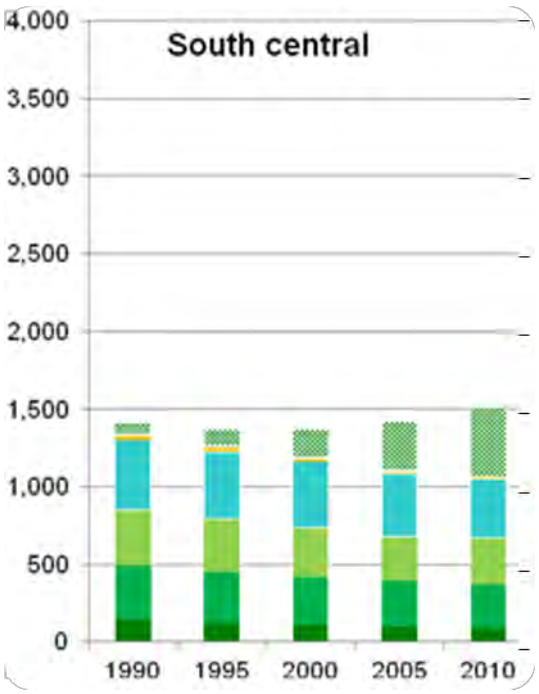

Figure 2.3.8 Forest Dynamics (South Central)

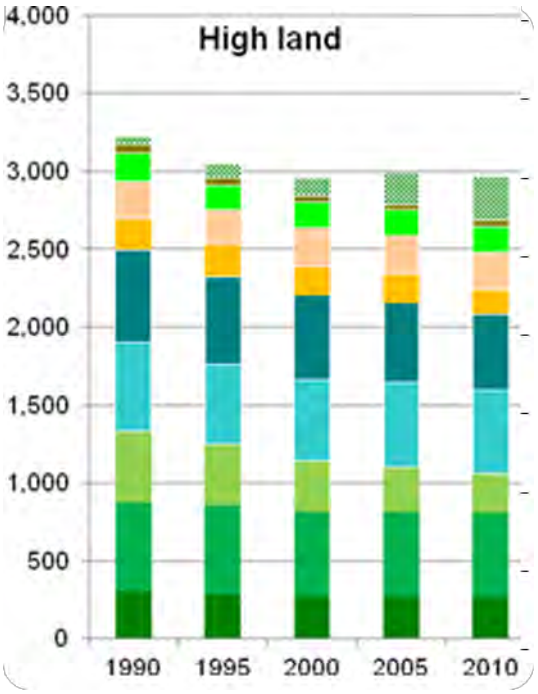

Figure 2.3.9 Forest Dynamics (High Land)

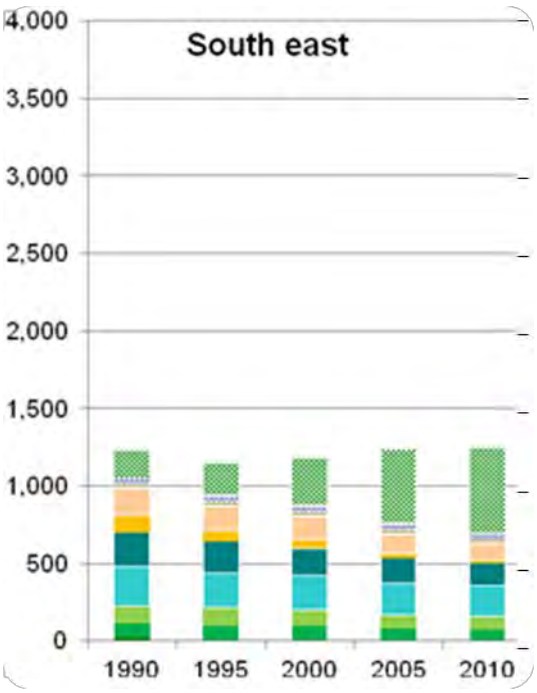

Figure 2.3.10 Forest Dynamics (South East)

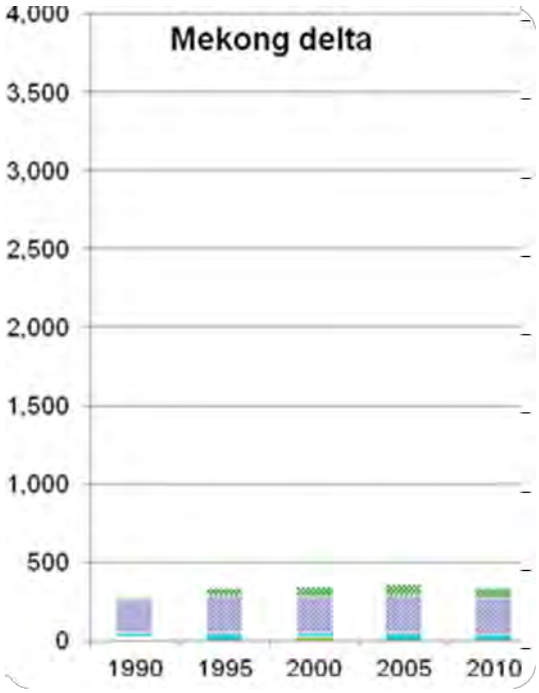

Figure 2.3.11 Forest Dynamics (Mekong Delta)

2.4 Verification of Forest Distribution Map (Activity Data)

The guidelines for submission of RELs/RLs which were resolved at SBSTA 35 stipulate that transparency and accuracy of information must be ensured. In order to ensure transparency, it is necessary to go through the verification process and evaluate the uncertainties. This section reports on the verification results for the AD used to create RELs/RLs.

2.4.1 Detailed Methodology

The accuracy of the maps can be verified from various standpoints. In the Study, the accuracy of thematic maps was verified.

The verification of thematic map accuracy is a process for checking whether the classification results for each forest type are correct. There are three verification processes as part of the development of Activity Data, verification processes 1, 2, and 3:

(1) Verification process 1 is mainly for the purpose of QC and partially for the purpose of final check of the forest distribution maps of year 2010 using SPOT satellite data as a benchmark;

(2) Verification process 2 is for the purpose of QC of the forest distribution maps at five points in time using Landsat satellite data; and

(3) Verification process 3 is for the purpose of final check of the forest distribution maps at five points in time.

In order to carry out the QC in the verification process, QC is separated into two verification methods due

to the lack of Ground truth. The Ground truth in 2010 can be used for verification of the satellite data taken in 2010 but not for the other old satellite data. Figure 2.4.1 and Figure 2.4.2 show the verification processes 1 to 3. Each process is described next.

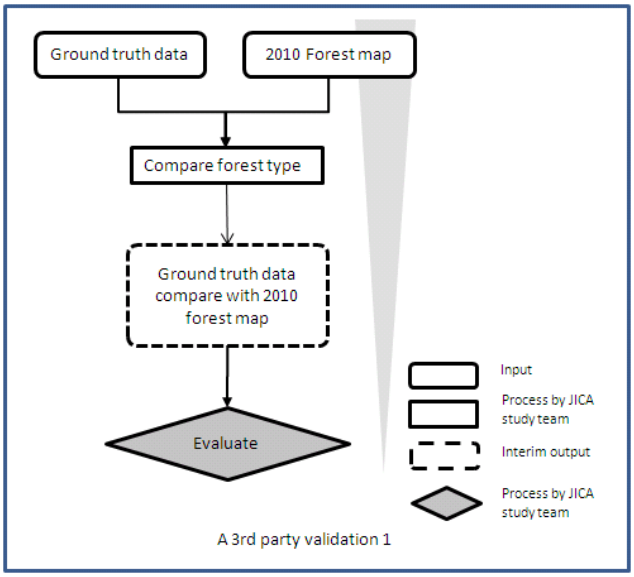

Figure 2.4.1 Process of the Verification 1

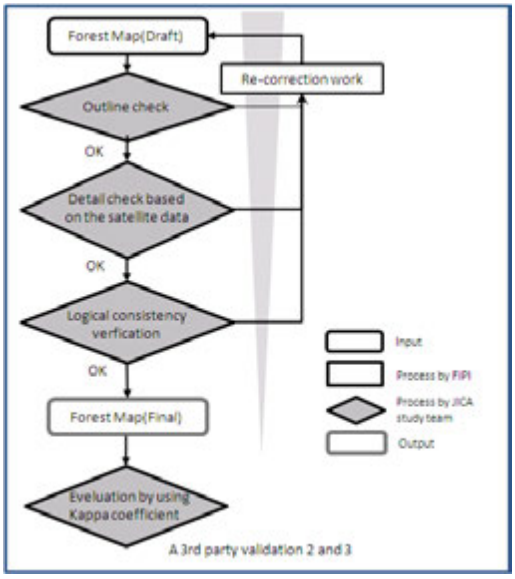

Figure 2.4.2 Process of the Verification 2

(1) Verification 1 for the QC purpose and final check purpose for forest distribution maps of year 2010

The verification 1 process includes not only the QC process but also the final check of verification 3. However, the former is the main purpose. For verification using the Ground Truth data in Verification 1, the basic method employed was to conduct the ground-based survey in order to obtain Ground Truth. It is important to implement it before time had passed after the images had been taken in order to evaluate the accuracy of the satellite classification data and to compare the ground-based survey results and the classification results for the relevant sites using positional information obtained from GPS (Global Positioning System). However, it is very difficult to obtain Ground Truth data for many points in order to cover all national land. Therefore sampling method is selected for the verification in the area where major forest types are existed.

(2) Verification 2 for the QC purpose for the forest distribution maps at five points in time

In verification 2, the outline check and the detail check were conducted. The guidelines on the submission of RELs/RLs (one of the resolutions at COP 17) stipulate that “consistency” needs to be ensured, but the interpretation of what “consistency” means varies. For example, consistency could mean consistency between RELs/RLs submitted in the past and newly submitted RELs/RLs, or consistency in the methods used. In Verification 2, the time-series consistency of thematic maps was verified. In this process, the consistency of the analysis results for the forest distribution maps at five points is conducted as explained in 2.2.5.

In this process, forest distribution maps were overlaid with satellite imagery using the GIS software and visual inspections were conducted to check whether the data was interpreted appropriately. The criteria for judgment were: 1) the appropriate borders are drawn to classify forested and non-forested land in accordance with the satellite imagery; and 2) the appropriate land cover categories were allocated for each area. The verification work was conducted on each forest distribution map and the map was considered to have passed the test if most of the area was consistent with the satellite imagery (about 80% of the total area of land) (Figure 2.4.3).

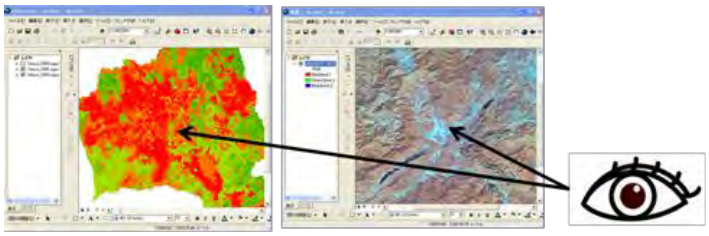

Figure 2.4.3 Evaluation Work

(3) Verification 3 for the final check purpose for the forest distribution maps at five points in time

In Verification 3, an equally spaced grid was placed on the created map, the third party interpreted whether or not the lattice points are on forested land or non-forested land, and the percentage of consistency with the final output of the forest distribution map was calculated. A typical way of verifying accuracy is to check the interpretation accuracy from the standpoint of the map producers ("Producer's Accuracy") and the accuracy from the standpoint of the third party ("User's Accuracy"), and to compare both results. However, Japanese experts are not necessarily familiar with forest types in Vietnam. Therefore, it is uncertain whether they could determine the forest types. Therefore, it was decided that they would only check and verify whether it was forested land or non-forested land.

2.4.2 Results of Verification

(1) Verification of the Forest Distribution Maps of year 2010 through Ground-Based Verification (Results of Verification 1)

Ground-based surveys were conducted from Oct 14th to Nov 16th in 2009 in order to evaluate the accuracy of the forest distribution maps. In the survey areas, evaluation of forest types and qualitative evaluation were conducted for a specific area of land. If survey areas are selected using random sampling, each survey point may contain multiple forest types and types of land cover. In order to avoid this, areas which have a homogeneous forest type was selected through visual interpretation and evaluation was conducted. Through this method, the evaluation eliminated bias derived from the levels of geometric correction accuracy and the levels of complexity of evaluation sites. The table below shows the survey results.

Table 2.4.1 Verification Results for the Accuracy of Interpretation of Forested/Non-Forested

Province	Incorrect	Correct	Sub-total
DakLak		3	3

Dien Bien		11	11
Gia Lai	2	4	6
Ha Tinh		5	5
Kon Tum	1	6	7
Lai Chau		13	13
Lao Cai		9	9
Nghe An		14	14
Quang Tri		6	6
Quang Nam	2	2	4
Thanh Hoa		5	5
Yen Bai		8	8
Sub-total	5	86	91

According to the table, 86 out of 91 points were correctly interpreted (the accuracy rate was 94.5%). The remaining five points were interpreted as forest, but they were non-forested land according to the Ground Truth results. Therefore, it is estimated that the error rate is 5%.

Out of the survey points which were correctly interpreted as forest, the survey points whose forest types were correctly interpreted accounted for 80%. Out of the survey points which were interpreted as Evergreen Forest, the survey points whose evergreen forest quality was correctly evaluated (Rich, Medium or Poor) accounted for 74%.

(2) Verification of the Forest Distribution Maps for before year 2010

FIPI provided the Study team with satellite imagery which they used for interpretation. At the technical meeting on the working report, the Study team explained the outline of the findings to FIPI and showed examples of sites which were found questionable using GIS. The participants discussed and agreed on whether or not the findings for each example were correct. The Study team then asked FIPI to check again and make corrections to each map. Forest distribution maps were created for each province and submitted as GIS data (the shape format and the projective method: UTM, Datum: VN2000 or WGS84. Maps were created for five points in time, 1990, 1995, 2000, 2005 and 2010. Evaluation was conducted for two points in time which were selected randomly out of the five points in time, for each province. The scales used for the work was decided to be between 1/100,000 and 1/200,000 as a result of discussions with FIPI.

Table 2.4.2 shows the main findings (points where incorrect interpretation may have occurred) for each map

Table 2.4.2 Main Findings of Possible Misinterpretation of the Forest Distribution Maps

No	Findings
A	Projection of forest maps is different from the satellite imagery.
B	Study Team cannot understand the reason of the interpretation of some polygon.
C	Unsuitable classification of the forest type
D	Several different forest types are included in one polygon.
E	Several different forest types are included in one texture and color of the satellite imagery.
F	Several re-corrections indicated by the JICA Study team in May 2011 have not done by FIPI.
G	Others

The most common problems found by the Study team were finding B and C. Finding B indicates that the polygon being placed on a forest distribution map is unclear (Figure 2.4.4). Finding C indicates that the land cover category allocated to a map does not match the land cover type assumed from the color on a satellite image.

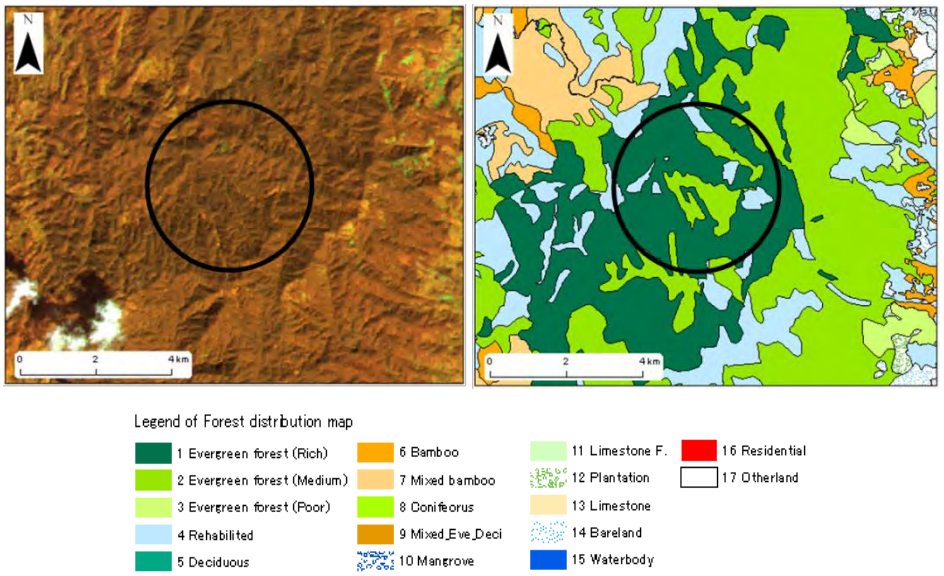

Figure 2.4.4 Examples of Findings

(Finding B: Unclear Reason for Interpretation of Some Polygons)

There were also other cases where an area which has the same color (land cover) on satellite imagery was classified into multiple different land cover types. In addition, there were cases where a forest distribution map for a certain year was simply copied to make a forest distribution map for another year, as well as cases where numerous small polygons were created on a map (about 110,000 polygons out of about 140,000 polygons were less than 25 ha). The following summarizes these findings.

- Corrections were made for several to 10% of the relevant land area.
- For some of the corrected sites, it was not clear why such changes were made.

- There are still many sites where the interpretation does not match the satellite imagery and the reason for the interpretation is unclear.

Due to this situation, it was determined that it is necessary to ask for re-correction for some of the provincial maps which were re-submitted, and the classification results were revised.

(3) Verification of the Forest Distribution Maps Based on the Percentage of Consistency between Two Parties' Interpretations (Results of the Verification 3)

Forest distribution maps are created mainly using the Landsat satellite imagery and the SPOT satellite imagery. They are created for several points in time. Therefore, verification was conducted by focusing on these factors. The method employed was to calculate the percentage of consistency between the results of interpretation by FIPI and the results of interpretation by the third party. A 4 km interval grid (lattice points) was placed on the forest distribution map of the area subject to the test and the percentage of consistency for the interpretation on the lattice points was calculated.

The areas subject to the test and the verification results are shown below (Table 2.4.3, Figure 2.4.5 ~2.4.8).

Table 2.4.3 Results of the Percentage of Consistency of the Forest Distribution Maps

Year	Satellite	Region	Province	Number of points verified	Percentage of consistency (%)
1990	Landsat	North East	Yen Bai / Phu Tho	655	88.9
2000	Landsat	Central High Land	Dac Lak	821	80.4[11]
2010	SPOT	North West	Lai Chau / Dien Bien	1,150	96.7
2010	SPOT	South Central	Quang Nam	656	94.4

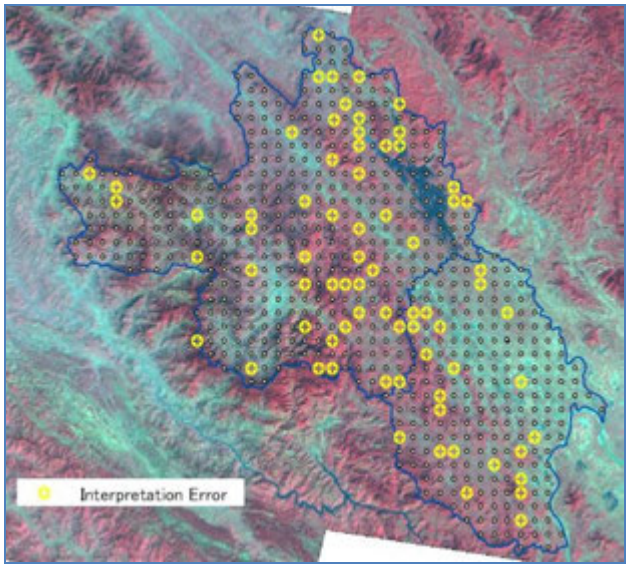

Figure 2.4.5 Verification of the Forest Distribution Map of year 1990 (Yen Bai Province and Phu Tho Province)

[11] The percentage of consistency was 89% when corrections were made using ground-based surveys and past materials as supplementary data.

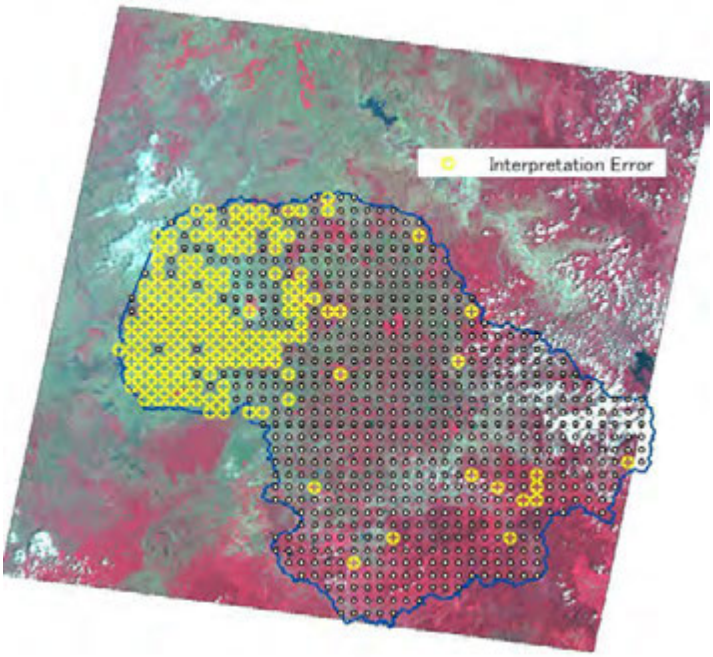

Figure 2.4.6 Verification of the Forest Distribution Map of year 2000 (Dac Lak Province)

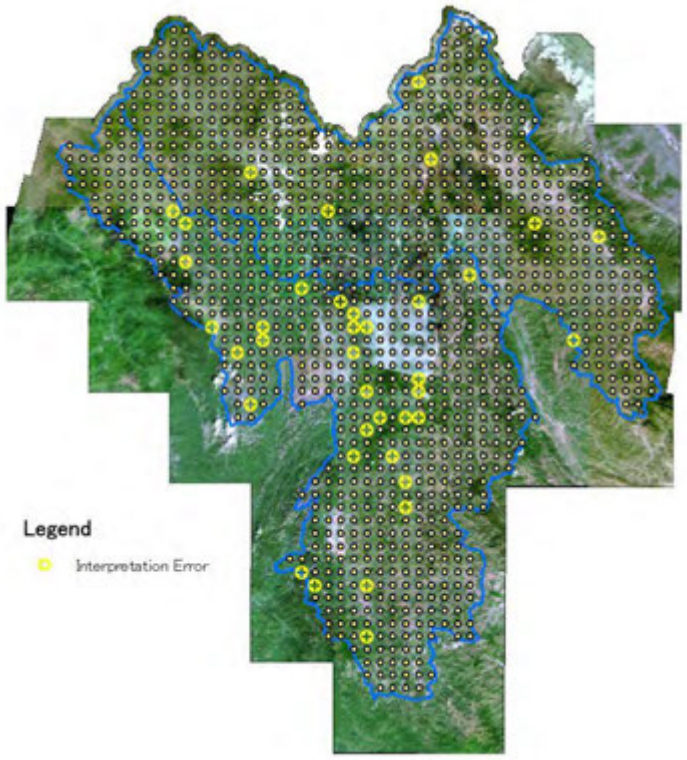

Figure 2.4.7 Verification of the Forest Distribution Map of year 2010 (Lai Chau Province and Dien Bien Province)

Figure 2.4.8 Verification of the Forest Distribution Map of year 2010 (Quang Ninh Province)

Verification for the forest distribution maps of year 2000 was conducted for Dac Lak Province. As a result, the interpretation results did not match for most of the border area in the western part of the country. This is because the areas which were interpreted as forested land by FIPI were interpreted as non-forested land by the third party. As a result of checking the satellite data taken in different seasons and interviewing engineers who are familiar with the forests in the relevant areas, it was discovered that the areas are mainly covered with deciduous forest. The Landsat satellite imagery used to create the forest distribution maps were taken during the defoliation period, and the deciduous forest areas were interpreted as non-forested land. However, there were also cases where some areas were correctly interpreted as deciduous forests by referring to supplemental information. After taking into consideration this fact, the percentage of consistency was corrected from the original about 80% to 90%. In addition to using satellite data, FIPI also added corrections to their interpretation results using additional information such as information obtained on the ground. This means that the percentage of consistency calculated based on the results of interpretation by the third party may not be always correct. This highlights that there are problems to be solved in third party verification.

As a result of verification, the accuracy of the interpretation for forested/non-forested land using the Landsat satellite data was estimated to be around 90%. It is thought that errors are almost evenly distributed to all areas rather than being localized. On the other hand, the accuracy of interpretation for forest/non-forested land using the SPOT satellite data was estimated to be around 95%. The accuracy of interpretation for forested/non-forested land through verification 3 was also estimated to be around 95% when verification 1 was conducted using ground-based surveys. Therefore, it was confirmed that it is possible to create forest distribution maps with a 95% accuracy rate if SPOT satellite imagery are used. It can be concluded that the higher accuracy was achieved because the resolution of the SPOT satellite is 2.5 m although the resolution of the Landsat satellite is 30 m.

The fact that the accuracy of classifying land into forested land and non-forested land is 95% means that it

is possible to estimate the AD for deforestation with the same level of accuracy. On the other hand, in order to work out the accuracy for evaluating forest degradation, it is necessary to quantify the accuracy of the classification of Evergreen Forest (Rich) and Evergreen Forest (Medium). Ground-based survey results (verification 1) show that the classification accuracy is about 75%. In the present study, the estimation of the percentage of consistency for forest degradation based on the third party interpretation could not be conducted because such third party verification requires higher levels of interpretation skill which takes into consideration supplementary information such as on-the-ground information.

2.5 Recommendation

As is emphasized in the REDD+ mechanism, estimates to be submitted need to be consistent, transparent, certain and complete method. The following gives recommendations for improving the current methods to create AD from these standpoints.

First, change analysis technology which ensures consistency can be introduced. Past forest distribution maps were made at each point in time without referring to the previous forest distribution maps. In the Study, analysis results for past forest distribution maps were tried to be corrected based on the forest distribution maps of year 2010 considering as a benchmark in order to ensure consistency. However, correction work has its limits.

When creating new forest distribution maps, it is desirable to follow the procedures for identifying non-changed areas and changed areas by referring to the polygons on previous forest distribution maps and then identifying land cover types and forest types for the changed areas. The main reason why this method is recommended used is because the relationship difference between the accuracy of the method used to estimate changes and the actual amount of change may become more appropriate and feasible. For example, if the actual amount of change is small, the accuracy of identifying changes needs to be high enough to fully detect the small change. Otherwise, there is a chance that fluctuations created due to uncertainties which are derived from the low level of accuracy may exceed the actual amounts of changes. In order to use this method, object-oriented forest classification is expected to be useful.

Second, the introduction of change analysis technology which takes into account the level of certainty is recommended. FIPI has been relying on visual interpretation for classification analysis. In the verification process for developing AD, it was discovered that many forest distribution maps for specific regions needed classification revision, but this trend was not found for forest distribution maps made in specific years. This suggests that the development of forest distribution map accuracy may depend on the level of experience of those who conduct the interpretation. This means that this visual interpretation method causes the bias among operators of interpretation and increases the level of uncertainty concerning forest distribution maps nationwide and the AD cannot be considered to be created using a method which ensures certainty.

Some efforts are effective in standardizing analysis accuracy or increasing accuracy. For example, it would be very useful to conduct standardized and constant interpretation training for analysis technicians as well as taking the technicians on ground-based verification surveys. These capacity building activities as well as the improvement of analysis technology and software are recommended.

The above-mentioned object-oriented image analysis software does not rely on the skill of users. It can create the same interpretation results by inputting specific parameters. It is expected that the use of such software will improve the situation where the above difficulties of creating forest distribution maps through different technicians.

As a conclusion, it is recommended that the QA/QC (quality assurance/quality control) process should be clarified and its results should be fed back into the analysis work. There was no verification procedure for the accuracy of the existed created forest distribution maps nor was there a procedure to feed back the verification results to the technicians engaged in the creation of maps. Therefore, it is surmised that efforts to improve the techniques of these technicians were not made or were limited. In order to reduce uncertainties, it is important to improve the accuracy of the systematic interpretation techniques by creating a continuous system for the QA/QC system as well as conducting regular training for the above-mentioned analysis.

Appendix 13 Report on the Training (Off-JT)

Training Report for Off-JT

Training Report for Off-JT

Facilitation skill training was carried out for official staffs of community level, district level, and provincial level by the project. The course included the outline of REDD+, forest knowledge, and its technology. Each training program and the participants are illustrated in the following table. The training materials of each training course are filed in the electronic medium.

(1) First REDD+ Local Facilitator`s Training Workshop in Dien Bien

Topic：The procedure to build the consensus with locals for creating the action plan for REDD+

Period： 18-20 December, 2012

Target Group：DPC, MCPFMB, MPSUFMB, district-FPD, CPCs and Rangers of MM and MP

≪Program≫

Time	Activities	Method	Facilitator
Day 1			
8h00-8h10	Openning speech		JICA
8h10-8h40	Introduction. Expectation. Pre test	Presentation	Nguyen Quang Ninh
8h40-8h45	Introduction of target of training, content. Working principles	- Presentation	Nguyen Quang Ninh
8h45-10h00	Introduction on REDD+ - What is REDD+ - Benefit of REDD+ - Relation bewteen REDD+ and Climate change	- Brainstorming - Question and Aswer (Q&A)	Nguyen Quang Ninh
10h00 -10h15	*Tea break*		
10h15- 10h45	Participation and the importance of local participation	- Brainstorming - Q&A - Card	Nguyen Quang Ninh
10h45 -11h30	Participatory approach - Charieristics of participants - Form of participation - Steps of participation	- Brainstorming - Q&A - Card - Presentation	Nguyen Quang Ninh
11h30-13h30	*Lunch time*		
13h30 -14h30	- Principles of participation - Barriers of participation - Method promote participation	- Brainstorming - Q&A - Card - Presentation	Nguyen Quang Ninh
14h30 -15h00	Role of facilitator	- Brainstorming	Nguyen Quang Ninh

	- Why we need facilitator - Role of facilitator	- Q&A - Group discussion	
15h00 -15h15	*Tea break*		
15h15 -15h45	- Participatory planning	- Brainstorming - Group discussion - Q&A	Nguyen Quang Ninh
15h45 – 17h 00	- Practice participatory planning + Group discussion + Present the result	- Role play	Nguyen Quang Ninh
Day 2			
8h00-8h10	Review the first day	Game Q&A	Nguyen Quang Ninh
8h10-8h30	Presentation skill	- Brainstorming - Q&A - Presentation	Nguyen Quang Ninh
8h30 – 9h15	Questionning skill Listening skill	- Presentation - Q&A - Situation exercise	Nguyen Quang Ninh
9h15 -10h15	Identify problem and solving problem	- Presentation - Q&A - Situation exercise	Nguyen Quang Ninh
10h15 -10h30	*Team break*		
10h30 -11h00	Using visualized material skill	- Presentation - Q&A - Visualized material	Nguyen Quang Ninh
10h00 -11h30	Kỹ năng điều hành nhóm	- Presentation - Brainstorming	Nguyen Quang Ninh
11h30-13h30	Luch time		
13h30 -14h45	Practices skill - Step to organize community meeting - Team work to discuss on sellected topic	- Group discussion	Nguyen Quang Ninh
14h45-15h00	*Tea break*		
15h00-17h00	Practice community meeting	- Role play - Q&A	Nguyen Quang Ninh
17h00 -17h15	Prepare for field trip	- Presentation	Organizer and Nguyen Quang Ninh

Day 3			
7h00-12h00	Field trip in Muong Phang commune		All participants
13h30 -14h45	Feedback on the field trip - Sharing result of the field trip - Lession learnt	- Group discussion - Presentation	Nguyen Quang Ninh
14h45-15h00	*Tea break*		
15h00-15h30	Discuss on the difficulties in the field trip	- Plenary	Nguyen Quang Ninh
15h30 -1600	FPIC implimentation - Principles - Steps	- Q&A - Presentation	Nguyen Quang Ninh
16h 00 -16h15	Post test	- Questionnaire	Nguyen Quang Ninh
16h15-16h30	Closing speech		DARD of Dien Bien

≪List of the participant≫

Name of participant	Agency	Position
Lo Van Chuc	Muong Cha DPC	Forest ranger
Cho A Vang	Muong Cha DPC	District DARD
Poong VanKien	Muong Cha PFMB	Staff member
Hoang Ba Liu	Muong Cha PFMB	Staff member
Ms Tong Thi Thu	Muong Muon CPC	Extensionist
Lo Van Tan	Muong Muon CPC	Land administrator
Tong Van Thuan	Dien Bien DPC	District DARD
Tham Van Noi	Dien Bien DPC	Forest ranger
Nong Xuan Vinh	Dien Bien DPC	Forest ranger
Bach Van Thanh	Dien Bien PFMB	Staff member
Mai Quang Hung	Dien Bien PFMB	Staff member
Ms Tran Thi Thu Hanh	Muong Phang CPC	Land administrator
Lo Van Sam	Muong Phang CPC	Extensionist
Quang Van Thu	Muong Phang SUFMB	Staff member
Quang Van Linh	Muong Phang SUFMB	Staff member

(2) Second REDD+ Local Facilitator's Training Workshop in Dien Bien

Topic：The procedure to build the consensus with locals for creating the action plan for REDD+.

Period：11 to 12 April, 2013

Target Group：DPC, MCPFMB, MPSUFMB, district-FPD, CPCs and Rangers of MM and MP

≪**Program**≫

Time schedule and duration		Content	Responsibility
Day 1: April 11th			
9:00-9:10	10’	Opening	PPMU
9:10-9:20	10’	Introduction of workshop purpose	National expert
9:20-9:50	40’	Introduction of REDD+	Visiting lecturer
9:50-10:30	30’	Introduction of communal plan for REDD+	Visiting lecturer
10:30-10:45	15’	Coffee break	
10:45-11:30	45’	Understanding basical knowledge	National expert
11:30-13:30	120’	Lunch	
13:30-14:00	30’	Presentation of planing process (part 1)	Participants
14:00-15:15	45’	Group discussion and presentation	National expert
15:15-15:30	15’	Coffee break	
15:30-16:00	30’	Presentation of planing process (part 2)	National expert
16:00-17:00	45’	Group discussion and presentation	Participants
17:00		Finish day 1	

Day 2: April 12th			
7:00-10:00	180’	Visit Phieng Ban (or Hang Tro B) village	Participants + experts + members of WT
10:30-11:00	30’	Presentation of planing process (part 3)	National expert
11:00-11:30	30’	Group discussion	Participants
11:30-13:30	120’	Lunch	
13:30-13:50	30’	Group presentation	Participants
13:50-14:20	30’	Presentation of planing process (part 4)	National expert
14:20-14:50	30’	Group discussion and presentation	Participants
14:50-15:00	10’	Coffee break	
15:00-15:30	30’	Presentation of planing process (part 5)	National expert
15:30-16:00	30’	Group discussion and presentation	Participants
16:00-16:15	15’	Closing	

≪**List of the participants**≫

Name of participant	Agency	Position
Quàng Van Thur	Muong Phang CPC	CPC officials
Quàng Van Linh	Muong Phang CPC	CPC officials
Trân Thi Thu Hanh	Muong Phang CPC	CPC officials

Lùong Van Chung	Muong Phang CPC	CPC officials
Nguyen Dang Hung	UBND huyên Diên Biên	Technical Staff
Tham Van Noi	Kiem lâm tai xã Muòng Phang	Ranger
Nông Xuân Vinh	Kiem lâm tai xã Muòng Phang	Ranger
Hoàng Bá Liu	BQLRPH Muòng Chà	Technical Staff
Poong Van Kien	BQLRPH Muòng Chà	Technical Staff
Tòng Yhi Thu	UBND xã Muòng Muon	Extensionist
Lò Van Tân	UBND xã Muòng Muon	Land administrator
Lò Van Chuc	UBND huyên Muòng Chà	Ranger
Luong Thi Lai	UBND huyên Muòng Chà	Agricultural department
Bach Van Thanh	BQLR Diên Biên, Muòng Pon CPC	Technical Staff
Mai Quang Hung	BQLR Diên Biên, Muòng Pon CPC	Technical Staff

(3) Remote Sensing/GIS/GPS training

Topic : For the field person who are in charge of grasping present condition of the forests, it was given training in knowledge and technology (remote sensing, GIS, and GPS) required for grasping the present condition by using the latest technology

Period：1st to 8th April, 2013

Target Group : Sub-DoF, Sub-FPD, District-FPD(2 districts）,Forest Ranger（2 communes）,PFMB(2 districts）, CAFPD

≪Program≫

Date	Contents	Trainer
April 1 (Mon)	1. Basic of GIS 2. Datum and Projection 3. Practice of GIS (in Data View) 4. Satellite imagery and Interpreting Satellite imagery 5. Practice of Remote sensing 6. Outline of the GPS 7. Practice of GIS, Making Map (in Layout View)	Mr. Haruyoshi Hayashi, Japanese expert
April 2 (Tue)	Join advanced course member Review and Brush-up for Basic course	Mr. Haruyoshi Hayashi, Japanese expert
April 3 (Wed)	Practical training in Moung Phang	REDD+PP
April 4 (Thu)	Practical training in Moung Muon	REDD+PP
April 5 (Fri)	Practical training in Moung Phang (advanced course)	REDD+PP
April 8 (Mon)	1. How to install GPS log data to GIS 2. How to use Photo taken by GPS camera 3. Some lecture if there are something left	REDD+PP

	4. Free talking about Remote Sensing, GIS, GPS 5. Graduation examination 6. Graduation Ceremony	

≪List of the participants≫ Basic course

Name of participant	Agency
Duong Thi Thu Huong	Sub-FPD
Le Van Quy	Sub-FPD
Le Trung Hieu	Sub-DoF
Tran Hong Quang	Muong Phang SUFMB
Nguyen Viet Cuong	Muong Phang SUFMB
Nong Xuan Vinh	Muong Phang Forest ranger
Lo Van Chuc	Muong Muon Forest ranger
Lo Van Thuong	Muong Cha PFMB

≪List of the participants≫ Advanced course

Name of participant	Agency
Tran Xuan Dao	Sub-DoF
Chu Ba Huy	Sub-FPD
Vuong Quoc Dai	Center for Agroforestry Planning and Designing
Tong Van Chien	Center for Agroforestry Planning and Designing
Bui Thanh Son	Center for Agroforestry Planning and Designing
Tran Thi My Linh	Center for Agroforestry Planning and Designing
Mai Thuy Duong	Center for Agroforestry Planning and Designing

(4) Training course on how to monitor the forest changes by using Map Info, GPS and DBR 2012 Software

Topic：Understanding about Software (DBE2012, MapInfo) and GPS, to improve method of the existing forest monitoring system.

Period：7 to 15 June, 2013

Target Group：Sub-DoF, Sub-FPD, District FPD, FPDF

≪Program≫

Date		Content	Lecturer	Help
Day 1 Friday (07/6/2013)	AM	- Opening - Introduction of technical measures on monitoring of forest changes.	Mr. Hai	
	PM	- Overview on satellite imagines in monitoring of forest changes	REDD+	

Day 2 Saturday (08/6/2013)	AM	- Installation of the system - Login / logout - System structure - Practice	Mr. Hai	
	PM	- Introduction of "HELP" function: - Inputting name of district, commune, file name, folder name - Forest volume classification - Age class of plantation - Practice	Mr. Hai	
Day 3 Sunday (09/6/2013)	AM	- Introduction of "DATA PROCESSING" - Inputting / revising of original data - Practice	Mr. Hai	
	PM	- Updating changed area - Some basic function of the system - Practice	Mr. Hai	
Day 4 Monday (10/6/2013)	AM	- Field practice on how to compare conditions between satellite images and real field.	REDD+	
	PM	- Converting data to reports - Creating reports by administrative levels and by volume - Practice	Mr. Hai	Mr. Hung
Day 5 Tuesday (11/6/2013)	AM	- Full practice: Using DBR2012 in forest change monitoring - Data backup. - Resolving some common errors - Q/A	Mr. Hai	Mr. Hung
	PM	Using GPS in field survey and update date to the map: - In-room - Out-door	Mr. Hung	
Day 6 Wednesday (12/6/2013)	AM	Using MapInfo in monitoring of forest changes. - Introduction - Main functions of software - Practice	Mr. Hung	

	PM	Using MapInfo in monitoring of forest changes - Main functions of software - Practice	Mr. Hung	
Day 7 Thursday (13/6/2013)	AM	Using MapInfo in monitoring of forest changes - Update data to the map - Practice	Mr. Hung	
	PM	Using MapInfo in monitoring of forest changes - Practice	Mr. Hung	
Day 8 Friday (14/6/2013)	AM	Using MapInfo in monitoring of forest changes - Map compilation: creating legend, grid, print layout,… - Practice	Mr. Hung	
	PM	Using GPS on field survey and update data to the map. - In-room - Out-door	Mr. Hung	
Day 9 Saturday (15/6/2013)	AM	Using GPS on field survey and update data to the map. - Practice of measuring by GPS - Processing data after field survey	Mr. Hung	
	PM	- Examination - Closing	Mr. Hung REDD+	

≪List of the participants≫

Name of participant	Agency
LE VAN QUY	Sub-FPD
Duong Thu Huong	Sub-FPD
Pham Quoc Huy	Sub-DOF
Le Trung Hieu	Sub-DOF
La Van Nguyen	CAFPD
Quang Van Long	CAFPD
Nguyen Huy Binh	FPDF
Kieu Thi Hong Oanh	Dien Bien Disctrict FPD
Lo Tien Sinh	Dien Bien Dong Disctrict FPD
Lo Thi Thi	Dien Bien Phu Disctrict FPD
Trinh Thi Hue	Muong Ang Disctrict FPD
Lo Van Chuc	Muong Cha Disctrict FPD
Ta Duc Dang	Muong Lay Disctrict FPD
Bac Cam Son	Muong Nhe Disctrict FPD

Tran Duc Quyen	Tua Chua Disctrict FPD
Nguyen Nang Hoan	Tuan Giao Disctrict FPD

(5) Introducing integrated "Forest Monitoring System" in Dien Bien province

Topic：Promoting an understanding of the Forest monitoring system proposed by REDD+PP.

Period：June 17th , 2013（Dien Bien district）, 18th（Muong Cha district）

Target：Forest ranger of Dien Bien district and Muong Cha district

≪Program≫（Dien Bien district, Muong Cha district）

Start	End	Duration	Contents	Presenter
14:00	14:05	10	Introduction	REDD+ PP
14:10	14:40	20	Active Listening	Participants
14：40	15:10	30	Discuss about the topic (2 teams)	Participants
15:10	15:40	30	Presentation (2 teams)	Participants
15:40	15:50	10	Comments from the participants	Participants
15:40	16:00	10	Conclusion (Forest Monitoring System planned by REDD+PP is given)	REDD+ PP

≪List of the participants≫（Dien Bien district）

Name of participant	Commune
Tran Xuan Thao	Pa Thom
Sam Van Dai	Sam Mun + Noong Het
Tham Thi Oanh	Sam Mun + Noong Het
Vo Manh Dung	Muong Loi
Luong Van Thuong	Muong Loi
Ngo Thi Dan	Thanh Nua
Kieu Hong Oanh	Thanh Nua
Nguyen Thi Nhai	Thanh Xuong + Thanh An
Nguyen Huu Long	Muong Pon
Nguyen Dinh Cong	Muong Pon
Dinh Thi Duyen	Na Nhan
Vu Thi Tuyet	Na Nhan
Nguyen Thi Tuyen	Na U
Vu Cong Can	Thanh Hung + Thanh Luong
Lo Van Doi	Nua Ngam
Tran Viet Hung	Nua Ngam
Tham Van Noi	Muong Phang
Nguyen Tien Dung	Muong Phang
Nong Xuan Vinh	Muong Phang
Nguyen Thi Mai	Thanh Chan + Thanh Yen

Lo Van Quy	Muong Nha
Lo Van Thanh	Muong Nha
Pham Anh Duong	Noong Luong
Lo Van Cuong	Na Tau

（Muong Cha district）

Name of participant	Commune
Dao Thi Tam	Muong Cha town
Nguyen Ngoc Dien	Na Sang
Lo Van Chuc	Muong Muon
Lo Van Phon	Sa Long
Quang Van Hinh	Hua Ngai
Lo Van Phanh	Huoi Lenh
Tran Dac Cai	Muong Tung
Tran Quoc Khanh	Muong Tung
Mao Van Thanh	Sa Tong
Luong Van Tinh	Pa Ham
Luong Van Nhuong	Ma Thi Ho
Ta Xuan Truong	Si Pa Phin
Duong Vuong Nghia	Phin Ho
Do Duc Manh	Cha Nua
Lo Thanh Truong	Cha To
Bui Thi Hue	Nam Khan

(6) Meeting on "the Feasibility Check on Forest Monitoring System in Dien Bien province proposed by Dien Bien REDD+PP"

Topic：Promoting an understanding of the Forest monitoring system proposed by REDD+PP and having a discussion about this system.

Period ：June 25, 2013

Target : Sub-DoF, Sub-FPD, District FPD（9 郡）,FPDF,Dien Bien District FPD, Muong Cha District FPD

≪Program≫

TIME	CONTENTS	PRESENTER
13:30 – 14:00	- Registration of participants	
14:00 – 14:05	- Objective of the meeting	DARD
14:05 – 14:45	- Introducing the Forest Monitoring System in Dien Bien province	REDD+ PP
14:45 – 15:55	- Discuss about the feasibility on : 1) verification system (villagers-forest rangers-district FPD)	REDD+PP

	2) approval system (validation/approval by CPC and DPC) 3) random sampling grid 4) methodology of measurement (M of MRV) by forest rangers 5) any information which must be added to PRAP	
15:55–16:00	-Summary (output of today)	DARD

≪List of the participants≫

Name of participant	Agency	Position
Nguyen Dinh Ky	Dien Bien DARD	Vice Director
Tran Khoa Phuong	Sub-DoF	
Pham Van Bach	Dien Bien DPC	Vice Chairman
Pham Cong Nguyen	Dien Bien District FPD	Vice Director
Nguyen Tuan Quang	Muong Cha District FPD	Director
Baku Takahashi	SUSFORM-NOW	
Shunsuke Miya	SUSFORM-NOW	
Shinji Abe	SUSFORM-NOW	
Hiroyuki Chiba	DB REDD+ Pilot Project	
Megumi Saito	DB REDD+ Pilot Project	
Nguyen Van Thanh	DB REDD+ Pilot Project	
Pham Quang Vinh	DB REDD+ Pilot Project	
Le Quang Trung	DB REDD+ Pilot Project	

(7) Understanding of Safeguard and its Monitoring System proposed by Dien Bien RED+PP

Topic : Introduction of safeguards and a discussion of the Safeguards required under the REDD+ activities

Period : July 26, 2013

Target : PMU and TG members; district-DARD; Sub-FPD; MCPFMB and MPSUFMB; district-FPD; CPCs and Rangers of MM and MP

≪Program≫

TIME	CONTENTS	PRESENTER
07:30- 08:00	-Registration of participants	
08:00- 08:10	-Key speech	Mr. Hoa, Vice PMU Director Sub-DOF
08:10- 08:15	-Objective of the meeting	REDD+ PP

08:15- 09:45	-What is Safeguard? 1) Definition of Safeguard 2) Safeguards in Vietnam 3) Safeguards and REDD+ implementations	Ms. Le Ha Phuong, Safeguards Officer, Vietnam REDD+ Office (VRO) of VNFOREST
09:45- 10:00	-Tea Break	
10:00- 10:30	-Provincial Safeguard monitoring proposed by the project	REDD+ PP
10:30- 11:00	-Discussion for comments from participants on safeguards in general and safeguards for REDD+ in particular in Dien Bien	Plenary
11:00- 11:10	-Summary (output of today)	Mr. Hoa, Vice PMU Director Sub-DOF

≪List of the participants≫

Name of participant	Agency
Tran Khoa Phuong	PMU and TG members
Dau Thi Giang	PMU and TG members
Tren Xuan Dao	PMU and TG members
Ving Van Dao	MP CPC
Luong Van Chung	MP CPC
Noug Xuan Vanh	MP CPC
Lo V Lieu	MM CPC
Tong Thi Thu	MM CPC
Nguyen Tran Duong	Muong Cha district-FPD
Phong My Giong	Dien Bien district-FPD
Dung Thi Lieu	Muong Cha district-DARD
Tong Van Thuan	Dien Bien district-DARD
Kydy Dinh	Sub-FPD
Dy Phae Lau	Sub-FPD
Li Van Qung	Sub-FPD
Chi Ba Huy	Sub-FPD
Duong Thi Huong	Sub-FPD

(8) Training on the implementation manual of PFMS

Topic : Practicing the series of implementation procedure through forest monitoring and data gathering methods by using the GPS camera for the implementations of PFMS.

Period : Oct 21 -23, 2013

Target : Sub-DoF, Sub-FPD, District FPD, FPDF,Dien Bien District FPD, Muong Cha District FPD

≪Program≫

Day	Date		Contents	Participants	Couse type	Venue
1	21. Oct (Mon)	AM	Introduction(purpose, schedule) Explanation about the contents(How to use the manual, and the framework of PFMS)	All (Forest ranger, District FPD, Sub-FPD Sub-DOF FPDF, CPC, DPC)	Lecture	DARD
		PM	preparation for the field training 1) Asking Forest rangers to inform villagers obtain the forest change in order to decide 2) Asking forest rangers to select the field site for the practice of Output1. 3) Show the point of the Output 3 to decide for the field practice. 4) The leader of the training course shall be decided (Mr. Thuc of Muong Phang Commune ranger is Saito's recommendation) who assist the lecturer.	Forest ranger, District FPD, Sub-FPD Sub-DOF CPC, DPC	Lecture	DARD
2	22. Oct (Tue)	AM	Field practice	Forest ranger District FPD Sub-FPD	Practice	Muong Phang commune
		PM	(the same as above)	(the same as above)	(the same as above)	(the same as above)
3	23. Oct (Wed)	AM	Meeting for the improvement of the PFMS implementation	All		DARD
		PM				

≪List of the participants≫

Name of participant	Agency
Mr. Lo Van Hoa	Sub-FPD
Mr. Nguyen Trong Tuyen	Sub-FPD
Ms. Nguyen Thi Mai	Sub-FPD
Mr. Lo Van Huong	Sub-FPD
Ms. Dau Thi Giang	Sub-DoF
Mr. Tran Khoa Phuong	Sub-DoF
Trần Thi My Linh	CAFPD

Mai Thi Duong	CAFPD
Ms. Nguyen Thi Minh Hai	FPDF
Mr. Quang Van Phanh	Dien Bien district FPD
Ms. Dinh Thi Duyen	Dien Bien district FPD
Ms.Tham Thi Oanh	Dien Bien district FPD
Mr. Lo Van Doi	Dien Bien district FPD
Mr. Nguyen Tuan Quang	Muong Cha district FPD
Mr. Ta Xuan Truong	Muong Cha district FPD
Mr. Lo Van Chuc	Muong Cha district FPD
Mr. Luong Van Pan	Muong Phang CPC
Mr. Lo Van Lun	Muong Muon CPC

(9) Training on database operation for PFMS

Topic : Building capacity to operate the proto-type forest information database for PFMS in accordance with the its operation manual

Period : Mar 12 -13, 2014

Target : Database operators from each sub-FPD, forest rangers from two communes (Muong Phan and Muong Muon)

≪Program≫

12th Mar, 2014: Collection of field information by forest ranger

Time	Contents
0800-1000	Dien Bien DARD to Muong Phan
1000-1500	Data collection on the field (ex, GPS measurement of Slash and burned area boundary and took photo)
1500-1600	Back to Dien Bien

13th Mar, 2014: Data input and operation training

Time	Contents
0930-0945	Opening remarks from DARD
0945-1045	Overall structure of PFMS
Tea break	
1100-1200	Operation training using manual and input collected data
1330-1600	Operation training using manual
1600-1630	Q/A

≪List of the participants≫

Name of participant	Agency	Position
Ms. Kieu Thị Oanh	Dien Bien District Sub-FPD	Ranger - Technical staff
Ms. Dinh Thị Duyen	Dien Bien District Sub-FPD	Ranger - Technical staff
Mr. Nong Xuan Vinh	Dien Bien District Sub-FPD	MP ranger
Mr. Luong Van Tinh	Muong Cha District Sub-FPD	Ranger
Mr. Lo Van Chuc	Muong Cha District Sub-FPD	Ranger - Technical staff

Appendix 14 Report on the Progress Workshop and the Final Workshop

1. Progress Workshop

The Progress Workshop was held on December 13, 2012. The purpose of holding the workshop was to share the update, interim outputs, issues and lessons learned of the implementation of REDD+ related projects among the relevant parties of Vietnam and enhance discussion to exchange ideas/information to lead to solutions of the issues that confront implementation of REDD+. It was aimed to give technical and operational feedback to implementation of NRAP and pilot activities in other provinces. Furthermore, upon having participation of the neighboring countries such as Laos and Cambodia, sharing the ideas/information on approaches to REDD+ implementation was also encouraged.

The participants of the workshop include: Vietnamese administrative organizations: Dien Bien Province – Sub-Department of Forestry, Sub-Department of Forest Protection; the provincial government of the pilot provinces; VNFOREST / MARD ; Forest Information and Planning Institute (FIPI); foreign donors – UN-REDD; GIZ; SNV; RECOFTC; FFI; WWF; neighboring countries – Laos; Cambodia; private companies.

Details of the workshop are described as follows.

Date: December 13, 2012
Time: from 08:30 to 16:30
Venue: Nikko Hotel, Hanoi

Agenda:

TIME	CONTENTS	Responsible by
8:00 - 8:30	Registration	Secretariat
8:30 - 8:45	Opening Remarks	- Dien Bien DARD - Dien Bien REDD+ Pilot Project
8:45 - 9:45	Situation in preparation of REDD+ implementation by countries	- VNFOREST, Vietnam - Department of Forestry, Laos - Forestry Administration of Cambodia
9:45 - 10:00	Break	
10:00 - 10:30	Q & A, discussion	Plenary
10:30 - 11:30	Report on the progress of project implementation	- Dien Bien REDD+ Pilot Project - Participatory Land and Forest Management Project for Reducing Deforestation in Lao P.D.R
11:30 - 12:00	Q & A, discussion	Plenary
12:00 - 13:30	Lunch	
13:30 - 15:00	Report on the progress of project	- SNV Lowering Emission in Asia's Forest Project

	implementation	- WWF Carbon and Biodiversity Project - GIZ: provincial readiness process in Quang Binh Province - UN-REDD Phase 2
15:00 – 15:15	Break	
15:15 - 16:15	Q and A, discussion	Plenary
16:15 - 16:30	Closing Remarks	Dien Bien REDD+ Pilot Project

Discussions:

Presentation by Ms. Nghiem Phuong Thuy from VNFOREST shows REDD+ implementation status in Vietnam. REDD+ Fund will be under VNFF but has a separate working mechanism from that of VNFF; mentioned REDD+ projects in Vietnam, among them are UN-REDD+ Phase 2 with 30 million USD, FCPF project in Quang Binh, Quang Tri and Dac Nong provinces, and LEAF project involving 6 nations. Vietnam has set up the National REDD+ Steering Committee and supporting this committee is Vietnam REDD+ Office, which is based at VNFOREST and headed by Mr. Pham Manh Cuong. Answering Mr. Shigeru Ono, Japanese expert based in Cambodia, about the staff of Vietnam REDD+ Office, Ms Thuy said some staff members are people of VNFOREST who work part-time for the office and others are hired from outside with their pay financed by REDD+ donors.

Presentation by Mr. Khamsene Ounekham from Lao Department of Forestry: Laos has no NRAP yet. There are several projects in Laos and it is difficult to get the exact amount of how much REDD+ investment has been made into Laos. It is estimated that 30% of the 70-90$ million is bilateral. REDD+ donors in Laos include WB, ADB through Forest Investment Program (FIP) projecct, Finland, Germany and JICA. JICA has 4 projects in Laos: FIM ($5 million, 2010- 2013), PAREDD ($ 4 million, 2009 – 2014, in Luang Prabang), FSCAP ($2 million, 2010 – 2014) and FPP ($ 10 million, 2012 – 2013). The problem in Laos is that there is no clear boundary of responsibility for REDD+ between MAF and MONRE. There is no BDS plan yet. However, Laos has experience in sharing timber revenue from production forest, which can be used as reference for BDS designing. There are also deficiencies in terms of law and technical issues such as MRV and FRELs/FRLs.

Presentation by Mr. Lao Sethaphal from Cambodia Forestry Aministration: Cambodia has the forest cover of 57%. Cambodia has developed a roadmap for REDD+ implementation. The Cam-REDD network comprises UN-REDD+, FCPF, FAO, TCP-NFI, LEAF and JICA. Forest in Cambodia is managed by the agriculture-forestry sector and environmental sector. Forest in Cambodia is managed through community forestry with agreements being signed for all CFs between 2009 and 2011. A biomass inventory was made in 2008 – 2010. Replying to Mr. Kazuhiro Goseki from SUSFORM-NOW, Mr. Nguyen Dinh Ky from SubDOF, Mr. Lo Van Hoa from Sub-FPD, Ms Nguyen Thi Thu Huyen from UN-REDD Vietnam and Ms Vu Thi Hien from CEDRA about the REDD+ project in Oddar Meanchay province, which has signed CF agreements with 13 communities with the total area of 54,000 ha. Mr. Lao said that the REDD+ project in Oddar Meanchay province started in 2008 and it has been 4 years now, but REDD+ credit has never been made. Pact, an NGO, helped connect the project with carbon credit buyers in America and they offered the rate of only 7$, so no agreement was reached. Before the project, villagers

practised shifting cultivation, then, with the project coming, the deforestation rate has been identified as 2.1% and the protected area is 54,000 ha. The participants were wondering why the credit price was offerred at just $7/ton CO2, how the rate of 2.1% could be identified and particularly, how the 13 communities with the total of 54,000 ha could be established (who assigned forestlands to them and what are their rights and interests to the protected forest).

Presentation by Mr. Hiroyuki Chiba and Mr. Kei Suzuki from Dien Bien REDD+ Pilot Project raises the question of linking National Forest Monitoring Sytem in Vietnam with MRV, potential REDD+ activities (protection, restoration, planting and livelihood development) and BDS options. Ms Akiko Inoguchi from FAO Vietnam wonders if 661 Program can be considered an early action and if it can be, how about PFES? Furthermore, REDD+ benefits are likely to go from international to national level. For this reason, she said, REDD+ and FPIC need not be necessary to be understood too technically for ordinary villagers but should be explained to them in a most understable and simplest way so that they know that they should practise sustainable forest management. REDD+ benefits can be incentives other than cash, for example, land certificates, soft loans, technical assistance, etc. Responding to her question, Mr. Suzuki informed the WS that up to COP18, it is still not clear what can be considered national circumstances. According to him, PFES cannot be considered national circumstances because it will be combined with REDD+. Mr. Chiba added that REDD+ contributors come in a diverse range, including PFES, private companies and villages where voluntary forest management teams are formed. The idea is just how to make REDD+ benefits come equally to various contributors. Ms Nguyen Thi Thu Huyen from UN-REDD Vietnam shows her wonder if Department of Finance is willing to integrate REDD+ into provincial plans as indicated by PRAP and if REDD+ can pay for plantations. Mr. Ky points out that REDD+ has already been integrated because of its similarities to PFES in terms of area and volume monitoring, and REDD+ plantations will be established if there is finance to do so. Ms. Vu Thi Hien from CEDRA wonders if forest plantations can count as REDD+ because up to COP 18, it is still decided that REDD+ benefits must still be performance-based while plantations are short-term and in the meantime, the 5th safeguard item requires the assurance of biodiversity while plantations are pure in terms of species. Mr. Ky explains that production forest plantations yield timber volumes and replanting is required after harvest, so it still counts as REDD+. Mr. Chiba added that REDD+ benefits will not be sufficient to replace the opportunity cost from shifting cultivation, so PFES and FPDP finances are needed to add it up. At present, the project has no money to cover REDD+ activity and it is still unknown when to have REDD+ credit. The plantation in the PRAP is the one with sustainable management. Mr. Do Trong Hoan from ICRAF raises the question of REDD+ opportunity cost, in addition to REDD+ implementation cost, suggesting that the project calculates the opportunity cost of REDD+ and calls for investment, rather than, waits for the REDD+ finance to come. Mr. Chiba cites the opportunity cost of shifting cultivation of $181/ha/year for upland rice and $161/ha/year for corn, being too high for all PFES and carbon benefits combined, so the solution can only resort to livelihood improvements. Mr. Ky says that the project is in the middle of developing a PRAP. However, if there is no money to fund the implementation of PRAP, then it will never be implemented. Taking the suggestions from Ms Nguyen Thi Thu Huyen from UN-REDD Vietnam that the province should be more active in REDD+ readiness to attract other REDD+ projects other than that of JICA, Mr. Ky promises that Dien Bien will take more drastic measures to push REDD+ forwards, including her suggestion to set up the Provincial Steering Committee, which has so far been established only in Quang Binh province. About Ms Vu Thi Hien's question on BDS, Mr Ky answers that REDD+ benefits will be

paid direct to individuals, or to communities where benefits will be shared among community members, or to forest management boards that will pay to the households contracted to protect forest. In Dien Bien, REDD+ benefits will go to communities mainly in the future.

Presentation by Mr. Takayuki Namura, a Japanese expert working for the project PAREDD in Laos, shows the achievements of the project in terms of engaging counterparts and villagers, providing them with technical training, and establishing village forest management teams. However, no monitoring plan has ever been developed. Mr Goseki's question for the project is about how they can identify village borders and the use of a commune village fund for forest protection while Ms Nguyen Thi Thu Huyen from UN-REDD Vietnam shows her interest in the project's involvement of villagers. PAREDD answers that involving villagers in every decision making action, land-use planning and improving their income from alternative sources are the project's approach.

Presentation by Ms Ly Thi Minh Hai, manager of LEAF project, describes what her project will do, which is, with the USAID donation and SNV management, to develop REDD+ action plans for Nghe An and Lam Dong provinces. Mr. Eiji Egashira from JICA Vietnam Office calls for the coordination among the similar projects to develop provincial REDD+ action plans. Ms Hai says that her project will produce a set of maps showing potential areas and potential REDD+ activities to select one or two therefrom, identify emission baselines (FRELs/FRLs) by referring to forest distribution maps of 1990 and 2010 and making use of previous SNV study outcomes to find out deforestation drivers and calculate the carbon stock change in the past and in the future. Ms Vu Thi Hien from CEDRA shows her doubt as to whether villagers can benefit from REDD+ in Lam Dong province where 85% of forestland is held by the State, 14% by companies and only 1% by communities, of which as few as 7% of the poor households have been contracted to protect forest. Leaving Ms. Hien's question unanswered in the context that there is still no compliance market in the world, Ms. Hai says that VNFOREST has asked her project to provide assistance in making a BDS system in Vietnam. A technical group has been set up headed by Mr. Nguyen Ba Ngai, Vice director of VNFOREST and Mr. Pham Manh Cuong, Head of Vietnam REDD+ Office.

Presentation by Mr. Nguyen Ngoc Thang from Carbi project tells the audience about his 9-million-euro project, funded by kWf of Germany and implemented by WWF, to set the stage for the first-ever trans-boundary conservation and REDD+ project. The project covers Sekong protected area in Selevan province, Laos and the Saola conservation areas in Quang Nam and Thua Thien Hue provinces, Vietnam. Mr. Nguyen Thi Thu Huyen from UN-REDD Vietnam criticizes the presentation for saying that many of the leaders still do not have deep understanding of REDD+. Not agreeing with her, Ms Vu Thi Hien from CEDRA says that it is quite normal for many leaders not to know about REDD+ given it is a new thing.

Presentation by Mr. Nguyen Van Long from Quang Binh Sub-DOF describes the preparations for REDD+ implementation in Quang Binh province, particularly institutional arrangements.

Presentation by Ms. Akiko Inoguchi from FAO Vietnam on UN-REDD Phase 2 informs that UN-REDD Phase 2 will start in February 2013, covering not only Vietnam, Laos, Cambodia but also Myanmar, in an effort to prevent emission displacement in the region. Six provinces will be selected to pilot the project. MRV is done at national level while participatory forest monitoring is carried out at

sub-national (provincial) level. However, to address the land tenure problems is likely to cost lots of funds of the project.

Mr. Chiba concludes the WS, expressing gratitude to the participants for their coming, hoping that similar projects of developing PRAPs can cooperate with each other, promising to share the presentations with the participants and informing them that another regional WS will be held in September or October next year.

Participants list:

Full name	Position	Organization
Mr. Pak Chealy	Deputy Director, Department of Forest and Community Forestry	Forestry Administration of Cambodia
Mr. Lao Sethaphal	Deputy Director, Department of Legislation and Law Enforcement	Forestry Administration of Cambodia
Mr. Kimsrim Seab	Technical assistant	CAM-REDD, Cambodia
Ms. Sopheap Ches	Office manager	CAM-REDD, Cambodia
Ms. Naomi Matsue	Administrative Coordinator/ Co-benefit	CAM-REDD, Cambodia
Mr. Nguyen Quang Thang		CarBi project
Ms. Vu Thi Hien	Director	CERDA
Mr. Tu	Technical staff	CERDA
Mr. Ho	Technical staff	CERDA
Mrs. Nguyen Thi Van	Director	CENEV
Mr. Nguyen Dinh Ky	Vice Director	Dien Bien DARD
Mr. Hiroyuki Chiba	Chief Advisor	Dien Bien REDD+ Pilot Project
Mr. Kei Suzuki	Sub-Chief Advisor	Dien Bien REDD+ Pilot Project
Mr. Nguyen Van Thanh	Coordinator	Dien Bien REDD+ Pilot Project
Mr. Pham Quang Vinh	Coordinator	Dien Bien REDD+ Pilot Project
Mr. Tran Xuan Dao	Staff	Dien Bien Sub-DoF
Ms. Dau Thi Giang	Staff	Dien Bien Sub-DoF
Ms. Mai Huong	Staff	Dien Bien Sub-DoF
Mr. Lo Van Hoa	Vice Director	Dien Bien Sub-FPD
Ms. Duong Thi Thu Huong	Staff	Dien Bien Sub-FPD
Mr. Dinh Van Cuong	Staff	Dien Bien Sub-FPD
Ms. Akiko Inoguchi		FAO Vietnam
Mr. Ngo Van Tu	Technical staff	FIPI
Mr. Do To Nhu	Technical staff	FIPI
Mr. Dang Viet Quan	Program Analyst	Forest Trends
Mr. Nguyen Thanh Phuong		GIZ Quang Binh
Mr. Takayuki Namura	Expert	FSCAP, Lao P.D.R
Mr. Do Trong Hoan		ICRAF
Mr. Shigeru Ono	JICA TA Team/Asia Air Survey	JICA Cambodia
Mr. Noriyoshi Kitamura		JICA Expert
Mr. Shinji Abe	Special Advisor	JICA Headquarter

Mr. Eiji Egashira	Project establishment advisor	JICA Vietnam Office
Mr. Khamsene Ounekham	REDD office	DoF, Ministry of Agriculture and Forestry, Lao PDR
Mr. Yoko Asada		Mitsubishi VFJ
Mr. Kanako Moria		NIES
Mr. Nguyen Van Long	Director	Quang Binh Forestry Sub-department
Mr. Nguyen Van Hop	Forestry Officer	Quang Binh PNKB Project
Ms. Ly Thi Minh Hai	LEAF Project manager	SNV
Mr. Kazuhiro Goseki	Chief Advisor	SUSFORM-NOW
Mr. Baku Takahashi		SUSFORM-NOW
Mr. Ivo Litzenberg	Technical Advisor	TFF
Ms. Nguyen Thi Thu Huyen		UN-REDD Vietnam
Ms. Dang Thuy Nga		Vietnam Forests and Deltas
Mr. Mark Fenn	Chief of Party	Vietnam Forests and Deltas
Ms. Nguyen Thi Nguyet		Vietnam REDD+ Office
Ms. Tran Thi Bich Thao		Vietnam REDD+ Office
Ms. Nghiem Phuong Thuy		VNFOREST
Dr. Le Thuy Anh	Central Annamites Landscape Manager	WWF Greater Mekong
Mr. Yasutoshi Yamada	Expert on Forest Resources Management	PAREDD, Lao PDR

2. Final Workshop

The Final Workshop was held on January 10, 2014 for the purpose of presenting the outputs (Provincial REDD+ Action Plan (PRAP) and PRAP Preparation Handbook) developed by Dien Bien REDD+ Pilot Project for the relevant parties; providing reference information on the experience of Dien Bien Province preparing the PRAP for implementation of the National REDD+ Action Program (NRAP) and REDD+ pilot projects in other provinces; discussing how the project outputs can be utilized for development of REDD+ in other provinces. Final Workshop encouraged participation of Vietnamese participants (provincial administrative personnel in particular) for the purpose of disseminating the project outputs such as PRAP and PRAP Preparation Handbook to the provinces where REDD+ pilot activities are implemented. In order to encourage Vietnamese participants to actively participate in the discussion, the project outputs were mainly presented by the Vietnamese counterpart (working group members).

In order to promote discussions on how the knowledge and experiences gained through the activities in Dien Bien Province can be applied to other provinces, the participants were divided into two groups; one group discussed the issues related to PRAP and another discussed the issues on PFMS. In each group, several topics to discuss were given and a facilitator was assigned to promote discussion along the given topics.

Details of the workshop are as follows.

Date: January 10, 2014
Time: from 08:30 to 17:00
Venue: Room “La Paix”, Daewoo Hotel, 360 Kim Ma, Ba Dinh District, Hanoi

Agenda:

Time	**Contents**	**Responsible by**
8:00 – 8:30	Registration	Secretariat
8:30 – 8:45	Opening Remarks	- Dr. Nguyen Phu Hung, Director of DoSTIC, VNFOREST - Mr. Nguyen, Dinh Ky, Deputy Director, DARD, Dien Bien Province - Mr. Eiji Egashira, JICA Vietnam Office
8:45 – 9:00	Situation of REDD+ development and background of the Dien Bien REDD+ Pilot Project	Ms. Nghiem Phuong Thuy, VNFOREST
9:00 – 9:15	Q & A, discussion	Plenary
9:15 – 9:35	Introduction of the PRAP: Part I • Basics for development of the PRAP in Dien Bien Province • Overview of the planning and implementation of REDD+ • Overview of the PRAP for Dien Bien Province	Dien Bien REDD+ Pilot Project: Ms. Dau Thi Giang, Sub-DoF, Dien Bien Province
9:35 – 9:45	Introduction of the PRAP: Part II • Setting the FRELs/FRLs and reference goal based on the Overall Goal	Dien Bien REDD+ Pilot Project: Mr. Kei Suzuki, Project Consultant Team
9:45 – 10:00	Break	
10:00 – 10:45	Introduction of the PRAP: Part III • Main contents of the PRAP for Dien Bien • Lessons learnt	Dien Bien REDD+ Pilot Project: Mr. Tran Khoa Phuong, Sub-DoF, Dien Bien Province
10:45 – 11:00	Introduction of PRAP Preparation Handbook	Dien Bien REDD+ Pilot Project: Mr. Hiroyuki Chiba, Project Consultant Team
11:00 – 11:45	Q & A, discussion	Plenary
11:45 – 13:00	Lunch	

13:00 – 13:20	Introduction of the PFMS	Dien Bien REDD+ Pilot Project Mr. Kei Suzuki, Project Consultant Team
13:20 – 13:35	Q and A, discussion	Plenary
13:35 – 13:55	REDD+ development for the future: How the REDD+ activities continue in Dien Bien Province	Dien Bien REDD+ Pilot Project Mr. Nguyen Dinh Ky, Deputy Director, DARD, Dien Bien Province
13:55 – 14:15	Q and A, discussion	Plenary
14:15 – 14:30	Break	
14:30 – 16:15	REDD+ development for the future: How to reflect the experiences of preparing for REDD+ implementation in Dien Bien on other projects in Vietnam	Group discussion Topic for Group 1: Provincial REDD+ Action Plan (Facilitated by Ms. Ly Thi Minh Hai, SNV) Topic for Group 2: Provincial Forest Monitoring System (facilitated by Mr. Vu Tan Phuong, VAFS)
16:15 – 16:45	Reporting the result of discussion	Representatives of Group 1 and 2
16:45 – 17:00	Wrap-up, Closing Remarks	Dr. Nguyen Phu Hung, Director of DoSTIC, VNFOREST

Discussions:

Opening remarks:

By Mr. Nguyen Phu Hung (VNFOREST): Vietnam is one of the first countries to be ready for full implementation of REDD+ by implementation of REDD+ at provincial level in parallel with national level with all technical aspects, such as setting FRELs/RELs, development of MRV, BDS, Safeguards,… The Dien Bien REDD+ Pilot Project of JICA is to strengthen Dien Bien to develop REDD+ implementation which is consistent with NRAP. By operating this project, the PRAP has been developed, provincial MRV, provincial forest monitoring system (PFMS), BDS are also developed and, lessons learnt from this project are to be very good reference for the other provinces to develop its PRAP as well as implementation of REDD+ in the upcoming time. VNFOREST sincerely thanks JICA Vietnam for its invaluable supports to VNFOREST as well as Dien Bien province. Result of the Dien Bien REDD+ Pilot Project is very important to, not only Dien Bien province but also for the forestry sector of Vietnam in the upcoming time, especially on implementation of NRAP.

By Mr. Nguyen Dinh Ky (Dien Bien DARD): Forest cover in Dien Bien is just about 40% of the total natural area and still facing deforestation and forest degradation. With valuable supports from VNFOREST and JICA, Dien Bien has been implementing several technical cooperation projects, of which Dien Bien REDD+ Pilot Project is meaningful for us. Dien Bien province will report all results of the implementations of the project on this final workshop and, taking this opportunity, we would like to sincerely thank VNFOREST, JICA and their experts, as well as those from relevant organizations, such as VAFS, VFU,… those who have been contributing their great supports to Dien Bien province in implementation of this REDD+ Pilot Project. The most important output of this project is the PRAP, which

is the first developed out of the country. However, with our understanding, this PRAP is still incomplete and we welcome all of your comments on it.

By Mr. Eiji Egashira (JICA Vietnam Office): JICA and Vietnamese counterparts agreed to launch this project since April 2012 with two key objectives: 1) to assist Dien Bien province to become one of the competent REDD+ provinces in Vietnam; this is done through the development of the PRAP and a series of associated exercises. It is hope that the PRAP will be approved soon. However, it is important that, the PRAP needs to be continuously reviewed and modified as a living document following the progress of national policies. Dien Bien province and JICA will continue to collaborate on this work until the end of 2015; 2) it is to contribute to the further development of policies and institutions of REDD+ at national level, as Vietnam is required with local experience to make REDD+ operational. The Dien Bien REDD+ Pilot Project has been implemented with many troubles and difficulties as it is the first provincial REDD+ program without any reference or experience. Therefore, the value of this project is to contribute to accelerating Vietnam to be ready for REDD+ implementation.

Presentations on PRAP and PRAP Preparation Handbook are made by Ms. Dau Thi Giang, Mr. Kei Suzuki, Mr. Tran Khoa Phuong and Mr. Hiroyuki Chiba according to the agenda. Please refer to the presentation materials contained in the attached CD-ROM for more detail.

Comments:

5. Mr. Truong Tat Do (DoSTIC – VNFOREST): There are 5 REDD+ activities recognized under the COP decision, but the PRAP covers 3 activities of forest protection, regeneration and afforestation and it looks Forest Protection and Development Plan with REDD+ rather than REDD+ action plan. There is large potential in Dien Bien province with more than 230,000 ha for enhancement of forest carbon stock and more than 118,000 ha (special use forest) for conservation of forest carbon stock but the PRAP does not mention any action plan for these two activities. Regarding FPIC, at which levels and with which relevant parties or stakeholders PRAP was consulted?

6. Ms. Akiko Inoguchi (FAO Vietnam): The Flow of Carbon Benefit (Slide 25 of Presentation III) does not clearly specify what kind of performance will be accessed (at commune, district and national levels). This diagram illustrates performance-based payment, but in reality, it is difficult and needs a large fund to pay in advance.

7. Mr. Pham Quang Canh (Thai Nguyen DARD):
   - Comment on the PRAP Handbook: There is no step to guide how to develop solutions to carry out the key tasks;
   - Comment on PRAP; 1) PRAP and FPDP are not closely linked; it does not seem the objectives of activities in PRAP are consistent with the objectives of the activities in FPDP; 2) According to the PRAP, about 50% of forestland is bare land in Dien Bien, so, is “increasing forest cover” the objective in Dien Bien province? 3) It is in doubt that population growth is the underlying cause of deforestation; it may be the land use production value as in other provinces.

8. Mr. Nguyen Dinh Ky (responding to above 3 comments):
   - For Mr. Truong Tat Do's comments: It is specified in page 11 of the PRAP that REDD+ contribute to the achievement of FPDP goal. All activities in FPDP related to REDD+ are the contents of the PRAP. Furthermore, one of important activities that is not involved in FPDP but strongly support REDD+ implementation is livelihood development. Once the local livelihood is developed, it is believed that deforestation and forest degradation will be reduced. Regarding the FPIC, we have been consulting and obtaining the consensus of all relevant stakeholders at village level, including villagers through village meetings, CPC officers and staff at commune workshops, district and provincial and also national level through consultant meetings and JCC meetings, and also the international donors on the donor consultant meetings.
   - For Ms. Inoguchi's comments, The BDS mechanism shown in the presentation is what we have been applying in Dien Bien under payment of PFES. It is running quite well without problems or troubles. Once the REDD+ benefit comes to the real, then a provincial REDD+ fund will be established under FPDF and its mechanism of operation should be the same as what we are operating for the PFES.
   - For other comments on the contents of PRAP, we recognize that some contents of the PRAP are not clear enough. For example, the activity on biodiversity conservation is not very specified. However, for the causes of deforestation and forest degradation, for other provinces, the causes may vary, but for Dien Bien province, the population growth is the cause of deforestation and forest degradation, which mostly, local people clear forests for shifting cultivation to meet a part of needs of food only. Moreover, in Dien Bien province, cause of population growth is due to free migration from other northern provinces.

9. Mr. Chiba: In response to the comment on solutions of implementation in the PRAP Handbook, there is a step on reviewing and identification of policies and institutional framework, while for Dien Bien case, REDD+ implementation is based on these policies and institutional frameworks. Therefore, the solutions of implementation are explained in this step. Driving forces of deforestation and forest increase are results of the field survey based on interviewing directly local peoples. However, sample size was rather small due to limitation in the budget and time.

10. Mr. Doan Ngoc Diem (VIFA): 1) In PRAP Handbook, Step 7 (survey on the present forest monitoring system) should be conducted before Step 4 (on socio-economic survey) and Step 8 (on assessment of policies on the safeguards) and after that, the items will be identified for analysis; 2) This is an Action Plan but without budget. The PRAP does not set payments for the villagers in forest monitoring, but for forest rangers only; while PRAP sets involvement of villagers in forest monitoring, it does not set payments to villagers.

11. Mr. Pham Xuan Phuong (REDD+ Network): why the REDD+ Action Plan for district level is not developed? The Law on Land has land use planning at provincial and district levels and The Law on Forest Protection and Development will have to change accordingly, so that REDD+ action plan should be developed for district level. Moreover, allocation of all forestland in Dien Bien province as described in the PRAP may not be feasible. How many percent of forestland will be allocated to communities or households or other owners? The PRAP will involve all 760,000 ha of forestland into

REDD+ implementation. Is it feasible or a large portion of bare land will be converted to other purposes? There are no typical REDD+ activities in this PRAP.

12. Mr. Ky: This PRAP is with open options because the fund sources are not clearly identified; we still will try to implement this PRAP even only with the internal sources (from existing programs and policies). REDD+ payment is not made to villagers because REDD+ fund is not available. However, villagers in two pilot communes are receiving benefits from supports of the projects. We are going to complete forestland allocation and we are going on the halfway of this and hopefully, we can complete our plan.

13. Ms. Huyen (Former UN-REDD): Responsibility of the DPC is not described in the PRAP. There is a role and responsibility of DCU but it should not be replaced for the DPC; this point should be clarified. Moreover, it is good for the PRAP in which "villagers will play as a central role in M & E Planning and implementation".

14. Mr. Vuong Dinh Tue: It is better for the PRAP if several kinds of maps of forest to be added.

15. Mrs. Vu Thi Hien (CERDA): The PRAP involves all REDD+ aspects as requirements of UNFCCC. However, the challenge is that, which comes first, implementation of REDD+ to get possible payment or, trying to get payment to cover the REDD+ implementation. The PRAP must clarify this point.

16. Mr. Ky: We will consider to reflect idea of Ms. Huyen on the PRAP. In response to Ms. Hien's comments on why Dien Bien province is implementing REDD+ in its own way with supports from JICA, REDD+ benefit can be realized, it is great for all of us. However, if there is no benefit to be realized from REDD+, the province still can carry out this Plan under PFES or FPDP and other policies.

17. Mr. Pham Xuan Phuong (REDD+ Network): On FRELs/FRLs calculation, it is assumed that not all forestland of Dien Bien will be covered by REDD+ implementation because a large area of forested land is benefitted from other sources, so making FRELs/FRLs calculation on the total forestland of the province is not suitable. Although FRELs/FRLs calculation is based on national and provincial levels according to Cancun Agreement, we must do more details in relation with BDS because there may be some households/villages/communes that practice very good reducing deforestation but they cannot get paid because the total provincial emission reduction is a minus figure due to not-well-practice by the others.

18. Ms. Ngoc Anh (GIZ Quang Binh): There are five activities in REDD+; however, the fact is that not all of these five activities will be implemented in one province. For example, Quang Binh province is not potential for reducing deforestation, but has good potential for reducing forest degradation and other REDD+ activities. For calculation of FRELs/FRLs, Quang Binh is making calculation for each district to try to find potential for each REDD+ activity at each district.

19. Dr. Nguyen Phu Hung: We are now in the progress of making ready for REDD+ implementation, we

still have no commitment and the international community still do not know how much they are going to pay to Vietnam. To be readiness, there are something to do for us: first, we have to set the reference level (how much it is); second; the completion of legal documents on how to distribute the benefit if it came to the real; and third, in order to secure REDD+ implementation, we have to secure the safeguards. After that, we can discuss on how to distribute the benefit, how much the benefit should be and where it comes from. Up to the COP19 in Warsaw recently, no one committed to pay us with a coin, all of them are just the supports for making ready for REDD+ implementation. There may be some fund sources if we implement the REDD+ activities at national level, but it is very difficult at provincial level. Therefore, we should not expect too much from REDD+ payment, however we must try our best to make it ready to receive such benefit, by meeting all requirements of UNFCCC, including setting accurate FRELs/FRLs, conducting of safeguard requirements, operation of monitoring system, setting transparent BDS, etc… The PRAP of Dien Bien Province is a first PRAP in the country and good to be a milestone for REDD+ development in other provinces, so we should focus on the feasibility of the PRAP, as well as the PRAP orientation. How about PRAP's objectives and goals, FMS, BDS, safeguards, etc.

Discussion:

REDD+ development for the future: How to reflect the experiences of preparing for REDD+ implementation in Dien Bien on other projects in Vietnam

Group 1: PRAP

1. What the objectives and elements of the PRAP should be?

Objectives of PRAP	Elements of PRAP
✓ To create additional income source for forestry sector; ✓ To coordinate resources to contribute to implement 5 REDD+ activities and goals of FPDP; ✓ First objective is reducing emissions, responding to climate change, implementing the activities of FPDP → enhancing management in forestry sector. Attracting more financial sources for livelihood development, poverty reduction and biodiversity conservation. ✓ To meet the international requirements on REDD+. ✓ Consistent with NRAP's objectives (capacity enhancement for the province, piloting the result-based payment). ✓ General (consistent with national) and particular (depending on provincial specific circumstances) such as emission reduction, deforestation prevention, etc.	✓ More consideration to safeguards and livelihood: do the projects voluntarily support livelihood development? Safeguards for villagers → clarification of negative impacts to villagers → measures to prevent and reduce. ✓ Two more detailed aspects: - REDD+ requires specific owners of forests, which is not mentioned in 13 steps; - How to compromise for prioritized activities, this point is also not clarified. ✓ Some activities on Safeguards are not necessary to implement at provincial level. ✓ Setting FRL/REL, MRV, BDS ✓ REDD+ activities to be the base for emission reduction. ✓ Based on Circular 05 to develop structure of Dien Bien PRAP. ✓ It is not logical on progress in Flowchart of Steps; there is no relationship between current status and solutions and institutional

	arrangement. ✓ PRAP is considered as a dossier to show the readiness. But FPIC implementation was not mentioned

2. What is linkage between PRAP and FPDP?

✓ Differences between PRAP and FPDP:
- FPDP is rather summarized than specific PRAP. REDD+ activities contributing to emission reduction must be pointed out.
- Safeguards: It is required to analyze the current status of existing laws, regulations and programs in the province → pointing out the solutions.

✓ FPDP is mentioned but the remaining contents are for REDD+ objectives.

✓ Safeguards were implemented but not fully, under piloting. FPDP is just within forestry sector, but PRAP is a plan which is relevant to various sectors.

✓ There will be no market mechanism for REDD+: there are only voluntary and sponsoring mechanism (COP19)

✓ Same objectives: Reducing deforestation and forest degradation, sustainable forest management.

3. In what levels is planning for REDD+ Action Plan needed?

Which levels (national, provincial, district, commune, village) the REDD+ Action Plan should be developed for?

✓ At commune level, it is not necessary to name as Action Plan, but Plan for Forest management and livelihood development activities → is it needed? Should it be for only provincial and district level?

✓ FPDP is just for provincial level, so REDD+ action plan should be for provincial level only because it is not feasible at implementation stage (analyzing the causes and potential of emission reduction) (at district and lower levels)!

✓ Planning must be specific at which level when implement.

Group 2: PFMS

1. What are the difficulties/challenges for PFM & solutions to overcome the difficulties?

- Righteousness of the forest rangers, capable and up-to-date in collection of the field data;
- Lack of technical capacity (operation of GIS, etc…) and equipment at the forest protection units;
- Lack of mechanism of monitoring and evaluating of data quality;
- Lack of reports and cooperation of the forest owners;
- Inconsistency in monitoring approach (criteria, base maps, carbon measurement);
- Consistency in designing of monitoring;
- Securing the quality in forest change monitoring (inconsistent, classification of the forest status);
- Independent in terms of financial?
- Lack of human resource (too large areas,…)

2. What are the needs to implement effective forest monitoring?

- One system of forest change monitoring (institutional, objectives, criteria) to be designed;
- Test operation of the model in each locality;

- Scale of monitoring: Forest? Livelihood?
- Capacity building, provision of the equipment (GPS, camera,…)
- Enhancement of participatory of the stakeholders;
- Review and verify the quality of data;
- Collaborations between forest rangers and forest owners (regulations to secure responsibility of the forest owners?)

3. How to implement forest monitoring?

- **Forest owners** directly report and provide data (as in provided data sheets);
- Roles the forest rangers on **implementation**: data aggregation; digitizing; report to higher levels; providing support to local authority; updating data directly;
- Clarification of the responsibility of the local authority;
- Consistency in the original dataset (development of original dataset) for monitoring – data of NFI;
- Development of random sampling system (application of the forest change monitoring and conducting the verification);
- Utilization of the resource of PFES (protection and monitoring the forest area)?

Participants list:

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Appendix 15 Photo collection in the Province of Dien Bien

Regrowth forests by Program 661at Sa Mun Commune

Garden Forests of Thai family (Muong Muon Commune)

Forest zoning shown on concrete board (Na Nhan Commune)

Forest regulation by village shown on concrete board (Na Nhan Commune)

Slope cultivation in Tua Chua District

Slope above Luong Luong Dam (Muong Phang Commune)

Rubber plantation development

Fruit planting around protected forests and paddy in Thai village

Paddy and Buffalo in Muong Phang Commune

Socio-economic survey in the villages in Muong Phang Commune

Identification of forest areas in the northern parts of the province

Commune consultation at the CPC in Muong Muon Commune


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