

**Ministry of Agriculture and Rural Development (MARD)**  
**Government of the Socialist Republic of Vietnam**

**The Preparatory Survey**  
**for**  
**the Project of Sustainable Forest Management**  
**in the Northwest Sub-region**  
**in the Socialist Republic of Vietnam**

**Final Report**  
**Volume I: Main Report**

**November 2016**

**Japan International Cooperation Agency (JICA)**

**NIPPON KOEI CO., LTD.**

**KRI INTERNATIONAL CO., LTD.**

**JAPAN FOREST TECHNOLOGY ASSOCIATION**

<b>1R</b>
<b>CR(5)</b>
<b>16-056</b>

## **Composition of Final Report**

Volume I    Main Report

Volume II   Annexes



**Location Map of the Survey Area** (Source : The JICA Survey Team (2016))



## Photographs taken during the Survey



Kick off meeting in Hanoi



Introduction Meeting in Dien Bien



PFES forest in Dien Bien



Wrap-up meeting with PPC in Son La



Discussion with DARD in Hoa Bin



Interview with MB in Hoa Bin



Nursery of PFMB in Lai Chau

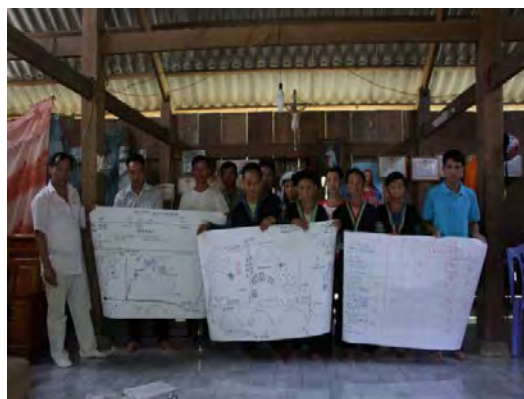


PFMB in Lai Chau





PRA workshop in Dien Bien



PRA in Lai Chau



Deforestation at a village in Son La



Key informant interview in Hoa Binh



Consultation meeting in Dien Bien



Consultation meeting in Lai Chau



Consultation meeting in Son La



Consultation meeting in Hoa Binh

## ***Executive Summary***

## EXECUTIVE SUMMARY

### PART I: Study on the Proposed Project

#### Chapter 1 Introduction

##### Background of the Survey

1. The forest area in Vietnam had drastically declined from 43% to 28% between 1943 and 1990. Extensive deforestation has posed significant threats to the national environment, economic activities, and people's lives in the country. Although the forest cover in the entire country has increased to approximately 42% from 1990 to 2010, the quality of forests in the country has not been fully recovered yet. Sustainable forest management is one of the crucial challenges that the Government of Vietnam (GoV) needs to address.
2. The Ministry of Agriculture and Rural Development (MARD) of GoV requested JICA to support MARD with the implementation of REDD+ in four Northwestern Provinces, namely, Dien Bien, Son La, Lai Chau, and Hoa Binh Provinces, where the progress of forest degradation and increase of natural disasters caused by forest degradation are acute issues to be tackled. In March 2016, JICA dispatched a survey team to undertake the preparatory survey for the Sustainable Forest Development Project in the Northwest Sub-region (hereinafter referred to as "the preparatory survey" or "the survey").

##### Objectives of the Survey

3. The main objectives of the survey are:
  - i) To validate the objectives, necessity, and relevance of the proposed project;
  - ii) To scrutinize project components, project cost, implementation schedule, implementation methods, organizational and institutional frameworks for implementation and operation and maintenance of the project;
  - iii) To assess potential environmental and social impacts and propose appropriate and necessary safeguards measures as may be required; and
  - iv) To collect data and information necessary for the appraisal of the project by JICA.

##### Survey Areas and Period

4. The survey targets four (4) provinces, namely Dien Bien, Son La, Lai Chau, and Hoa Binh, and its total survey period was about eight and a half months from the beginning of March to the middle of November 2016.

##### Counterpart Agency

5. The International Cooperation Department (ICD) and Management Board of Forestry Projects (MBFPs) of MARD are the counterpart agencies for the survey at the central level, while DARDs of the target four provinces are the focal points at the provincial level.

#### Chapter 2 Forest Sector in Vietnam

##### Forest Administration

6. The following are the government institutions and organizations relevant to the forestry sector from the central to commune levels.

Central Government Institutions relevant to the Forestry Sector

- i) Ministry of Agriculture and Rural Development (MARD)
- ii) VNFOREST
- iii) Management Board of Forestry Projects (MBFPs)

Provincial Government Institutions relevant to the Forestry Sector

- i) Provincial People's Committee (PPC) and Department of Agriculture and Rural Development (DARD)
- ii) Sub-department of Forestry (SubDoF) and Sub-department of Forest Protection (SubDFP)

District and Commune Level Institutions Relevant to the Forestry Sector

- i) District People's Committee (DPC), District Forest Protection Unit (DFPU), and District Division of Agriculture and Rural Development (D-DARD)
- ii) Commune People's Committee (CPC) and Forest Ranger Office at the Commune Level

**Forestry Research and Extension**

7. Vietnam Academy for Forestry Science (VAFS) under the direct guidance of MARD is the main research organization for forestry in the country. It was established in 2010 by merging several research institutes under the former FSIV (Forest Science Institute in Vietnam). The National Agriculture Extension Center (NAEC) is the main agricultural extension arm at the national level, which has provided several types of services for agriculture and forestry extension, such as information dissemination, public awareness campaigns, technical training, and technology transfer on skills/techniques in the respective fields, to name a few. At the provincial and district levels, the Provincial/District Agriculture Extension Centre (PAEC/DAEC) is the main institutions for agriculture and forestry extension.

**Policies, Laws/Regulations, and Plans relevant to the Proposed Project**

8. The major government policies, strategies, plans, and regulations relevant to the project are listed below.

Socio-Economic Development Strategy and Plan

- i) Socio-economic Development Strategy
- ii) Socio-economic Development Plan

Policies, Laws/Regulations, and Plans relating to Forest Management

- i) National Forest Protection and Development Plan (National FPDP/PM Decision No. 57/QD-TTg)
- ii) Provincial and District Forest Protection and Development Plan (Provincial and District FPDP)
- iii) Forest Sector Reform Proposal (MARD Decision No. 1565/QD-BNN-TCLN)
- iv) Regulation on Protection Forest Management (PM Decision No. 17/2015/QD-TTg)

Policies, Laws, Regulations, and Plans relating to REDD+

- i) National Action Program on REDD+ (2011-2020) (PM Decision No. 799/QD-TTg)



- ii) Guidelines on Development of Provincial Action Plan on REDD+ (MARD Decision No. 5414/QD-BNN-TCLN)

### **Chapter 3 Status of REDD+ and Environmental and Social Consideration System in Vietnam**

#### **Status of REDD+ Development in Vietnam**

9. The GoV has received considerable international financial and technical support for the development of REDD+ since February 2008 when the country clearly indicated its interest in REDD+ to the UNFCCC secretariat. In January 2011, the Vietnam REDD+ Steering Committee was established under authorization of the Prime Minister chaired by Minister of MARD to coordinate all efforts and activities among government agencies at the central and local levels, private organizations, NGOs, CSOs and international development partners in the REDD+ implementation.
10. In terms of progress to date, a key milestone in REDD+ development in Vietnam was the elaboration of a National REDD+ Action Plan (NRAP) in 2012. The NRAP confirmed that it was designed in compliance with policies and laws of Vietnam, and consistent to the provisions of the UNFCCC and relevant treaties and international conventions Vietnam has joined. The NRAP identified a various REDD+ readiness objectives and associated key tasks for the periods 2011-2015 and 2016-2020.
11. In 2012, GoV also approved the establishment of the Sub-Technical Working Group on REDD+ Safeguards (STWG-SG). This group has been relatively active and has discussed various relevant issues and a country-led approach to REDD+ safeguards. An important output developed through STWG-SG consultations was the elaboration of a ‘Safeguards Roadmap’ in 2014, which provided an initial analysis of options, priorities, milestones and recommendations on all aspects related to REDD+ safeguards in Vietnam.

#### **Environmental and Social Consideration System in Vietnam**

12. The Law on Environmental Protection (LEP) in 2014 provides the overall and fundamental legal framework for environmental regulation in Vietnam. The LEP stipulates environmental assessment policies and procedures that include: i) requirements for public participation; ii) consideration of environmental management and monitoring actions; iii) clear roles of the central and local government agencies in Environmental Impact Assessment (EIA) enforcement and monitoring; iv) a prescriptive approach to screening/scoping of EIA documents; v) clear requirements for smaller projects not subject to a full EIA process; vi) roles of Government agencies in EIA review and appraisal; and vii) transfer of responsibility to provinces and sector ministries for EIA approval.
13. The current EIA system in Vietnam is basically consistent with the international systems. Particularly, it has been significantly improved in LEP to fill the gaps between the Vietnam and international systems in terms of public consultation, information disclosure, monitoring. However, there are still a few gaps were identified between the JICA Guidelines for Environmental and Social Considerations (April 2010) and Vietnam’s EIA institutional framework.

## Social Safeguard and Management Systems

14. Vietnam has a relatively well-developed legal framework which covers a range of social safeguards issues such as land acquisition, involuntary resettlement, public consultation and participation, provision of equal opportunities, inclusion of vulnerable groups such as ethnic minorities and women in development interventions, and mechanisms for raising and addressing grievances. In general, Vietnam's legal framework on paper is largely consistent with the international laws, treaties, principles, and guidelines (including JICA's Guidelines) with respect to consultation and participation, access to information, recognition of ethnic minorities and respect for their cultures, gender equity, grievance redress and other pertinent social safeguard issues.

## Grievance Redress

15. The Vietnamese legal framework has the following main pieces of legislation which are relevant to the receipt of complaints and grievances and their handling:

- i) **The Land Law (2013)** and Decree 84/2007/ND-CP are applied for resolution of land acquisition and related compensation and resettlement complaints and denunciations. In the case of administrative decisions made by the DPC or PPC related to land, including land acquisition, compensation, support and resettlement due to land acquisition, affected people can lodge a complaint.
- ii) **The Law on Complaints and Denunciations (2011)** provides the main legal framework for registering complaints not related to land acquisition and compensation. Decrees 75 and 76, dated October 3, 2012 guide the implementation of these laws along with Circular 07/15. The complaint settlement process includes the following steps: (i) filing the complaint and prepare to verify the complaint; (ii) verify the merit of the complaint, and (iii) finish the complaint settlement with a decision of settlement.

## Chapter 4 Present Conditions of the Target Provinces

### Natural Conditions

16. The four target provinces cover a total area of 37,415 km<sup>2</sup>, which consists of around 11% of the total land of Vietnam. Those provinces are known as Northwest sub-region, which lies between latitudes 21°00' - 22°30'N and longitude 102°30' - 106°00'E. The area belongs to Humid Subtropical Climate according to Koppen Climate Classification and its average annual rainfall ranges from 1,100 to 2,400 mm. According to the national statistics in 2014, about 60% of the total areas of the target provinces are used for forestry, which is rather higher than other areas in the country.

17. About 2.9 million ha of the lands are classified as the forest land in the four target provinces, of which about 1.36 million ha and 1.12 million ha are classified as protection forest and production forest, respectively. Forests in the area are broadly classified into three types: natural forest, plantation, and bare land. About 30~55% of the forest land in the target provinces are bare lands or in less vegetative conditions. Among the four province, Dien Bien shows the highest ratio of bare lands.

18. The ownership status of the forest lands in the target provinces is summarized below.

## Forest Ownership in the Target Provinces

Unit: ha

Province	Hoa Binh		Son La		Dien Bien		Lai Chau	
	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%
Management Boards	42,942	12.4	78,276	7.5	52,527	6.5	297,188	41.7
Forest Company	11,198	3.2	26,691	2.6	0	0.0	0	0.0
Households	143,004	41.2	197,808	19.0	6,253	0.8	7,835	1.1
Community groups	48,771	14.0	621,512	59.7	256,199	31.5	293,638	41.2
Other organizations	3,211	0.9	23,899	2.3	66	< 0.1	7,248	1.0
CPC*3	98,300	28.3	93,899	9.0	498,693	61.3	107,563	15.1

Sources: PPC's Decisions from the Target PPCs on Forest Classification in 2016

19. The major forest products in the four provinces are: timber, firewood, bamboo, and other non-timber forest products (NTFPs) such as rattan and cardamom. Hoa Binh shows the highest production of all the forest products except NTFPs, because of existence of wood processing factories and prevalence of production forests in the province. The NTFP products such as medical plants, cardamom, honey, acanthopanax (dang sam) and, fake-cardamom (day mau cho) are sometimes sold to local collectors in the localities, and then, brought to small business operators at the district or provincial level.

### Socio-economic Conditions

20. Administratively, the target provinces have four (4) cities, one (1) town, 36 districts, which are further divided into 29 wards, 32 townships and 591 communes. The total population in the four target provinces in 2015 is estimated to be around 3.0 million. Son La has the largest population (1.19 million) among the four provinces, while the population density is highest in Hoa Binh (179 persons/km<sup>2</sup>). Lai Chau has the least population, which is less than 0.5 million. The average population growth rates (2009-2015) in the provinces range from 0.9% to 1.9%.

21. Ethnic compositions of the target provinces are more diverse in contrast to the tendency at the national level. More than 80% of the population are ethnic minorities in the target provinces except Hoa Binh. Thai is the dominant group, whose shares ranges from 34% to 54% of the total population in the three provinces (Son La, Dien Bien, and Lai Chau), followed by Mong, Hmong, and other ethnic groups (10 to 20 groups in total) in the same provinces. In Hoa Binh, 74% of the population are ethnic minorities, of which the majority are Muong people.

22. The poverty ratio in the country has been drastically reduced from 14% to 4% for the last five years. The four provinces shows the similar trend toward a decrease in poverty ratios, although the ratios in 2015 are still far higher than the national average in the same year. In Lai Chau, more than 30% of the total households are categorized as poor households in particular.

23. The UNDP's Vietnam Development Report 2011 claims that the target four provinces were ranked at the bottom in the gender development index, particularly Lai Chau (63rd ranking among 63 provinces) and Dien Bien provinces (61st among 63). Almost all the figures of the four provinces are lower/worse than the ones of the national average, and the adult female literacy rate, in particular, is as low as 68.05%, while the same of the national average is 91.28%.



24. Paddy rice is the main staple crop produced in the four target provinces with the total cropped area of 121,572 ha (which is the total of cropped areas of winter paddy and spring paddy). About 613,148 ton of paddy are produced mainly for self-consumption. Among the four provinces, Hoa Binh has the largest cropped area of paddy rice, while upland rice is the most prevailing crop in Dien Bien and Son La.
25. In the target provinces, the formal lending scheme available for poor households are 1) Vietnam Bank for Social Policy (VBSP), and 2) Vietnam bank for Agriculture and rural Development (so called Agribank). VBSP has a branch office basically at each district, and also has a transaction point which operates once a month at each CPC office. Agribank has its branches and transaction points at the same levels but their numbers are less than those of VBSP.

### **Rural Infrastructure**

26. There are 604 roads registered with total length of around 9,865 km in the four provinces. The average road density per 1,000 persons in the four provinces is 3.4 km/1,000 population, which is higher than the national average of 2.1 km/1,000 population. The proportions of rough roads (roads in poor conditions) in the district, provincial, and national roads in the target provinces are 57%, 18%, and 9%, respectively. The necessity of improving the district roads is considered high.
27. In the four provinces, there are 273 provincial and 5,415 district irrigation systems covering 28,907 ha and 76,461 ha, respectively. The total coverage of the potential irrigable area in the four provinces is 57%, which implies the necessity of improving the existing irrigation systems for increase of agricultural productivity. The annual cropping intensities (cultivated area per irrigation service area per year) under the provincial and district irrigation systems in the provinces ranges from 100% to 174% and 100% to 158%, respectively. The cropping intensity per season varies with provinces.
28. In the four target provinces, 65 urban and 3,520 rural water supply systems have been developed as of 2014, which supply water to 530,239 and 1,422,646 population in urban and rural areas, respectively. The beneficiary population ratio is 94% in the urban but is limited to 76% in the rural area. The average design capacity per day of urban water supply system is 1,845 m<sup>3</sup>/day/system, and the one of rural system is 57 m<sup>3</sup>/day/system.

## **Chapter 5 Review of Past and On-going Forestry Project similar to the Project**

### **Major ODA Forestry Project in Vietnam**

29. A number of ODA-funded forestry projects have been implemented in the forestry sector of Vietnam since the early 1990s. They have played an important role in the sector in terms of i) facilitation of the implementation of the government priority programs, ii) introduction of innovative silvicultural methods, iii) contribution to the formulation and development of relevant policies, and iv) development of new mechanisms and models on sustainable forest management including livelihood development.

## Reviews of Similar Projects

30. The preparatory survey team made the literature reviews of the past and on-going forestry projects similar in nature to the project to draw important lessons from those project for the formulation of the proposed project.

### Lessons learned from SPL-III

- a. Extensive information dissemination should be done for the local government and people at the commencement of the project.
- b. Local community should be fully involved in the preparatory and planning stage of the project.
- c. Contractor of the project working in forest development component should be public institutions.
- d. Ceiling of the budget for infrastructure construction and livelihood development should be increased.
- e. Benefit sharing mechanism should be piloted during the Project period.

### Lessons learned from JICA 2 Project:

- a. Commencement of the consulting services should not be delayed largely.
- b. Forest inventory data and GIS maps should be updated at the commencement of the Project.
- c. PPMUs should be responsible for the conducts of the surveys and detailed designs, which are implemented by sub-contractors at the local level, during the preparatory works.
- d. Physical targets of the forestry development component should not be ambitious but feasible.
- e. It takes a certain period of time to make disbursement from the time when a payment request is submitted to CPMU.

### Lessons learned from KfW7:

- a. Necessity of Guidelines and Manuals for Implementation
- b. Difficulty in Identification of the Project Sites
- c. Cost Norms for Forest Development and Management Components
- d. Difficulty in Allocation of Counterpart Funds
- e. Necessity of Capacity Development
- f. Weakness in Special Use Forest (SUF) Management
- g. Effectiveness of the Use of Saving Account

### Lessons learned from SUSFORM-NOW

- a. Utilization of provincial forest monitoring system (PFMS)
- b. Selection of rural development activities
- c. Improvement of the village development fund
- d. Necessity of improvement of management of special use forest

## Chapter 6 Results of the Study and Examination on Project Components and Scope

### Identification of Potential Target Sites for the Project

31. In order to select the target sites in an effective and efficient manner, the following two-step selection method was employed.

**First Selection: Long-listing of the potential target sites**

- i) DARDs of the target provinces preliminarily selected proposed areas according to the criteria for the 1st selection.
- ii) The survey team reviewed and assessed the proposed areas by checking the forest status, land ownership, site conditions and de facto land use in the respective areas together with DARDs and management boards concerned.
- iii) The capacity of the management boards were also considered in the selection of the potential target sites.

**Second Selection: Prioritization/Short-listing of the target sites**

- i) The survey team verified the current forest conditions in the potential target sites using the data of the National Forest Inventory and Statistics (NFI&S).
- ii) The potential target sites were evaluated in terms of i) poverty ratio of commune relating to the sites, ii) tendency of deforestation, iii) area of afforestation, iv) area of natural forest, and v) proportion of commune area in protection/special use forest.

**Potential Target Sites**

32. As a result of the assessment, the following areas were selected as the potential target sites in the four provinces.

**Potential Target Sites in the Four Provinces**

Province	Proposed Areas	Protection (ha)	ANR (ha)	Afforestation (ha)	No. of communes
Dien Bien	3 PFs and 1 SUF	10,400	2,030	3,160	8
Lai Chau	4 PFs	0	11,900	6,610	40
Son La	2 PFs and 2 SUFs	12,570	2,510	3,310	15
Hoa Binh	1 PF and 3 SUFs	29,580	1,240	3,270	34
<b>Total</b>	<b>10PFs and 6SUFs</b>	<b>52,550</b>	<b>17,680</b>	<b>16,350</b>	<b>97</b>

Source: JICA Preparatory Survey Team (2016)

33. The potential target sites are under the management of either PFMBs or SUFMB, but the part of the areas are allocated to households, groups of households, and/or villages in the communes relating to the proposed areas.

**Study on the Proposed Project Components**

34. The preparatory survey team examined and studied the proposed components of the proposed project, reviewed the institutional arrangements for the similar forestry projects, and examined the possible institutional framework for implementation of the project. As a result of the studies and examination, the preparatory survey team concluded that:
- i) The proposed project components are generally acceptable except those under Extension and Information Dissemination, which might not be eligible to be financed by the ODA loan;
  - ii) The project structure for the proposed project can be similar to that of JICA 2, although the names of the organizations in the structure may be changed and adjusted with the new decree; and
  - iii) The establishment of the project management units at the district level is expected to help the the project management units at the provincial level operate, manage, and monitor the project activities at the commune/village level, especially those carried out in the areas allocated to households/groups of communities. However, it is judged that the district project management unit (DPMU) is not necessarily required for implementation of the proposed project.



## PART II: Implementation Plan of the Proposed Project

### Chapter 1 Present Conditions of the Potential Target Sites

#### Location and Administrative Divisions

35. The potential target sites are administratively located in 97 communes out of 262 within 15 districts in the four provinces.

#### Forest Conditions and Forest Land Allocation

36. The present forest conditions in the communes relating to the potential target sites were shown below.

Forest Area in the 97 Communes in the Four Provinces

(Unit: ha)

Provinces	Evergreen broadleaves (Rich)	Evergreen broadleaves (Medium)	Evergreen broadleaves (Poor)	Evergreen broadleaves (Regrowth)	Bamboo forest	Mixed wood-bamboo forests	Lime stone forest	Plantation	Total
Dien Bien	111	2,268	2,685	27,812	49	5,313	0	3,395	42,733
Lai Chau	19	3,783	16,455	58,285	530	2,436	8,803	14,988	105,299
Son La	3,777	6,427	5,234	41,395	1,813	9,974	12,757	2,791	84,178
Hoa Binh	53	5,947	4,765	24,018	689	3,086	28,612	18,961	86,130
<b>Total</b>	<b>3,960</b>	<b>19,524</b>	<b>29,149</b>	<b>151,510</b>	<b>3,081</b>	<b>20,809</b>	<b>50,172</b>	<b>40,136</b>	<b>318,340</b>

Source: NFI&S (2015) obtained in the provinces (adapted by the JICA Survey Team (2016))

37. The forest land allocation conditions in the 97 communes relating to the target protection forests and nature reserves are summarized below.

Land Allocation Conditions of the Proposed Areas

(Unit: ha)

Province	Target PF/SUF	No. of commune	Areas allocated to MB	Areas allocated to HHs	Area unallocated	Total Area
Dien Bien	3 PFs and 1 SUF	8	7,258	0	13,929	21,187
Lai Chau	4 PFs	40	51,950	0	0	51,950
Son La	2 PFs and 2 SUFs	15	45,014	0	9,163	54,177
Hoa Binh	1 PF and 3 SUFs	34<1	15,068	35,457	0	50,526
<b>Total</b>	<b>10 PF and 6 SUFs</b>	<b>97</b>	<b>119,291</b>	<b>35,457</b>	<b>22,092</b>	<b>178,840</b>

Note: <1 Three (3) communes in Da River Watershed Protection Forest also relate to Phu Canh SUF; therefore, the total number of communes selected as target communes in Hoa Binh is 34.

Source: JICA Preparatory Survey Team (2016)

#### Socio-economic Conditions

38. The total population in the 97 communes amount to 358,655, which accounts for around 30% of the total population of the 15 districts. Lai Chau occupies the largest share, which accounts for 40 communes with 172,000 population, while the number of communes and populations related to the potential target sites in Dien Bien are 8 and 30,690, respectively, which are the smallest shares among the four provinces.

39. Like in the case of the four target provinces, ethnic groups are the majority populations in the 15 districts. The overall proportion of ethnic minorities to the total populations in the 15 districts is estimated at 86%. As a whole, Thai is the most dominant group whose share range from 16 to 83% in the 15 districts, followed by Hmong, Muong and Dao.

40. The labor force population in 2015 in the four provinces is estimated at 62%. In the four provinces, the labor force engaged in the agriculture, forestry and fishery sector has

declined from 74% to 69% for the last four years, while those of the industry and construction sector and the service sector have slightly increased for the same period.

41. The results of the socio economic survey conducted by the preparatory survey team reveals that the average per capita annual income in the sampled communes is about VND 9,200,000, which is far lower than the provincial average of VND 22,309,000 per person per annum. The results suggest that the average per capita annual income in the sampled communes in Son La and Hoa Binh may be less than 40% of the provincial averages. The poverty rate in the 15 districts has been reduced from 38.9% to 22.4% for the last five years. Compared with the latest national poverty rate (6%) in 2014, the rate of the target districts is still about four times higher.

### **Small-scale Rural Infrastructure**

42. Commune level roads are generally classified as “commune roads” or “village roads,” which are managed and maintained by local communities. The total length of commune level roads in the district ranges from 248 km in Tan Uyen district in Lai Chau to 1,661 km in Lac Son district in Hoa Binh. Most of the commune level roads are earth roads, which might not be passable during the rainy season. In particular, the ratio of earth roads in the 15 districts except two districts (Tan Uyen and Than Uyen) in Lai Chau and three districts (Mai Chau, Lac Son, and Tan Lac) in Hoa Binh is more than 80% of the total length of the commune level roads.
43. There are many small scale irrigation systems existing in the 15 districts. The number of the systems ranges from 11 to 880, while the irrigation areas of the systems range from the micro level (less than 1 ha) to the medium scale (more than 100 ha). The majority of them falls within the range from 10 to 20 ha/system in general.
44. A small-scale and simple water supply infrastructure is commonly found as a rural water supply system at the commune, village, or hamlet levels. The number and size of the water supply system in the target districts vary with the districts from 7 units to 436 units and from 2 households to 2,589 households.

### **Forest Production**

45. The major forest products harvested and marketed in the 15 districts are timber, firewood and NTFPs (namely bamboo, medicinal plants and rattan) like in the case of the provinces.

### **Issues and Problems**

46. The major drivers of forest degradation, which were confirmed in the socio-economic survey in the sampled communes, are categorized as follows: i) illegal logging, ii) conversion of forests to farms, and iii) forest fire. They are mainly attributed to i) a lack of arable land and limited alternative livelihood options, ii) exploitation of timber for house construction, iii) collection of firewood, iv) slash and burn cultivation, v) harvesting of honey, vi) littering of cigarette butts, and vii) natural fires.
47. The issues of livelihood development in the 15 districts closely relate to the underlying causes of forest degradation and deforestation. They are diverse, inter-linked with each other, but generally derived from two fundamental conditions in the districts, namely, i) poor accessibility, and ii) unfavorable farming conditions.

48. Low quality and low durability of the facilities are common issues found in the small scale infrastructure facilities in the 15 districts: namely commune/village roads, village irrigation systems, and village water supply systems. These issues are mainly caused by a lack of budget allocated to small scale rural infrastructure.

## **Chapter 2 Rationales and Justifications of the Project**

### **Contribution to the Existing Policies and Plans in the Forestry Sector**

49. The implementation of the proposed project will contribute to the achievement of the following key policies and plans in the forestry sector.

- ◆ Vietnam Forest Development Strategy (2006-2020)
- ◆ National Forest Protection and Development Plan (2011-2020)
- ◆ Forestry Sector Reform Proposal
- ◆ National Action Program on REDD+ (2011-2020)
- ◆ Provincial Forest Protection and Development Plan

### **Compliance with International Conventions**

50. The proposed project will also contribute to the achievement of GoV's commitment to international conventions. Among others, the project will directly contribute to the reduction of Vietnam's Greenhouse Gas (GHG) emissions. In addition, the project will directly contribute to the conservation of natural ecosystems, especially natural forests in nature reserves and protection forests, which is also one of the objectives of the National Biodiversity Strategy to 2020.

### **Consistency with Japanese ODA Policy**

51. The proposed project will contribute to i) quality growth, ii) poverty eradication in the northwest region, iii) mitigation of climate change, and iv) improvement of socio-economic conditions, especially in hilly and mountainous areas. Hence, the project is considered consistent with the Japanese ODA policy as well as JICA's country policy.

### **Necessity of the Project**

52. As described in the Forest Sector Reform Proposal (MARD Decision No. 1565/QĐ-BNN-TCLN on July 8, 2013), forests in the Northwest region have an important role in protecting watersheds of major hydropower plants in the region, such as Hoa Binh Dam and Son La Dam. Moreover, they have also contributed to the stabilization of river flow of the major rivers flowing into Hanoi (e.g., the Da river and other tributaries of the Red river). Lowering of the innate watershed functions due to deforestation and forest degradation in the area is a serious concern of the country. Hence, aggressive interventions for improving functions of watershed forests in the region is needed for economic and social stability in the country. As the project will directly address such concerns, its necessity is considered high from the national socio-economic point of view.

### **Necessity of JICA's Assistance**

53. JICA is one of the largest donors in the forestry sector and have been implementing a number of forestry projects in Vietnam. Among others, the experiences gained and lessons learned from the JICA2 Project can be fully used for the proposed project as its project framework and organizational structure are similar to those of the proposed project.



Furthermore, the technical guidelines and manuals and human resources that the Sustainable Natural Resource Management Project will develop and enhance in the course of the project can be used for the implementation of the proposed project. Consequently, the experiences of JICA are best fit to the proposed project.

## Chapter 3 The Project

### Overall Goal and Project Objectives

54. The overall goals of the Project are: i) sustainable development, management and protection of forests in the Northwest region; ii) improvement of the production values of forest products; iii) conservation of biodiversity; and iv) reduction of poverty and improvement of livelihoods of households living in mountainous areas. In order to achieve these overall goals, the Project specifically aims:
- To restore and improve watershed forests in four provinces in the Northwest region for both economic and environmental purposes;
  - To strengthen the capacity of the local governments and owners of forests, such as, management boards of protection and special use forests, organizations, groups of households, and individuals for sustainable forest management; and
  - To contribute to the achievement of the goal and objectives of the National REDD+ Action Plan, especially the reduction of greenhouse gas (GHG) emissions through reduction of deforestation and forest degradation in the Northwest region.

### Basic Approaches and Project Features

55. The following basic approaches are to be taken for efficient implementation of the proposed project and effective achievement of the project objectives.
- Community-centered
  - Introduction of Benefit Sharing Mechanisms
  - Integration of Livelihood Development with Forest Development and Improvement
  - Contribution to REDD+ Activities in the Provinces
  - Capacity Development of the Relevant Stakeholders
  - Synchronization with JICA-T/C

### Project Areas

56. In order to examine an optimum plan of the proposed project, the preparatory survey team further assessed and evaluated the 97 communes relating to the potential target sites in terms of the following aspects.
- Size of the potential area for afforestation
  - Size of natural forests
  - Proportion to the proposed PF/SUF
  - Trend of forest degradation
  - Poverty ratio
57. Having evaluated the 97 communes and classified them into three classes (high, medium and low), the preparatory survey team, in close consultation with MBFPs/MARD, selected the target sites for communes classified as high and medium priority as the project areas to

optimize the project size in terms of physical and financial aspects. The project areas selected in the respective provinces are summarized below.

Summary of the Project Areas

Province	Proposed Areas	Protection (ha)	ANR (ha)	Afforestation (ha)	No. of district	No. of communes
Dien Bien	3PFs and 1 SUF	10,400	2,310	3,160	3	8
Lai Chau	4PFs	0	7,500	6,550	3	22
Son La	2PFs and 2 SUFs	9,900	2,470	3,220	3	11
Hoa Binh	1PF and 3 SUFs	24,880	840	3,020	3	23
<b>Total</b>	<b>10PFs and 6 SUFs</b>	<b>45,180</b>	<b>13,120</b>	<b>16,010</b>	<b>14</b>	<b>64</b>

Source: JICA Preparatory Survey Team (2016)

## Project Components

58. The proposed project is composed of eight components: namely, i) survey and detailed planning; ii) improvement of watershed forests; iii) development of silviculture infrastructure, iv) improvement of small scale rural infrastructure, v) support for livelihood improvement, vi) forest fire control, vii) project management, and viii) technical cooperation/consulting services.

## Major Activities and Purposes of the project components

59. The following table shows the purposes and activities of each component proposed in the project.

Major Purposes and Activities of the Project Components

Component	Main purposes
Survey and detailed planning	<ul style="list-style-type: none"> <li>- to purchase high resolution satellite images covering the target protection forests and special use forests.</li> <li>- to develop photo-like maps covering the target communes for the participatory land use planning (PLUP)</li> <li>- to conduct PLUP in the communes geographically relating to the target protection forests and special use forests to determine the project areas in a participatory manner.</li> <li>- to select local households and communities who will take part in the project and organize them into village working groups.</li> <li>- to prepare detailed plans of forest development/improvement activities</li> </ul>
Improvement of watershed forests	<ul style="list-style-type: none"> <li>- to restore forests in bare lands/grasslands/bushes in the target protection forests and special use forests located in critical watersheds in a participatory manner.</li> <li>- to improve degraded forests and protect natural forests in the target protection forests and special use forests located in critical watersheds in a participatory manner.</li> <li>- to prepare regulations and decisions on benefit sharing mechanism and collaborative management system.</li> </ul>
Improvement of silviculture infrastructure	<ul style="list-style-type: none"> <li>- to develop and construct silviculture infrastructure, such as motorbike roads, watch towers, guard stations, fire break lines, and information boards, to enable forest owners to manage the target protection and special use forests in a proper and efficient manner.</li> </ul>
Improvement of small-scale rural infrastructure	<ul style="list-style-type: none"> <li>- to improve small-scale rural infrastructure, such as village roads, communal irrigation systems, and water supply systems, which could improve the marketing conditions and increase productivity or profitability of existing or potential income generating activities and/or contribute to the improvement of living conditions in the target communes/villages.</li> </ul>
Support for livelihood improvement	<ul style="list-style-type: none"> <li>- to identify priority potential income generating/livelihood development activities in the target communes.</li> <li>- to develop strategies for marketing major forestry and agricultural products in the target provinces.</li> <li>- to develop the capacity of local communities to introduce new techniques and skills for improvement of agricultural production, sustainable forest management, utilization and processing of NTFPs, and production of any marketable commodities.</li> <li>- to help the village working groups/group members save a certain amount of payments made by the project for forest development, improvement and protection activities and to effectively use the savings for livelihood improvement of the members and forest protection in the post project period.</li> </ul>
Forest fire control	<ul style="list-style-type: none"> <li>- to capacitate forest rangers and local communities to prevent and control forest fires by provision of fire extinction equipment and training on forest fire control.</li> </ul>

Component	Main purposes
Project management	<ul style="list-style-type: none"> <li>- to establish organizational structures at both the central and provincial levels and deploy/hire project officers for project implementation and management.</li> <li>- to prepare the project implementation guidelines/regulations for CPMB and PPMBs.</li> <li>- to prepare technical handbooks for PFMBs, SUFMBs, and village working groups.</li> <li>- to procure project equipment for CPMB and PPMBs.</li> <li>- to develop a GIS-based monitoring system.</li> <li>- to make CPMB, MBFPs, PPMBs, DARDs, PFMBs, and SUFMBs understand the project concept, guidelines/regulations and procedures for project implementation</li> <li>- to help CPMB, MBFPs, PPMBs, and DARDs implement and manage the project in a proper and effective manner.</li> <li>- to make CPCs and local communities in the target communes/villages aware of the project (outlines, concepts, activities, expected benefits and obligations of the communities).</li> <li>- to help PFMBs, SUFMBs, DPCs, CPCs, and extension workers provide technical assistance to local communities.</li> <li>- to check physical and financial progress of the project and detect issues/problems that would affect the project implementation at an early stage.</li> <li>- to provide adequate data and information to the project owners and project implementation agencies for proper project management on a timely manner.</li> <li>- to support the relevant forest management boards (PFMBs/SUFMBs) concerned in monitoring the changes of forest cover in the project areas and reporting the annual changes to DARDs/PPCs.</li> <li>- to evaluate the impact of the project.</li> </ul>
Technical cooperation / Consulting services	<ul style="list-style-type: none"> <li>- to assist CPMB and PPMBs in the implementation and management of the project in an effective and proper manner.</li> <li>- to provide necessary coaching and guidance to the relevant stakeholders, especially CPMB and PPMBs, for improvement and enhancement of their managerial, administrative, and technical capacities.</li> </ul>

Source: JICA Preparatory Survey Team (2016)

## Work quantity of project components

60. The proposed work quantities of the respective project components are summarized below.

Work Quantity of the Project Components	
Component	Major works
Survey and detailed planning	<ul style="list-style-type: none"> <li>◆ Procurement of the latest high resolution satellite images covering 4,681 km<sup>2</sup></li> <li>◆ Conduct of participatory land use planning activities with formation of village working groups in 64 communes</li> <li>◆ Demarcation of about 16,010 ha of sites for afforestation with set-ups of land marks</li> <li>◆ Conduct of baseline surveys in 64 communes</li> <li>◆ Preparation of detailed designs for forest development and improvement activities</li> </ul>
Improvement of watershed forests	<ul style="list-style-type: none"> <li>◆ Conduct of the following forest development and improvement activities in 10 protection forests and 6 special use forests in the four provinces <ul style="list-style-type: none"> <li>- Afforestation in 16,010 ha of bare lands, grasslands, and bushes</li> <li>- Assisted natural regeneration of 13,120 ha of degraded forests</li> <li>- Protection of 45,180 ha of natural forests</li> </ul> </li> <li>◆ Provision of guidance on silviculture techniques to PFMBs and SUFMBs each in the four provinces</li> <li>◆ Provision of guidance on collaborative management to PPMBs, DARDs, PFMBs, and SUFMBs</li> <li>◆ Arrangement and organization of workshops for development of a forest management plan with 64 communes in the four provinces</li> </ul>
Improvement of silviculture infrastructure	<ul style="list-style-type: none"> <li>◆ Development and improvement of silviculture infrastructure: <ul style="list-style-type: none"> <li>- Motorbike roads: 121.5 km</li> <li>- Footpaths: 30 km</li> <li>- Fire break lines (FBL): 278 km</li> <li>- Fire watch towers: 29 units</li> <li>- Forest management board office: 1 units</li> <li>- Forest guard station: 33 units</li> <li>- Information boards: 59 units</li> <li>- Sign boards: 71 units</li> <li>- Nurseries: 10 units</li> </ul> </li> <li>◆ No physical development within areas designated as special use forest</li> </ul>
Improvement of small-scale rural infrastructure	<ul style="list-style-type: none"> <li>◆ Planning of improvement of small scale rural infrastructure in 64 communes in the four provinces, such as: <ul style="list-style-type: none"> <li>- Rehabilitation of village roads: 61.4 km</li> <li>- Rehabilitation of irrigation systems: 28.3 km of canal</li> <li>- Rehabilitation of water supply systems: 14 units</li> </ul> </li> <li>◆ Conduct of ground surveys and detailed designing of the improvement of small scale rural infrastructure</li> </ul>

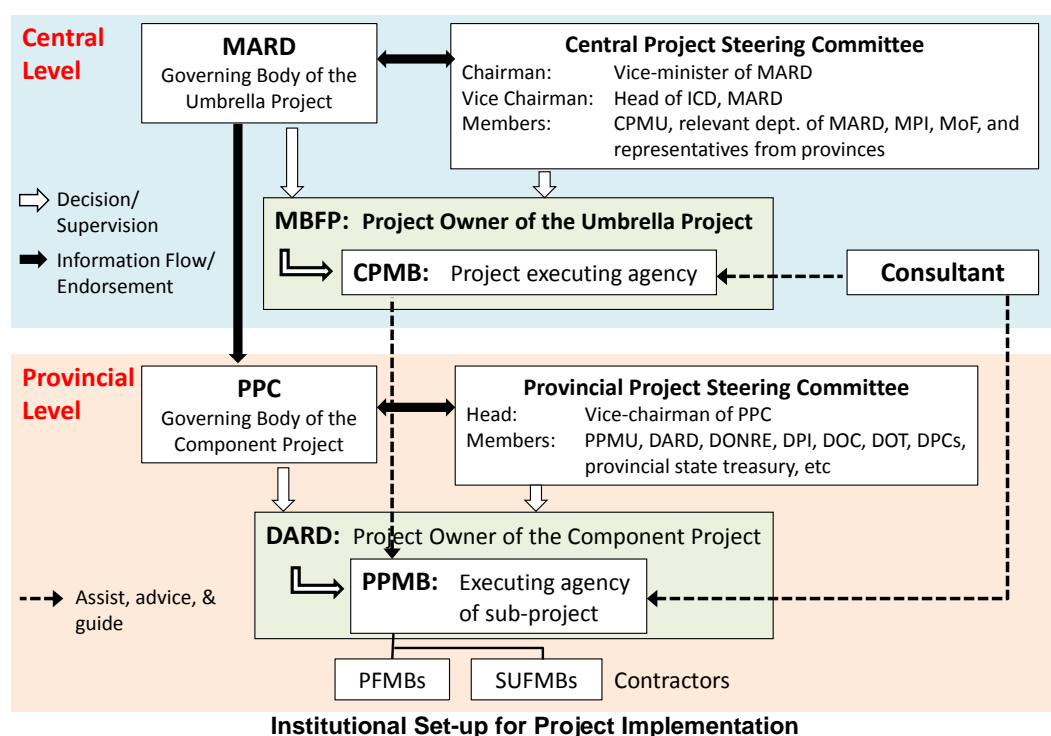


Component	Major works
	<ul style="list-style-type: none"> <li>◆ Construction for improvement of small scale rural infrastructure</li> <li>◆ Provision of guidance on O&amp;M of small scale rural infrastructure and livelihood development activities to CPCs, commune extension workers, and users' groups in 64 communes in the four provinces</li> </ul>
Support for livelihood improvement	<ul style="list-style-type: none"> <li>◆ Arrangement and organization of workshops for identification and selection of priority livelihood development options in 64 communes in the four provinces</li> <li>◆ Arrangement and conduct of a marketing survey to develop marketing strategies for major agricultural and forestry products</li> <li>◆ Development of demonstration/model plots for selected priority livelihood development options in 64 communes in the four provinces</li> <li>◆ Provision of training courses on selected priority livelihood development options to i) DAECs and commune extension workers in 11 districts, ii) local communities at the demonstration/model plots developed in 64 communes in the four provinces</li> <li>◆ Provision of guidance on the management of payments made by the project and the use of saving capitals for forest management and livelihood development in 64 communes in the four provinces</li> <li>◆ Arrangement and organization of training courses on financial management for the village working groups organized in 64 communes in the four provinces</li> <li>◆ Arrangement and organization of workshops on the preparation of business plans on potential income generating activities</li> </ul>
Forest fire prevention	<ul style="list-style-type: none"> <li>◆ Provision of equipment for forest fire control to 11 District Forest Ranger Offices and 16 PFMBs/SUFMBs in the four provinces</li> <li>◆ Arrangement and organization of training courses on forest fire training for i) forest rangers in each province and ii) village leaders and members of the village working groups in 64 communes in the four provinces</li> <li>◆ Assist trained forest rangers in the organization of forest fire drills twice in 64 communes in the four provinces in the course of the project</li> </ul>
Project management	<ul style="list-style-type: none"> <li>◆ Establishment of one CPMB and four (4) PPMBs at the central and provincial levels, respectively</li> <li>◆ Allocation and employment of the project staff</li> <li>◆ Development of a GIS-based monitoring system and forms/formats for regular monitoring</li> <li>◆ Preparation and establishment of regulations and guidelines for implementation of the project</li> <li>◆ Procurement of project equipment</li> <li>◆ Development of draft TORs for the works to be contracted out to contractors for implementation of the project components</li> <li>◆ Arrangement and organization of project orientations for i) CPMB and relevant departments of MARD, ii) PPMBs and DARDs of four provinces, iii) 10 PFMBs, 6 SUFMBs, 11 DPCs, and 64 CPCs in the four provinces</li> <li>◆ Arrangement and organization of annual planning workshops with i) CPMB and ii) PPMBs in the four provinces</li> <li>◆ Provision of orientation and guidance on annual work plan to i) 10 PFMBs, 6 SUFMBs and 11 DPCs and ii) 64 CPCs and the associated village working groups</li> <li>◆ Provision of orientation and guidance on benefit sharing mechanism to i) CPMB and the relevant department of MARD, ii) PPMBs and DARDs of the four provinces, 10 PFMBs, and 6 SUFMBs, and iii) 11 DPCs, 64 CPCs, and the associated village working groups</li> <li>◆ Production, publication, and distribution of project documents, such as project brief (overall and provincial projects), project newsletters (overall and provincial projects), and awareness raising materials.</li> <li>◆ Arrangement and conduct of the following study tours twice each: <ul style="list-style-type: none"> <li>- study tour to JICA2 sites for PPMBs, PFMBs, and SUFMBs</li> <li>- study tour to SNRMP target communes for PFMBs, SUFMBs, and village working groups</li> <li>- overseas study tours for CPMB/MBFPs and PPMBs and DARDs</li> </ul> </li> <li>◆ Arrangement and organization of bi-annual review meetings with i) CPMB and ii) PPMBs in the four provinces</li> <li>◆ Establishment of monitoring, supervision and evaluation systems for the project</li> <li>◆ Conduct of progress monitoring on a regular basis (monthly and quarterly)</li> <li>◆ Conduct of periodic monitoring and evaluation of the project (initial, mid-term and terminal evaluation)</li> <li>◆ Monitoring of forest resources (changes in forest resources) by using PFMS and its associated devices introduced by SNRMP in 11 districts</li> </ul>
Consulting Service	<ul style="list-style-type: none"> <li>◆ Assistance in development and preparation of technical manuals, forms, and systems for proper and efficient implementation of the project</li> <li>◆ Assistance in supervision and management of the project activities contracted out to contractors</li> <li>◆ Provision of OJT and periodic coaching to the relevant stakeholders, especially CPMB and PPMBs, on the implementation and management of the project components</li> <li>◆ Expertise required: Project management, Forest development, planning, and monitoring, REDD+ safeguard and community-based/collaborative management, Livelihood development, and NTFP production</li> <li>◆ Total MM allocated: 83 MM for international experts, 262 MM for national experts, and 200 MM for supporting staff</li> </ul>

Source: JICA Preparatory Survey (2016)

## Institutional Arrangement of Implementation of the Project

61. The following figure shows the proposed institutional set-up for the implementation of the project.



Source: JICA Preparatory Survey Team (2016)

## Implementation and Procurement Methods

62. The project activities will be implemented basically by two ways: i) direct implementation by CPMB or PPMBs with or without technical and managerial assistance from the project consultant and ii) implementation by outsourcing to external organizations, which are mainly public institutions, such as NAEC, FIPI, PAEC, PFMBs, SUFMBs, state universities, state research institutions, and design and consulting centers.

63. Direct appointment method is to be employed for procurement of contractors for the project activities which only specific public institutions are considered capable to undertake from the financial, technical, and managerial points of view, such as site demarcation (to be outsourced to PFMBs/SUFMBs) and Forest development and improvement (to be outsourced to PFMBs/SUFMBs).

64. Aside from the above-listed activities, CPMB or PPMBs will chose the procurement method, local competitive bidding or direct appointment, considering i) technical and financial capacities of potential executors/contractors and ii) difficulties of the respective project activities prior to the procurement of contractors for the works. The project consultant should be procured by the international competitive bidding (ICB) method.

## Implementation Schedule

65. A draft implementation schedule of the project is as follows.

Work Items	- (2016/17)	1st Yr (2017/18)	2nd Yr (2018/19)	3rd Yr (2019/20)	4th Yr (2020/21)	5th Yr (2021/22)	6th Yr (2022/23)	7th Yr (2023/24)	8th Yr (2024/25)	9th Yr (2025/26)	10th Yr (2026/27)	11th Yr (2027/28)
JICA Appraisal of the Project	■											
Approval of the Project by GoV		■										
Signing of Loan Agreement		■										
<b>0. Preparatory Work (under Project Management)</b>												
0-1 Establishment of CPMB, CSC, PPMBs, and PSCs		■										
0-2 Institutional Set-up		■										
0-3 Procurement of Consultant		■	■									
<b>1. Survey and Detailed Planning</b>												
1-1 Participatory Land Use Planning and Group Formation			■	■	■	■						
1-2 Site demarcation and set-ups of land marks				■	■	■						
1-3 Baseline surveys in the target communes					■	■						
1-4 Detailed Designing of Forest Development and Silviculture Infrastructure			■	■	■	■	■					
1-5 Detailed Designing of Small Scale Rural Infrastructure				■	■	■						
<b>2. Improvement of Watershed Forests</b>												
2-1 Afforestation					■	■	■					
2-2 Protection of Natural Forests												
2-3 Assisted Natural Regeneration												
2-4 Phase-out/Phase-in Activities								■	■			
<b>3. Improvement of Silviculture Infrastructure</b>												
3-1 Forestry Roads				■	■	■						
3-2 Footpaths				■	■	■						
3-3 Fire Breakline					■	■	■	■				
3-4 Fire Watch Towers					■	■	■	■				
3-5 Forest Protection Station				■	■	■	■					
3-6 Forest Protection Office				■	■	■	■					
3-7 Information Boards					■	■	■	■				
3-8 Sign Board					■	■	■	■				
3-9 Nursery				■								
<b>4. Improvement of Small Scale Rural Infrastructure</b>												
4-1 Tender					■	■	■					
4-2 Construction					■	■	■					
4-3 Operation and Maintenance												
<b>5. Support for Livelihood Development</b>												
5-1 Assistance in Identification/Selection of Priority Livelihood Options				■	■	■						
5-2 Marketing Survey			■	■								
5-3 Development of Demonstration/Model Plots and Provision of Training Courses on Selected Livelihood Development Options					■	■	■					
5-4 Assistance in Management and Use of Payments made to the Village Working Groups				■	■	■	■	■				
5-5 Inter-district or province Cross Field Visit						■	■	■	■			
<b>6. Forest Fire Prevention</b>												
6-1 Provision of Equipment for Forest Fire Control		■			■							
6-2 Forest Fire Control Training					■		■					
<b>7. Project Management</b>												
7-1 Information Dissemination			■	■	■	■	■	■				
7-2 Production and Publication of Project Documents			■	■	■	■	■	■				
7-3 Study Tours			■	■	■	■	■	■				
7-4 Technical Guidance to the Stakeholders			■	■	■	■	■	■				
7-5 Review Meetings		■	■	■	■	■	■	■	■	■	■	■
7-6 Project Monitoring and Evaluation		■	■	■	■	■	■	■	■	■	■	■
7-7 Forest Monitoring			■	■	■	■	■	■	■	■	■	■
<b>8. Consulting Services</b>												
8-1 Provision of Consulting Services			■	■	■	■	■	■	■	■	■	■

Draft Implementation Schedule of the Project

Source: JICA Preparatory Survey Team (2016)

## Chapter 4 Project Cost

### Total Project Cost

66. The total project cost of the entire project is estimated at VND 2,292.1 billion as shown below.

## Summary of Currency Components for the Project Cost

(Unit: VND million)

Component	LC	FC	Total
1. Survey and Detailed Planning	65,131	0	65,131
2. Improvement of Watershed Forests	984,878	0	984,878
3. Improvement of Silviculture Infrastructure	112,469	0	112,469
4. Small scale infrastructure	148,755	0	148,755
5. Support for Livelihood Development	44,006	0	44,006
6. Forest Fire Control	16,881	0	16,881
<b>7. Sub-total of Direct Costs (Sum of 1-6)</b>	<b>1,372,120</b>	<b>0</b>	<b>1,372,120</b>
8. Price Escalation	322,356	0	322,356
9. Physical contingency	68,606	0	68,606
<b>10. Sub-total (7+8+9) (Base Cost for Components eligible to be loaned)</b>	<b>1,764,082</b>	<b>0</b>	<b>1,764,082</b>
11. Project Management	125,580	0	125,580
12. Price Escalation	30,868	0	30,868
13. Physical contingency	6,279	0	6,279
<b>14. Sub-total (11+12+13) (Administration Cost)</b>	<b>162,728</b>	<b>0</b>	<b>162,728</b>
15. Consulting Services	64,799	66,251	131,050
16. Taxes and Duties	186,840	9,938	196,778
<b>17. Total Project Cost excluding Loan Interest and Front End Fees (10+14+15+16)</b>	<b>2,178,449</b>	<b>76,189</b>	<b>2,254,638</b>
18. Loan Interest during the Project Period	33,680	0	33,680
19. Front End Fee	3,790	0	3,790
<b>20. Grand Total (Sum of 17-19)</b>	<b>2,215,918</b>	<b>76,189</b>	<b>2,292,107</b>

Source: JICA Preparatory Survey Team (2016)

## Annual Cost Schedule

67. The annual cost disbursement schedule for the whole project is summarized below.

## Summary of Annual Cost Schedule of the Whole Project

(Unit: VND million)

Items	1st (2017/18)	2nd (2018/19)	3rd (2019/20)	4th (2020/21)	5th (2021/22)	6th (2022/23)	7th (2023/24)	8th (2024/25)	9th (2025/26)	10th (2026/27)	11th (2027/28)	Total
Direct cost <1	0	11,574	43,845	226,815	370,236	391,662	186,325	106,102	35,562	0	0	1,372,120
Administration <1	10,644	13,049	11,602	12,939	11,888	13,341	12,227	10,713	10,713	15,994	2,674	125,580
Price contingency	404	1,891	6,564	38,573	78,335	101,570	59,232	40,611	18,908	7,230	1,356	354,436
Physical contingency	532	1,221	2,772	11,988	19,106	20,250	9,928	5,841	2,416	800	134	74,885
Consulting services	0	14,398	21,009	24,445	22,413	17,092	15,719	12,239	3,781	0	0	131,050
Taxes & duties	341	5,097	8,333	31,231	48,718	52,466	27,487	16,544	5,740	818	3	196,778
<b>Total Project Cost</b>	<b>11,921</b>	<b>47,028</b>	<b>94,124</b>	<b>345,945</b>	<b>550,695</b>	<b>596,381</b>	<b>310,916</b>	<b>192,050</b>	<b>76,568</b>	<b>24,841</b>	<b>4,167</b>	<b>2,254,638</b>

Note: &lt;1 The figures exclude price escalations and physical contingencies.

Source: JICA Preparatory Survey Team (2016)

## Financial Plan

68. The total cost to be borne by the GoV is estimated at VND 363.3 billion, while the total cost to be covered by the JICA loan is estimated at VND 1,928.8 billion (JPY 8,999.9 million).

## Summary of Fund Requirement

(Unit: VND million)

Component	GoV	Loan	Total
1. Survey and Detailed Planning	0	65,131	65,131
2. Improvement of Watershed Forests	0	984,878	984,878
3. Improvement of Silviculture Infrastructure	0	112,469	112,469
4. Small scale infrastructure	0	148,755	148,755
5. Support for Livelihood Development	0	44,006	44,006
6. Forest Fire Control	0	16,881	16,881
<b>7. Sub-total of Direct Costs (Sum of 1-6)</b>	<b>0</b>	<b>1,372,120</b>	<b>1,372,120</b>

Component	GoV	Loan	Total
8. Price Escalation	0	322,356	322,356
9. Physical contingency	0	68,606	68,606
<b>10. Sub-total (7+8+9) (Base Cost for Components eligible to be loaned)</b>	<b>0</b> <b>(0)</b>	<b>1,764,082</b> <b>(8,139.8)</b>	<b>1,764,082</b> <b>(8,139.8)</b>
11. Project Management	125,580	0	125,580
12. Price Escalation	30,868	0	30,868
13. Physical contingency	6,279	0	6,279
<b>14. Sub-total (11+12+13) (Administration Cost)</b>	<b>162,728</b>	<b>0</b>	<b>162,728</b>
15. Consulting Services	0	131,050	131,050
16. Taxes and Duties	196,778	0	196,778
<b>17. Total Project Cost excluding Loan Interest and Front End Fees (10+14+15+16)</b>	<b>352,505</b> <b>(1,658.8)</b>	<b>1,895,132</b> <b>(8,744.5)</b>	<b>2,254,638</b> <b>(10,403.3)</b>
18. Loan Interest during the Project Period	0	33,680	33,680
19. Front End Fee	3,790	0	3,790
<b>20. Grand Total (Sum of 17-19)</b>	<b>363,296</b> <b>(1,676.3)</b>	<b>1,928,812</b> <b>(8,899.9)</b>	<b>2,292,107</b> <b>(10,576.2)</b>

Source: JICA Preparatory Survey Team (2016)

## Chapter 5 Project Evaluation

### Economic Cost of the Project

69. The total economic cost of the project was estimated at VND 1,243 billion as shown below. In addition to the project cost, the economic operation and maintenance cost and replacement cost were calculated for the evaluation.

#### Economic Cost of the Project

(Unit: VND Million)

	Cost Items	Financial Cost	CF	Economic Cost
1	Survey and Detailed Planning	65,131	0.9	58,617
2	Improvement of Watershed Forests	984,878	0.6 for labour cost, 0.9 for other cost	638,146
3	Improvement of Silviculture Infrastructure	112,469	0.8	89,974
4	Small scale infrastructure	148,755	0.8	119,004
5	Support for Livelihood Development	44,006	0.9	39,607
6	Forest Fire Control	16,881	0.9	15,195
7	<b>Sub-total OF Base Cost (1-6)</b>	<b>1,372,120</b>		<b>960,544</b>
8	Project Management	125,580	0.9	113,019
9	Price contingency of Base Cost and PM Cost	354,225	None *	0
10	<b>Sub-total (7+8+9)</b>	<b>1,851,925</b>		<b>1,073,563</b>
11	Physical Contingency (5% of items 7 and 8)	74,885	-	53,678
12	Consulting Services (including Physical Cont.)	115,880	1.0	115,880
13	Price contingency of Consulting Services	15,170	-	0
14	Tax and Duty	196,778	None *	0
15	<b>GRAND TOTAL (10+11+12+13+14)</b>	<b>2,254,638</b>		<b>1,243,122</b>

\* The price contingency and TAX is excluded from the economic cost

Source: JICA Preparatory Survey Team (2016)

### Economic Benefits

70. The following economic benefits are expected to be generated through the implementation of the project.

- Benefits from collection of firewood, timber, and resin from the plantations developed in protection forests
- Benefits from CO<sub>2</sub> sequestration by afforestation and assisted natural regeneration
- Benefits from reduction of CO<sub>2</sub> emissions through reduction of deforestation and forest degradation



## Cost-Benefit Analysis

71. The economic rate of return (EIRR), cost-benefit ratio (B/C) and the net present values (NPV) were estimated by using the discount rate of 10% to validate the economic feasibility of the project.

Results of the Economic Analysis			
	EIRR	B/C	NPV
Whole Project	10.7 %	1.08	VND 75,037 million

Source: JICA Preparatory Survey Team (2016)

## Financial Analysis

72. The affordability of the counterpart funds required for operations of the component projects in the respective target provinces was first assessed as compared to the average provincial budgets, especially those categorized as “development investment expenditures.” Moreover, the financial soundness of the provincial governments, in the case where the on-lending scheme would be adopted, was assessed by checking if the provincial governments could pay 50% of the loan amount for the component projects implemented in the respective provinces. The results suggest that:

- i) It would not be difficult for the target provinces to secure the counterpart budget necessary for the project implementation; and
- ii) The target provinces might be capable to repay 50% of the loan amount allocated to the respective provinces in theory, although it might not necessarily be easy for the provincial governments coordinate the other priority development activities planned by other sectors in the provinces.

73. A household budget analysis was made to assess the potential financial impact on local households who would participate in the forest development and improvement activities. The results of the assessment indicate that local household who participate in the forest development and improvement activities could earn cash income of VND 8.0 ~ 21.3 million/year for the first four years. Furthermore, those working in protection forests are expected to be able to earn VND 0.3 million/year ~ 6.3 million/year on average for 20 years after the end of the project support on conditions that local communities and PFMBs concerned would exchange the collaborative management agreement with the benefit sharing mechanism developed by the project. It is, however, necessary to develop another benefit sharing mechanism for collaborative management of forests in nature reserves in addition to the PFES scheme to ensure the sustainable forest management in such areas in the post-project period.

## Chapter 6 Environmental and Social Considerations and Potential Impacts

### Positive Environmental Impacts

74. The project is primarily focused on restoration, rehabilitation, and protection of forests; therefore, the associated activities are expected to generate various environmental benefits, which include:

- Climate change mitigation through reduction of GHG emissions from deforestation and forest degradation;
- Enhancement of carbon stocks and sequestration;

- Regeneration of natural or buffering/connecting forest habitats offering opportunities for wild fauna and flora to establish and recover;
- Enhancement of protection and conservation of protected areas, species, and habitats of significantly precious species; and
- Improvement of forest ecosystem services, such as watershed protection, protection of soils, and regulation of hydrological flows.

### **Possible Negative Environmental Impacts**

75. The following aspects are confirmed as potential negative environmental impacts as a result of environmental screening and scoping. However, all of them could be minimized or eliminated by applying the “negative environmental checklist” and “simplified environmental code of practice (ECOP) for small civil works,” which are included in the Environmental Social and Management Framework (ESMF), in the planning and construction stages of the components concerned.

- a. Habitat disturbance and biodiversity loss from inappropriate afforestation techniques
- b. Habitat loss, disturbance, biodiversity loss and other negative impacts from construction of forest roads
- c. Various minor, small scale and temporary environmental impacts associated with construction/rehabilitation of small-scale rural infrastructure
- d. Minor and small-scale environmental impacts associated with livelihood support activities

### **Positive Social Impacts**

76. While the primary objective of the project is the improvement of watershed forests, the project is also expected to provide a number of social co-benefits, such as:

- Improvement of physical capital for rural poor communities through upgrading of community infrastructure;
- Improvement of financial capital through provision of employment and income generating opportunities to poor communities;
- Improvement of livelihood improvement opportunities through support for capacity building and training on livelihood development activities; and
- Improvement of natural capital through enhancement of ecosystem services.

### **Possible Negative Social Impacts**

77. Overall, social considerations are of greater concern than environmental issues. There are potentially serious social safeguard issues linked to their land and forest tenure rights which would cause impacts on the livelihoods of such people, many of whom are amongst the poorest and most vulnerable in Vietnam and dependent on forest lands and resources. However, they will be minimized and likely eliminated by proper application of the proposed FPIC (Free, Prior, Informed and Consultation) process and procedures including the participatory land use planning proposed as an activity of the Survey and Detailed Planning component.

- a. Loss of assets or access to assets (including land – land acquisition)
- b. Loss of income sources or livelihoods
- c. Restricted access to protected areas resulting in adverse impacts on incomes and livelihoods

- d. Exclusion from and/or or inequitable distribution of project benefits (and costs)
- e. Insufficient community consultation
- f. Gender issues

### Management and Mitigation of Environmental and Social Risks

78. The integrated Environmental and Social Management Framework (ESMF) is prepared to ensure that potential adverse environmental and social impacts associated with the project are properly addressed in accordance with the JICA guidelines on environmental and social considerations, as well as Vietnam's own relevant policies, laws and regulations.
79. The ESMF aims to manage the potential adverse impacts by establishing a guide consisting of a set of relatively simple procedures and measures to facilitate adequate environmental and social management, including risk management of environmental and social impacts, in relation to the activities to be financed by the project. The Integrated ESMF is comprised of the following elements.
- 1) **Negative Checklist:** Eliminates activities and/or provides conditions so as to ensure that the scope and scale of project impacts do not exceed that of its categorisation level i.e. Category B).
  - 2) **Environmental Management and Monitoring Procedures:** Provides guidance for meeting environmental planning requirements for management and mitigation of any potential impacts caused by silviculture and small-scale infrastructure development and monitoring of potential impacts.
  - 3) **Community Participation Guidelines:** Provides guidance for free, prior and informed consultation (FPIC) processes, stakeholder engagement and participation and serves to meet the requirements for ethnic minority development planning.
  - 4) **Grievance Redress Mechanism:** Outlines an institutional mechanism and procedures for addressing project-related complaints and grievances.

### Environmental Monitoring Plan

80. The safeguard compliance during the project/subproject implementation should be also closely monitored by staff from local authorities; provincial and district Environment Officers; Technical staff of CPMU and representatives from local NGOs, Cooperatives and Associations; and community mass organizations such as Social Groups, women's Unions, youth unions. The following aspects will be monitored periodically.

#### During construction of silviculture and small scale rural infrastructure

- ◆ Dust generation/Air pollution
- ◆ Water Quality
- ◆ Solid waste
- ◆ Chemical or hazardous wastes
- ◆ Drainage and sedimentation
- ◆ Soil Erosion
- ◆ Restoration of affected areas
- ◆ Noise and vibration
- ◆ Disruption of vegetative cover and ecological resources
- ◆ Communication with local communities
- ◆ Worker and public Safety
- ◆ Traffic management

In operations of sylviculture and small scale rural infrastructure

- ◆ Accidents

During implementation of the forest development and improvement activities

- ◆ Disturbance of ecosystem
- ◆ Resettlement (loss of income or loss of access)
- ◆ Affects on livelihoods

After establishment of plantations or rehabilitation of degraded forests

- ◆ Affects on livelihoods

## Chapter 7 Operation and Effect Indicators

81. For effective and efficient evaluation, a framework for evaluation with verifiable indicators tentatively is tentatively set as shown in the table below.

Tentative Framework for Evaluation		
Aim of evaluation	Verifiable Indicators	Means and sources
Monitor the progress, process, and effectiveness of the project	<ol style="list-style-type: none"> <li>1. A GIS-based monitoring system will be developed and set up at the central and provincial levels <u>by the end of the 2<sup>nd</sup> year.</u></li> <li>2. A total of 10 PFMBs and 6 SUFMBs will have the latest forest cover and land use maps covering the areas under their jurisdiction <u>by the end of the 3<sup>rd</sup> year.</u></li> <li>3. A total of ( ) villages of 64 communes in the target provinces will develop the future land use map with rules on forest protection and management in the localities <u>by the end of 5<sup>th</sup> year.</u></li> <li>4. A total of ( ) village working groups in ( ) villages of 64 communes will be formed for the forest development and improvement activities in 10 protection forests and 6 nature reserves in the target provinces <u>by the end of the 5<sup>th</sup> year.</u></li> <li>5. The average survival rate of the new plantations established by the project should more than 75% at the time when the mid-term evaluation is conducted <u>in the 5<sup>th</sup> year.</u></li> <li>6. At least three model/demonstration sites will be developed in a total of 64 communes in the target provinces <u>by the end of 5<sup>th</sup> year.</u></li> <li>7. A total of 16,010 ha of new plantations will be established in 10 protection forests and 6 nature reserves in the target provinces <u>by the end of the 6<sup>th</sup> year.</u></li> <li>8. A total of 12,500 ha of woodlots or degraded forests in 10 protection forests and 6 nature reserves in the target provinces will be managed by ( ) village working groups <u>in the 6<sup>th</sup> year.</u></li> <li>9. A total of 45,180 ha of natural forests in 10 protection forests and 6 nature reserves in the target provinces will be protected by ( ) village working groups <u>in the 6<sup>th</sup> year.</u></li> <li>10. A total of 61 km of commune/village roads, 28.3 km of irrigation canals of commune/village irrigation systems, and 14 units of water supply systems will be rehabilitated / upgraded in 64 communes in the target provinces <u>by the end of the 6<sup>th</sup> year.</u></li> <li>11. A total of ( ) forest rangers and ( ) households will be trained on forest fire control skills <u>by the end of the 6<sup>th</sup> year.</u></li> <li>12. A total of 64 communes in the target provinces will have technical training on livelihood development including financial management <u>by the end of the 7<sup>th</sup> year.</u></li> <li>13. More than 50% of local communities participating in training will apply the techniques that they have learned for improvement of their livelihoods <u>by the end of the 9<sup>th</sup> year.</u></li> </ol>	<ol style="list-style-type: none"> <li>1. Review of regular monitoring reports submitted by PPMBs</li> <li>1~4 Reviews of the accomplishment reports submitted by the contractors for PLUP and regular monitoring reports submitted by PPMBs</li> <li>5. Review of the mid-term evaluation report</li> <li>6. Review of the accomplishment reports submitted by the contractors and regular monitoring reports submitted by PPMBs</li> <li>7~9 Review of the accomplishment reports submitted by PFMBs/SUFMBs and regular monitoring reports submitted by PPMBs</li> <li>10. Review of the as-built reports from the contractors and regular monitoring reports submitted by PPMBs</li> <li>11. Review of regular monitoring reports submitted by PPMBs</li> <li>12. Review of the accomplishment reports submitted by the contractors and regular monitoring reports submitted by PPMBs</li> <li>13~15. Review of regular</li> </ol>

Aim of evaluation	Verifiable Indicators	Means and sources
	<p>14. All the 64 communes where small-scale rural infrastructure facilities upgraded by the project are located will develop an O&amp;M plan for their facilities <u>by the end of the 9<sup>th</sup> year</u>.</p> <p>15. More than 80% of the village working groups will exchange the agreement on collaborative management of the protection forest/nature reserve with 10 PFMBs and 6 SUFMBs in the target provinces <u>by the end of the 9<sup>th</sup> year</u>.</p> <p>16. The average survival rate of the new plantations established by the project should more than 75% at the time when the terminal evaluation is conducted <u>in the 9<sup>th</sup> year</u>.</p> <p>17. Forest monitoring data will have been updated and stored in the GIS-based monitoring system and shared with FORMIS and the provincial data base <u>until the end of the 9<sup>th</sup> year</u>.</p>	<p>monitoring reports submitted by PPMBs</p> <p>16. Review of the terminal evaluation report</p> <p>17. Data in the GIS-based monitoring system</p>
Effect indicators	<p>1. Forest cover in the project areas will be increased by 28,510 ha by the end of the project.</p> <p>2. The quality of vegetation/forest covers in the project areas will be improved as shown below by the end of the project.</p> <ul style="list-style-type: none"> <li>- 16,010 ha of bare lands/grasslands/bushes (1a and 1b) will be changed to young plantation/ recovering forests (II);</li> <li>- 12,500 ha of woodlots will be changed to recovering forests (II); and</li> <li>- 45,180 ha of natural forest will be maintained properly.</li> </ul> <p>3. The incidence of forest fires in the project areas will be halved in the end of the project.</p> <p>4. More than 80% of the project area will be managed by local communities under the collaborative management with the village working groups by the end of the project.</p> <p>5. The average annual household income will increase by (      ) % in the end of the project.</p> <p>6. No adverse environmental and social impact will be caused by the project by the end of the project.</p> <p>7. No involuntary land acquisition or loss of livelihood opportunities for local communities will be caused by the project</p>	<p>1~2. Review of the terminal evaluation report</p> <p>3. Review of the reports from Sub-FPDs of the target provinces</p> <p>4. Review of regular monitoring reports submitted by PPMBs</p> <p>5. Review of the terminal evaluation report</p> <p>6~7. Review of the environmental monitoring activities</p>

Source: JICA Preparatory Survey Team (2016)

\*Indicators shall be determined in the detailed planning stage based on the results of the baseline survey.

## Chapter 8 Project Risks / Important Assumptions

82. For the effective and smooth implementation of the project, it is assumed that the following external conditions and requirements shall be met, as otherwise there may be significant impacts to project implementation.

- a. No delay in fund disbursement during the implementation.
- b. No delay in procurement, approval and any other decision making by CPMB/MARD at central level and DARDs/PPCs at provincial level.
- c. No change in strategies, policies, plans, and organizational structures in the forest sector.
- d. No social conflict or dispute occurring in the target communes/villages.
- e. No large scale immigration into the target protection forests and nature reserves from other district or provinces.
- f. No drastic economic recession in the national and regional economy.

83. The following external conditions and requirements shall also be met in order for the envisaged project outcomes to have the desired and expected effects and impacts.

- a. No large-scale and destructive natural disaster, such as severe drought or strong cyclone, takes place in the target provinces.



- b. The categories of watershed protection forest or forest classification are not changed by PPCs.
- c. The prices of wood chips and timber do not drastically drop.
- d. The prices of staple crops do not drastically rise.
- e. Employment conditions in rural areas in the regions/target provinces are not drastically changed.
- f. The macro economy of the country is stable.
- g. Climatic conditions in the target provinces are unchanged.

**Final Report**  
**for**  
**the Preparatory Survey for**  
**the Project of Sustainable Forest Management in the Northwest Sub-region**  
**in the Socialist Republic of Vietnam**

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### **List of Abbreviations**

ADB	Asian Development Bank
ANR	Assisted Natural Regeneration
AR-CDM	Afforestation/ Reforestation-Clean Development Mechanism
ASL	Above Sea Level
BAU	Business as Usual
BC	Biodiversity Conservation
B/C	Cost benefit
CBD	Convention on Biological Diversity
CD	Community Development
CEMA	Committee for Ethnic Minority Affairs
CF	Conversion factor
CFM	Community Forestry Management
CIFOR	Center for International Forestry Research
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CM	Collaborative Management
CoP	Conference of Parties
CPC	Commune People's Committee
CPCU	Central Project Coordination Unit
CPMBs	Central Project Management Boards
CPMU	Central Project Management Unit
CRAP	Commune REDD+ Action Plan
CSC	Central Steering Committee
CPSC	Central Project Steering Committee
DAEC	District Agriculture Extension Center
DARD	Department of Agriculture and Rural Development
D-DARD	District Division of Agriculture and Rural Development
DD	Detailed Design
DFPU	District Forest Protection Unit
DFROs	District Forest Rangers Offices
DIU	District Implementation Unit
DOC	Department of Construction
DOLISA	Department of Labor, Invalids and Social Affairs
DONRE	Department of Natural Resources and Environment
DOST	Department of Science and Technologies
DPC	District People's Committee
DPI	Department of Planning and Investment
DPMU	District Project Management Unit
EIA	Environmental Impact Assessment
EIRR	Economic internal rate of return
EMDP	Ethnic Minority Development Plan
EMP	Environmental Management Plan
EPC	Environmental Protection Clearance
EPD	Environment Protection Division
EPP	Environmental Protection Program
ESMF	Environment and Social Management Framework
ESMP	Environment and Social Management Plan
FCPF	Forest Carbon Partnership Facility
FE	Forest Establishment
FFC	Forest Fire Control
FIPD	Forest Inventory and Planning Department
FIPI	Forest Inventory and Planning Institute
FPIC	Free, Prior and Informed Consultation
FLA	Forest Land Allocation
FMBs	Forest Management Boards
FORMIS	The Project for Development of Management Information System for the Forestry

	Sector in Viet Nam
FRO	Forest Ranger Office
FPD	Forest Protection Department
FPDP	Forest Protection and Development Plan
FRL	Forestry Reference Levels
FSIV	Forest Science Institute in Viet Nam
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GIS	Geological Information System
GoV	Government of Vietnam
GRMs	Grievance redress mechanisms
HHs	Households
ICD	International Cooperation Department
IEE	Initial environmental examination
IPs	Indigenous Peoples
IOL	Inventory-of-loss
It/R	Interim Report
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
JICA2	Protection and Forest Restoration and Sustainable Management Project
KfW	Kreditanstalt fuer Wiederaufbau (German Bank for Reconstruction)
L/A	Loan Agreement
LEP	Law on Environmental Protection
MARD	Ministry of Agriculture and Rural Development
MBFPs	Management Board of Forestry Projects
M&E	Monitoring and Evaluation
MOFA	Ministry of Foreign Affairs
MONRE	Ministry of Natural Resources and Environment
MoST	Ministry of Science and Technology
MPI	Ministry of Planning and Investment
MOF	Ministry of Finance
MRV	Measurement, reporting, and verification
NAEC	National Agricultural Extension Center
NFI	National Forest Inventory
NFI&S	National Forest Inventory and Survey
NGO	Non-Government Organization
NPMU	National project management unit
NPSC	National Project Steering Committee
NPV	Net Present Value
NR	Nature Reserve
NREO	Natural Resource and Environment Office
NRMB	Nature Reserve Management Board
NTFP	Non Timber Forest Products
NTP-RCC	National Target Programme Responding to Climate Change
O&M	Operation & Maintenance
ODA	Official Development Assistance
OJT	On the job training
PAEC	Provincial Agriculture Extension Center
PaMs	Policies and measures
PASCA 2	The Project for Afforestation in Coastal Sandy Area Phase 2
PC	People's Committee
PF	Protection Forest
PFES	Payment for Forest Ecosystem Service
PFMB	Protection Forest Management Board
PFMS	Provincial Forest Monitoring System
PLUP	Participatory Land Use Planning
PM	Prime Minister
PMUs	Project Management Units



PPC	Provincial People's Committee
PPMBs	Provincial Project Management Boards
PPMU	Provincial Project Management Unit
PSC	Provincial Steering Committee
PPSC	Provincial Project Steering Committee
REL	Reference Emission Levels
PRAP	Provincial REDD+ Action Plan
Prod F	Production forest
PSC	Project Steering Committee
QA	Quality assurance
QC	Quality control
REDD+	Reduced Emissions from Deforestation and forest Degradation
SCF	Standard Conversion Factor
SEA	Strategic Environmental Assessment
SEDP	Socio-Economic Development Plan
SFE	State Forest Enterprises
SIS	Safeguard Information System
SNRMP	Sustainable Natural Resource Management Project
SPL-III	Special Loan Project III funded by JBIC
STWG	Sub-Technical working group
SubDFP	Sub-department of forest protection
SubDoF	Sub-department of forestry
SUF	Special Use Forest
SUFMB	Special Use Forest Management Board
SUSFORM-NOW	Sustainable Forest Management and Living Standard Improvement Project in the Northwest Watershed Area
SWR	Shadow Wage Rate
TA	Technical Assistance
T/C	Technical Cooperation
TORs	Term of references
UNDRIP	UN Declaration on the Rights of Indigenous Peoples
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
VBSP	Vietnam Bank for Special Policy
VAFS	Viet Nam Academy for Forestry Science
VMB	Village Management Board
VNFOREST	VN Forest Administration

#### Exchange Rate

**US\$ 1.0 = ¥ 101.3 = 21,954 VND (as of October 2016)**

US\$ = United State Dollar, ¥ = Japanese Yen, VND = Vietnamese Dong

*Source: JICA*

#### Unit

km<sup>2</sup> : Square kilometer

ha : Hectare

m<sup>2</sup> : Square meter

m<sup>3</sup> : Cubic meter

*Part I*  
***STUDY ON THE PROPOSED PROJECT***

## **Chapter 1 Introduction**

### **1.1 Background of the Survey**

The forest area in Vietnam had drastically declined from 43% to 28% between 1943 and 1990. Extensive deforestation has posed significant threats to the national environment, economic activities, and people's lives in the country. Although the forest cover in the entire country has increased to approximately 42% from 1990 to 2010 owing to the notable government-led afforestation programs, namely, i) Program 327 (1993-2000) and ii) Program 661 or “the Five Million Hectare Afforestation Program” (1998-2000), the quality of forests in the country has not been fully recovered yet. If anything, continued loss and degradation of natural forest has progressed due to forest fires, illegal logging, changes in land use (or conflict in land use policies), infrastructure development, and slash-and-burn farming practices, to name a few. Sustainable forest management is one of the crucial challenges that the Government of Vietnam (GoV) needs to address.

In order to improve the quality of forests, increase the national forest cover up to 45%, and contribute to poverty alleviation, GoV developed the Forest Protection and Development Plan (FPDP) (2011~2020) in 2012 (No. 57/QD-TTg dated January 9, 2012), and has implemented the FPDP since then. GoV further proposed the Forestry Sector Reform in 2013 (No. 1565/QD-BNN-TCLN dated July 08, 2013) to enable the forestry sector to contribute to the economic growth of the country. It provides the long term orientations for reformation of the forestry sector toward 2030 specifying directions of forest development in the respective regions and strategies to i) increase forest areas of the three (3) types of forests, ii) enhance added values of timber products, iii) restructure forest management entities, and iv) mobilize financial resources. In 2012, the Government of Vietnam approved the national action program on “Reduction of Green-house Gas Emissions through Efforts to Reduce Deforestation and Forest Degradation, Sustainable Management of Forest Resources, Conservation and Enhancement of Forest Carbon Stocks 2011-2020 (so-called the National REDD+ Action Plan 2011-2020) “ in response to international initiatives for reduction of GHG through REDD+ activities.

The Japan International Cooperation Agency (JICA) has been supporting GoV in addressing deforestation and forest degradation through the implementation of a number of Japanese ODA projects, such as Rural Infrastructure Development and Living Standard Improvement Project III (Afforestation component) (SPL-III: 2002~2008), Sustainable Forest Management in the Northwest Watershed Area (SUSFORM-NOW) (2010-2015), and Protection Forest Restoration and Sustainable Management Project (JICA 2: 2012~2021), to name a few. JICA has recently focused its effort on the support for implementation of the National REDD+ Action Plan through supporting the development and implementation of Vietnam's first provincial REDD+ action plan (PRAP) in Dien Bien. In August 2015, JICA has launched a technical cooperation project named “Sustainable Natural Resource Management Project (SNRMP)” to assist four (4) provinces, namely Dien Bien, Lai Chau, Son La, and Hoa Binh, in the preparation of PRAPs and implementation of pilot activities in selected communities in the provinces.

Under the circumstances, the Ministry of Agriculture and Rural Development (MARD) of GoV requested JICA to support MARD with the implementation of REDD+ in four

Northwestern Provinces, Namely Dien Bien, Son La, Lai Chau, and Hoa Binh Provinces, where the progress of forest degradation and increase of natural disasters caused by forest degradation are acute issues to be tackled, in synchronization with SNRMP. Since there was no study or project plan prepared by MARD for the proposed activities, JICA and MARD agreed to carry out a preparatory survey to collect sufficient information necessary for the appraisal of the proposed project and assist MARD in the formulation of a feasibility study on the proposed project. In March 2016, JICA dispatched a survey team to undertake the preparatory survey for the Sustainable Forest Development Project in the Northwest Sub-region (hereinafter referred to as “the preparatory survey” or “the survey”).

## **1.2 Objectives of the Survey**

The main objectives of the survey are:

- i) To validate the objectives, necessity, and relevance of the proposed project;
- ii) To scrutinize project components, project cost, implementation schedule, implementation methods, organizational and institutional frameworks for implementation and operation and maintenance of the project;
- iii) To assess potential environmental and social impacts and propose appropriate and necessary safeguards measures as may be required; and
- iv) To collect data and information necessary for the appraisal of the project by JICA.

## **1.3 Scope of the Survey**

### **1.3.1 Survey Areas**

The survey targets four (4) provinces, namely Dien Bien, Lai Chau, Son La, and Hoa Binh. The location of the survey areas is presented in the local map attached to this report.

### **1.3.2 Scope of Work**

The scope of the preparatory survey is shown in **Table I-1-1** attached to Part I of this report, and outlined below.

- 1) Examination of necessity, relevance, and background of the proposed project
- 2) Review of the target four provinces, determination of criteria for selection of the target areas, and selection of target areas
- 3) Examination of the scope of the project
- 4) Examination of consulting services and construction and procurement methods
- 5) Examination of institutional arrangements for implementation, operation, and maintenance of the project
- 6) Review of environmental and social considerations
- 7) Estimation of project cost including annual fund requirement
- 8) Formulation of an optimum project implementation plan
- 9) Assessment of the financial status and ability of the target provinces
- 10) Examination of project effects and assessment of potential risks

### 1.3.3 Survey Period

The survey will be carried out from the middle of March to the end of September 2016. The work schedule of the survey is shown below.

- a. Preparatory work in Japan (Mid March 2016)
- b. Field work in Vietnam (Mid March to Mid July 2016)
- c. Home work in Japan (Mid July and Mid August 2016)
- d. Field work in Vietnam (Beginning September 2016)

## 1.4 Overall Framework of the Survey

### 1.4.1 Composition of the Survey Team

The survey team is composed of a total of 11 international experts as listed below.

**Composition of the Preparatory Survey Team**

Position	Name
1. Team Leader/Sustainable Forest Management	Yoji Mizuguchi
2. Co-Team Leader/Rural Development/Livelihood Development	Izumi Okata
3. Forest Development/Forest Management 1	Hiromi Yasu
4. Forest Development/Forest Management 2	Hisamitsu Kuno
5. Small Scale Infrastructure Development	Hideki Imai
6. Environmental and Social Consideration	Richard Rastall
7. Cost Estimation	Yoshito Mochizuki
8. GIS/Remote sensing	Kei Suzuki
9. Economic and Financial Analysis/Institution (2)	Takeshi Murakami
10. Institution (1)/Human Resource Development/Coordinator	Aya Mizuno
11. Review of the Grant Aid Project in Quang Ngai	Akihito Sakurai

Source: JICA Preparatory Survey Team (2016)

In addition, a total of 11 Vietnamese experts and one local consultancy firm are employed for the survey, especially data collection in the target four provinces and socio-economic survey at the selected communities, respectively.

### 1.4.2 Counterpart Agency

The International Cooperation Department (ICD) and Management Board of Forestry Projects (MBFPs) of MARD are the counterpart agencies for the survey at the central level, while DARDs of the target four provinces, especially the Forest Protection Sub-department and/or Forestry Development Sub-department, are the focal points at the provincial level. They have actively supported the preparatory survey team in coordinating with relevant offices and organizations and collecting data and information in the respective provinces.

## 1.5 Structure of the Report

This is the Final Report (F/R) prepared by the preparatory survey team based on the results of the surveys and examinations that the team has made for a half year since mid March 2016. The report is composed of two volumes: Volume 1: Main Report and Volume 2: Annexes. The main report has two parts: Part I: Study on the proposed project and Part II: Implementation of the proposed project.

Part I describes the results of the reviews and studies made by the preparatory survey to examine the framework and scope of the project. The report has the following six chapters:

- Chapter 1: Introduction
- Chapter 2: Forest Sector in Vietnam
- Chapter 3: Status of REDD+ and Environmental and Social Consideration System in Vietnam
- Chapter 4: Present Conditions of the Target Provinces
- Chapter 5: Review of Past and On-going Forestry Project similar to the Project
- Chapter 6: Results of the Study and Examination on Project Components and Scope

Part II introduces the detailed implementation plan of the proposed project with cost estimation and project evaluation. The report has 8 chapters as listed below.

- Chapter 1: Present Conditions of the Potential Target Sites
- Chapter 2: Rationales and Justifications of the Project
- Chapter 3: The Project
- Chapter 4: Project Cost
- Chapter 5: Project Evaluation
- Chapter 6: Environmental and Social Considerations and Potential Impacts
- Chapter 7: Operation and Effect Indicators
- Chapter 8: Project Risks/Important Assumptions

## Chapter 2 Forest Sector in Vietnam

### 2.1 Forest Status in Vietnam

#### 2.1.1 Forest Classification and Forest Cover

Forests in Vietnam are classified into three management types: special use forest (SUF), protection forest (PF), and production forest (Prod F). In 2016, MARD determined the allocation of the forest land to the respective types as shown below.

**Area by Forest Type in Vietnam (as of July 2016)**

Item	Special-use		Protection		Production		Other <sup>1)</sup>		Total	
	Area (000ha)	Ratio (%)	Area (000ha)	Ratio (%)	Area (000ha)	Ratio (%)	Area (000ha)	Ratio (%)	Area (000ha)	Ratio (%)
Total Forest Area	2,106	15	4,463	32	6,668	47	825	6	14,062	100.0

Source: MARD Decision, No. 3158/QĐ-BNN-TCLN dated on 27 July 2016

1) Other: Forest land which has not been classified into three forest type.

Special use forests comprise i) national parks, ii) special use forests and flora and fauna habitat reserves, iii) historical, cultural and environmental relics or landscape protected area, while protection forests are composed of i) watershed protection forests, ii) wind and sand shielding protection forests, iii) Tide and sea spray prevention protection forests, and iv) protection forests for environmental protection. Production forests have been mainly used for production of timber and other forest-related products including NTFPs. In the northwest region, it also plays an important role in protection of environmental services of forests.

MARD Decision No. 3158/QĐ-BNN-TCLN (on July 27, 2016) also indicates the vegetation cover in the country including the forest land as shown below.

**Forest Cover in the Forest Land and Others**

Type of Land	Special Use Forest		Protection Forest		Production Forest		Others		Total Forest Land	
	Area (000ha)	Ratio (%)	Area (000ha)	Ratio (%)	Area (000ha)	Ratio (%)	Area (000ha)	Ratio (%)	Area (000ha)	Ratio (%)
<b>Forested area</b>	<b>2,106</b>	<b>100</b>	<b>4,463</b>	<b>100</b>	<b>6,668</b>	<b>100</b>	<b>825</b>	<b>100</b>	<b>14,062</b>	<b>100</b>
1) Natural forest	2,027	96	3,840	86	3,940	59	368	45	10,176	72
2) Plantation	79	4	623	14	2,728	41	457	55	3,886	28

Source: MARD Decision, No. 3158/QĐ-BNN-TCLN dated on 27 July 2016

Out of 14.06 million ha of the total forest land, natural forest accounts for about 72% (or 10.18 million ha), while plantation occupies about 28% (or 3.88 million ha).

#### 2.1.2 Forest Owners

The following table shows the forest land by forest owners in the country in 2013. About one third of the forest land in the country are allocated to protection or special use forest management boards (PFMBs or SUFMBs). Those allocated to private families/households and state enterprises account for significant shares at 23% and 10%, respectively. It is also noted that around 19% of the total forest land are still not officially allocated to any organization and temporarily managed by commune people's committees (CPCs).

**Forest Land by Forest Owners**

Unit: '000 ha

Item	Forest Management Boards	State Enterprises	Private/ HHs	Community Groups	Others <sup>1)</sup>	Other organization	CPC
Total Area	4,896	1,454	3,146	1,110	412	342	2,701
Ratio to total forest area	35%	10%	23%	8%	3%	2%	19%

Source: MARD Decision, No. 3158/QĐ-BNN-TCLN dated on 27 July 2016

Notes: 1) "Others" covers "Other economic organizations include private entities engaging in the forest industries such as paper mill companies, wood and timber companies, etc." and Army Forces

A comprehensive study on forest land allocation (FLA) in 2006 reported that the progress of forest land allocation in the country was relatively slower than expected due to the following constraints: i) reassignment of forest land allocation responsibility from MARD to the Ministry of Natural Resource and Environment (MONRE), ii) relatively complicated process that two ministries need to follow, and iii) people's hesitance to accept the restrictions on land use especially among local communities whose livelihoods would be affected.<sup>1</sup>

**2.1.3 Changes in Forest Cover**

The following table shows the changes in forest cover in Vietnam since 1940.

**Changes in Forest Cover in Vietnam**

Unit: '000 ha

Items	1943	1976	1980	1985	1990	1995	2000	2004	2008	2015
Total forest area	14,300	11,169	10,608	9,892	9,176	9,302	10,916	12,307	13,117	<b>14,062</b>
Natural forest	-	11,077	10,016	9,308	8,431	8,253	9,444	10,088	10,349	<b>10,175</b>
Planted forest	-	93	422	583	745	1,048	1,471	2,219	2,770	<b>3,886</b>
Forest cover	43%	34%	32%	30%	28%	28%	33%	37%	40%	<b>41%</b>

Source: Forest Rehabilitation in Vietnam: Histories, realities and future (2006) and MARD Decision No. 1267/QĐ-BNN-KL dated 05/5/2009 and MARD Decision, No. 3158/QĐ-BNN-TCLN dated on 27 July 2016

As mentioned above, the forest area had significantly decreased particularly from 1976 to 1990 mainly due to: i) contract logging by state organizations, ii) conversion of forests into farms for food production, iii) devastation by the Vietnamese war, iv) forest fires, and v) illegal logging and over-exploitation of forest products by local communities, and vi) insufficient legal system and weak law enforcement capacity of the government organizations in the forestry sector.

The forest statistics indicates that natural and planted forests have increased from 1990 to 2015 by around 1.8 million ha (from 8.4 million ha to 10.2 million ha) and 3.2 million ha (0.7 million ha to 3.9 million ha), respectively as a result of the government-led programs, namely "327" and "661 Programs." However, despite of its substantial increase it is widely recognized that the quality of rehabilitated forest is still low.

**2.1.4 Contribution of the Forest Sector to the National Economy**

Gross domestic product (GDP) of the agriculture, forestry and fishing sectors comprises about 17% of the total national GDP in 2015 as shown below. Out of 17%, the share of the forestry sector is estimated at just over 1% of the national GDP.

<sup>1</sup> Report: "Forest Rehabilitation in Vietnam: Histories, realities and future" 2006, Center for International Forestry Research (CIFOR).



## GDP by Sector at Current Price

Unit: billion VND

Sectors	2010	2011	2012	2013	2014	Prel. 2015
1. Energy, Industrial Production, Transport	755,414	975,492	1,182,349	1,292,215	1,307,935	1,394,130
% to total GDP in the year	35%	35%	37%	36%	33.22%	33.25%
2. Financial, Trading, Wholesale and retail, Real estate, Information, etc	518,510	669,617	790,102	882,905	1,083,980	1,168,114
% to total GDP in the year	24%	24%	25%	25%	27.52%	27.86%
<b>3. Agriculture, Forestry, Fishery</b>	<b>396,576</b>	<b>543,960</b>	<b>623,815</b>	<b>643,862</b>	<b>696,969</b>	<b>712,460</b>
<b>% to total GDP in the year</b>	<b>18%</b>	<b>20%</b>	<b>19%</b>	<b>18%</b>	<b>18%</b>	<b>17%</b>
4. Scientific & technical activities, Education, Health and social work, Public administration, Arts, & Entertainment	179,243	210,336	244,530	301,079	382,001	419,463
% to total GDP in the year	8%	8%	8%	8%	9.71%	10.01%
5. Other services	308,086	365,560	377,630	425,004	466,971	498,693
% to total GDP in the year	14%	13%	12%	12%	11.86%	11.89%
<b>Total GDP</b>	<b>2,157,829</b>	<b>2,764,965</b>	<b>3,218,426</b>	<b>3,545,065</b>	<b>3,937,856</b>	<b>4,192,862</b>
<b>% to total GDP in the year</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: Statistical Yearbook of Vietnam, 2015. The figure of 2015 is only the preliminary data.

As the figures do not calculate the values of forest products unofficially exploited, processed, and marketed by local people, they are considered “underestimated” as compared to the real value of the forestry sector.

Moreover, the figures do not count the non-tangible benefits from the forestry sector. Forest ecosystem services, such as protection of watershed, coastal, and urban environments, biodiversity conservation, protection of valuable genes, which are widely known as significant values generated by forests.

## 2.1.5 Timber Production

As the forested area in the country has increased since 1990, the total production of wood from natural forests and plantations has increased 2.1 times between 2010 and 2015 as shown below.

## Wood Production by Region in Vietnam

Unit: '000 m<sup>3</sup>

Region / Year	2010	2011	2012	2013	2014	Prel.2015
<b>Total</b>	<b>4,043</b>	<b>4,692</b>	<b>5,251</b>	<b>5,908</b>	<b>7,701</b>	<b>8,671</b>
Red River Delta	187	28	319	382	516	484
<b>Northern Midlands and Mountain</b>	<b>1,328</b>	<b>1,403</b>	<b>1,590</b>	<b>1,731</b>	<b>2,278</b>	<b>2,627</b>
North Central and Central Coastal	1,238	1,444	1,717	2,350	3,474	4,150
Central Highlands	417	589	620	540	447	456
Southeast	263	325	323	324	321	322
Mekong River Delta	610	653	682	581	665	634

Source: Statistical Yearbook of Vietnam, 2015; The figure of 2015 is only the preliminary data.

Timber produced in the Northern Midlands and Mountain Areas accounts for about 30% or 2.63 million m<sup>3</sup> of the total timber production (8.67 million m<sup>3</sup>) in the country in 2015. The demand for wood/timber is expected to increase along with constant economic growth and population increase in the country. It is, therefore, important to rehabilitate degraded forests and expand plantations so as to meet the future demand for timber woods.

## **2.2 Forest Administration**

### **2.2.1 Central Government Institutions Relevant to the Forestry Sector**

#### **(1) Ministry of Agriculture and Rural Development (MARD)**

The Ministry of Agriculture and Rural Development (MARD) is the main state administration which oversees the agriculture, forestry, salts industry, water resources and rural development sectors pursuant to Decree No. 199/2013/ND-CP dated 26 Nov. 2013. The major tasks of MARD in the forestry sector are highlighted below.

- i) Perform governance responsibilities for implementation of regulations issued by the Government/Prime Minister on forestation, forest resource development, plants and animals protection and preservation, and forest management regulations;
- ii) Announce, govern, inspect, evaluate and make comprehensive reports on implementation of strategies, master plans, forestry protection and development plans approved nationwide;
- iii) Appraise master plans of province's or city's forestry protection and development;
- iv) Guide and govern inspection and demarcation of boundaries of three types of forest and forest inventory, monitor natural resources in forests and lands for growing forests, and make reports on forestry situation and forestry inventory;
- v) Regulate criteria for forestry classification;
- vi) Guide integrated agriculture, forestry, and fishery production, socio economic cost norms and measure of forestry development;
- vii) Issue i) a list of valuable, rare and endangered forestry plant and animal genes that could be exploited and used, ii) a list of major forestry plants, iii) a list of seedlings that could be produced and traded, iv) a list of forestry plants prohibited from being exported, v) national standards of seed classification, multiplication and restoration of purely genuine seed, etc.
- viii) Issue, monitor, and inspect the implementation of regulations and improvement of forestry and forestry product exploitation;
- ix) Guide and govern forest land allocation, lease/contract of forest land, and change of forest types;
- x) Be responsible for management of forestry rangers; and
- xi) Be responsible for forest fire control and forecast and prevention of other disaster events to prevent deforestation.

#### **(2) VNFOREST**

Pursuant to the PM Decision No.59/2014/QĐ-TTg on October 22, 2014, VNFOREST was established to perform the tasks of i) assisting MARD in functioning as the state administration in the forestry sector, ii) enforcing laws and regulations on forestry and forest ecosystem conservation, and iii) managing and providing public services on forestry and forest ecosystem conservation. The major responsibilities of VNFOREST include, but not limited to, the following:

- i) Draft decisions, circulars, and plans on forest development, management, protection, conservation and utilization, and evaluate the achievement of the plans in the forestry sector, and promulgate the policies and technical manuals;
- ii) Draft the technical standards and guidelines in the forestry sector including the criteria of forest identification and classification;
- iii) Provide guidance to the relevant organizations on forest inventory and database management, implementation of forest development plans, forest land allocation, forest fire control, monitoring against illegal logging, conservation of national park, and harvesting; and
- iv) Settle all the complaints and denouncements, and supervise the violation of the law and regulations in the forestry sector.

VNFOREST has a total of seven departments, one administration office, two associated agencies/authorities, and six inter-provincial national park management boards in its organizational structure. Among the departments, Forest Protection Department (FPD) is responsible for implementing state management on forest protection and enforcing laws and regulations on forest protection, development, and forest product management.

### **(3) Management Board of Forestry Projects (MBFPs)**

MBFPs takes responsibility for management and supervision of the ODA-funded forestry projects. The main tasks of MBFPs include, but not limited to, the following:

- i) Conduct the feasibility study to formulate the project and prepare the project proposal to cover all necessary inputs to attain its goal, then it to MARD, the Ministry of Planning and Investment (MPI) and the Ministry of Finance (MOF) for their appraisal and approval before starting the project;
- ii) Supervise, appraise and approve the overall and annual implementation plan of the project prepared by the project management units (PMUs);
- iii) Guide, instruct, and inspect the performance of PMUs and report to MARD the progress and achievements of the projects, and
- iv) Coordinate with the donor agencies and relevant authorities of the Government such as MARD<sup>2</sup>, MPI, MOF, and PPCs.

## **2.2.2 Provincial Government Institution Relevant to the Forestry Sector**

### **(1) PPC and DARD**

- The Provincial People's Committee (PPC) is the highest authority at the local level to implement the policies of all sectors in their administrative area. PPC is commissioned to direct and supervise all the activities of not only the forestry sector but also other sectors in its jurisdiction.
- The Department of Agriculture and Rural Development (DARD) is one of the provincial departments, which shall perform the following tasks relating to the forestry sector under the guidance and management of PPC as well as the directions and control of MARD.

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<sup>2</sup> Among others, International Cooperation Department (ICD) and VN Forest Administration Office (VNFOREST) are the key agencies that MBFPs needs to coordinate with.

- i) Conduct surveys, classify the forest land into the forest types, estimate the volume of forest products, prepare maps, demarcate boundaries of the forest types and forest land in the province in accordance with the guidance of MARD;
- ii) Assist PPC in preparing the long-term, medium-term, and short-term plans on the development and utilization of forests and forest land in the province for submission to the competent authorities for their approval;
- iii) Appraise the decision or submit it to the decisive agencies for the establishment of protection and special use forests in the province according to the current government regulations;
- iv) Guide the District People's Committees (DPCs) in the province for them to a) make plans for the management, use, and development of forests for the appraisal of the decisive agencies, b) synthesize the planning and plans submitted by DPCs for approval of PPC, and c) direct and organize the implementation whenever plans are approved by PPC;
- v) Assist PPC in management and regulation of the exploitation of natural forests in the province by i) organizing the councils for assessment of designs for exploitation of natural forests submitted by forest owners to PPC/MARD for approval, ii) issuing permits of exploitation of natural forests to forest owners and checking the exploitation activities in the field upon receipt of the approval on forest exploitation, and iii) preparing the development plans and supervising the operations of forest product processing activities in the province;
- vi) Formulate or issue documents for implementation of policies and regulations on use, management, and development of forests and guide DPCs, CPCs, other organizations, and households in the province;
- vii) Manage and supervise the forestry extension works including seed collection and management in the province;
- viii) Annually check the implementation of procedures and regulations for the exploitation of timber and forest products; and
- ix) Organize, manage, and supervise the implementation of forestry projects in production and protection forests, social forestry, and rural development in mountainous areas.

**(2) Sub-department of Forestry (SubDoF) and Sub-department of Forest Protection (SubDFP)**

The sub-department of forestry (SubDoF) and sub-department of forest protection (SubDFP) under DARD are responsible for implementation of the policies, regulations, and plans in the forestry sector in the province. In particular, SubDoF is responsible for implementation of projects and activities for forest development, rehabilitation, and management of plantations and natural forests mainly in production and protection forests in the province. It generally consists of three sections, namely administration, planning, and technical. A special unit may be further attached to the structure in case there is any ODA-funded/special project implemented in the province. In many cases, SubDoF supervises the project implementing body (i.e., Provincial Project Management Unit: PPMU) of a forestry project at the provincial level.

SubDFP functions as forest police to protect natural forests in protection and special use forests in the province. Its major functions and tasks are to: i) control and regulate illegal activities, ii) prevent the occurrence of forest fires, iii) minimize and mitigate any other hazardous events which cause severe damage to forests. To effectively and efficiently regulate and control illegal and hazardous activities down to the village level, SubDFP has its branches placed at the respective levels.

### **(3) Merger of SubDOF and SubDFP at the provincial level**

At present, the merger of the two sub-departments are in the process at the provincial level in accordance with the PM Decision on the Scheme of Strengthening the Organization, Enhanced Effective, Efficient Operation on Forest Protection Stage 2014-2020 (PM Decision No. 1920/QĐ-TTg dated October 25, 2014) and the Joint Circular of MARD and the Ministry of Interior (Circular No. 14/2015/TTLT-BNNPTNT-BNV dated March 25, 2015). In fact, Hoa Binh, has already completed the process of restructuring the two sub-departments, while the rest are in the final stage of putting the new structure in place. After the merger of the two sub-departments, the new SubDFP is placed and take roles that the previous two sub-departments owned. Some of the key tasks and functions redefined by the Joint Circular for those of the new SubDFP are as follows:

- i) Guide DPCs and District DARDs to formulate the Forest Protection and Development Plans at the district level;
- ii) Assist PPC in a) classification of forests, b) determination of boundaries of forest classes, c) conduct of a forest inventory and monitoring on a regular basis in accordance with the guidance of MARD, and d) establishment of protection forests, special-use forests, production forests in its jurisdiction;
- iii) Implement projects/programs/activities for forest land allocation, lease, forest recovery, change of purposes of forest utilization, and validation of the forest utilization rights;
- iv) Assist PPC in advising DPCs to progress forest land allocation in coordination with villages, communities, households and individuals in accordance with the relevant laws and regulations; and
- v) Mobilize the human and other resources as well as means in coordination with organizations and individuals in the province for forest protection, forestry products management and fire prevention/fire fighting.

## **2.2.3 District and Commune Level Institutions Relevant to the Forestry Sector**

- (1) District People's Committee (DPC), District Forest Protection Unit (DFPU), District Division of Agriculture and Rural Development (D-DARD), etc.

DPC is the authority to be responsible for policy implementation in townships and communes under its jurisdiction. DPC is also commissioned to supervise the activities for forest development, protection, and management in the forest land through the District Division of Agriculture and Rural Development (D-DARD) as well as District Forest Protection Unit (DFPU) in the district.

D-DARD performs duties and tasks for forest management and administration at the district level under the supervision of DPC as well as the guidance of SubDFP. In many cases,

D-DARD has only a few officers as compared to their expected roles. In fact, most of the activities for forest protection and development in the field have been entrusted to local government institutions such as forest enterprises, protection forest management boards, and special use forest management boards.

The District Forest Protection Unit (DFPU) is the district branch of SubFPD, which is responsible for protection of forests, control of illegal activities, and prevention of forest fire in the district under the supervision and guidance of SubFPD.

Protection Forest Management Board and/or Special Use Forest Management Board (PFMB/SUFMB) are the government institutions established according to Law on Forest Protection and Development (No. 29/2004/QH11 dated Dec. 3, 2004) and its supporting decree (Decree on Implementation of Law on Forest Protection and Development (No. 23/2006/ND-CP on March 3, 2006), which stipulates that management boards should be established for management of important watershed protection forests covering more than 5,000ha and special use forests designated as national park or nature conservation zones. PFMB has obligations to protect natural forests, rehabilitate degraded forests, and restore barelands in its managed protection forests to maintain and enhance their functions, while SUFMB is responsible for conservation of biodiversity by protecting natural forests and rehabilitating/restoring degraded natural habitats/ecosystems in special use forests.

## **(2) Commune People's Committee (CPC) and Forest Ranger Office at the Commune Level**

CPC has a central role in developing an annual plan on agricultural production, forest protection and development, and rural development including infrastructure development at the commune level. It is also responsible for supervision and monitoring of the progress of the annual plan in coordination with DPC. In general, CPC assigns one officer for forestry in each village and organize a commune-level steering committee for the forest protection and development project.

Forest Ranger Office (FRO) is the field station of DFPU, which covers a few communes in general. The main tasks of FRO are to prevent forest fire, control/extinguish forest fire, and control/regulate the exploitation and utilization of forest resources by local communities. To ensure fulfillment of its tasks and duties, especially prevention of forest fires, FRO has organized 5 to 10 villagers into a forest protection group in each village and coordinated the forest fire protection activities with the groups in the field.

## **2.3 Forestry Research and Extension**

### **(1) Forestry research**

Vietnam Academy for Forestry Science (VAFS) under the direct guidance of MARD is the main research organization for forestry in the country. It was established in 2010 by merging several research institutes under the former FSIV (Forest Science Institute in Vietnam). Its main tasks and functions are as follows:

- i) Organize and implement scientific and technological researches on silviculture, forest industry, forest economics, forestry organization and management;
- ii) Research tropical forest science of Vietnam;

- iii) Elaborate and implement forest socio-economic, scientific and technical programmers and develop a mechanism for economic management, technical procedures and economic and technical standards;
- iv) Train researchers in various fields of forest science and upgrade scientific knowledge for scientists, technicians and managerial personnel in the forestry sector;
- v) Carry out international cooperation programmes; and
- vi) Provide a consultancy service for forestry investment.

## (2) Forestry Extension

The National Agriculture Extension Center (NAEC) was restructured in 2010 as a public non-business unit under MARD for agricultural extension at the central level in accordance with the Decree No. 02/2010 ND-CP dated 8 January 2010. NAEC has provided several types of services for agriculture and forestry extension, such as information dissemination, public awareness campaigns, technical training, and technology transfer on skills/techniques in the respective fields, to name a few.

At the provincial and district levels, the Provincial/District Agriculture Extension Centre (PAEC/DAEC) is the main institutions for agriculture and forestry extension. Each and every province/district has the said extension service unit. Aside from NAEC/PAEC/DAEC, PFMBs/SUFMBs have also provided training/guidance on silvicultural techniques for local communities when contracting out the forest development and protection works to them. Furthermore, DFPU/FRO has occasionally provided training in controlling fire to local people using the budget allocated by PPC.

## 2.4 Forest Inventory and Monitoring

### 2.4.1 Forest Inventory

The Government of Vietnam has periodically implemented the forest inventory and monitoring programs on a national scale as shown below. The 5<sup>th</sup> forest inventory and monitoring, named the National Forest Inventory and Statistics (NFI&S) program, has been carried out since 2013 in accordance with the PM and MARD Decisions.<sup>3</sup> The results of NFI&S is expected to be issued/published by October 2016.

**Forest Inventory and Monitoring System**

Cycle of Forest Inventory / NFI Period 1)	Forest Inventory Program	Forest Change Monitoring Program 2)
1 (1991-1995)	National Forest Inventory Monitoring and Assessment Program	-
2 (1996-2000)	Ditto	-
3 (2001-2005)	Ditto	Annual Forest Areas Monitoring Program (2002-, by Forest Rangers-Forest Protection Department)
4 (2006-2010)	Ditto	Ditto
5 (2011-2015)	National forest inventory and statistics (NFI&S) program	Ditto

*Compiled using data presented by Dr. Nguyen Phu Hung, Director, DOSTIC, VNFOREST, MARD. Vietnam National Forest Monitoring System*

Notes: 1) Forest inventory has been conducted every five years and publicized in the 2<sup>nd</sup> quarter of the subsequent year, according to Article 32, Law on Forest Protection and Development (No. 29/2004/QH11 dated 3 Dec. 2009 [Order

<sup>3</sup> MARD Decision No. 25/2009/TT-BNN dated May 5, 2009, PM Decision No. 1699/2009/QD-TTg dated October 20, 2009 and PM Decision No. 594/2013-QD-TTg dated April 15, 2013.

No. 25/2004/L-CTN dated 14 Dec. 2004dated 14 Dec. 2004])

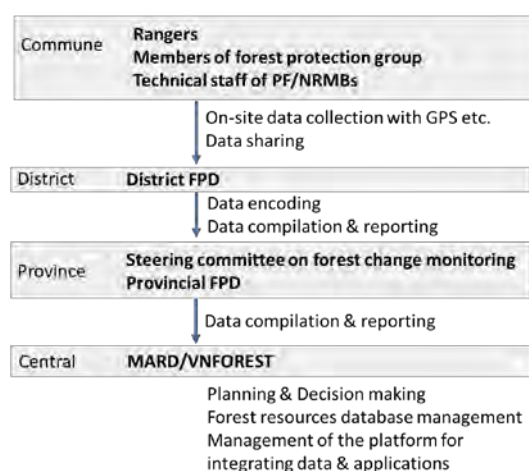
- 2) Forest change monitoring has been conducted annually and data of forest change monitoring have been publicized in the 1<sup>st</sup> quarter of the subsequent year, according to Article 32, Law on Forest Protection and Development (No. 29/2004/QH11 dated 3 Dec. 2009 [Order No. 25/2004/L-CTN dated 14 Dec. 2004dated 14 Dec. 2004])

Forest Inventory and Planning Institution (FIPI) established in 1961 is the main executing agency of the forest inventory program. It has more than 700 officers working throughout the country including six branches (so-called sub-FIPIs) and four scientific, technical and service centres. Its main tasks defined by MARD Decision (MARD Decision No. 3818 /QĐ-BNN-TCCB on September 5, 2014) are summarized below.

- i) Development of strategies, plans, programs, projects for biodiversity conservation and forest environmental protection and national standards/technical regulations that could be used as national guidelines defined by MARD;
- ii) Conduct of forest inventories (forest land, forest resources, fauna and flora, biodiversity, and socio-economic issues) in the forestry sector;
- iii) Development of forestry plans (e.g., forest development master plans, forest protection and development plans, land use plan, and socio-economic development plan in mountainous areas)
- iv) Designing of forestry development (e.g., survey and design of forest land allocation, design of afforestation, rehabilitation, design of logging, and design of agroforestry and fisheries model)
- v) Development, update, and management of the national forest resource database;
- vi) Scientific research and application of scientific technologies; and
- vii) Education and training on forest inventory and planning.

## 2.4.2 Forest Monitoring

A computer-based forest monitoring system was first introduced in 2002 in accordance with MARD Decision No. 78/2002/QĐ-BNN\_KL, which stipulated that the National Forestry Inventory 2000 data should be used as baselines for forest changes to be monitored periodically. It was further upgraded recently according to the newly issued MARD Decision (No. 589/QĐ-BNN-TCLN) in February 2016. The overall framework of the current forest monitoring system called “the annual forest change monitoring system” is outlined below.



### Summary of Institutional Framework for Forest Change Monitoring System

Source: JICA Preparatory Survey Team (2016)



In the framework shown above, field monitoring data is periodically collected by forest rangers and technical staff of PFMBs/SUFMBs with or without GPS, and reported to District FPDs concerned for data compilation. District-level data is further reported to Provincial FPDs concerned for compilation. The Provincial FPDs reports the consolidated data to VNFOREST for updating the forest monitoring database at the central level. It is, however, said that the system still needs to be further improved in terms of: i) quality assurance of data, ii) IT system improvement, and iii) standardization of baseline data (NFI&S data) for the use of monitoring data in the REDD+ scheme in Vietnam.

## 2.5 PFES for Forest Protection

The payment for forest environmental services (PFES) is the mechanism/scheme to provide financial incentives for forest owners, especially local communities and individuals, in exchange for protection of watershed forests. In Vietnam, PFES was first piloted in a few provinces in 2008, and was officially approved as the scheme by PM Decree No. 99 in 2010. The same decree defines that (i) hydropower plants, (ii) water supply companies, (iii) industrial facilities using water directly from water sources, and (iv) tourism business companies are the service users who should make the payments for forest-based environmental services. The following table shows the total amount of PFES made by the services users from 2010 to 2012. As shown below, the amount of PFES has increased from USD 5.3 million to USD 58.6 million, of which more than 90% are from hydropower plants.

**Source of Payment from 2010 to 2012**

(Unit: USD million)

Payment Source	2010	2011	2012	Total	Share
(i) Hydropower Plants	4.9	13.4	57.7	86.5	97%
(ii) Water Companies	0.4	0.7	0.9	2.5	3%
(iv) Eco Tourism	0.02	0.03	0.04	0.11	0%
Total	5.3	14.1	58.6	89.1	100%

\* Charge has not been collected from (iii) industrial facilities

Source: Payment for forest environmental services in Vietnam: from policy to practice (CIFOR, 2013)

The Forest Protection and Development Fund is responsible for collection, management, and distribution of the payments. As stipulated in the decree, more than 90% of the collected funds to be delivered to forest owners, such as forest management boards, forest enterprises, communities, individual households, and other organizations. The performance-based payment is employed in the PFES scheme; hence, the payment rate to forest owners is supposed to be calculated based on the “K-factor” which is defined by the quality of forests. Nevertheless, the flat payment per hectare has been employed in the field due to technical difficulties as well as for simplifying the monitoring and payment process.

## 2.6 Policies, Laws/Regulations, and Plans relevant to the Proposed Project

### 2.6.1 Socio-Economic Development Strategy and Plan

#### (1) Socio-Economic Development Strategy

The socio-economic development strategy for the period of 2011-2020 was approved by Prime Minister on April 12, 2012 (Ref: Decision No. 432/QĐ-TTg) with an aim to achieve sustainable and effective economic growth balancing with social equality, environmental protection, socio-political stabilization, and territorial integrity of the country. The strategy lay

out a path towards industrialization by 2020 based on the review and assessment of the achievements made for socio-economic development in the country from 2001-2010. Some of the key targets of economic, socio-cultural and environmental development set by the strategy for 2020 are shown below.

Targets of economic development in 2020

- Average annual GDP growth rate: 7-8%/year
- Average per capita GDP in real price: US\$ 3,000
- Ratio of communes with standard rural infrastructure: about 50%

Targets of socio-cultural development in 2020

- Human development index: Medium to high
- Annual population growth rate: 1.1%/year
- Decrease rate of poor households: 2~3%/year
- Real income of household: 3.5 times of the level in 2010

Targets of environmental development in 2020

- Ratio of forest cover: 45%
- Access to clean water: Almost 100%

In order to achieve the targets, a total of 12 socio-economic development orientations are proposed by the strategy. Sustainable forest development is one of the activities proposed for the achievement of three orientations, namely “effective and sustainable agricultural development,” “sustainable development of urban and rural areas,” and “improvement of environment quality.”

**(2) Socio-Economic Development Plan (2016-2020)**

The socio-economic development plan has been discussed by the National Assembly and developed on the basis of the Socio-Economic Development Strategy for 2011-2020. A total of 12 guiding principles are set: i) to achieve macro-economic, social and environmental targets, ii) to fulfill its commitments to the international community, and iii) to cope with several changes that the country has faced. Among 12 principles, the following principles are relevant to the proposed project.

- Cultural development, implementation of social progress and justice, and improvement of living standards in harmony with economic development
- Active response to climate change, disaster prevention, resource management and environmental protection

**2.6.2 Policies, Laws/Regulations, and Plans relating to Forest Development and Management**

**(1) National Forest Protection and Development Plan (National FPDP/PM Decision No. 57/QD-TTg)**

The Forest Protection and Development Plan for the period of 2011-2020 was approved by Prime Minister on January 9, 2012 (Prime Minister Decision No. 57/QD-TTg). It sets the following objectives of the forestry sector with its development targets for a decade (2011-2020).

### Objectives

- ◆ To effectively manage available forest and land resources available for forestry in an effective and sustainable manner;
- ◆ To increase the forest cover to 42-43% by 2015 and 44-45% by 2020, respectively; increase the productivity, quality, and values of forests; restructure the sector towards increasing added values; and meet basic demands for timber and forest products for domestic consumption and export; and
- ◆ To generate more job opportunities; improve income structure of forest-dependent households; contribute to hunger elimination and poverty reduction; and ensure national security and defense.

### Targets

- ◆ To protect 13,388,000 ha of existing forest, 750,000 ha of regenerated forests, and 12,500,000 ha of new plantations;
- ◆ To develop 250,000 ha of new protection and special use forests, 1,000,000 ha of new production forests, and 1,350,000 ha of replanting after harvesting;
- ◆ To zone 750,000 ha of regeneration mainly in protection and special use forests;
- ◆ To rehabilitate 350,000 ha of critically poor natural forests;
- ◆ To conduct supplemental planting of 500 million trees; and
- ◆ To improve quality of natural forests, productivity of plantation forests by 25% in 2020 compared with 2011.

To achieve the targets listed above, the plan outlines the key approaches and actions as follows:

- 1) Strengthening of communication and enhancement of awareness;
- 2) Review of planning of forest lands and improvement of management of three types of forests;
- 3) Strengthening of institutional set-ups and law enforcement for forest protection;
- 4) Facilitation of forest allocation, lease contract, and co-management;
- 5) Strengthening of science, technology and forestry extension;
- 6) Coordination with international cooperation;
- 7) Strengthening of market chain of forest products; and
- 8) Development of a mechanism for mobilization of funding sources.

### (2) Provincial and District Forest Protection and Development Plan (Provincial and District FPDP)

In response to the National Forest Protection and Development Plan, every province and district prepared and developed its Forest Protection and Development Plan to achieve the target set by the national plan. The provincial and district FPDPs indicate the targets of forest protection and development in the respective localities with necessary interventions with budget requirement. The FPDPs of the target provinces are outlined in Section 5.6 of this report.

### (3) Forest Sector Reform Proposal (MARD Decision No. 1565/QD-BNN-TCLN)

The Forest Sector Reform Report Proposal approved by MARD Minister on July 8, 2013 (MARD Decision No. 1565/QD-BNN-TCLN) aims to reform the forestry sector into an economically, socially, and environmentally sustainable one by i) improving the value-added products and services, ii) increasing the annual average production values by 4-4.5% by 2020,

iii) gradually satisfying the demand of timber and timber products in the national and international markets, and iv) contributing to creation of job opportunities, poverty alleviation, livelihood improvement, and ecological and environmental protection for sustainable development.

The reform proposal defines the orientation of the sector, such as structure of forests in 2020, approaches to the increase of added value of forestry products, institutional reform in the forestry sector, mobilization of financial resources, and functions of forestry and forest resources in the respective regions in the country. Among others, the reform proposal specifies that the forest sector in the Northwest Region should place priority on “development and fostering of watershed protection forests, special use forests, and natural production forests in the watersheds of hydropower plants to maximize protective efficiency and enable localities to get more benefits from Payment for Forest environmental Services (PFES).

#### (4) Regulation on Protection Forest Management (PM Decision No. 17/2015/QĐ-TTg)

This decision was approved by Prime Minister on June 9, 2015 to provide regulations on the management, protection, development, and use of protection forests and enjoyment of benefits from protection forests and investment in the same. The regulations define the criteria for classification of watershed protection forests into “very important” and “important” forests as shown below.

Criteria for Classification of Watersheds		
Criteria	Very Important	Important
Rainfall	More than 2,000 mm/year or 1,500~2,000 mm/year but concentrated in 2~3 months	1,500~2,000 mm/year or 1,000~2,000 mm/year but concentrated in 2~3 months
Terrain (Mountainous and hilly terrain)	Over 50 m difference in height and over 35 degree sloping, 25-50 m difference in height and over 25 degree sloping Under 25 m difference in height and over 15 degree sloping	At least 50 m difference in height and 26-35 degree sloping, 25-50 m difference in height and 15-25 degree sloping At least 25 m difference in height and 8-15 degree sloping
Location	Upper part of the mountain (at least 1/3 of the mountain from the top)	Middle part of the mountain (at least 1/3 of the mountain in the middle)
Soil conditions	Medium texture of soils at a thickness of less than 80 cm or Light or medium clayey soils at a thickness of less than 30 cm	Sandy and mix texture of soils at a thickness of more than 80 cm or Light or medium clayey soils at a thickness of 30-80 cm

Source: Decision on Promulgating the Regulation on Protective Forest Management, 2015 (Decision No. 17/2015/QĐ-TTg) adapted by the preparatory survey team

Chapter 3 (Articles 11 and 12) of the regulation defines the activities to be carried out in protection forests to protect and enhance its functions, while Chapter 4 (from Article 13 to 19) of the same stipulates potential benefits that forest owners and/or communities concerned could benefit from protection and management activities.

#### (5) Action Plans on Improvement of Forestry Products (MARD Decision No. 1565/QĐ-BNN-TCLN)

In response to the forestry sector reform proposal, MARD approved the following action plans to take steps toward improvement of the quality and values of forestry products from production forests by 2020.

- Action Plan on improving the productivity, quality and values of plantation production forests for the period of 2014-2020 (MARD Decision No. 774/QD-BNN-TCLN on April 18, 2014)
- Action plan on enhancing the added values for processed timber products for the period of 2014-2020 (MARD Decision No. 919/QD-BNN-TCLN on May 5, 2014)

The former proposes necessary interventions with budget requirement for improving the value of plantations in production forests, specially focusing on the development of large-sized timber plantation by prolonging the harvesting cycle, while the latter introduces actions to be taken for strengthening the timber processing industry and implementation of sustainable forest management with forest certifications.

### **2.6.3 Policies, Laws, Regulations, and Plans relating to REDD+**

#### **(1) National Action Program on REDD+ (2011-2020) (PM Decision No. 799/QD-TTg)**

MARD has actively addressed the climate change issues since 2011 by approving i) the action plan on climate change response of agriculture and rural development sector for the period of 2011-2015 with vision to 2050 (Decision No. 543/QD-BNN-KHCN, 23 March 2011) and ii) the programmes of greenhouse gas (GHG) emission reduction in the agriculture and rural development sector up to 2020 (Decision No. 3119/QD-BNN-KHCN, 16 December 2011). As one of the activities proposed in the said programmes, MARD developed and approved the national action program on reduction of GHG emissions through efforts to reduce deforestation and forest degradation, conservation and enhancement of forest carbon stocks 2011-2020 (so-called “the National REDD+ Action Program 2011-2020”) to reduce GHG emissions by i) mitigating deforestation and forest degradation, ii) increasing GHG sequestration by forests, iii) achieving sustainable management of forest resources and conservation of biodiversity, and iv) implementing the national strategy on climate change along with poverty reduction. Specifically, the program aims to:

##### 2011-2015

- ◆ Develop and operate pilot mechanisms, policies, organizational systems to ensure effective management, coordination and operation of REDD+ related projects;
- ◆ Raise awareness and capacity of relevant parties to proactively participate in REDD+ activities;
- ◆ Form and operate the national REDD+ network effectively;
- ◆ Contribute to the protection of existing forest along with upgrading of the quality and value of forests;
- ◆ Reduce emissions of GHG and create additional employment opportunities and sources of income for people through the implementation of REDD+ pilot projects in 8 provinces.

##### 2015-2020

- ◆ Accomplish the mechanisms, policies, organizational structures, and technical capacity to ensure the proper management, coordination, and effective operation of projects and activities under the National REDD+ action program at the national scale; and

- ◆ Reduce GHG emissions through i) reduction of deforestation and forest degradation, ii) increase of GHG sequestration by forests, iii) management and sustainable development of forest resources, iv) increase of the national forest cover ratio to 44-45%, v) conservation of biodiversity and vi) improvement of livelihoods of forest owners and households concerned with forests.

The action program comprises key tasks in two succeeding periods as follows:

**Key Tasks in two periods between 2011 and 2020**

2011-2015	<ul style="list-style-type: none"> <li>■ Capacity building and institutional development on REDD+ activities</li> <li>■ Conduct of forest and carbon investigation and data collection to establish RELs/FRLs for each period, and project RELs/FRLs for coming years</li> <li>■ Development and operation of measurement, reporting, and verification (MRV) system</li> <li>■ Development of REDD+ programme financial management mechanism</li> <li>■ Implementation of pilot REDD+ projects</li> <li>■ Strengthening of cooperation and experience sharing with counties in the region on the implementation of REDD+ and improvement of forest law enforcement, governance, and trade</li> <li>■ Review and documentation of lessons learnt from the pilot REDD+ projects</li> </ul>
2016-2020	<ul style="list-style-type: none"> <li>■ Continuous improvement of coordinating mechanisms, management and operation of the program and its implementation at the national level</li> <li>■ Implementation of the legal framework for implementation of REDD+</li> <li>■ Enhancement of awareness and improvement of capacity of staff at all layers including local people and organization involved in implementation of REDD+</li> <li>■ Revision and improvement of RELs/FRLs at the national and local levels in the pilot provinces</li> <li>■ Improvement of the information system for REDD+ including MRV</li> <li>■ Achievement of the financial management mechanism and the payment policy based on REDD+ performance</li> </ul>

Source: *Decision on Approval of the National Action Program on Reduction of Green-house Gas Emissions through Efforts to Reduce Deforestation and Forest Degradation, Sustainable Management of Forest Resources, and Conservation and Enhancement of Forest Carbon Stocks" 2011 – 2020 (PM Decision No. 799/QD-TTg) adapted by JICA preparatory survey team*

**(2) Guidelines on Development of Provincial Action Plan on REDD+ (MARD Decision No. 5414/QD-BNN-TCLN)**

The guidelines on development of provincial action plan on reducing greenhouse gasses emission through efforts to reduce deforestation and forest degradation, sustainable forest management, and conservation and enhancement of forest carbon stocks (REDD+) (MARD Decision No. 5414/QD-BNN-TCLN) was approved by Minister of MARD on December 25, 2015 with an aim to i) provide guidelines on the preparation and development of provincial REDD+ action plan (PRAP) to the respective provinces and ii) facilitate the mobilization of resources for implementation of the national REDD+ action plan and forest protection and development plans (FPDPs) in provinces.

The decision stipulates the standard outline of the provincial REDD+ action plan (PRAP) with its template and the procedures for development of PRAPs, so that DARDs could develop PRAPs in the respective provinces in a proper manner.

## **Chapter 3 Status of REDD+ and Environmental and Social Consideration System in Vietnam**

### **3.1 Overview of Action against Climate Changes and for REDD+ in Vietnam**

This section summarizes the context and current status of Vietnam's actions against climate change and, in particular, for REDD+ development in Vietnam. More details are presented in **Appendix-1** attached to this report.

#### **3.1.1 Climate Change Trends and Impacts in Vietnam**

Vietnam's long coastline, geographic location, and diverse topography and climates contribute to its being one of the most hazard-prone countries of the Asia-Pacific region, with storms and flooding, in particular, responsible for economic and human losses (GFDRR, 2011). Climate change is in general expected to increase the frequency and intensity of hazard events. Given that a high proportion of the country's population and economic assets (including irrigated agriculture and especially wet rice) are located in coastal lowlands and deltas, numerous studies on climate change modelling for Vietnam and anticipated impacts have concluded that Vietnam is likely to be one of the countries most severely affected by climate change in Asia (IPCC, 2014, 2010; ADB, 2013; MoNRE, 2012; GFDRR, 2011; IsPONRE, 2009; Dasgupta, 2007).

Overall climate change trends for Vietnam indicate the possibility that the average temperatures over large parts of the country may increase, the number of days with temperatures over 35°C may notably increase, the occurrence of drought may be frequent in the Northern and Central Coast regions, and the precipitation may increase along with the rise of sea level in Mekong Delta region (ADB, 2013; MoNRE, 2012).

#### **3.1.2 National Efforts to Reduce GHG Emissions**

Because of the climatic trends and anticipated impacts across large parts of the country, GOV has taken climate change very seriously. Vietnam ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1994 and the Kyoto Protocol in 2002, and has actively participated in the international negotiations. Whilst adaptation to the likely impacts of global climate change in Vietnam is perhaps unsurprisingly prioritized, GoV also notes the need to take advantage of opportunities to develop a low carbon economy and to join international efforts to mitigate climate change.

Ahead of the most recent UNFCCC Conference of Parties in Paris (CoP21), Vietnam submitted its Intended Nationally Determined Contribution (INDC) which includes both a mitigation and an adaptation components. INDC pledges to reduce Vietnam's Greenhouse Gas (GHG) emissions by 8% by 2030 compared to a Business as Usual scenario (BAU). The above-mentioned contribution could be increased up to 25% with international support. The mitigation component indicates that GHG emission intensity would be reduced over time through policy initiatives to improve energy efficiency, reduce energy consumption, shifts to renewable energies, promote sustainable agriculture, and enhance forest carbon sequestration (including through the development of REDD+).

At the national level, the primary policy documents laying out GoV response to climate change are the National Target Programme Responding to Climate Change (NTP-RCC)

(2008) and the National Climate Change Strategy (2011). The stated strategic objectives of the NTP-RCC are to assess climate change's impacts and develop feasible action plans to effectively respond to the issues in both the short and long-terms to ensure sustainable development. The plan contains near term (to 2010) and longer term (to 2020) priority activities to address the following eight sub-objectives or program areas:

- 1) Assessing the impacts of climate change
- 2) Identifying appropriate responses
- 3) Developing a scientific-technical program
- 4) Strengthening capacity and the policy framework in the relevant organizations and institutions
- 5) Raising awareness across the country
- 6) Enhancing international cooperation
- 7) Mainstreaming the NTP across all sectors
- 8) Developing specific action plans to respond to climate change

In addition, climate change has been mainstreamed into the National Socio-Economic Development Strategy (2011-2020) and Socio-Economic Development Plan (2011-2015), as well as various strategies on green growth, disaster risk reduction, coastal zone management, and energy supply and use. Economic sectors and provinces have also developed Action Plans to respond to climate change.

### **3.1.3 Status of REDD+ Development in Vietnam**

#### **(1) Overview**

The GoV, through their INDC have indicated that the forestry sector is expected to play a considerable role in climate change mitigation, in particular with reference to the National Forest Sector policy goal of restoring forest cover to 45%. The INDC as well as GoV forest sector policy emphasize the role of Payments for Forest Ecosystem Services (PFES), including the development of REDD+ as a means towards achieving this ambitious target.

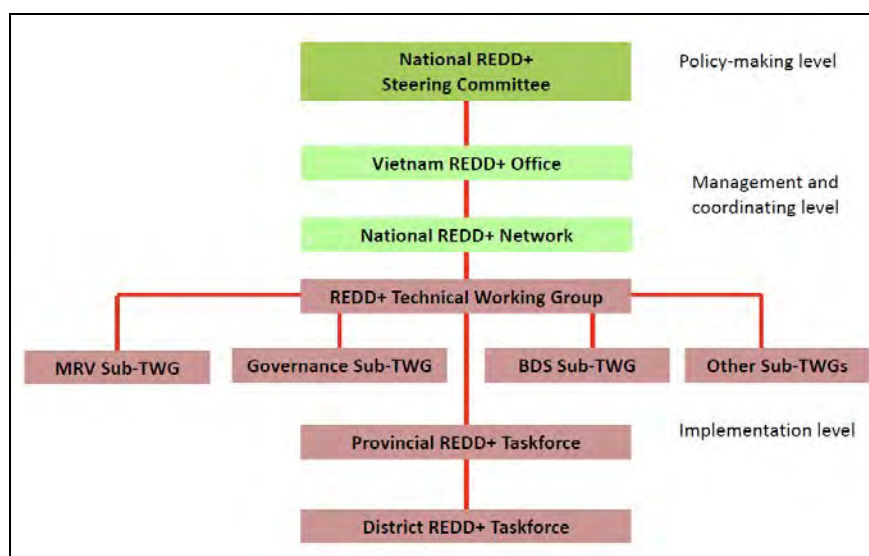
In the international climate negotiations the GoV has clearly indicated its interest in REDD+ to the UNFCCC secretariat in February 2008. As such, the country has received considerable international financial and technical support for the development of REDD+. Vietnam became one of the original UN-REDD pilot countries in 2010, with support subsequently extended into a second phase (2014-2018). At the same time, Vietnam was also one of the first countries to be supported by the World Bank's Forest Carbon Partnership Facility (FCPF). Both programs have provided technical and financial support for REDD+ 'readiness' i.e. determining and filling the gaps between Vietnam's existing social, technical and institutional capacities and those that may be required for participation in an eventual international mechanism providing results-based payments for REDD+. Additionally, several bilateral development agencies have also provided significant investment support for the development of REDD+ at national level as well as in piloting REDD+ 'on the ground' at sub-national levels, notably GIZ, JICA and the United States Agency for International Development (USAID).

#### **(2) Institutional Arrangements for REDD+ in Vietnam**

In January 2011, the Vietnam REDD+ Steering Committee was established under authorization of the Prime Minister chaired by Minister of MARD to coordinate all efforts and



activities among government agencies at the central and local levels, private organizations, NGOs, CSOs and international development partners in the REDD+ implementation. The REDD+ Steering Committee includes representatives from MoNRE, Ministry of Planning and Investment (MPI), Ministry of Finance (MoF), Ministry of Foreign Affairs (MOFA), Ministry of Science and Technology (MoST) and the National Committee for Ethnic Minority Affairs (CEMA). In addition to the steering committee, the National Network and Working Group for REDD was established in 2009 by the GoV decision<sup>4</sup>. The diagram below outlines the institutional arrangements for REDD+ in Vietnam.



**Institutional Arrangements for REDD+ in Vietnam**

Source: Vietnam REDD+ Website/ [www.vietnam-redd.org](http://www.vietnam-redd.org)

### (3) Progress of REDD+ Development in Vietnam

In terms of progress to date, a key milestone in REDD+ development in Vietnam was the elaboration of a National REDD+ Action Plan (NRAP) in 2012<sup>5</sup>. The NRAP confirmed that it is designed in compliance with policies and laws of Vietnam, and consistent to the provisions of the UNFCCC and relevant treaties and international conventions Vietnam has joined. The NRAP identified a various REDD+ readiness objectives and associated key tasks for the periods 2011-2015 and 2016-2020.

Since 2014, there has been a considerable increase in the level of REDD+ planning and implementation at sub-national levels, starting with the development of a Provincial REDD+ Action Plan (PRAP) in Dien Bien in 2014 with the technical assistance from the SUSFORM-NOW project. A recent review of NRAP implementation (McNally & Nguyen, 2015) concluded that there has been important progress in the development of the four design elements of REDD+: the National REDD+ Action Plan, the Forest Reference Emission Level (FREL/FRL), the Measuring, Reporting and Verification (MRV) system and the Safeguard Information System (SIS). The review however also made reference to shortcomings in NRAP implementation to date and in particular called for the better integration of REDD+ in the broader context of green growth and sustainable development highlighting the need to

<sup>4</sup> Decision 2614/QĐ-BNN- LN, 16 Sept. 2009

<sup>5</sup> Prime Ministerial Decision 799/QĐ-TTg on "Approval of the National Action Program on Reduction of Greenhouse Gas Emissions through Efforts to Reduce Deforestation and Forest Degradation, Sustainable Management of Forest Resources, and Conservation and Enhancement of Forest Carbon Stocks" 2011 – 2020, 27 June, 2012

define appropriate and more targeted REDD+ policies and measures (PaMs) based on thorough analyses of the drivers of deforestation and forest degradation. Such analyses would also help GoV determine the focused areas, scale and scope of REDD+, rather than covering all five REDD+ activities (avoided deforestation, avoided degradation, forest conservation, sustainable forest management, and forest stock enhancement). To this end, a ‘drivers’ assessment covering each of Vietnam’s eight agro-ecological zones has just started as part of a process to revise the NRAP.

### **3.1.4 REDD+ Safeguards**

REDD+ as a concept has evolved over time and it is now widely acknowledged that in addition to climate change mitigation or the ‘carbon benefits’ it could present various environmental and social risks, as well as a range of ‘non-carbon benefits’. In recognition that social and environmental risks associated with REDD+ must be addressed (REDD+ does no harm), and that multiple benefits are important (REDD+ does good), parties to the UNFCCC agreed to a set of seven safeguards for REDD+ at COP 16 in Cancun (referred to as the ‘Cancun safeguards’).

Although the “Cancun safeguards” states that “when undertaking REDD+ activities, the safeguards should be promoted and supported,” the UNFCCC has provided limited guidance on how countries should report on the application of this set of safeguards. It further says that a system for providing information on how the safeguards are being addressed and respected throughout the implementation of REDD+ activities is required and that the system should: be country driven; be implemented at the national level; be built on existing systems; recognize international conventions and agreements; and respect gender considerations.

NRAP prepared in 2012 states that it is ‘designed in compliance with policies and laws of Vietnam, as well as in consistency with the provisions of the UNFCCC and relevant treaties and international conventions Vietnam has joined’. This includes environmental and social safeguards provisions under the UNFCCC text on REDD+ as well as other relevant international conventions and treaties such as CBD, CITES, UNDRIP among others.

In 2012, GoV also approved the establishment of the Sub-Technical Working Group on REDD+ Safeguards (STWG-SG). This group has been relatively active (co-chaired by the VRO & SNV) and has discussed various relevant issues and a country-led approach to REDD+ safeguards. Central to this idea is that rather than adopting or appropriating external safeguards policies and standards (such as those of the World Bank or other donors), Vietnam will respond to the international requirements through its own existing policy and legal framework. An important output developed through STWG-SG consultations was the elaboration of a ‘Safeguards Roadmap’ in 2014, which provided an initial analysis of options, priorities, milestones and recommendations on all aspects related to REDD+ safeguards in Vietnam.

A preliminary analysis of Vietnam’s policy, laws and regulations in comparison with the UNFCCC safeguard requirements was also carried out to inform the roadmap. This analysis produced a range of gap-filling recommendations as part of the process of developing a country-led approach to REDD+ safeguards. In addition to recommending the development of national legislation, the roadmap outlined the further steps towards development of the safeguards framework for REDD+ and safeguard information system, namely, the assessment

of institutional and compliance frameworks for implementing the existing policies, laws and regulations. The UN-REDD Programme Phase II now supports these next steps as key readiness activities.

## **3.2 Environmental and Social Consideration System in Vietnam**

### **3.2.1 Laws and Regulations on Environmental Assessment and Approval**

The following laws and regulations were reviewed in this reporting period to grasp the legislative framework of the environmental protection and management sectors in Vietnam.

- a. Law on Environmental Protection No. 55/2014/QH13 passed by the National Assembly on 23 June 2014 and took effect since 01 January 2015;
- b. Decree No. 19/2015/ND-CP, dated 14 February 2015, on detailed regulation for implementing some articles of the Environmental Protection Law, issued by the Government;
- c. Decree No. 18/2015/ND-CP, dated 14 February 2015, providing environmental protection planning, strategic environmental assessment, environmental impact assessment and environmental protection plans, issued by the Government
- d. Circular No. 27/2015/TT-BTNMT, dated 29 May 2015, detailing a number of articles of the Government's Decree No. 18/2015/ND-CP on Strategic Environmental Assessment, Environmental Impact Assessment and Environmental Protection Commitment, issued by the Ministry of Natural Resources and Environment;
- e. Circular No. 09/2014/TT-BNNPTNT, dated 26 March 2014, regulating the Strategic Environmental Assessment, Environmental Impact Assessment by the Ministry of Agriculture and Rural Development
- f. MARD Directive No.36/2008/CT-BNN of February 20, 2008, enhancing environmental protection activities in agriculture and rural development
- g. MARD Notice No.6494/TB-BNN-VP of November 3, 2008, the conclusion given by the MARD Minister Cao Duc Phat at the conference on agriculture and rural environmental protection

The Law on Environmental Protection (LEP) in 2014 provides the overall and fundamental legal framework for environmental regulation in Vietnam. The LEP regulates activities, policies, measures and resources for environmental protection and defines general powers of the central and local governments as well as the rights and obligations of organizations, family households and individuals with regard to environmental protection.

The LEP stipulates environmental assessment policies and procedures that include: i) requirements for public participation; ii) consideration of environmental management and monitoring actions; iii) clear roles of the central and local government agencies in Environmental Impact Assessment (EIA) enforcement and monitoring; iii) a prescriptive approach to screening/scoping of EIA documents; iv) clear requirements for smaller projects not subject to a full EIA process; v) roles of Government agencies in EIA review and

appraisal; and vi) transfer of responsibility to provinces and sector ministries for EIA approval.

The preparatory survey team also confirmed that there was no variation in the environmental assessment policies and procedures between the central and provincial levels. The local authorities have seriously followed the national regulations and guidelines in general.

### 3.2.2 Comparison of the EIA system in Vietnam with the JICA's Guidelines

The current EIA system in Vietnam is basically consistent with the international systems. Particularly, it has been significantly improved in LEP, which was revised in 2014 to fill the gaps between the Vietnam and international systems in terms of public consultation, information disclosure, monitoring. Consequently, a few gaps were identified between the JICA Guidelines for Environmental and Social Considerations (April 2010) and Vietnam's EIA institutional framework. A comparison with the measures to fill the gaps is shown in **Table I-3-1** attached to this report, and summarized below.

**Comparison between the JICA Guidelines and Vietnamese EIA Framework**

Content	JICA's Guidelines for Environmental and Social Considerations (April 2010)	Vietnam's EIA institutional framework: LEP 2014, Decree 18/2015, Circular 27/2015	Gap Between JICA Guidelines & Vietnam Law, and the measures to fill the gap
Principle	<ol style="list-style-type: none"> <li>1. Environmental impacts that may be caused by projects must be assessed and examined in the earliest possible planning stage. Alternatives or mitigation measures to avoid or minimize adverse impacts must be examined and incorporated into the project plan.</li> <li>2. Such examinations must be conducted in close harmony with the economic, financial, institutional, social, and technical analyses of projects.</li> <li>3. The findings must include alternatives and mitigation measures.</li> <li>4. For projects that have a particularly high potential for adverse impacts or that are highly contentious, a committee of experts may be formed so that JICA may seek their opinions, in order to increase accountability.</li> </ol>	<ol style="list-style-type: none"> <li>1. Environmental impacts of projects are assessed and examined before approval. Alternatives/ mitigation measures are included and incorporated.</li> <li>2. EIA requires detailed assessment of possible environmental impacts including environmental components and socio-economic elements to be impacted by the project.</li> <li>3. EIA must include specific measures to minimize bad environmental impacts, prevent and respond to environmental incidents and commitments to take environmental protection measures during project construction and operation.</li> <li>4. EIA reports shall be appraised by appraisal councils formed of appropriate experts as required and as determined by the relevant organizations (depending on project categorisation).</li> </ol>	<ol style="list-style-type: none"> <li>1. No significant gap between the JICA Guidelines and Vietnam's EIA legislation is detected.</li> <li>2. The inclusion of environmental and social considerations during the preparatory survey was in line with both guidelines so that any potential environmental and social issues could be addressed in the project planning process.</li> </ol>
Examination of Measures	<ol style="list-style-type: none"> <li>1. Multiple alternatives must be examined in order to avoid or minimize adverse impacts and to choose better project options in terms of environmental and social considerations.</li> <li>2. Appropriate follow-up plans and systems, such as monitoring plans and environmental management plans, must be prepared; the costs of</li> </ol>	<ol style="list-style-type: none"> <li>1. Alternatives are not compulsory in the environmental assessment procedure.</li> <li>2. Environmental Management Plans are required.</li> </ol>	<ol style="list-style-type: none"> <li>1. Alternatives at the site-level including a zero option have been considered in the design and as part of the environmental and social considerations.</li> <li>2. Environmental management and monitoring plans proposed in this ESMF shall be implemented accordingly.</li> </ol>

Content	JICA's Guidelines for Environmental and Social Considerations (April 2010)	Vietnam's EIA institutional framework: LEP 2014, Decree 18/2015, Circular 27/2015	Gap Between JICA Guidelines & Vietnam Law, and the measures to fill the gap
	implementing such plans and systems, and the financial methods to fund such costs, must be determined.		
Scope of Impacts to be assessed:	1. The impacts to be assessed include: impacts on i) the natural environment, that are transmitted through air, water, soil, waste, accidents, water usage, climate change, ecosystems, fauna and flora, including trans-boundary or global scale impacts; ii) social impacts, including involuntary resettlement, employment and local livelihoods, utilization of land and resources, social institutions such as social capital and local decision-making institutions, existing social infrastructures and services, vulnerable social groups (e.g. poor and indigenous peoples), equality of benefits and losses and equality in the development process, gender, children's rights, cultural heritage, local conflicts of interest, infectious diseases, and working conditions.	1. Vietnamese legislation does not specify the scope of impacts to be assessed. The LEP broadly indicates that environmental and socio-economic elements are to be considered.	1. A full range of potential impacts as indicated in the JICA Guidelines were first assessed and considered. 2. Among them, those which identified as likely or possible impacts were further assessed for scoping. 3. The extents of possible impacts were assessed and the necessary measures/ interventions to either avoid or minimize the adverse impacts were designed and incorporated in the project plan.
Compliance with Laws, Standards and Plans	1. Projects must comply with the laws, ordinances, and standards related to environmental and social considerations established by the governments that have jurisdiction over project sites. 2. Projects must, in principle, be undertaken outside of protected areas.	1. All projects must comply with the relevant policies, laws and ordinances established by national and local governments.	1. No significant gap. The project is in accordance with national and provincial/local policy objectives and priorities. 2. In this case the project will be implemented in certain designated protected areas but the objective is to promote forest protection and restoration at these sites, and will not include any adverse environmental impacts.
Social Acceptability	1. Projects must be adequately coordinated so that they are accepted in a manner that is socially appropriate to context. 2. Appropriate consideration must be given to vulnerable social groups, such as women, children, the elderly, the poor, and ethnic minorities, all members of which are susceptible to environmental and social impacts and may have little access to decision-making processes within society.	1. Under LEP and implementing Decree 18/2005, provisions are made for the appraisal of projects to ensure their appropriateness considering environmental and socio-economic aspects. Disclosure and consultation with affected communities and local stakeholders is also required as part of the process. 2. As above, there are no specific requirements for special consideration of vulnerable social groups in Vietnamese EIA legislation.	1. Initial information disclosure was conducted during the consultation meetings held by the preparatory survey team. 2. The project will require an EIA to be appraised by MoNRE. The law requires public disclosure of this report at the PPCs. 3. In addition, the ESMF itself as well as the Consultation and Participation Guidelines developed as part of this ESMF aim to ensure that site-level planning and implementation includes special considerations for vulnerable groups. These guidelines include further disclosure and consultation at local levels prior to implementation of activities; hence, CPMB/MARD and PPMBs/DARDs shall follow

Content	JICA's Guidelines for Environmental and Social Considerations (April 2010)	Vietnam's EIA institutional framework: LEP 2014, Decree 18/2015, Circular 27/2015	Gap Between JICA Guidelines & Vietnam Law, and the measures to fill the gap
			the ESMF in general and CPGs (Consultation and Participation Guidelines) in specific to address social issues in an appropriate manner.
Ecosystems and Biota	<p>1. Projects must not involve significant conversion or degradation of critical natural habitats and forests.</p> <p>2. Illegal logging of forests must be avoided.</p>	<p>1. Vietnamese EIA legislation as well as biodiversity and forest legislation also prohibits significant conversion of critical natural habitats and forests. However, conversion of natural forest is still possible under Vietnamese law.</p> <p>2. Not applicable. This project will not engage in any logging.</p>	<p>1. Since this project also aims to contribute to REDD+ implementation, any conversion of natural forest cannot be accepted. Hence, any activities that would cause clearance or conversion of forests in special use forests were eliminated. The activities can be further controlled and eliminated by using the Negative Checklist developed in the ESMF (Annex-I).</p>
Involuntary Resettlement	<p>1. Involuntary resettlement and loss of means of livelihood are to be avoided by exploring all viable alternatives.</p> <p>2. Affected persons must be sufficiently compensated and supported by project proponents etc. in a timely manner.</p> <p>3. Appropriate participation by affected people and their communities must be promoted in the planning, implementation, and monitoring of resettlement action plans and measures to prevent the loss of their means of livelihood. In addition, appropriate and accessible grievance mechanisms must be established.</p>	<p>1. Involuntary resettlement is also avoided wherever possible for development projects in Vietnam. In Vietnam, issues on land acquisition, compensation, resettlement, etc. are regulated by the law and regulations on land administration (such as the New Land Law 2013) If a development project needs to acquire some lots of land, then the above-mentioned law and regulations will be applied, an inventory-of-loss (IOL) will be carried out, and people who loses lands, properties, means of livelihood, etc. will be compensated and/or supported in relocation and resettlement. The Land Law also includes mechanisms for the redress of grievances.</p> <p>2. However, it needs further efforts to improve legal framework on involuntary resettlement and strengthen capacity of local agencies responsible for planning and implementing the livelihood restoration plan.</p>	<p>1. The survey team has carefully considered the issue of involuntary resettlement. This ESMF includes a summary description of potential involuntary resettlement related issues.</p> <p>2. There will be no physical relocation nor formal land acquisition under this project.</p> <p>3. The project will not engage in forest land allocation. It is also recommended that ongoing or proposed land acquisition for certain FMBs funded by the GoV is halted or the sites be removed from the project.</p> <p>4. At other sites where project activities such as afforestation could conflict with areas of land customarily or traditionally used by upland ethnic groups but where they do not have formal land rights, this ESMF and the survey and detailed planning component of the project proposes the conducts of village-level consultations and participatory discussions based on the concept of FPIC. These activities shall be carried out in a proper and timely manner to avoid and mitigate potential losses of access to assets and livelihoods.</p>
Indigenous Peoples (IPs)	<p>1. Any adverse impacts that a project may have on IPs are to be avoided when feasible by exploring all viable alternatives.</p> <p>2. When projects may have adverse impacts on IPs, all of their rights in relation to land and resources must be respected in accordance with the</p>	<p>1. The term IP is not used with respect to any group of peoples in Vietnam. However, it is accepted that ethnic minority (EM) groups share many similar characteristics with those of IPs.</p> <p>2. EMs nor anyone else in Vietnam have collective rights over lands</p>	<p>1. EMs comprise the majority of the peoples to be affected by the project. Therefore, ethnic minorities and their traditional ways of life has been strongly considered in designing the project as well as in the development of</p>

Content	JICA's Guidelines for Environmental and Social Considerations (April 2010)	Vietnam's EIA institutional framework: LEP 2014, Decree 18/2015, Circular 27/2015	Gap Between JICA Guidelines & Vietnam Law, and the measures to fill the gap
	spirit of relevant international declarations, including UNDRIP – FPIC is required. 3. Measures for the affected IPs must be prepared as an IP plan and must be made public in compliance with the relevant laws and ordinances of the host country.	and territories. 3. EIA law does not include special provisions for vulnerable groups. However, the Constitution does respect many relevant IP/EM rights (self-determination, non-discrimination), and the GoV implements a number of programs aimed at supporting such groups.	appropriate safeguard measures to ensure their consultation and participation, and that they receive culturally-appropriate benefits. 2. This ESMF intends to integrate EM considerations throughout and through the Consultation and Participation Guidelines in particular aims to ensure that indigenous peoples planning requirements are met.
Monitoring	1. Project proponents should make efforts to make the results of the monitoring process available to local project stakeholders	1. There is no provision on the project owner's obligation to publicize results of monitoring process even though the EMP disclosure is mandatory after completion of EIA approval.	1. The monitoring and reporting has been included in ESMF. Such a plan shall be implemented accordingly.

Source: JICA Preparatory Survey Team (2016)

In accordance with the Vietnamese regulations, particularly Decree No. 18/2015/ND-CP, SEA is not required for the proposed project as it is categorized as “projects” but not “strategy development” or “planning for development.” Instead, an EIA report might be required according to the same decree<sup>6</sup>, as the proposed project may be categorized as an investment project to be approved by Prime Minister.

### 3.2.3 Institutional Arrangements and Procedures for EIA

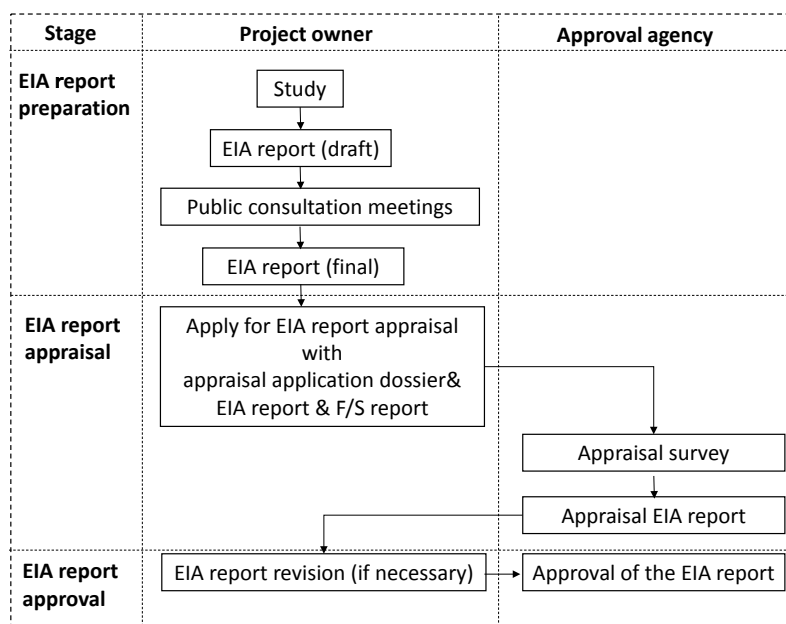
LEP also stipulates that a council shall be established to appraise an EIA report at any one of the following: i) Ministry of Natural Resources and Environment (MONRE), ii) other Ministries that implement the project, and iii) PPC/DONRE where the project is located. The organization where the council shall be placed is determined based on the nature of the project.

The council shall be organized at MONRE for the project which ought to be decided or approved by the National Assembly, while an implementing Ministry will be the right organization where the council is placed when the project will be managed by the line ministry. For the project which is located in a province and under direct responsibility of PPC/DONRE, the council shall be organized at PPC.

It should take about 30~45 working days from the date of the submission of the satisfactory application of the project to the date of completion of the appraisal by MONRE/line ministries/PPC/DONRE. After the appraisal, the EIA report appraisal authority must notify the project owner in writing of the results of appraisal. The period mentioned above does not include the period for completion of the EIA report made by the project owner.

<sup>6</sup> Decree No. 18/2015/ND-CP stipulates that “projects under competence to decide investment policies of the National Assembly; or competence to decide investment approval of the Government or Prime Minister” are required to conduct an EIA.

For a small-scale project<sup>7</sup>, either DONRE or DPC is responsible for approval of environmental protection plans according to LEP.<sup>8</sup> It will take 10 working days from the date of the submission of the environmental protection plan to the completion of the approval of DONRE/DPC. The processes of and procedures for approval of EIA and EPP are illustrated in **Figure I-3-1**, and summarized below.



**Outline of the Process/Procedure for EIA Approval**

*Source: JICA Preparatory Survey Team (2016)*

### 3.2.4 Environmental Management Capacity and Gaps

The environmental management capacity of relevant stakeholders at the provincial and district levels were reviewed and assessed in this reporting period. Some findings confirmed by the preparatory survey team are highlighted below.

- Environment Protection Division (EPD) under DONRE is in charged of EIA review and appraisal at the provincial level. Although the capacity of EPD is moderately adequate in consideration of its track record and educational background of its staff, it should be further enhanced by technical guidance and training specifically on biodiversity and ecosystem management, EIA support, and environmental monitoring.
- Natural Resource and Environment Office (NREO) under the DPC is responsible for environment issue like reviewing the EPP at the district level. Its staff has environment-related background in general.
- Currently EPDs and NREOs do not have enough staff to fulfill the allocated mandates. In particular, there are around 4~5 officers working in NREO, though it has various responsibilities in addition to environmental appraisal and compliance monitoring (environment, land, mineral resource, climate change etc.).

<sup>7</sup>Any project which is not listed in Appendix-C of Decree No. 18/2015/ND-CP dated February 14, 2015 can be categorized as the “small-scale project,” which can be handled by DONRE/PPC.

<sup>8</sup> Annex 5.1 of Circular 27/2015 dated 29 May, 2015



- Budget limitation is a big constraint that DONRE/EPDs/NREOs have faced in reviewing and appraising EIAs/EPPs. In general, the budget allocated for EIA review is quite limited and not enough to cover the expenses of hiring professional experts for EIA/EPP review/appraisal and/or conducting a field survey in the process.
- The quality of EIA document is not as satisfactory as expected in general due to the limitations of budget and human resources.
- The members of EIA appraisal committee are the staff from other line departments (DARD, DPI, DOC, DOH, etc.) but not the professional experts relating to the specific project. In general SubDFP has not been invited or consulted during the EIA appraisal process even for the forestry project.
- The monitoring of environmental compliance is a big challenge at the provincial and district levels. As the budget allocated for environmental monitoring is limited; therefore, it has not been easy to monitor the environmental compliance during the project implementation after EIA.
- There are cases/projects where EPP has not been prepared at the district level since the expected environmental impact is not significant and the awareness and capacity of local authorities are limited.

### 3.3 Social Safeguard and Management Systems

#### 3.3.1 Legal Framework for Social Safeguards

Vietnam has a relatively well-developed legal framework which covers a range of social safeguards issues such as land acquisition, involuntary resettlement, public consultation and participation, provision of equal opportunities, inclusion of vulnerable groups such as ethnic minorities and women in development interventions, and mechanisms for raising and addressing grievances. The following table summarizes the most important pieces of legislation relevant to social management and safeguards in Vietnam.

**Legal Framework for Social Safeguards**

Legislation	Main Provisions	Relevance to the Project	Institutions
<b>Land Law (2003 and revised 2013)</b>	Governs the powers and responsibilities of the State as representative of the ownership of land by the entire people for uniform administration of land and the regime for administration and use of land; and the rights and obligations of land users.	The Land Law specifies the procedures for consultation, and provision of compensation, which shall be referred whenever any physical resettlement or land acquisition is foreseen.	MONRE DONRE
<b>Grassroots Democracy Ordinance (2007)</b>	Provides for the exercise of democracy in communes, wards and townships.	Local communities and affected households have a right to know about project interventions which affect land/forest management and a right to participate in decision-making.	-
<b>Law on Complaints and Denunciations</b>	Provides a legal framework for the registering of complaints with public sector agencies	Implementation of project activities could cause grievances and there should be recourse mechanisms to	CPC, DPC, PPC

Legislation	Main Provisions	Relevance to the Project	Institutions
(2011)		address them.	
<b>Law on Grassroots Mediation (2013)</b>	Identifies mediators and governs the roles played by mediators and their operation	A potential recourse mechanism is offered for resolution of minor grievances that could arise in/between communities, forest companies, management boards and other relevant stakeholders in implementation of project activities.	Village head/elders, heads of mass organizations, customary/religious leaders
<b>Law on Gender Equality (2006)</b>	Provides for principles of gender equality in all fields of social and family life, measures ensuring gender equality, responsibilities of agencies, organizations, families, individuals in exercising gender equality.	Gender equality is important in the design and implementation of project interventions. Women should be consulted and encouraged to participate in sub-project activities.	-
<b>Article 5 of the 2013 Constitution</b>	All nationalities are equal, solidary, mutually respect and assist in their development; all acts of national discrimination and division are strictly prohibited. The national language is Vietnamese, but every nationality has the right to use its own language and system of writing, to preserve its national identity, and to promote its fine customs, habits, traditions and culture.	The majority of the populations in the target provinces are ethnic minority groups (various). These groups are potentially affected by project interventions, particularly as many of those groups are poor and dependent on natural resources and hence may be adversely affected by forest conservation and protection activities which restrict access to resources and strengthen forest law enforcement.	-
<b>Decree No. 05/2011/ND-CP on the Treatment of Ethnic Minorities (2011)</b>	Provides guidance for activities related to ethnic minorities which include support for the maintenance of language, culture, customs and identities of every ethnic minority.		

Source: JICA Preparatory Survey Team (2016)

In general, Vietnam's legal framework on paper is largely consistent with the international laws, treaties, principles, and guidelines (including JICA's Guidelines) with respect to consultation and participation, access to information, recognition of ethnic minorities and respect for their cultures, gender equity, grievance redress and other pertinent social safeguard issues. A review of Vietnam's safeguards policies, laws and regulations against the Cancun safeguards (Rey et al, 2014) also concluded that the Vietnamese legal framework was broadly adequate in terms of meeting the Cancun requirements for the main safeguard issues.

The following sections provide an overview of how key social issues relevant to this project are addressed in the legal and institutional framework in Vietnam. As the project plans not to involve any project activities leading to land acquisition or physical resettlement (negative checklist), the procedures for involuntary resettlement and/or land acquisition are not assessed in detail in this report.

### 3.3.2 Consultation, Participation, and Social Inclusion in Forest Planning

The community participation is relevant for intervention in the forestry sector, particularly a project/program where strengthened conservation and activities aimed at forest restoration in

protection forests and special use forests may have consequences for rural poor communities that are dependent on forests for their livelihoods or that have customarily used forest lands for agricultural production. Project interventions for conservation and afforestation may exclude communities from the lands and forests on which they depend for their day to day livelihoods. Such activities where they restrict practices or change existing land uses can lead to negative impacts on livelihoods through loss of access, ownership or use rights, and increased conflicts on forest lands.

Therefore, a primary social consideration should be given to whether the communities themselves are adequately informed about project activities, and whether there is adequate consultation and community participation are secured in planning and implementation of the project.

### **3.3.3 Institutional Arrangements and Procedures for Social Safeguard**

The site-level planning for forestry development is under the responsibility of forest owners such as PFMBs and SUFMBs, and submitted to PPCs concerned for approval as laid out in Decree 26/2006. At the provincial level, SubDFP (or currently SubDoF) is responsible for reviewing the plans and endorsement of the same to PPCs. It is, therefore, considered that they, namely FMBs and SubDFPs/SubDoFs, have the primary responsibility for paying due attention to community participation, consultation, and other social safeguard issues in the process of the planning.

### **3.3.4 Management Capacity and Gaps**

The legal and policy framework in Vietnam provides a sufficient basis for consultation and participation in environmental, land use and forestry planning. However, many have criticized that genuinely full and effective community participation in the planning has been somewhat limited especially in the forestry sector.

One of the main reasons for this is the top-down hierarchy and nature of government planning processes. Usually, forest owners, namely PFMBs/SUFMBs, or other responsible agencies (which could be Commune/District PCs or other recognized forest owners) make a wish list of activities as a development plan. The national/provincial governments then determine how much money would be distributed to particular sites – the full amount requested is usually not funded. This indicates that typically FMBs would not consult with communities prior to submission of the plan but would rather do only once the plan (or part of it) has been approved. The pragmatism is understandable, however it also means that there is little room for negotiations with communities because the budget has already been approved for particular activities against pre-defined cost norms and standard designs. The process is good enough for practical silvicultural activities but from a social perspective there may be problems due to inadequate prior information and community appreciation or interest in the measures. In this sense, there is a ‘gap’ between the intentions of the safeguards principles, policies and laws and the reality in the field as what ‘consultation’ does take place in the existing system is actually more like ‘promulgation’ of the plan which has already been approved. For this reason, under the project it may be necessary to include a free, prior and informed consultation (FPIC) process, which should involve a number of steps including participatory mapping and clear spatial definition of rights and responsibilities, before broad

community support is finally verified through conservation agreements or forest protection contracts.

In many case local people are contracted as laborers for reforestation but they typically have little say in the management of the activities due to the top-down decision making hierarchy and the target-focused mind of the agencies in the implementation of the activities. Although there have been efforts made in recent years to promote a co-management mechanism in protection forests and special use forests, they still remain in pilot stages rather than approaches embedded in the existing system.

Another concern to be addressed is that the government officials in the forest sector are not well-trained on aspects related to consultation, participation, safeguards and co-management. Unlike silvicultural and technical aspects (such as plantation designing), social consideration is not part of the standard curricula and there is no special staff with a designated community engagement (or similar) role within SubDFP/SubDoF or at any levels. It may be, therefore, proposed that the proposed project should address these gaps in the framework of the environmental and safeguard management and/or other project components. Capacity building of the government officials on this matter will be relevant in the context of implementing REDD+ activities and meeting the Cancun safeguard requirements.

### **3.4 Grievance Redress**

An important component of effective and responsive social management is to put a system in place for the early identification, assessment, and resolution of complaints which may arise. Although the JICA Guidelines do not specifically mention the grievance redress mechanisms, they do make reference to good governance surrounding projects in order that measures for appropriate environmental and social considerations are implemented. The JICA Guidelines also do state that they do not deviate significantly from the World Bank's Safeguard Policies, and refer as a benchmark to the standards of the international financial organizations and other international standards of good practice. The World Bank and other international development banks such as the Asian Development Bank (ADB) typically require that projects have Grievance Redress Mechanisms (GRMs) in place as a standard element in their safeguards measures.

#### **3.4.1 Institutional Responsibilities and Procedures**

The Vietnamese legal framework has the following main pieces of legislation which are relevant to the receipt of complaints and grievances and their handling:

- i) **The Land Law (2013)** and Decree 84/2007/ND-CP are applied for resolution of land acquisition and related compensation and resettlement complaints and denunciations. In the case of administrative decisions made by the DPC or PPC related to land, including land acquisition, compensation, support and resettlement due to land acquisition, affected people can lodge a complaint which is handled in the following manners.
  - Complaints must be lodged within 90 days from the issuance of the administrative decision.
  - The People's Committees (PCs) at district or provincial levels are responsible for implementing the first resolution of complaints received on administrative decisions and behaviors by that level (e.g., the PPC will review administrative

decisions/ behaviors by provincial government divisions). They must respond within a stipulated timeframe (30 days for normal cases, 45 day for complicated cases, and 45-60 for remote areas).

- If the claimants disagree with the first resolution by the District People’s Committee, they have up to 45 days to appeal to the PPC or to take the case to the administrative court for resolution. If the claimants disagree with the first resolution by the PPC, they can only take the case to the administrative court for a final judgment.
- The Law on Grassroots Mediation (2011) formally writes into law a widely accepted system of informal dispute/grievance redress whereby recognized neutral community mediators (including village heads, elders, representatives of mass organizations such as the WU etc.) at the hamlet/village level (i.e. below the lowest formal level of the State administrative structure – the commune) facilitate discussions, negotiations and agreements between disputing parties to resolve conflicts and/or disputes which arises in everyday life in the community. It is a cultural norm or customary/traditional practice that is now formally encoded in Vietnamese Law. The law is relatively flexible and allows the opportunity to employ customary or traditional grievance redress mechanisms of ethnic minority cultures which may differ from typical Kinh approaches.

Procedures are simple and flexible and grievances are logged in a Grievance Mediation Monitoring Book by the village head (usually) or other recognized person. The system is generally widely appreciated and considered effective for most grievances according to a draft survey report on GRM by UN-REDD (2015). A large proportion of grievances may be addressed effectively in this manner.

Most grievances are relatively minor and relate to small boundary disputes or other domestic issues between neighbors. If the issue cannot be addressed at the village levels, it is referred to the commune level. This is the beginning of the formal grievance mechanism under the Land Law (2013) and/or the Law on Complaints and Denunciations (2011). A complainant must go upward through the administrative levels as grievances become more serious or cannot be resolved at local levels.

- ii) **The Law on Complaints and Denunciations (2011)** provides the main legal framework for registering complaints not related to land acquisition and compensation. Decrees 75 and 76, dated October 3, 2012 guide the implementation of these laws along with Circular 07/15. The complaint settlement process includes the following steps: (i) filing the complaint and prepare to verify the complaint; (ii) verify the merit of the complaint, and (iii) finish the complaint settlement with a decision of settlement. Within the period of 90 days from the date of receipt of the administrative decision or acknowledge of the administrative behaviors; individuals/organizations will exercise the right of appeal, based on the verified result, the state agencies will promulgate, send and publish the decision of the complaint settlement that will have the legal effect which is mandatory to execute<sup>9</sup>.

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<sup>9</sup> Article 46 of the Law on Complaints and Denunciations (2011)

### **3.4.2 Management Capacity and Gaps**

According to the UN-REDD Study on GRMs in the context of REDD+ (Do et al, 2015), the grassroots mediation process is widely appreciated and considered effective for many local level disputes and grievances. However, a number of problems appear to emerge when grievances are more serious and in particular when individuals wish to raise grievances with entities such as companies or State FMBs. Interviews with officials in Dien Bien District indicated that they only have 8 staff for handling grievances from 25 communes, and all of those staff have other responsibilities. It was also mentioned that there was some confusion over the application of procedures in terms of handling of grievances under the Land Law and the Law on Complaints. Guidance was only issued in 2015 and there is limited awareness at the commune level on the procedures.

Above and beyond these practical difficulties, it is also observed that there are particular challenges for households or communities in raising grievances through a State system against State entities such as FMBs that are managed under the provincial level (and sometimes national level in the case of certain SUFs). This means that the complainants must register their grievances at commune and then district PCs would be able to do little more than forward the grievance upward. It would be extremely difficult for an individual complainant to go through all these levels and effectively register a complaint and that the grievance would be fairly addressed.

Weaknesses within the existing safeguards framework with respect to addressing grievances related to land disputes provide another basis for recommending that the proposed project should not support activities related to forest land allocation (or reallocation) to FMBs. Additionally, with the various constraints, it is likely that a simple and direct project-based grievance mechanism will be proposed. FMBs would be required to set up a simple grievance mechanism for receiving and responding to complaints and grievances from local communities directly (either from village level or commune level).

## Chapter 4 Present Conditions of the Target Provinces

### 4.1 Location and Topography

The four target provinces cover a total of 37,415 km<sup>2</sup> of geographical area, which comprise around 11 % of the total land of Vietnam. Those provinces are geographically categorized as Northwest sub-region, which lies between latitudes 21°00' - 22°30'N and longitude 102°30' - 106°00'E as shown below.

**Location and Area of the Target Provinces**

Province	Location (latitudes-longitude)	Area (km <sup>2</sup> )	Elevation
1. Dien Bien	21°00' - 22°30'N, 102°30' - 103°30'E	9,563	More than 90 % of the lands are at altitudes between 500 ~ 1,500 m asl.
2. Lai Chau	22°00' - 22°30'E, 102°30' - 104°00'E	9,069	About 60 % of the lands are at altitudes between 500 ~ 1,500 m asl.
3. Son La	21°00' - 22°00'N, 103°00' - 105°00'E	14,174	More than 70 % of the lands are at altitudes between 500 ~ 1,000 m asl.
4. Hoa Binh	22°20' - 21°00'N, 104°30' - 106°00'E	4,609	About 80 % of the lands are at altitudes between 100 ~ 500 m above sea level (asl).
<b>Total</b>	<b>21°00' - 22°30'N, 102°30' - 106°00'E</b>	<b>37,415</b>	

Source: Vietnam Administrative Atlas, Statistical Year Book of Vietnam 2013

As shown in the location map attached to this report, Lai Chau province is located along the boundaries with China at its northern edges, while Son La and Dien Bien share the borders with China and Lao PDR.

One of the characteristics of the target provinces is their mountainous and hilly terrains. Major parts of the lands in the four provinces except Hoa Binh are located in the mountainous and hilly areas at altitudes between 500 to 1,500 m above sea level (als).

### 4.2 Natural Conditions

#### 4.2.1 Rainfall and Temperature

The Northwestern region belongs to Humid Subtropical Climate according to Koppen Climate Classification. The average annual rainfall ranges from 1,570 mm to 1,960 mm from 2011 to 2015.

The rainfalls in the target provinces concentrate mainly on about five months between May and September. The annual mean temperature in the provinces is between 20~26 °C, but it tends to be below 20 °C between November and February. In fact, the provinces had the severest cold damage last January, which they have ever faced for the last 30 years.

#### 4.2.2 Land Use

According to the national statistics in 2014, about 60 % of the total areas of the target provinces are used for forestry, which is rather higher than other areas in the country. In Hoa Binh and Son La, more than 60% of the land is covered with forest, while only 43% of the land are used for forestry purposes in Lai Chau. Such a tendency suggests that management and utilization of forest resources is considered crucial in the region, for sustainable socio-economic development of the provinces.

**Land Use in the Four Target Provinces (as of 1 January 2014)**

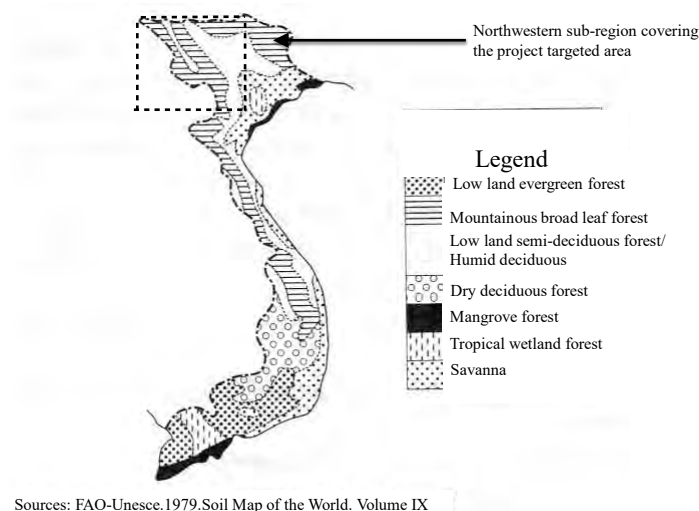
Unit: thousand ha

Province	Forestry Land	Agricultural Production Land	Others	Total	Ratio of Forestry Land (%)
1. Dien Bien	351	371	232	954	48
2. Lai Chau	387	107	413	907	43
3. Son La	663	356	394	1,413	65
4. Hoa Binh	288	65	108	461	63
<b>Total</b>	<b>2,303</b>	<b>588</b>	<b>851</b>	<b>3,741</b>	<b>61</b>
Whole Country	15,845	10,232	6,993	33,070	48

Source: Decision No. 1467/QĐ-BTNMT (21 Jul. 2014) by MONRE, Statistical Year Book of Vietnam, 2015

**4.3 Forest Conditions****4.3.1 Forest Types**

The forests in the northwest region are broadly classified into two major forest types: (i) mountain broadleaved forest and (ii) lowland semi deciduous forest/humid deciduous forest.

**Distribution of Forest Class in Vietnam**

In the targeted provinces, the mountainous broad leaf forest is dominant, though it is fragmented and mainly left as mosaic patches on the steep slopes or high peaks of the mountains due to shifting cultivation, conversion of forests into plantations of estate crops, such as rubbers and tea, and submergence caused by dam construction. Low land semi deciduous forest/humid deciduous forest is mainly found in the flat lowlands, particularly along rivers as riparian forests.

**4.3.2 Forest Classification and Forest Cover****(1) Forest Land**

In accordance with the respective PPC Decisions and MARD Decision (No. 3158/QĐ-BNN-TCLN dated July 27, 2016) on the forest classification issued in 2016, about 2.9 million ha of the lands are classified as the forest land in the four target provinces, of which about 1.36 million ha and 1.12 million ha are classified as protection forest and



production forest. Among the target provinces, the ratio of forest land is high in Dien Bien and Lai Chau Provinces.

#### Forest Classification (Forest Land) in the Four Provinces

Unit: ha

Province	Special Use Forest	Protection Forest	Production Forest	Others	Total Forest Land (a)	Total Land Area (b)	Ratio of Forest Land (a/b) (%)
Dien Bien	119,230	369,742	287,774	36,991	813,737	956,290	85
Lai Chau	41,595	394,611	244,709	26,488	707,403	906,878	78
Son La	77,623	464,651	424,884	70,477	1,037,635	1,417,444	73
Hoa Binh	40,531	133,226	166,381	7,288	347,426	460,869	75
Sub-total (c)	278,979	1,362,231	1,123,748	141,244	2,906,201	3,741,481	78
Whole country (d)	2,106,051	4,462,635	6,668,202	824,968	14,061,856	33,108,691	43
c/d (%)	13	31	17	17	21	11	-

Source of (b) and (d) (Whole country data): MARD Decision No. 3158/QĐ-BNN-TCLN Dated on 27 July 2016

Source of all other figures: Provincial Peoples Committee's Decision

(1) Dien Bien PPC Decision No. 499/QĐ-UBND, dated on 8/4/2016

(2) Lai Chau PPC Decision No. 347/QĐ-UBND, dated on 29/3/2016

(3) Son La PPC Decision No. 1529/QĐ-UBND, dated on 29/6/2016

(4) Hoa Binh PPC Decision No. 742/QĐ-UBND, dated on 28/3/2016

## (2) Forest Cover in Forest Land

Forest cover is broadly classified into three types: natural forest, plantation, and bare land. As shown in the table below, about 30~55% of the forest land in the target provinces are bare lands or in less vegetative conditions. Among the four province, Dien Bien shows the highest ratio of bare lands.

#### Forest Covers in the Forest Land in the Target Provinces

Unit: ha

Province	Natural Forest (a)	Plantation (b)	Bare Lands (c)	Total Forestry Land (d)	Ratio of Bare Land (c/d) (%)
Dien Bien	362,243	5,227	446,268	813,737	54
Lai Chau	403,963	8,049	295,391	707,403	41
Son La	573,593	25,870	436,171	1,037,635	42
Hoa Binh	158,812	76,187	112,428	347,426	32
Total of 4 province (e)	1,498,610	115,333	1,292,257	2,906,201	44
Whole country (f)	10,175,519	3,886,337	N.A.	14,061,856	N.A.
e/f (%)	14.7	3.0	N.A.	20.7	

Source (f): MARD Decision No. 3158/QĐ-BNN-TCLN, dated on 27 July 2016.

N.A.: Data of bare land in whole country are not presented in MARD Decision No. 3158, dated on 27 July 2016.

Source of all other figures: Provincial Peoples Committee's Decision

(1) Dien Bien PPC Decision No. 499/QĐ-UBND, dated on 8/4/2016

(2) Lai Chau PPC Decision No. 347/QĐ-UBND, dated on 29/3/2016

(3) Son La PPC Decision No. 1529/QĐ-UBND, dated on 29/6/2016

(4) Hoa Binh PPC Decision No. 742/QĐ-UBND, dated on 28/3/2016

## 4.3.3 Forest Ownership

The ownership status of the forest lands in the target provinces is summarized below.

#### Forest Ownership in the Target Provinces

Province	Dien Bien		Lai Chau		Son La		Hoa Binh	
	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%
Management Boards	52,527	6.5	297,188	41.7	78,276	7.5	42,942	12.4
Forest Company	0	0.0	0	0.0	26,691	2.6	11,198	3.2
Households	6,253	0.8	7,835	1.1	197,808	19.0	143,004	41.2
Community groups*1	256,199	31.5	293,638	41.2	621,512	59.7	48,771	14.0
Other organizations	66	< 0.1	7,248	1.0	23,899	2.3	3,211	0.9
CPC*3	498,693	61.3	107,563	15.1	93,899	9.0	98,300	28.3

Source : (1) Dien Bien PPC by decision No 499/QĐ-UBND date on 8/4/2016  
 (2) Lai Chau PPC by decision No 347/QĐ-UBND date on 29/3/2016  
 (3) Son La PPC by decision No 1529/QĐ-UBND date on 29/6/2016  
 (4) Hoa Binh PPC by decision No 742/QĐ-UBND date on 28/3/2016

Note: \*1 Community means the household groups or villages who are living adjacent to the forest.

\*2 Other organizations include: i) economic organizations such as private entities operating its business in the sector, ii) army force, and iii) others such as police groups guarding the national borders.

\*3 CPC means that the areas have not been allocated to owners yet.

Each province has different status of forest land allocation such as:

- ◆ Dien Bien still has about 498,693 ha of unallocated forest land.
- ◆ About 40% of the forest land (or about 143,004 ha) have already been allocated to households in Hoa Binh.
- ◆ A majority of the forest land (621,512 ha or about 60% of total forest land) are allocated to community groups in Son La.
- ◆ A significant part of the forest land is allocated to management boards (297,188 ha or 42% of total forest land) and community groups (293,638 ha or about 41%) in Lai Chau.

#### 4.3.4 Latest Forest Inventory and Monitoring Data

As described in Section 3.4, the results of NFI&S are expected to be officially issued by the end of October of 2016. As of the end of October 2016, PPCs of all the four provinces have already approved and endorsed the results of NFI&S to MARD. MARD compiled all the data and issued the summary of the forest status of the country (MARD Decision No. 3158/QĐ-BNN-TCLN, dated on 27 July 2016). As the same decision does not specify the forest status of the respective provinces, the data approved by the respective PPCs were used for assessment of the current forest status in the target provinces as shown in the previous sections.

#### 4.3.5 Production and Marketing of Forest Products

##### (1) Production of Forest Products

The major forest products in the four provinces are: timber, firewood, bamboo, and other non-timber forest products (NTFPs) such as rattan and cardamom. The production of the major forest products in the target provinces is shown in **Table I-4-1** attached to the report, and summarized below.

**Production of Major Wood & NTFPs (2011-2015)**

Product	Unit	2011	2012	2013	2014	2015	Average
<b>Dien Bien</b>							
Timber	m <sup>3</sup>	24,402	24,002	21,385	19,876	18,550	21,643
Fire wood	Staples	923,184	955,586	949,080	929,911	892,130	929,978
Bamboo	1000 poles	7,582	4,428	4,373	4,177	3,858	4,884
Cardamom	Ton	49	40	39	37	35	40
Rattan	Ton	79.6	65	63.4	60.2	54	64.4
<b>Lai Chau</b>							
Timber	m <sup>3</sup>	7,890	9,571	8,676	8,449	8,020	8,521
Fire wood	Staples	826,061	738,060	623,776	526,077	508,270	644,449
Bamboo	1000 poles	668	733	743	391	396	586
Cardamom	Ton	1,096	1,224	1,250	1,648	1,594	1,362
Rattan	Ton	23	23	23	23	17	21.8
<b>Son La</b>							
Timber	m <sup>3</sup>	43,989	44,758	42,349	42,428	42,109	43,127
Fire wood	Staples	1,381,186	1,370,392	1,371,894	1,342,272	1,347,576	1,362,664
Bamboo	1000 poles	7,719	8,164	8,153	8,678	8,119	8,167

Product	Unit	2011	2012	2013	2014	2015	Average
Rattan	Ton	294	301	324	326	323	313.6
<b>Hoa Binh</b>							
Timber	m <sup>3</sup>	146,639	150,546	165,743	200,845	275,277	187,810
Fire wood	Staples	1,523,639	1,571,746	1,684,923	1,922,379	1,946,350	1,729,807
Bamboo	1000 poles	26,105	26,851	27,187	26,794	23,266	26,041
Cinnamon	Ton	N/A	N/A	43	46	47	45
Rattan	Ton	7	7	7	7	7	7
<b>Overall</b>							
Timber	m <sup>3</sup>	222,920	228,877	238,153	271,598	343,956	261,101
Fire wood	Staples	4,654,070	4,635,784	4,629,673	4,720,639	4,694,326	4,666,898
Bamboo	1000 poles	42,074	40,176	40,456	40,040	35,639	39,677
Cardamom	Ton	1,145	1,264	1,289	1,685	1,629	1,402
Cinnamon	Ton	N/A	N/A	43	46	47	27
Rattan	Ton	404	396	417	416	401	406.8

Note: The figure of 2015 of Lai Chau and Hoa Binh province are only the preliminary data.

Sources: Statistical Year Books of the each province, 2015.

Hoa Binh shows the highest production of all the forest products except NTFPs, because of existence of wood processing factories and prevalence of production forests in the province. Son La follows Hoa Binh showing higher production of firewood, while Lai Chau is the largest producers of other NTFPs among the four provinces. The following table shows the major tree species and NTFPs produced in plantations in the target provinces. In the target provinces, the majority of NTFPs are not cultivated but mostly exploited from natural forests at present.

**Major Species of Wood Product in Plantation Forest**

Province	Major Tree Species	Major NTFP
Dien Bien	Acacia species (keo tai tuong), Vernicia Montana (trau), eucalyptus (bach dan)	Flow, cane, bamboo, rattan, tiger grass (bong chit), docynia doumeri shneid (Tao meo), Cardamom (Thao qua), cibotium barometz (cay cau tich, long cu ly), medical herbs, honey
Lai Chau	Acacia (keo), Pinus (thong), Alnus mepalenisis (Tong qua su), Cleistocalyx operculatus (voi thnoc)	Cardamom (thao qua), rattan, bamboo, Atiso, Maranta arundinacea (củ Hoàng Tinh), Eucommia ulmoides (Đỗ Trọng), Schefflera heptaphylla (ngũ gia bì), Fallopia multiflora (Hà Thủ ô), Codonopsis pilosula (Đẳng Sâm) and indigenous mixed medicinal herbals, honey
Son La	Pine tree, Acacia mangium, Eucalyptus, Chukrasia tabularis, Teak, Bamboo, Medlar, Chinaberry, and Manglietia	Bamboo, medlar, Bamboo shoot, medical plants (cardamon, acanthopanax (dang sam), false cardamom (day mau cho), honey, Turmeric, Cork, Rattan, Resin, Line leaves, Lac, wood ear
Hoa Binh	Acacia mangium, Acacia clonals, Eucalyptus clones, Dracontomelon duperreanum, Canarium, Chukrasia tabularis, Michelia mediocris Dandy, fruit trees, etc.	Flow, cane, Bamboo shoot, line leaves, cork, wood ear

Source: JICA Preparatory Survey Team (2016)

Some features of production of forest products in the target provinces are summarized below.

- ◆ Bamboo and its associated products (e.g., bamboo shoots) are the major NTFPs in the provinces except Lai Chau.
- ◆ Aside from Bamboo, line leaves, rattan, turmeric, lac, and cardamom are harvested from forests in the provinces.
- ◆ Though it is not shown in statistic, medical herbs and honey bee are also commonly used and collected by communities.

## (2) Marketing of Wood/Timber

The officers of DARD and Department of Training and Industry, whom the preparatory survey team interviewed in the provinces, shared their ideas that the demand of wood for construction and raw materials for processing was increasing but the supply of timber and other raw materials was still limited due to the slow progress of afforestation. To the contrary, the overview of the processing industry in the provinces suggests that the wood processing business is not very vigorous in the target provinces except Hoa Binh. In fact, a majority of the marketing activities in the provinces are carried out by household level carpenters and furniture shops at the local level. The enterprises that the preparatory survey team confirmed in the provinces are listed in **Table I-4-2** attached to this report, and summarized below. No statistic datum on volume of wood and raw materials handled/marketed in the provinces was available.

**Summary of Major Wood Business Companies in the Four Provinces**

Province	District	No. of companies	Product	Note
Dien Bien	Tuan Giao District	1	Finger join product (van thanh) and wood chipboard (van dam)	Not in operation as of May 2016
	Dien Bien District	1	Wood chipboard and Bamboo products	Not in operation as of May 2016
Lai Chau	Tam Duong District	1	Wood processing, Finger join product, Practical Board	100,000m <sup>3</sup> /year
Son La	Muong La district	1	wood for furniture and firewood	
	Song Ma district	1	wood for furniture and firewood	
	Sop Cop district	1	wood for furniture and firewood	State company
	Phu Yen district	1	wood for furniture and firewood	State company
	Son La city	1	wood for furniture and firewood	
	Moc Chau district	1	wood for furniture and firewood	
Hoa Binh	Lac Thuy district	1	Wood pallets	10,000tons/year
	Mai Chau district	1	Wood pallets Strand woven bamboo	144,000tons/year 100,000m <sup>3</sup> /year
	Mai Chau district	1	Wood pulp/ paper Bamboo chopstick	5,000-6,000tons/year
	Mai Chau district	1	Wood pulp/ paper	4,000-6,000tons/year
	Da Bac district	1	Wood pulp/ paper	4,000-6,000tons/year
	Yen Thuy district	1	Medium density fiberboard	54,000m <sup>3</sup> /year
	Luong Son district	1	Wood pulp/ paper	4,000-6,000tons/year

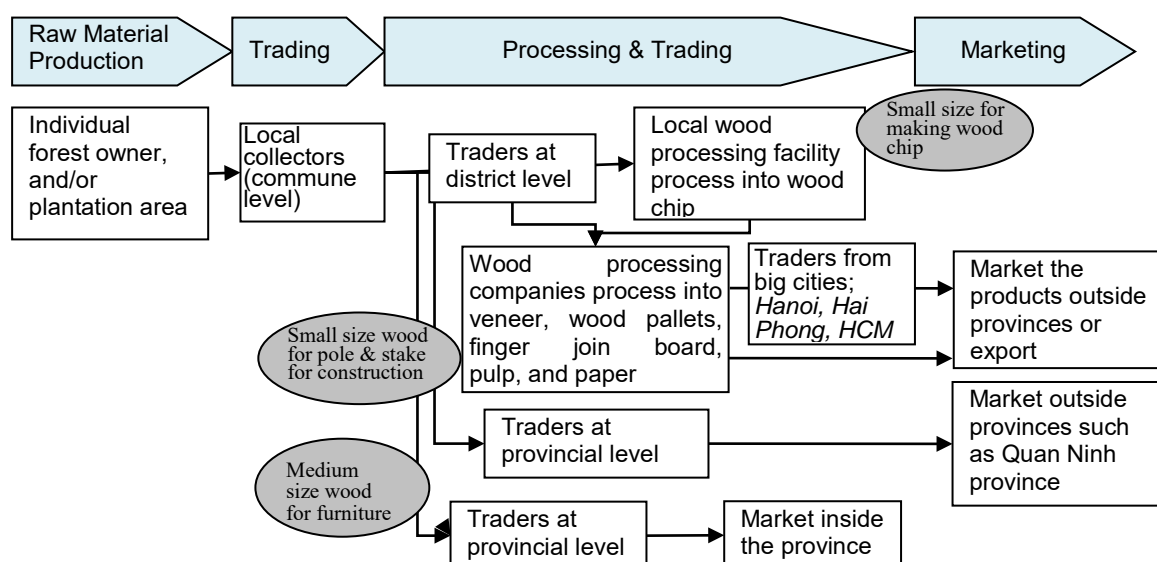
Source: JICA Preparatory Survey Team (2016)

The following obstacles were confirmed through interviews to existing enterprises and other agencies concerned with the industry.

- ✧ In Dien Bien province, trees planted under the government programs, such as 327 program and the 661 program, have already grown enough to harvest; however, they have not been harvested yet as the government has not prepared the internal procedures for harvesting.
- ✧ Due to a lack of capital, local communities tend to avoid a risk to invest in afforestation which requires a long period of time to obtain its return.
- ✧ As the price of wood is basically set by the buyers, such as processing companies, production of timber/wood is not very attractive to local communities.
- ✧ Since forest areas are mostly located in sloping area, it requires high production cost, especially for plantation, harvesting, and transportation.

### (3) Example of Trade Flow of Wood/ Timber Product

The majority of wood and timber products, which are mainly acacia and eucalyptuses, are traded within the district and/or province where the products are produced. If there are wood/timber processing enterprises existing within the provinces, the processed products are marketed to big cities and other provinces. A trade flow of wood products in Hoa Binh province is shown below as an example of market flows of wood products in the provinces.



• Source: JICA Preparatory Survey Team (2016)

#### Example of Trade Flows of Wood/Timber Products in Hoa Bin Province

As illustrated above, there are three types of marketing flows depending on the size and purpose of the use, namely i) small size wood for making wood chip, ii) small size wood for pole and stake for construction, and iii) medium size wood for furniture making.

##### i) Small size wood for making wood chips and others:

After collection of small wood by local collectors (usually households who function as middle persons of agriculture and forestry products), they are brought to local wood processing facilities to be processed into wood chips. Wood chips are sold to wood processing companies in Hoa Binh and further processed into veneer, finger join board, wood pallets, pulp or even paper sheet as final products. Finally, they are sold to traders for marketing them in other provinces or even for export.

##### ii) Small size wood for poles and stakes for construction:

Local collectors sell small size wood for poles and stakes to provincial traders first, and then, the provincial traders further sell the same in markets in the provinces in Red river delta.

##### iii) Medium size wood for furniture making

Medium size wood will be sold to traders at the provincial level after collection by local collectors. They are mainly marketed within the province as materials for furniture making.

### (4) Marketing of NTFP

The NTFP products such as medical plants, cardamon, honey, acanthopanax (dang sam) and, fake-cardamon (day mau cho) are sometimes sold to local collectors in the localities, and then,

brought to small business operators at the district or provincial level. The small business operators do simple processing, such as cleaning, drying, grinding, and grading, and then sell them in the district/province or to middle persons/wholesalers in Hanoi. Some herbal plants such as cardamom are currently exported to China through Lao Cai as well as Lai Chau and Son La. Because of the location, pharmaceutical companies and/or traders in Hoa Binh have been active in producing, processing and trading medicinal herbs and mushrooms, to supply them to buyers in Hanoi.

Summary of Major NTFP Companies in the Target Provinces

Province	District	No. of companies	Product	Note
Dien Bien	Tuan Giao district	3	Medical herbs such as Uncaria (Cây Đẳng), Rauvolfia (Cây ba gác), Acanthopanax (đăng sâm), False cardamom (Cây máu chó), Cibotium barometz (Củ câu tích, cu ly), Tiger grass (bông chít)	
	Điện Biên district	1	Medical herbs such as false cardamom (Cây máu chó), Cibotium barometz (cay cau tích, long cu ly), Indigenous ginseng, Homalomena pierreana	
Lai Chau	Tam duong district	1	Cardamom	
	Sin Ho district	2	Medical herbs such as Atiso, mixed medicinal herbs for Dao traditional herbal bath	
Son La	Van Ho district	1	Trading medical plants	350 tons/year
	Bac Yen district	1	Fruit drink and wine from medlar fruit	
	Moc Chau district	1	Bamboo rug mats	
Hoa Binh	Hoa Binh city	2	Processing and trading medical herbs	
	Yen Thuy district	1	Processing and trading	

Source: JICA Preparatory Survey Team (2016)

Recently, the exploitation of forest and NTFP commodities are regulated by MARD Circular 35/2011/TT-BNNPTNT which stipulates that all forest owners need to comply with the procedures defined by the Circular and submit a total of eight types of applications/documents, such as land use certificate, logging application, inspection record of forest exploitation, and transportation and market confirmation, to the forest management board to get permission of exploring any forest products including NTFPs. It is not easy for minority groups to comply with the guidelines due to their limited literacy level.

#### 4.3.6 Drivers of Forest Degradation and Forest Fire

In general, i) illegal cutting, ii) forest fire, and iii) insect attack are considered as major causes of forest degradation in the country as stipulated in MARD Decision No.1267/QĐ-BNN-KL dated on May 5, 2009. Another study made by the Center for International Forestry Research (CIFOR)<sup>10</sup> also pointed out that i) conversion of forests into farms including plantations of high value perennial crops, ii) submergence caused by dam construction, iii) unsustainable legal and illegal logging, and iv) frequent forest fire are considered as the major drivers of forest degradation in the country.

The following table summarizes the major threats confirmed by the preparatory survey team through the interviews to key informants in SubDFPs in the target provinces.

<sup>10</sup> Pham, T.T., Moeliono, M., Nguyen, T.H., Nguyen, H.T., Vu, T.H. 2012. The context of REDD+ in Vietnam: Drivers, agents and institutions. Occasional Paper 75. CIFOR, Bogor, Indonesia.

Direct Drivers of Deforestation and Forest Degradation		
Province	Threats to natural forests	Threats to natural plantation
Dien Bien	Ditto	Animal grazing, Wild fire, Hot and cold damages
Lai Chau	Ditto	Wild fire, Animal grazing (less)
Son La	Upland farming, Forest fires, Cold damage, Dam construction	Wild fire, Cold damage, Animal grazing (less)
Hoa Binh	Upland farming, Dam construction, Illegal cutting (limited)	Less

Source: Results of the interviews made by the preparatory survey team to informants of Forest Protection Sub-department and DARDs of the target provinces

Among others, forest fire is considered as the major cause of forest degradation in not only natural forests but also plantations in the target provinces except Hoa Binh. Accordingly, the risk of forest fire becomes high in the dry season between October and April. Since there was no statistical data available on the number of forest fire from 2012 to 2015, the number of hotspots detected by the satellite monitoring system is substituted as the number of fire cases. The following table shows the frequency of forest fires taking place in the provinces for the last six (6) years.

Data on Forest Fire in the Target Provinces							
Province	2010	2011	2012	2013	2014	2015	Average
<b>Dien Bien</b> (Hotspot) 1)	1,448	N/A	41	555	167	1,947	832
(Damaged area) 2)	29.60	1.20	57.60	7.07	22.90	N/A	23.80
<b>Lai Chau</b> (Hotspot) 1)	1,362	N/A	26	208	125	619	468
(Damaged area) 2)	346.3	67.3	613.7	79.6	211.00	N/A	265.58
<b>Son La</b> (Hotspot) 1)	1,909	N/A	54	492	175	2,048	936
(Damaged area) 2)	N/A	14.70	1.80	N/A	119.20	N/A	27.14
<b>Hoa Binh</b> (Hotspot) 1)	201	N/A	14	23	80	234	110
(Damaged area) 2)	33.40	N/A	15.4	N/A	4.40	N/A	10.64
<b>Average of 4 Provinces</b>	1,230	N/A	34	320	137	1,212	586
(Damaged area)	102.33	20.80	172.13	21.83	91.88	N/A	81.79

Sources: 1) Forest Protection Department, MARD (<http://www.kiemlam.org.vn/firewatchvn/Tinh.aspx>)

2) Statistical Year Book of Vietnam 2014

The data suggest that i) forest fires have frequently occurred in Son La and Dien Bien; ii) the frequency in Lai Chau is less than those of Dien Bien and Son La but its scale is large, iii) Hoa Binh has less threats of fire in general.

#### 4.3.7 Activities Related to REDD+

As described in Chapter 2, MARD issued its decisions on national REDD+ action plan as well as guidelines on development of provincial REDD+ action plans to promote the REDD+ activities throughout the country. It is, therefore, expected that all the four provinces would develop their provincial REDD+ action plans (PRAPs) in the near future. Any PRAP to be developed should be aimed at: i) reduction of deforestation, ii) reduction of forest degradation, iii) sustainable management of natural forests, and iv) increase of forest carbon stock as specified in **Table I-4-3** attached to this report. The same table shows the basic outline of PRAP defined by Decision No. 5414/QD-BNN.

Among the four provinces, Dien Bien has already developed its PRAP with technical assistance from SUSFORM-NOW and officially approved it on May 26, 2014 (PPC Decision No. 379 /QD-UBND). The outline of the PRAP of Dien Bien Province is shown below. SUSFORM-NOW also assisted Dien Bien province in the implementation of a part of the activities planned in the PRAP using its pilot scheme in the course of the project.

## Outline of the PRAP of the Dien Bien Province

Component	Basic activities	Activities	Remarks
1. Scaling up the implementation of forest protection, regeneration and afforestation	1.1. Promoting Implementation of Forest Protection, Regulation and Afforestation	1) Promotion of the forest protection	a) PFES Forest Area (Protection Forest): PFES monies (Patrolling for forest fire prevention and control) b) No PFES Forest Area (Production forest and Special Use Forest: Forest protection contract (VND 200,000/ha/yr.))
		2) Promotion of the regeneration	a) Bare land (Ib, Ic) of Special Use Forest/Protection Forest: State Budget
		3) Promotion of the afforestation	a) Bare land (Ia, Ib, Ic): State Budget
	1.2. Land & forest land allocation	1) Land allocation plan PPC Decision No. 388/KH-UBND	a) Required for PFES
	1.3. Strengthen management of forest protection and development	1) Establishment of Village Management Board for forest management and livelihood development (VMB)	a) VMB establishes forest patrolling team
		1) Formulation of Village Management Regulations (VFMR)	a) Village-level Forest Management Plan
2. Provision of support for livelihood development	2.1. Evaluation/ selection of the best livelihood development activities	1) Formulation of Village Management Regulations (VFMR)	a) Existing livelihood support programs will also be utilized.
	2.2. Potential livelihood activities	1) Agricultural activities	a) Increasing productivity of crop land: Soil improvement, Compost b) Agroforestry, Fruit production
		2) Energy efficient activities	a) Biogas and wood-saving stoves
		3) Livestock production activities	a) Production of chicken, pigs and aquaculture
		4) Forestry activities	a) Development of tree plantation including NTFPs
3. Strengthen management of Special Use Forest	3.1. Clarification of the boundary of SUF and its buffer zone		
	3.2. Controlling migration and stabilization of the population		
	3.3. Improving organizational structure		
	3.4. Awareness raising on forest protection		
	3.5. Improving the SUF Buffer zone management		
	3.6. Promotion on the participatory forest management in SUF based on the Benefit Distribution System		a) PM Decision No. 126/QĐ-TTg on pilot policy on Benefit Distribution Mechanism (BDM in management, protection and development of SUF dated on 2 Feb. 2012)
4. Promotion of investment from enterprises	4.1. Facilitate land acquisition process by private companies in afforestation schemes		a) Private companies which have a line in commune can finance a part of VFMP with agreement of VMBs
	4.2. Promote afforestation by private sectors for carbon offset		
5. Implementation of Provincial Forest Monitoring System (PFMS)	5.1. Modification of the PFMS		a) In accordance with the national forest monitoring system
	5.2. Revision and adjustment to PFMS		b) Ditto

Sources: Dien Bien Province's PPC Decision No. 379 /QĐ-UBND dated 26 May 2014

Moreover, the new JICA-TA Project named Sustainable Natural Resource Management Project (SNRMP) plans to assist the other three provinces in the preparation of their PRAPs in 2016/2017.



## 4.4 Socio-economic Conditions

### 4.4.1 Administrative and Demographic Conditions

#### (1) Administrative Conditions

Administratively, the target provinces have four (4) cities, one (1) town, 36 districts, which are further divided into 29 wards, 32 townships and 591 communes as shown below.

Number of Administrative Units in the Target Provinces							
Province	District level administration			Commune level administration			
	Cities	Towns	Districts	Wards	Township	Communes	Sub-Total
1. Dien Bien	1	1	8	9	5	116	130
2. Lai Chau	1	0	7	5	7	96	108
3. Son La	1	0	11	7	9	188	204
4. Hoa Binh	1	0	10	8	11	191	210
<b>Total</b>	<b>4</b>	<b>1</b>	<b>36</b>	<b>29</b>	<b>32</b>	<b>591</b>	<b>652</b>

Source: Statistical Year Book of Vietnam 2014

#### (2) Population

The total population in the four target provinces in 2015 is estimated to be around 3.0 million. Son La has the largest population (1.19 million) among the four provinces, while the population density is highest in Hoa Binh (179 persons/km<sup>2</sup>). Lai Chau has the least population, which is less than 0.5 million. The average population growth rates (2009-2015) in the provinces range from 0.9% to 1.9%. Hoa Binh shows the lowest rate (0.9%) among the four provinces, which is even lower than the national average.

Population and Population Density in the Target Provinces				
Province	Population (persons)	Share of rural population (%)	Average population growth	Population density (person/km <sup>2</sup> )
1. Dien Bien	547,785	85%	1.8%	57
2. Lai Chau	430,960	83%	1.9%	48
3. Son La	1,192,100	86%	1.9%	84
4. Hoa Binh	824,325	85%	0.9%	179
National Level	91,713,300	66%	1.1%	277

Source: Provincial Statistical Yearbook of each province 2015, General statistic office of Vietnam

The population of the potential target districts in each province is as follow.

Population and Population Density in the Potential Target District in Each Province				
Province	District	Area (km <sup>2</sup> )	Population (persons)	Population density (person/km <sup>2</sup> )
1. Dien Bien	Dien Bien	1,639	113,584	69
	Tuan Giao	1,137	79,447	63
	Muong Cha	1,199	42,380	35
2. Lai Chau	Sin Ho	1,526	79,720	52
	Than Uyen	792	63,280	80
	Tan Uyen	897	54,132	60
3. Son La	Quynh Nhai	1,060	60,220	59
	Van Ho	979	57,969	67
	Moc Chau	1,074	107,200	99
	Thuan Chau	1,549	162,002	156
4. Hoa Binh	Da Bac	778	53,106	68
	Mai Chau	571	54,333	95
	Lac Son	587	137,737	235

Source: District Statistical Year Book of each district 2015

The average household size varies from the province to the province. The household with more than six persons is the largest proportion in Dien Bien (29%) and Lai Chau (32%), while the average household size in Hoa Binh is four persons in a house (32%).

Tendency of Household Size in the Target Provinces

Provinces	1 person	2 persons	3 persons	4 persons	5 persons	6 persons+
Dien Bien	5%	10%	18%	24%	14%	29%
Lai Chau	5%	9%	15%	23%	17%	32%
Son La	4%	10%	18%	29%	16%	24%
Hoa Binh	4%	11%	22%	32%	16%	15%

Source: GSO, Vietnam 2009 Population and Housing Census

#### 4.4.2 Ethnic Groups

Ethnic compositions of the target provinces are more diverse in contrast to the tendency at the national level, which indicates that Kinh occupies around 90% of the total population in the country. In fact, more than 80% of the population are ethnic minorities in the target provinces except Hoa Binh. Thai is the dominant group, whose shares ranges from 34% to 54% of the total population in the three provinces (Son La, Dien Bien, and Lai Chau), followed by Mong, Hmong, and other ethnic groups (10 to 20 groups in total) in the same provinces. In Hoa Binh, 74% of the population are ethnic minorities, of which the majority are Muong people.

Ethnic Composition of the Target Provinces

Dien Bien (2009)		Lai Chau (2014)		Son La (2015)		Hoa Binh (2014)	
Group	%	Group	%	Group	%	Group	%
Thai	38	Thai	34	Thai	54	Muong	63
Mong	35	Hmong	23	Kinh	16	Kinh	27
Kinh	18	Kinh	15	Hmong	16	Tay	3
Khu Mu	4	Dao	12	Muong	7	Thai	4
Others	5	Others	16	Others	7	Others	3
Total ethnic minority	82%	Total ethnic minority	85%	Total ethnic minority	84%	Total ethnic minority	74%

Source: Committee for Ethnic Minority Affairs of each province of the respective year

#### 4.4.3 Economic Conditions

##### (1) Gross Domestic Product (GDP)

Gross Domestic Product (GDP) has increased in all the provinces for the last five years as shown below.

GDP at Current Price and Share of Major Sector (2010-2015)

Province	Items	2011	2012	2013	2014	Prel. 2015*
Dien Bien	GDP (mill VND)	7,811	8,743	9,465	10,474	11,324.30
	-Agriculture, forestry & fisheries (%)	26.4%	25.7%	24.9%	25.4%	24.8%
	-Industry (%)	6.6%	7.1%	7.7%	7.8%	8.5%
	-Construction (%)	18.8%	18.4%	18.2%	17.2%	16.9%
	-Service and others (%)	45.8%	45.8%	46.6%	47.1%	47.5%
	-Import tax (%)	2.4%	3.07%	2.6%	2.4%	2.3%
Lai Chau	GDP (mill VND)	4,645	5,139	6,252	7,190	7,859.06
	-Agriculture, forestry & fisheries (%)	30.0%	28.5%	25.4%	24.5%	23.6%
	-Industry (%)	3.8%	3.7%	9.7%	13.7%	13.7%
	-Construction (%)	15.9%	16.5%	13.2%	12.1%	13.2%
	-Service and others (%)	47.3%	46.9%	45.9%	44.2%	44.1%
	-Import tax (%)	3.1%	4.4%	5.8%	5.5%	5.5%
Son La	GDP (mill VND)	17,130	19,766	22,854	26,970.08	28,716.29
	-Agriculture, forestry & fisheries (%)	41.2%	38.0%	36.2%	32.4%	30.4%
	-Industry (%)	7.8%	8.8%	11.3%	15.2%	15.1%
	-Construction (%)	14.0%	11.6%	10.7%	10.9%	10.4%
	-Service and others (%)	37.0%	41.6%	41.8%	41.50%	44.0%
	-Import tax (%)	0.01%	0.01%	0.02%	0.02%	0.05%
Hoa Binh	GDP (mill VND)	16,772	18,808	21,350	24,593	26,665
	-Agriculture, forestry & fisheries (%)	27.6%	26.5%	24.0%	22.7%	22.0%
	-Industry (%)	30.4%	29.4%	31.6%	34.1%	35.1%

Province	Items	2011	2012	2013	2014	Prel. 2015*
	-Construction (%)	6.2%	7.3%	7.4%	7.3%	7.3%
	-Service and others (%)	31.4%	31.7%	31.8%	31.0%	30.6%
	-Import tax (%)	4.5%	5.1%	5.3%	5.1%	5.1%
Whole country	GDP (1000 mill VND)	2,779,880	3,245,419	3,584,262	3,937,856	4,192,862
	-Agriculture, forestry & fisheries (%)	19.6%	19.2%	18.0%	17.7%	17.0%
	-Industry (%)	26.6%	28.2%	28.1%	28.1%	33.3%
	-Construction (%)	5.66%	5.4%	5.1%	5.1%	
	-Service and others (%)	36.7%	37.3%	38.7%	39.0%	
	-Import tax (%)	11.5%	9.9%	10.1%	10.1%	
						10.0%

Note: \* "Prel.2015." means that figures of 2015 are still regarded by PPCs as preliminary data.

Source: Provincial Statistical year book 2015, General Statistic Office website

The share of the agriculture, forestry and fishery sectors in the GDP has slightly declined in all the four provinces, although it still accounts for more than 22% of GDP in 2015, which is obviously higher than the national average. The service sector, which includes political organizations, public administration, education, and finance, occupies the highest proportion of the total GDP ranging from 30.6% (in Hoa Binh) to 47.5% (in Dien Bien).

Although the GDPs from the agriculture, forestry and fishery sectors have declined recently, the labor force that engaged in the same sector is still as high as around 70% in the four provinces according to the survey made by DOLISA. This implies that the majority of people in the target provinces still heavily rely on agriculture and forestry products for their livelihoods. The per capita GDPs at current prices in the target provinces are shown below. Hoa Binh shows the highest figure, which is 1.3-1.7 times higher than those of the other provinces.

#### GDP per Capita by Target Provinces (current prices)

(Unit: VND Thousand)

Province	2011	2012	2013	2014	Prel. 2015
Dien Bien	15,291	16,824	17,911	19,465	20,672
Lai Chau	11,798	12,745	15,074	16,944	18,236
Son La	15,314	17,426	19,865	23,122	24,089
Hoa Binh	20,991	23,358	26,347	30,348	32,348

Source: Provincial statistical year book (2015)

## (2) Monthly Average Income

The average monthly income levels in urban and rural areas are estimated at VND 2,999,000/person and VND 988,000/person, respectively. The income in Hoa Binh province is relatively high among the four provinces, particularly the one in rural area (VND 1,309,000/person), which is almost twice the amount of Lai Chau province.

#### Monthly Average Income per Capita at Current Prices by residence and Income Source

(Unit: VND Thousand)

Province	By residence (Thous.VND)		% of income source			
	Urban	Rural	Salary & wage	Agriculture, forestry & fishery	Non-agriculture	Others
Dien Bien**	2,810	969	41%	33%	19%	8%
Lai Chau**	2,964	769	31%	42%	18%	9%
Son La*	2,918	904	34%	48%	13%	5%
Hoa Binh*	3,304	1,309	44%	25%	22%	10%
Average	2,999	988	37%	37%	18%	8%
National average	3,968	2,041	-	-	-	-

Source: Provincial Statistical Year Book (2015), GSO (2014)

Note: \*=actual data in 2014; \*\*=prel. data in 2015

As shown in the table above, the rural and urban gap is evident. The data suggests that the productivity of the agriculture, forestry, and fisheries sectors is likely low although the

majority of the population in rural areas are engaged in the same sectors. In other word, the enhancement of the productivity and profitability of the sectors is requisite for improvement of income level of the rural populations in the provinces.

#### 4.4.4 Poverty Situation

The poverty ratio in the country has been drastically reduced from 14% to 4% for the last five years as shown below. Likewise, the four provinces shows the similar trend toward a decrease in poverty ratios, although the ratios in 2015 are still far higher than the national average in the same year. In Lai Chau, more than 30% of the total households are categorized as poor households in particular.

Rate of Poor Household (2010-2015)					
Year	Dien Bien	Lai Chau	Son La	Hoa Binh	Whole country
2010	50%	47%	38%	32%	14%
2011	45%	47%	35%	28%	13%
2012	38%	43%	32%	25%	11%
2013	35%	41%	29%	22%	10%
2014	33%	39%	26%	20%	6%
Prel. 2015	28%	36%	23%	16%	4%

Source: Provincial statistic year book of each province (2015), GSO

Almost all the poor households (or about 96~99% of the poor households) in the target provinces are from ethnic minorities as shown below. The data suggests that the proportion of vulnerable population among ethnic minority households are 4-8% higher than the one of provincial level respectively.

Rate of Poor Households of Ethnic Minority						
Name of Province	Total of Household		Poor Household at the end of 2014 **			
	Household	Household of Ethnic Minority*	Household	rate %	Household of Ethnic Minority*	rate %
	A	B	C	D=C/A	E (%=E/B)	F=E/C
Dien Bien	115,319	89,492	37,565	33	36,826 (41%)	98
Lai Chau	86,098	69,013	20,219	23	19,962 (29%)	99
Son La	261,613	211,898	62,642	24	60,224 (28%)	96
Hoa Binh	206,183	N.A.	31,796	15	N.A.	N.A.

Note: \* "Ethnic Minority" is defined here as all ethnic groups except for the Kinh group

\*\* The poverty ratios of the provinces are not consistent with those presented in the previous table titled "Rate of Poor Household (2010-2014) due to differences of data sources.

Source: DOLISA of each province

The poverty line in Vietnam has been defined by two authorities, MOLISA and GSO, and been reviewed every five years. Until 2015, the poverty line had been decided based on single dimension of monthly income level. From 2016, the poverty line is determined by multifaceted socio-economic indicators, which include those related to living standards of the population, such as health condition, access to education, access to electricity, sanitary condition, and possession of durable goods such as motor bike, TV, computer and so forth. Those various conditions are evaluated and converted into points, and then integrated into the evaluation.

Definition of Poverty Line	
Period	Major points on Definition of Poverty Line
2006-2010	(rural area) less than 200,000 VND/person/month (urban area) less than 260,000 VND/person/month
2011-2015	Poor

Period	Major points on Definition of Poverty Line
	(rural area) less than 400,000 VND/person/month (or 4.8million VND/person/year) (urban area) less than 500,000 VND/person/month (or 6 million VND/person/year) <u>Near poor</u> (rural area) 401,000 to 520,000 VND/person/month (urban area) 501,000 to 650,000 VND/person/month
2016-2020	1) Income indicator <u>Poor:</u> (rural area) less than 700,000 VND/person/month, (urban area) less than 900,000 VND/person/month <u>Near poor</u> (rural area) less than 1,000,000 VND/person/month (urban area) less than 1,300,000 VND/person/month 2) the community without fulfilling the 5 basic human needs which are good health condition, education, housing, clean water and sanitation, and information 3) evaluation result from 10 indicators with multi dimension

Source: Decision No.170/2005/QĐ-TTg of July 8, 2005, Decision No.09/2011/QĐ-TTg of January 30, 2011, and Decision No.59/2015/QĐ-TTg of November 19, 2015

#### 4.4.5 Existing Government Programs for Poverty Alleviation

To support these marginalized populations, the Government of Vietnam has been implementing various programs. Among others, “program 135” is the most prevalent one which started in 1998 to improve the living standards of the vulnerable communities in the country. Since then, the program has been continuously implemented, and the current phase (4<sup>th</sup> phase) from 2016-2020 has just started in accordance with PM Decision No.551/QĐ-TTg dated 4th April 2013 as part of the National Target Program on Sustainable Poverty Reduction for the period of 2016-2020. The program includes various types of support for livelihood and social development. In particular, the current program focuses on two components, namely, i) improvement of agriculture production and ii) infrastructure development (e.g., rural road system, electricity, health stations, education facilities, irrigation systems, and other small scale infrastructure) necessary for improvement of living conditions of ethnic minority people. The Committee for Ethnic Minority Affairs (CEMA) is the leading agency to implement the program. As shown below, almost all the poor communes in the four provinces are the target communes of the 135 program.

**No. of Poor Communes and the Communes under 135 Program**

Province	District	No. of communes	No. of poor communes	No. of communes under 135 program
1. Dien Bien	Whole province	130	101	101
	Dien Bien	26	18	18
	Tuan Giao	19	15	15
	Muong Cha	11	11	11
2. Lai Chau	Whole province	108	93	77
	Sin Ho	22	21	18
	Than Uyen	12	11	7
	Tan Uyen	10	9	5
3. Son La	Whole province	204	102	102
	Quynh Nhai	12	3	3
	Van Ho	15	10	10
	Moc Chau	15	6	6
	Thuan Chau	30	14	14
4. Hoa Binh	Whole province	210	95	95
	Da Bac	15	14	14
	Mai Chau	11	10	10
	Lac Son	15	14	14

Source: “Data collection survey on socio-economic and natural resources for the Northwest province, SNRMP, JICA

#### 4.4.6 Gender

As the economic growth has progressed in Vietnam, the progress in promoting people's well-being and gender equity have been observed in the country. The UNDP's Vietnam Development Report 2011 claims that the target four provinces were ranked at the bottom, particularly Lai Chau (63rd ranking among 63 provinces) and Dien Bien provinces (61st among 63). Almost all the figures of the four provinces are lower/worse than the ones of the national average, and the adult female literacy rate, in particular, is as low as 68.05%, while the same of the national average is 91.28%. Hoa Binh is the best in the four provinces. It is speculated that the situation is likely strongly linked with the economic conditions of the provinces.

**Gender Development Index (GDI) by province (2008)**

Indicator	Dien Bien	Lai Chau	Son La	Hoa Binh	Average of the 4 provinces	National average
GDI Rank	61/63	63/63	59/63	51/63	-	-
GDI	0.59	0.53	0.64	0.68	0.61	0.73
Life Expectancy at Birth (M)	62.48	60.38	65.9	68.53	64.32	70.04
Life Expectancy at Birth (F)	68.58	66.57	71.87	74.14	70.29	75.44
Adult literacy rate (M)	83.41	75.50	90.45	96.21	86.39	96.09
Adult literacy rate (F)	60.47	48.05	72.33	91.35	68.05	91.28
Equally Distributed Education Index	0.68	0.59	0.74	0.83	0.71	0.83
Equally Distributed Income Index	0.42	0.37	0.44	0.44	0.42	0.56

Source: UNDP, Social Services for Human Development -Vietnam Development Report 2011

#### 4.4.7 Agriculture Production

##### (1) Production

Paddy rice is the main staple crop produced in the four target provinces with the total cropped area of 121,572 ha (which is the total of cropped areas of winter paddy and spring paddy). About 613,148 ton of paddy are produced mainly for self-consumption. The average yield of rice paddy is estimated at 5.0 ton/ha in 2015. Among the four provinces, Hoa Binh has the largest cropped area of paddy rice, while upland rice is the most prevailing crop in Dien Bien and Son La. The yield of upland rice is as low as 1.0~1.5 ton/ha (on average, 1.3 ton/ha) in 2015.

**Planted area, Production and Yield of Paddy**

Crops	Dien Bien		Lai Chau		Son La		Hoa Binh		Total/Average	
	2010	2015	2010	2015	2010	2015	2010	2015	2010	2015
<b>Winter paddy</b>										
Planted area (ha)	15,940	17,161	18,702	19,918	15,980	18,440	24,062	22,878	74,684	78,397
Production (tons)	77,388	87,117	81,120	92,780	68,140	84,720	110,670	105,698	337,318	370,315
Yield (ton/ha)	4.9	5.1	4.3	4.7	4.3	4.6	4.6	4.6	4.5	4.7
<b>Spring paddy</b>										
Planted area (ha)	7,919	8,839	5,380	6,395	9,490	11,590	15,746	16,351	38,535	43,175
Production (tons)	46,421	53,582	28,240	35,020	54,830	64,160	81,954	90,071	211,445	242,833
Yield (ton/ha)	5.9	6.1	5.2	5.5	5.8	5.5	5.2	5.5	5.5	5.6
<b>Upland paddy</b>										
Planted area (ha)	22,602	23,445	6,190	4,621	32,680	22,110			61,472	50,176
Production (tons)	31,302	34,115	7,410	5,030	38,880	28,490			77,592	67,635
Yield (ton/ha)	1.4	1.5	1.2	1.1	1.2	1.3			1.3	1.3

Source: Statistic yearbook of each province, 2015.

Maize and cassava are also commonly produced in the target provinces. In 2015, maize and cassava are grown in about 251,196 ha and 55,005 ha in total in the four provinces, while the total amounts of production are estimated at 897,758 ton and 607,683 ton, respectively. Maize

and cassava produced in the provinces are mainly used for self-consumption, though some surplus of those crops in Son La are sold in the provincial market as a cash crop. In general, the products collected by local traders are marketed in the provincial market, and then, further brought to the provinces in Red river delta for animal feed. Accordingly, the demand of animal feed has been increasing in the entire Vietnam, but the supply of maize and cassava has not been able to fill the demand due to low crop yields. The production of upland crops produced in the provinces in 2010 and 2015 are presented in **Table I-4-4** attached to the report, and the same of the major crops are summarized below.

**Production Data of Other Major Crops in the Four Provinces**

Crops	Dien Bien		Lai Chau		Son La		Hoa Binh		Total/Average	
	2010	2015	2010	2015	2010	2015	2010	2015	2010	2015
<b>Maize</b>										
Planted area (ha)	29,083	29,739	19,440	22,660	170,200	159,910	35,854	38,887	254,577	251,196
Production (tons)	67,378	76,199	49,660	66,010	538,450	592,920	145,999	162,629	801,487	897,758
<b>Sweet potatoes</b>										
Planted area (ha)	569	616	430	280	531	224	5,299	4,890	6,829	6,010
Production (tons)	3,564	6,790	2,140	1,400	3,560	1,487	26,709	26,581	35,973	36,258
<b>Cassava</b>										
Planted area (ha)	7,198	7,653	5,380	4,450	24,640	31,220	11,294	11,682	48,512	55,005
Production (tons)	54,740	61,712	46,740	36,930	295,110	359,480	123,837	149,561	520,427	607,683
<b>Peanut</b>										
Planted area (ha)	1,641	1,453	-	-	1,661	1,153	5,726	N/a	9,028	2,606
Production (tons)	1,905	1,846	-	-	1,584	1,196	8,417	N/a	11,906	3,042
<b>Sugar cane</b>										
Planted area (ha)	22	29	87	119	3,265	5,492	8,067	9,507	11,441	15,147
Production (tons)	461	638	4,064	5,979	174,664	352,339	527,375	645,939	706,564	1,004,895
<b>Soybean</b>										
Planted area (ha)	7,729	4,869	-	-	7,380	1,350	1,439	N/a	16,548	6,219
Production (tons)	9,955	6,431	-	-	10,644	1,500	2,061	N/a	22,660	7,931
<b>Tea</b>										
Planted area (ha)	238	297	3,052	3,516	3,745	4,123	2,448	1,672	9,483	9,607
Production (tons)	78	82	18,327	23,249	23,899	37,331	7,043	5,858	49,347	66,521
<b>Coffee</b>										
Planted area (ha)	891	3,414	-	-	7,259	11,793	-	-	8,150	15,207
Production (tons)	2,208	6,357	-	-	7,544	13,049	-	-	9,752	19,406

Source: Statistic year book of each province, 2015.

Demand of tea and coffee has increased with an increase of interest in its quality and safety. For example, arabica variety of coffee is getting popular in consumers and the price is also becoming high in general. The green tea in Bac Yen and Moc Chau districts in Son La province is also famous in domestic markets because of its high quality and safety. In Lai Chau province, tea plantation is strategically promoted to support the local tea enterprises. Tea in Lai Chau is even exported to international markets, such as China, India, Afghanistan and Pakistan through agents in Hanoi.

Production of fruit has also become popular particularly in Son La and Hoa Binh, though such trends have not been appeared yet clearly in statistic.

## (2) Current Condition and Issues on Main Crop Cultivation

In the four target provinces, there is a tendency that large, flat and irrigated cultivation areas are owned by wealthy people, who are usually kinh group, while the ethnic minorities live in



hilly and mountainous areas and cultivate farms in sloping lands. Most of the ethnic minorities have practiced conventional farming techniques for long years and are not familiar with the improved farming techniques. In fact, they do not use fertilizer and chemical in shifting cultivation farms. Furthermore, a lack of water during the rainy season and soil erosion during the rainy season are the main constraints that have hindered them from improving crop yields.

Provincial and District Agriculture Extension Centers (PAECs or DAECs) in the target provinces noted that the major technical issues on crop production in the provinces were: i) improper use of fertilizer, ii) limited/improper use of agri-chemical, iii) use of self-produced seeds, iv) low quality of maize and soybean products, and v) difficulty in cultivation, especially use of machines in sloping and/or small farms.

To cope with these issues, PAECs/DAECs in the target provinces have provided several extension services in combination with technical training and provision of quality seeds and fertilizer. They have tried to introduce sloping agriculture and agroforestry models in the field, though the number of models/demonstration plots established in the field is still limited. Some of the achievements made by PAECs/DAECs are summarized below,

**Example of Attempts for establishing Intensive Sloping Cultivation and Agroforestry Models in Recent Years in the Target Provinces**

Province	Model	Year	Participants	Impact
Dien Bien	Agroforestry model with eucalyptus (30 ha), mixed with soybean (10 ha) and peanut (5 ha)	2011-2013	50 HH in Pu Dao, tan Lap and nam Chim II villages, Si Sa Phin Commune Muong cha district	After 2 years of implementation, 5 ha of the same model was copied in tan Lap Village in Si Sa Phin Commune.
Son La	Sustainable maize production model on sloping land	2014	129 HH in Tong Co commune in Thuan Chau district	With having technical training, the productivity increased to 10-11 tons/ha
	Agroforestry model with Hmong apple + Cot khi + upland rice	2014	Model 1: 0.5 ha by 1 HH in Pa Not village, Pa long commune Model2: 0.5 ha by 1 HH in Co Tong communes: Scale	The results in Co Tong commune: upland rice yield reached 3 ton/ha; and Pa Long commune got 3.4 ton of upland rice/ha.
	Agroforestry model on sloping land with eucalyptus and peanuts	2014	30ha with 50 participating HH	

Source: JICA preparatory survey team (2016), and "Data collection survey on socio-economic and natural resources for the Northwest province, SNRMP, JICA

Lessons learned from these experiences are as follows:

- ✧ Crop selection should be done in a participatory manner but with due consideration of crop suitability to soils and other outer environments.
- ✧ Sufficient training courses should be arranged and organized along with development of models/demonstration plots to ensure that local people could learn how to apply the techniques to their own farms.
- ✧ Models/demonstration plots should be developed at the village levels in addition to those at the commune levels so that more people could participate in training activities.
- ✧ Households participating in training activities should be selected in consideration of their motivation and willingness to apply the techniques to their own farms.

#### 4.4.8 Rural Industry and Access to Market

The Government of Vietnamese recognizes the importance of adding value to agriculture and forest products including NTFPs, as stipulated in several policies issued by provincial and central governments. The major decisions issued at the national levels on this matter are as follows:



- ◆ PM Decision No.899/QD-TTg on approving the scheme "Restructuring the agricultural sector towards higher value-added and sustainable development" on June 10, 2013; and
- ◆ MARD Decision No.1565/QD-BNN-TCLN on approving the scheme "restructuring forestry sector" on July 8, 2013.

Based on these national decisions, each province also has issued relevant decisions to promote additional investment to processing/value-adding activities and improve the accessibility of major crops to markets. Nevertheless, most of the farm products are still used for self-consumption and some surplus of maize and cassava or NTFPs are sold to local collectors in the form of raw materials in the target provinces.

The following table shows the proportion of communes which have processing units in the localities and the number of processing units per commune. The data suggests that more than 80% of communes have some sort of processing units in the area and there are about 30 processing units available per commune even in the mountainous areas, although the scale of processing unit is likely at the household level.

**Summary of the Households engaged in Industries in the Four Provinces**

	Agriculture		Forestry		Fishery/ Aquaculture	
	% of Commune with processing units	No of processing units/ commune	% of Commune with processing units	No of processing units/ commune	% of Commune with processing units	No of processing units/ commune
Northern midlands and mountain areas	81	31	64	14	1	5
National Total	89	32	79	31	9	20

Source: Results of the Rural, Agricultural and Fishery Census (2011)

The following table shows the number of communes that have accessible markets where local communities can access and sell/buy/exchange foods with neighboring communes in 2014. The data indicates that around 42% of the communes (or 971 communes) in the northern midlands and mountainous areas have some markets accessible to their communities, although the situation of such markets is considered below the standards set by the Ministry of Construction. Only 3.5 % of the total rural markets throughout the country or 240 market places can meet the standards.

**No of Communes having Market**

Items	No. of communes		No. of communes with market	
	2006	2011	2006	2011
Northern midlands and mountain areas	2,253	2,271	965 (43%)	971 (43%)
National Total	9,073	9,071	5,336 (59%)	5,228 (58%)

Source: Results of the Rural, Agricultural and Fishery Census (2011)

#### 4.4.9 Access to Credit

##### (1) Major Rural Credit Institutions

In the target provinces, the formal banks available for poor households are 1) Vietnam Bank for Social Policy (VBSP), and 2) Vietnam bank for Agriculture and rural Development (so called Agribank). The latter is the biggest state-owned commercial bank, while the former has the biggest share (around 50%) in the total outstanding loans provided to farmers/households living in rural areas.

VBSP has a branch office basically at each district, and also has a transaction point which operates once a month at each CPC office. The branches and transaction points of Agribank are also set at the same level but the numbers are less than those of VBSP.

Transaction Offices/Points of the Main Banks

Rural Credit Institutions	Dien Bien	Lai Chau	Son La	Hoa Binh
<b>【VBSP】</b>				
No. of branch/transaction office	9	7	12	10
Transaction point at commune level	130	108	175	N.A.
<b>【Agribank】</b>				
No. of transaction office	21	12	20	10
Transaction point at commune level	N.A.	N.A.	45	N.A.

Source: JICA3 preparatory survey result, and "Data collection survey on socio-economic and natural resources for the Northwest province, SNRMP, JICA

VBSP provides various credit services and trust funds particularly for low-income rural households to help them fulfill their needs. The following are the lending programs provided/offered by VBSP and Agribank in 2015.

<b>【VBSP】</b>
◇ Program for poor households (HH)
◇ Program for job opportunity
◇ Program for promoting labor export
◇ Program for drinking water and environmental sanitation program
◇ Program for ethnic and extremely difficult HH
◇ Program for student in difficulty
◇ Program for extremely difficult HH who doing business and production
◇ Program for businessman/traders in extremely difficult area
◇ Program for Poor HH on their housing
◇ Program for pro-poor (marginalized) HH
◇ Program for household escaping from poverty
◇ Program supported by other projects/program (such as local industry promotion project by KfW, decision 755)
<b>【Agribank】</b>
◇ Rural Development finance Project I- III
◇ Rural and agricultural development program
◇ Other program/projects such as (Resolution 30a, Decree No.55)

The credit is usually offered to commune-level mass organizations, such as farmers' association, women's union and cooperative alliance. Depending on the needs and objectives, a borrower group can be formed at the village level but a group should not as large as 60 persons in a group. A head of the group selected among the members is in charge of transaction of money with a certain incentive (in case of VBSP, which is 0.025% of the total interest amount).

The commune-level organizations call for the application from the respective households for each program and manage/collect the repayments in coordination with the bank. Accordingly, the repayment rate is reported as high as nearly 100% due to peer pressure among the members, though there are some cases of delay in the repayment.

## (2) Collaboration with Development Project and Program

The KfW forestry projects have used existing networks and branches of VBARD/Agribank for efficient and transparent disbursement to local households/individuals who have participated in the project activities for more than 20 years. Groups of local households opened saving accounts in branches of VBARD/Agribank to receive the payments (subsidies)

provided by the projects in compensation for their works for forestry development (such as afforestation or assisted natural regeneration) in their forest lands (production forests).

In the case of Son La province, which was one of the target provinces of the KfW7 project, 18,742 persons have been involved and able to withdraw the money through the bank accounts throughout the project period. Out of the total numbers of persons, 7,289 persons (1,452 are female) newly opened the bank accounts for this purpose according to the KfW7 project management board in Son La. It is reported that this kind of payment system could be introduced for other project/program, not only in the case of KfW7.

The following box outlines how the KfW projects have used the scheme of VBARD/Agribank in the projects.

- a. Upon the agreement between MBFPs and VBARD, the project budgets for subsidies are first transferred from MBFPs to the central office of VBARD.
- b. Referring to the participant lists provided by MBFPs, the VBARD allocates and transfers the respective amount to their branch offices in the project provinces/districts.
- c. In the project district, DPMU verify the accomplishments made by local households, and determine the amount to be paid for each household. Once the performance is confirmed and evaluated according to the regulations, DPMU issues an official request letter to VBARD for money transfer to the participants' accounts.
- d. With having this notice, local households (leaders of groups of local households) open bank accounts at VBARD/Agribank with the assistance from DPMUs.
- e. The leaders of groups or account holders withdraw cash/subsidies paid by the project based on their accomplishment (or performance) presenting a certificate issued by DPMU as an evidence that they have completed their tasks.

**Use of VBARD/Agribank for Disbursement to Households in the KfW projects**

### (3) Village Fund

Village fund is not commonly observed in the target provinces in general, except for the cases established with technical assistance from the external organizations.

In Dien Bien, the village fund was introduced and established in the target villages supported by the JICA-TA project named SUSFORM-NOW to reinforce the roles of communities in protecting and managing forests in the localities and help them use the invested capital for the sake of communities in a proper manner.

Under mutual agreement between the village and the provincial project management unit of the said project, the project beneficiaries, who received livestock animals, biogas facilities, and fuel saving stoves from the project, deposited certain percentages of the costs incurred by the project for such livelihood supporting materials to the village fund. The project also assisted the villages in the development of by-laws and guidelines on the use and management of the village fund.

Among 15 villages supported by the project, 12 villages at least received minimum repayment from the beneficiaries, while only 6 villages could operate the village fund. Based on the reviews of the report prepared by the project (*"Mission report- village Fund Management Improvement in 15 villages under SUSFORM-NOW in Dien Bien Province"*, May 2014), the preparatory survey team extracted key lessons as follows:

- ✧ The inputs (livestock, construction material, etc.) for livelihood development provided by the Project were not in cash but in kind. It seemed not easy for the beneficiaries to accept that they should pay a certain amount of cash to the village fund in return for in-kind benefits.
- ✧ The inputs procured by the project were high quality but also expensive as compared to those usually used by local communities. Such differences in understanding of the values of inputs hindered the beneficiaries from accepting the amount of their repayment.
- ✧ The project assisted the villages in the establishment of a livelihood operating sub-group for the respective livelihood activities. As there were eight livelihood development activities introduced under the project, it was not easy for the project management unit to finalize the regulations, set the repayment rates, or monitor the repayment by beneficiaries on a timely manner.
- ✧ It is important to provide sufficient training opportunities to villagers involved in the management of the village fund.

## 4.5 Rural Infrastructure

### 4.5.1 Roads

There are 604 roads registered with total length of around 9,865 km in the four provinces. The average road density per 1,000 persons in the four provinces is 3.4 km/1,000 population, which is higher than the national average of 2.1 km/1,000 population.

**Existing Roads in the Four Provinces (2015)**

Type of Road	Dien Bien		Lai Chau		Son La		Hoa Binh		4 Provinces		Whole Country	
	No.	Length (km)	No.	Length (km)	No.	Length (km)	No.	Length (km)	No.	Length (km)	No.	Length (km)
1. Existing Road												
National	6	752	5	317	6	652	12	301	29	2,022	109	15,360
Provincial	22	607	4	217	18	912	21	441	65	2,177	n.a	36,225
District	108	1,220	62	981	131	1,997	66	685	367	4,883	n.a	129,259
Urban	9	206	15	149	7	143	112	285	143	783	n.a	6,650
Total	145	2,785	86	1,664	162	3,704	211	1,712	604	9,865	109	187,494
2. Road Density (km/km <sup>2</sup> )												
Per 1,000 person		5.2		4.0		3.2		2.1		3.4		2.1
Per km <sup>2</sup> of used and forestry area		0.3		0.2		0.4		5.3		0.4		0.7

Note : n.a: not available

	Dien Bien	Lai Chau	Son La	Hoa Binh	4 Provinces	Whole Country
Used area and forestry land in 2014 (km <sup>2</sup> )	7,977	8,413	9,517	326	26,233	286,838
Population in 2014 (1,000 person)	538	415	1,166	808	2,928	90,729

Source: DOTs, Provincial statistic

The traffic volumes of the national and provincial roads range from 250 pcu/day to 2,281 pcu/day and 170 pcu/day to 800 pcu/day, respectively. The same of district roads ranges from 20 pcu/day to 350 pcu/day.

**Traffic Volume of Roads in the Four Provinces (2014)**

Province	National Road (pcu/day)		Provincial Road (pcu/day)		District Road (pcu/day)	
	Lowest	Highest	Lowest	Highest	Lowest	Highest
Dien Bien	250	1,114	170	450	40	330
Lai Chau	331	1,174	187	361	20	270
Son La	342	2,281	207	800	35	350
Hoa Binh	759	1,206	380	603	77	129

Source: DOTs, Provincial statistic

The proportions of rough roads (roads in poor conditions) in the district, provincial, and national roads in the target provinces are 57%, 18%, and 9%, respectively. The necessity of improving the district roads is considered high.

**Road Condition in the Four Provinces (2014)**

Province	National Road (km)			Provincial Road (km)			District Road (km)		
	Total Length	Normal Condition	Bad Condition	Total Length	Normal Condition	Bad Condition	Total Length	Normal Condition	Bad Condition
Dien Bien	752	659	93	607	516	91	1,220	586	634
(%)	100	88	12	100	85	15	100	48	52
Lai Chau	317	282	35	217	160	57	981	400	581
(%)	100	89	11	100	74	26	100	41	59
Son La	652	597	55	912	684	228	1,997	599	1,398
(%)	100	92	8	100	75	25	100	30	70
Hoa Binh	301	301	0	441	430	11	685	494	190
(%)	100	100	0	100	98	3	100	72	28
Total	2,022	1,839	183	2,177	1,790	387	4,883	2,079	2,803
(%)	100	91	9	100	82	18	100	43	57

Source: DOTs, Provincial statistic

## 4.5.2 Irrigation

In the four provinces, there are 273 provincial and 5,415 district irrigation systems covering 28,907 ha and 76,461 ha, respectively. The total coverage of the potential irrigable area in the four provinces is 57%, which implies the necessity of improving the existing irrigation systems for increase of agricultural productivity.

**Existing Irrigation Systems in the Four Provinces (2014)**

Item	Dien bien		Lai Chau		Son La		Hoa Binh		4 Provinces		Whole Country	
	Province	District	Province	District	Province	District	Province	District	Province	District	Province	District
No of System (No.)	36	799	88	805	8	2,653	141	1,158	273	5,415	14,830	31,550
Service Area (ha)	8,245	10,698	8,101	15,742	491	15,636	12,070	34,385	28,907	76,461	4,125,391	1,375,130
Average (ha/system)	229	13	92	20	61	6	86	30	468	69	278	44
Cropping Intensity of irrigation service area (%)	164	124	157	119	174	158	155	129	158	132	174	
Potential irrigable area (ha)	27,247		29,162		24,548		51,820		132,777		5,610,892	
Irrigated area (ha)	16,076		15,014		15,465		28,872		75,427		3,860,294	
% to the potential	59		51		63		56		57		69	

Source: MARD, DARD, IMC

The annual cropping intensities (cultivated area per irrigation service area per year) under the provincial and district irrigation systems in the provinces ranges from 100% to 174% and 100% to 158%, respectively. The cropping intensity per season varies with provinces. Among the target provinces, Son La shows the highest cropping intensity of 158%~174%, while only single cropping is conducted in the irrigated areas in Hoa Binh.

**Cropping Intensity in Irrigation Systems in the Four Provinces (2014)**

Province	Provincial System				District System			
	Total Service Area (ha)	Cropped Areas			Total Service Area (ha)	Cropped Areas		
		Winter-Spring (ha)	Summer-Autumn (ha)	Cropping Intensity (%)		Winter-Spring (ha)	Summer-Autumn (ha)	Cropping Intensity (%)
Dien Bien	8,245	6,578	6,982	164	10,698	4,218	9,093	124
Lai Chau	8,101	4,785	7,949	157	15,742	5,132	13,643	119
Son La	491	367	485	174	15,636	9,788	14,980	158
Hoa Binh	12,070	5,841	6,230	100	34,385	16,068	18,317	100
Total	28,907	17,571	21,646	136	76,461	35,206	56,033	119

Source: DARD, IMC

**4.5.3 Water Supply**

In the four target provinces, 65 urban and 3,520 rural water supply systems have been developed as of 2014, which supply water to 530,239 and 1,422,646 population in urban and rural areas, respectively. The beneficiary population ratio is 94% in the urban but is limited to 76% in the rural area. The average design capacity per day of urban water supply system is 1,845 m<sup>3</sup>/day/system, and the one of rural system is 57 m<sup>3</sup>/day/system.

**Existing Water Supply Systems in the four Provinces (2014)**

Item	Dien Bien		Lai Chau		Son La		Hoa Binh		4 Provinces		Whole Country	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
No of System (No.)	10	946	9	807	34	1,456	12	311	65	3,520	-	-
Population (No.)	126,200	301,482	61,020	198,035	200,655	842,526	142,364	80,603	530,239	1,422,646	24,298,350	48,752,457
% of population to the total	91	75	87	56	99	87	99	85	94	76	95	75
Total Design Capacity (m <sup>3</sup> /day)	37,600	54,577	18,300	22,396	44,500	106,960	19,506	18,385	119,906	202,318	5,800,208	
Population per System (No/system)	n.a.	n.a.	6,780	245	5,902	579	11,864	259	n.a.	n.a.	-	-
Design Capacity per System (m <sup>3</sup> /day/system)	3,760	58	2,033	28	1,309	73	1,626	59	1,845	57	-	-

Note: Urban population includes the surrounding rural population under water supply

Source: Water supply companies and DARDs

The following table shows the usage rate of the design capacity of the water system. Around 77% of the design capacity of the existing urban water supply systems is used, while 62% of the same of the rural water supply systems is used in the four provinces.

**Utilization of Water Supply Systems in the Four Provinces (2014)**

Province	Urban System			Rural System		
	Total Design Capacity (m <sup>3</sup> /day)	Capacity Utilized		Total Design Capacity (m <sup>3</sup> /day)	Capacity Utilized	
		(m <sup>3</sup> /day)	%		(m <sup>3</sup> /day)	%
Dien Bien	37,600	33,400	89	54,577	42,025	77
Lai Chau	18,300	14,685	80	22,396	12,652	56
Son La	44,500	33,840	76	106,960	60,630	57
Hoa Binh	31,820	19,506	61	18,385	10,827	59
<b>Total</b>	132,220	101,431	77	202,318	126,134	62

Source: Water supply companies and DARDs

**4.6 Capacity of Key Stakeholders in the Target Provinces**

The capacity of the key stakeholders, particularly PPCs and DARDs (SubFoDs or new SubFPDs), in the target provinces should be evaluated from financial and technical points of view. Hence, the following sections describe the overview of the current financial status and capacities of the key stakeholders at the provincial and district levels.

#### 4.6.1 Financial Status of the Provincial Governments of the Target Provinces

The financial status data of the provincial governments in four target provinces for the last five years with revenues and expenditures are summarized below.

##### Financial Condition of Dien Bien Province from 2011 to 2015

(Unit: VND million)

Dien Bien	2011		2012		2013		2014		2015
	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan
<b>I Local Budget Revenues</b>	<b>3,578,057</b>	<b>5,985,242</b>	<b>4,666,229</b>	<b>8,375,719</b>	<b>5,737,484</b>	<b>8,194,175</b>	<b>6,357,296</b>	<b>8,541,778</b>	<b>6,651,424</b>
1 Revenues with 100% entitlement	88,577	137,075	129,967	146,040	155,831	188,346	162,576	280,119	256,413
2 Shared revenues in percentage	258,423	237,731	296,213	303,331	348,169	350,814	400,424	381,056	440,187
3 Balancing transfers	2,511,967	2,511,967	2,612,446	2,969,539	2,612,446	3,477,677	2,612,446	3,841,704	2,612,446
4 Target transfers	615,590	2,055,616	1,473,783	2,997,743	1,549,007	2,317,052	2,908,850	2,571,499	3,319,878
5 Revenues from grants	0	1,921	0	25,807	0	0	0	7,072	0
6 Investment mobilizations under Article 8. Clause 3 - State Budget Law	0	30,000	0	100,000	0	155,000	273,000	180,000	0
7 Budget remainder revenues	0	45,804	0	31,952	0	50,600	0	55,254	0
8 Brought forward revenues	0	875,726	0	1,518,575	0	1,247,824	0	1,128,947	0
<b>II Local Budget Expenditures</b>	<b>3,578,057</b>	<b>5,953,290</b>	<b>4,666,229</b>	<b>8,325,119</b>	<b>5,737,484</b>	<b>8,138,911</b>	<b>6,357,296</b>	<b>8,505,919</b>	<b>6,651,424</b>
1 Development investment expenditures	791,460	1,208,605	1,005,175	2,152,819	1,082,063	1,457,066	1,098,472	1,627,750	1,304,346
2 Recurrent expenditures	2,670,327	3,076,898	3,537,864	4,609,525	4,507,926	5,116,437	5,111,376	5,432,481	5,145,544
3 Payment for principals and its interest of mobilizations under Article 8. Clause 3 - State Budget Law	30,000	30,000	32,000	32,000	42,285	39,364	58,358	58,156	85,354
4 Brought forward expenditures	0	1,518,575	0	1,247,824	0	1,128,947	0	1,308,855	0
5 Target programs expenditure and others	0	0	0	0	0	0	0	0	0
6 Transfer to financial reserve fund	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Source: MOF Home Page, DOF of Dien Bien Province

##### Financial Condition of Lai Chau Province from 2011 to 2015

(Unit: VND million)

Lai Chau	2011		2012		2013		2014		2015
	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan
<b>I Local Budget Revenues</b>	<b>N.A.</b>	<b>6,826,254</b>	<b>5,300,000</b>	<b>9,464,133</b>	<b>6,850,000</b>	<b>7,617,697</b>	<b>5,780,325</b>	<b>7,770,149</b>	<b>6,207,007</b>
1 Revenues with 100% entitlement	N.A.	832,225	1,562,886	923,803	1,893,471	583,584	525,880	810,195	824,000
2 Shared revenues in percentage	N.A.	662,438		912,882					
3 Balancing transfers	N.A.	2,097,625	2,160,554	2,160,554	2,160,554	3,117,913	3,398,510	3,398,510	3,253,885
4 Target transfers	N.A.	1,916,276	1,174,560	3,450,356	2,230,975	2,069,517	1,706,635	2,129,834	1,972,122
5 Revenues from grants	N.A.	0	0	0	0	0	0	0	0
6 Investment mobilizations under Article 8. Clause 3 - State Budget Law	N.A.	30,000	0	130,000	150,000	191,553	0	53,957	0
7 Budget remainder revenues	N.A.	63,945	0	65,719	0	192,270	0	96,762	0
8 Brought forward revenues	N.A.	848,013	92,000	1,493,104	130,000	1,139,933	149,300	1,181,743	0
<b>II Local Budget Expenditures</b>	<b>N.A.</b>	<b>6,751,330</b>	<b>5,300,000</b>	<b>9,354,640</b>	<b>6,850,000</b>	<b>7,518,935</b>	<b>5,780,325</b>	<b>7,746,645</b>	<b>6,207,007</b>
1 Development investment expenditures	N.A.	1,707,211	479,000	939,265	579,880	724,561	321,300	588,850	322,400
2 Recurrent expenditures	N.A.	3,150,476	3,616,579	4,563,139	4,563,139	3,746,012	3,825,288	4,018,542	4,076,226
3 Payment for principals and its interest of mobilizations under Article 8. Clause 3 - State Budget Law	N.A.	62,776	21,000	84,734	60,120	53,445	0	126,892	150,000
4 Brought forward expenditures	N.A.	1,493,104	0	1,538,601	0	1,181,744	149,300	1,297,546	0
5 Target programs expenditure and others	N.A.		797,321	2,227,221	1,210,761	1,589,063	1,244,883	1,591,346	1,374,071
6 Transfer to financial reserve fund	N.A.	1,100	1,100	1,100	1,100	1,000	1,000	1,000	1,000

\* Only the sum of the "Revenues with 100% entitlement" and "Sheared revenues in percentage" is described in the financial report.

Source: MOF Home Page, DOF of Lai Chau Province

## Financial Condition of Son La Province from 2011 to 2015

(Unit: VND million)

Son La	2011		2012		2013		2014		2015
	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan
<b>I Local Budget Revenues</b>	N.A.	<b>7,865,379</b>	<b>6,645,393</b>	<b>10,252,196</b>	<b>7,635,148</b>	<b>11,157,957</b>	<b>8,376,864</b>	<b>11,773,752</b>	N.A.
1 Revenues with 100% entitlement	N.A.	648,120	361,775	879,182	472,650	574,667	550,500	1,123,715	N.A.
2 Shared revenues in percentage	N.A.	932,655	1,288,225	1,158,439	1,187,350	1,455,195	1,409,500	1,869,515	N.A.
3 Balancing transfers	N.A.	3,161,843	3,256,698	3,700,642	4,396,911	4,396,911	4,788,720	4,788,720	N.A.
4 Target transfers	N.A.	1,962,969	1,558,695	2,932,238	1,511,317	2,282,844	1,628,144	2,278,578	N.A.
5 Revenues from grants	N.A.	1,146	0	3,945	0	0	0	7,767	N.A.
6 Investment mobilizations under Article 8. Clause 3 - State Budget Law	N.A.	40,000	0	99,000	0	0	0	0	N.A.
7 Budget remainder revenues	N.A.	34,709	0	55,503	0	59,383	0	67,657	N.A.
8 Brought forward revenues	N.A.	854,261	0	1,288,627	0	1,653,285	0	1,445,314	N.A.
<b>II Local Budget Expenditures</b>	N.A.	<b>7,804,255</b>	<b>6,465,393</b>	<b>10,185,550</b>	<b>7,631,358</b>	<b>11,082,890</b>	<b>8,356,949</b>	<b>11,691,899</b>	N.A.
1 Development investment expenditures	N.A.	463,012	381,400	656,837	382,900	730,732	386,100	797,508	N.A.
2 Recurrent expenditures	N.A.	4,436,141	5,061,642	5,914,446	5,508,221	6,848,893	6,206,925	7,268,785	N.A.
3 Payment for principals and its interest of mobilizations under Article 8. Clause 3 - State Budget Law	N.A.	24,000	0	32,000	0	51,800	0	80,800	N.A.
4 Brought forward expenditures	N.A.	1,274,499	0	1,653,283	0	1,445,314	0	1,822,594	N.A.
5 Target programs expenditure and others	N.A.	1,379,068	841,151	1,663,328	1,578,337	1,597,195	1,628,144	1,499,582	N.A.
6 Transfer to financial reserve fund	N.A.	1,200	1,200	1,200	1,200	1,200	1,200	1,200	N.A.

Source: MOF Home Page, DOF of Son La Province

## Financial Condition of Hoa Binh Province from 2011 to 2015

(Unit: VND million)

Hoa Binh	2011		2012		2013		2014		2015
	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan
<b>I Local Budget Revenues</b>	N.A.	<b>6,188,833</b>	<b>5,105,469</b>	<b>8,033,215</b>	<b>6,186,051</b>	<b>8,386,037</b>	<b>5,780,325</b>	<b>8,669,971</b>	<b>7,198,038</b>
1 Revenues with 100% entitlement	N.A.	1,452,233	1,653,400	1,636,803	1,754,248	1,837,012	525,880	1,994,315	2,139,120
2 Shared revenues in percentage	N.A.								
3 Balancing transfers	N.A.	2,043,793	2,105,106	2,105,106	2,105,106	2,105,106	3,398,510	2,105,106	2,105,106
4 Target transfers	N.A.	1,739,429	1,196,963	2,901,297	2,126,697	2,726,255	1,706,635	2,183,153	2,853,812
5 Revenues from grants	N.A.	0	0	0	0	0	0	25,807	0
6 Investment mobilizations under Article 8. Clause 3 - State Budget Law	N.A.	40,000	0	130,000	0	400,000	0	175,000	0
7 Budget remainder revenues	N.A.	72,772	0	85,200	0	100,240	0	94,728	0
8 Brought forward revenues	N.A.	604,327	0	962,525	0	941,244	0	913,271	0
<b>II Local Budget Expenditures</b>	N.A.	<b>6,103,633</b>	<b>5,105,469</b>	<b>7,932,975</b>	<b>6,186,051</b>	<b>8,291,309</b>	<b>5,780,325</b>	<b>8,568,215</b>	<b>7,198,038</b>
1 Development investment expenditures	N.A.	622,437	501,000	680,177	993,698	622,973	321,300	1,824,446	1,297,787
2 Recurrent expenditures	N.A.	3,105,018	3,767,688	4,731,373	5,000,693	5,041,742	3,825,288	5,389,867	5,630,491
3 Payment for principals and its interest of mobilizations under Article 8. Clause 3 - State Budget Law	N.A.	38,000	0	11,969	65,000	323,947	0	190,900	137,000
4 Brought forward expenditures	N.A.	961,466	0	941,246	0	913,271	0	957,304	0
5 Target programs expenditure and others	N.A.	1,139,131	574,881	1,248,626	0	1,103,824	1,244,883	0	0
6 Transfer to financial reserve fund	N.A.	1,300	1,300	1,300	1,300	1,300	1,000	1,300	1,300

\* Only the sum of the “Revenues with 100% entitlement” and “Sheared revenues in percentage” is described in the financial report.

Source: MOF Home Page, DOF of Hoa Binh Province

The revenues of Dien Bien, Son La, Lai Chau and Hoa Binh in 2014 are VND 8,542 trillion, 11,774 trillion, 7,770 trillion and 8,670 trillion, respectively. Revenues of all provinces has gradually increased by the increase of the economic growth and price inflation of the country. The expenditure is controlled not to surpass the revenue amount, and the amounts of revenues and expenditures balanced every year.

The budget can be spent over two years. The pending amount of revenues and expenditures are categorized as “brought forward revenues” and “brought forward expenditures” to be carried over to the following budget year.

It should be noted that there is the wide gap between the planned budget amount and actual expenditure amount in the budgeting system. As shown in the table below, the actual expenditure increased by approximately 10-80% compared with the planned budget amount. The amount of the target transfer varied mostly. It means that the actual revenue could be increased flexibly if the central government received higher revenue in the financial year.



**Comparison of Actual Expenditures and Planned Budget \***

(Unit: VND million)

Province	2012	2013	2014
Dien Bien	179%	143%	134%
Lai Chau	179%	111%	134%
Son La	154%	146%	141%
Hoa Binh	157%	136%	150%

Note: \* The percentage means the ratio of actual expenditures to planned budgets in the respective years.

Source: JICA Preparatory Survey Team (2016)

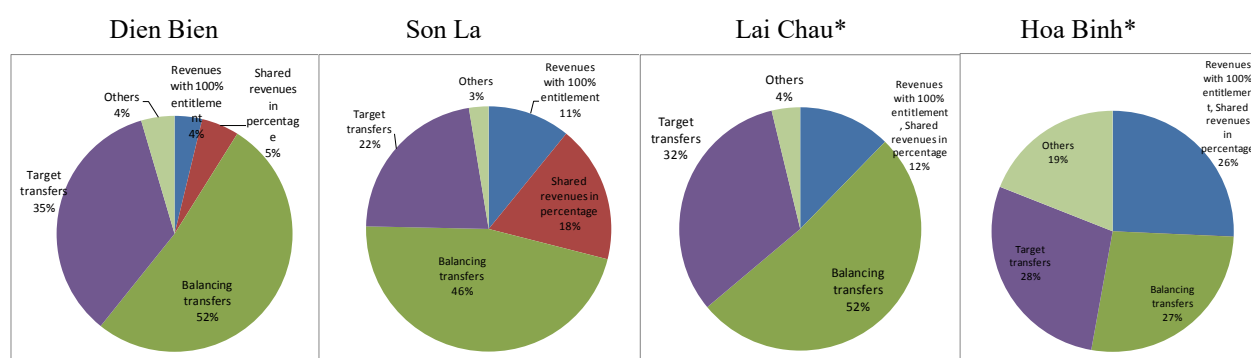
**(1) Revenue**

Revenue of local governments is mainly composed of two tax-related revenues called “Revenue with 100% entitlement” and “Shared revenues in percentage”, and two types of subsidies provided from the central government, namely “Balancing Transfer” and “Target Transfer”.

Several taxes, such as land and housing taxes, natural resources tax, etc. are categorized as local taxes and called “Revenue with 100% entitlement,” of which the whole amount can be retained in the provincial budget. The other taxes, such as corporate income tax and income tax on high-income earners, which are categorized as “Shared revenues in percentage,” are firstly collected in the state budget, and allocated to the local budget based on the percentage considering the stability of local budget.

A total of 50 provinces out of all the 63 provinces in the country received the “Balancing transfer”. The allocated amount is calculated by using factors defined on the basis of population, geographic location, poverty level, number of administrative units, specific circumstances and funding needs. This budget is not conditional and could be spent on any expenditure of recurrent costs and investment expenditures.<sup>11</sup> Unlike the balancing transfer, “Target Transfer” is provided with an aim to spend it for the specific purposes, such as supporting new policies, implementation of national projects/programs for agriculture, poverty reduction, etc.

The composition of actual revenues of the four target provinces in 2014 excluding the brought forward revenue is shown in the following figures.



Source: JICA Preparatory Survey Team (2016)

**Composition of Revenue Items in 2014 in Target Provinces excluding brought forward revenue**

\* In Lai Chau and Hoa Binh provinces, only the sum of the “Revenues with 100% entitlement” and “Shared revenues in percentage” are described in the financial report of 2014.

<sup>11</sup> Contents of this section are extracted from “Note on Budget Transfer System from Central Government to Provincial Governments in Vietnam” (JICA Vietnam Office, April 2015).

The total revenue excluding the brought forward revenue is composed of two Tax revenues of 9-29%, balancing transfer of 27-52% and target transfer of 22-35% in 2014. The shares of balancing transfer and target transfer range from 55% to 86% in the provinces, which implies the high dependency of local governments on the subsidy in the target provinces.

## (2) Expenditures

Amounts and share of the “Development investment expenditures” and “Recurrent Expenditures” are summarized as below.

### Composition of Expenditures (excluding the brought forward expenditure)

(Unit: VND billion)

Province	Items	2011	2012	2013	2014	2015	Average
		Actual	Actual	Actual	Actual	Plan	
Dien Bien	Development investment expenditures	1,209	2,153	1,457	1,628	1,304	1,550
		24%	31%	21%	22%	20%	24%
	Recurrent expenditures	3,077	4,610	5,116	5,432	5,146	4,676
		60%	67%	74%	73%	77%	70%
Lai Chau	Development investment expenditures	1,707	3,166	2,314	2,180	1,696	2,213
		29%	40%	36%	33%	27%	33%
	Recurrent expenditures	3,150	4,563	3,746	4,019	4,076	3,911
		53%	57%	58%	61%	66%	59%
Son La	Development investment expenditures	1,842	2,320	2,328	2,297	N.A.	2,197
		26%	26%	24%	22%	N.A.	25%
	Recurrent expenditures	4,436	5,914	6,849	7,269	N.A.	6,117
		63%	66%	72%	70%	N.A.	68%
Hoa Binh	Development investment expenditures	1,762	1,929	1,727	1,824	1,298	1,708
		32%	27%	23%	24%	18%	25%
	Recurrent expenditures	3,105	4,731	5,042	5,390	5,630	4,780
		56%	67%	68%	69%	78%	68%

Source: JICA Preparatory Survey Team (2016)

On average approximately 59-70% of the total expenditures (excluding the brought forward expenditure) have been spent on the “Recurrent Expenditures” for the last five years. The recurrent expenditures cover the administration costs composed of salaries of employees, education and training costs of staff under the respective departments, and other administration costs. Approximately 24-33% of the total expenditures have been spent on the investment of infrastructure and implementation of projects/programs for the same period on average. The annual average expenditures for the last five years in the provinces varied from VND 1,550 billion in Dien Bien province to VND 2,213 billion in Lai Chau province.

## 4.6.2 Financial Sources in the Forestry Sector

The main financial sources relating to the forestry sector are composed as follows:

- Subsidy (Target Transfer) from the central government;
- Recurrent expenditure under the local budget; and
- Payments for Forest Environmental Services (PFES) collected by the service users.

### (1) Subsidy (Target Transfer) from the central government

The budget borne by the central government is provided to the provincial budgets as “Target Transfer” for implementation of the national target programs. At present, “Forest Protection and Development Plan (FPDP) for period 2011-2020” is led by MARD in accordance with Prime Minister Decision No. 57/QD-TTg (9 January, 2012). The design, implementation plan and budget plan of each province is made and submitted by DARD to MARD, and approved by MPI and MOF. In the decision in 2012, the total required capital in 2011-2020 is estimated

at VND 49,317 billion to achieve the target of 44 - 45% of forest cover by 2020. Out of the total budget, 29% (VND 14,067 billion) is planned to be provided by state budget.

Decision No. 57 stipulates the purposes and items that the state budget can be used, such as large-scale protection and plantation projects, conservation and improvement of national parks, projects in districts related to poverty reduction programs, construction of forestry roads in area with inconvenient traffic systems, studies relating to high technologies, etc. The annual budget allocated for FPDP from the state budget is estimated at VND 1,525 billion in 2013 referring to the “Forest Sector Development Report in 2013.”

## (2) Recurrent Expenditures under the Local Budget

The salaries and other administration costs of the public departments/organizations are provided through the annual budget categorized as “Recurrent expenditures.” Each department submits its budget plan to DOF and DOF compiles all the budget plans submitted by departments/organizations into an integrated plan. The integrated budget plan is firstly approved by the PPC concerned, and endorsed to MOF for approval. It is essential to secure sufficient budget necessary for salaries, operations, and other expenditures for implementation of any projects throughout the project period.

## (3) Payments for Forest Environmental Services (PFES) collected by the Service Users

The final report of “Forestland Allocation and Payment for Forest Environmental Services in Four Northwest Provinces: From Policy to Practice” done by CIFOR under the contract with SNRMP in 2016 revealed the implementation status of the PFES scheme in the target provinces. The following table is its summary.

**Summary of the Implementation Status of the PFES Scheme in the Target Provinces**

Items	Dien Bien	Lai Chau	Son La	Hoa Binh
Institutional arrangement of FPDP	Under DARD	Under DARD	Under DARD	Under PPC
Established year	2012	2009	2008	2012
Payment start year	2013	2012	2009	2012
Staff number	12	16	60	5
Number of buyers	9 hydropower plants, 6 water companies	8 hydropower plants, 1 water company	31 hydropower plants, 2 water companies	7 hydropower plants, 3 water companies, 4 tourism companies
Annual PFES revenue in 2015 (VND million) *	192,323	210,872	109,578	11,400
Number of service providers	40,000 HHs, 1 forest management board	992 communities, 7 companies, 4 HHs, 2 group HHs, 1 forest management board	35 state organizations, 1,375 village mass organizations, 2,217 communities, 2,290 group HHs,	6 organizations, 11,402 HHs, 218 group HHs, 2 contacted organizations, 163 contracted HHs
Forest area eligible to be paid (2015) *	311,241	436,646	582,177	72,904
Average PFES rate (VND/ha) *	248,220	430,763	116,950	162,000

\* The calculation of average PFES level, annual revenue and eligible land area do not match. There would be miscalculation in the report.

Source: “Forestland Allocation and Payment for Forest Environmental Services in Four Northwest Provinces: From Policy to Practice” final report

The revenues from the PFES scheme in the provinces vary with the number of service buyers and their business scales. Lai Chau was able to have more than VND 210 billion, while about VND 11 billion was paid to Hoa Binh. The unit payment rates were estimated by dividing the total revenue by the total forest area eligible to be paid. Again, the unit rate of payment in Lai

Chu is estimated at more than VND 400,000, while those in Son La and Dien Bien are estimated at less than VND 200,000, which may not be sufficient to motivate local communities to protect forest.

#### 4.6.3 Capacity of the Key Stakeholders at the Provincial and District Levels

##### (1) SubDoF

The number of staff in SubDoF in the target provinces except Hoa Binh ranges from 15 to 22. About 80% of the staff working in SubDoF are BSc or MSc holders in the forestry sector. In Hoa Binh, SubDoF was already merged with SubDFP into the new SubDFP in 2015; therefore, the number of the staff is more than 200 as it counts forest rangers deployed at the ranger stations.

**Staffing of Sub-DOF in the Target Provinces**

Province	Dien Bien	Lai Chau	Son La	Hoa Binh <1
<b>No of staff</b>	Total:15 (Managerial level: 2 , Tech/Admn: 13)	Total:18 (Managerial level: 2 , Tech/Admn: 16)	Total:22 (Managerial level: 3 , Tech/Admn: 19)	Total:288 (Managerial level: 5 , Tech/Admn: 283)
<b>Educational background</b>	3 MSc, 10 BSc	16 BSc	8 MSc, 8 BSc	7 MSc, 212 BSc

Note: <1 As SubDOF was merged with SubDFP in 2015 in Hoa Binh, the figures in the table above represent the present status of the new SubDFP. Since the total number of the staff includes forest rangers deployed at the ranger stations in the province in addition to those who used to work for the offices of SubDoF and SubDFP, the figure was higher than those of the other provinces.

Source: JICA Preparatory Survey Team (2016)

Since the target provinces except Lai Chau have implemented the donor-funded forestry projects, namely SUSFORM-NOW in Dien Bien and KfW 7 in Son La, and Hoa Binh, respectively, some of the staff of SubDoFs in such provinces had chances to take part in technical training and/or study tours during the project periods of the said projects. Nevertheless, there is less training opportunities for them to develop their skills and knowledge, especially on operation and management of a forestry project, in general.

The results of the interview survey made by the preparatory survey team supported such findings. All the directors of SubDoF/SubDFPs in the provinces pointed out that the capacity of their staff needed enhancing in terms of project management. The results of the assessment of capacity gaps of the staff of SubDoFs/SubDFPs are shown in **Table I-4-5** attached to this report, and summarized below.

**Needs of Managerial Trainings at the Provincial Level**

Topics	Sub-topics	Dien Bien	Lai Chau	Son La	Hoa Binh
1) Project management	- Project regulation preparation - Financial planning - Fund management - Reporting etc.	High	Middle	High	Middle
2) Monitoring & evaluation of the project operation	- Monitoring of the financial and physical progress - Evaluation of the progress based on the plan - Review of the project progress - Reporting etc.	High	Middle	High	High
3) Procurement	- Understanding of the Procurement law - Bidding procedure - Contract procedure - Contract management	Middle	Middle	Middle	Low

Source: JICA Preparatory Survey Team (2016)

##### (2) D-DARD

In general, the capacity of D-DARDs in the target provinces for implementation of a forestry sector project is apparently limited in terms of the number, capacity, and experience of the

staff. Most of the forest development and protection works have been outsourced to PFMBs or forest enterprises. In districts where there is no such organizations existing, D-DARDs established a special unit named the District Forest Management Board/Unit to implement the forestry development projects/programs, such as 661 and KfW 7. In the case of Hoa Binh and Son La, several D-DARD officers have concurrently served as the staff of the District Forest Management Board/Unit.

### (3) Protection /Special Use Forests Management Boards (PFMBs/SUFMBs)

PFMBs and SUFMBs are the public institutions responsible for development, management, and protection of either protection forests or special use forests under its jurisdictions. In principle, they are forest owners of the assigned forest lands; however, there are cases where part or almost all the forest lands in the managed area are allocated to villages/groups of communities/households although the management responsibility is given to the management boards in the target provinces except Lai Chau.

The majority of PFMBs and SUFMBs in the target provinces were transformed from state-owned forest enterprises after 2000, especially in Dien Bien and Son La. Hence, their track records in forestry development are rather limited as compared to those established in 1990'. Such tendency is obvious in SUFMBs as most of them has been newly established and forestry development activities have been rarely introduced in their areas due to the restrictions defined by the laws/regulations.

Land allocation or forest ownership is another constraint that they have faced along with the de facto land use on the ground by local people living in and around protection and special use forests. It is obviously not easy for PFMBs and SUFMBs to use the areas of which forest ownership belongs to households/individuals and/or which are currently used for farming and other economic purposes by local communities. Due to such limitations combined with a lack of capability (mainly financial capability) of the management boards, the average annual afforested areas by the management boards in the target provinces ranges from 0 to 1,000 ha. In fact, some SUFMBs have mainly engaged in protection of natural forest, control of illegal activities, and forest fire control rather than forest development activities.

Because of the background of the management boards, most of their staff have an educational background and work experiences in the forestry sector. In fact, some of technical officers in PFMBs have experiences as a trainer on silvicultural techniques in forestry extension services to local communities, and some also have a certain GIS skill for mapping. Having said that most of the technical officers of PFMBs and SUFMBs have basic skills required for forestry development, their skills and knowledge still need strengthening for smooth operations and management of the proposed project in the future. The interviews with directors of some PFMBs/SUFMBs in the target provinces also revealed that their capacity gaps/training needs to be filled were considered still high as presented in **Table I-4-6** attached to this report. The following table shows its summary.

**Capacity Gaps/Training Needs of PFMBs/SUFMBs**

Topics	Sub-topics	Dien Bien	Lai Chau	Son La	Hoa Binh
1) Forest inventory and planning	<ul style="list-style-type: none"> <li>- Forest inventory survey in the field</li> <li>- Application of GPS and GIS skills to forest management</li> <li>- Forest boundary delineation</li> <li>- Land consolidation</li> </ul>	High	High	High	High

Topics	Sub-topics	Dien Bien	Lai Chau	Son La	Hoa Binh
2) Participatory land use planning (PLUP)	- Concept & steps of PLUP - Facilitation skill of the participatory meetings etc. - Land use planning	Middle	High	High	High
3) Forest protection contracts with the local people	- Procedure of forest protection contracts - Inspection of the contracted work achievement and payment procedure etc.	Middle	Low	High	Middle
4) Protection forest development	- Silviculture techniques - O&M of silviculture infrastructure	Middle High	Middle High	High High	High High

Source: JICA Preparatory Survey Team (2016)

#### 4.6.4 Experiences in JICA 2 Project

As described above, capacity development of the relevant stakeholders at both the provincial and district levels are deemed necessary for efficient and effective implementation of the proposed project. Even in the JICA2 Project, of which some provinces had experiences of the SPL-III project, the project has arranged and organized a number of training courses for the stakeholders mainly at the provincial and district/commune levels. The following table shows the training courses arranged by the JICA2 Project as of the end of 2015.

**Training Courses arranged by the JICA 2 Project (as of the end of 2015)**

Training Courses	Trainer	Timing	Target Groups
<b>Managerial training courses</b>			
Project orientation	NAEC	2013/2014	PAEC, PFMB, Commune
Managerial Capacity Development for the Staff of PPMUs and PFMBs	NAEC	2014	PPMU, PFMBs
Contract procurement as a sub-consultancy work under the consulting service contract	International Consulting Corporation for Development and Management (ICDM)	2014	PPMU
Planning, M&E and regulation of JICA2	Consultant Office	2015	PPMU
Oversea training	Consultant Office	2015	CPMU, PPMU
<b>Technical training courses</b>			
Livelihood development planning	Consultant Office	2015	PPMU
Guide for Models on Sustainable Livelihood Improvement of JICA2	Consultant Office	2015	PPMU, PAEC
Quality management of the infrastructure construction	Vietnam Institute for Building Science and Technology (IBST)	2015	PPMU
Management and operation of the contract for infrastructure	Vietnam Institute for Building Science and Technology (IBST)	2015	PPMU
Afforestation technical guideline with priority indigenous species of JICA	NAEC	2015	PPMU, PFMB, Local people concerned

Source: Annual reports of the JICA2 Project (adopted by the preparatory survey team)

#### 4.6.5 Development Plans of the Four Provinces

##### (1) Socio-Economic Development Plans

In accordance with the SEDP (2016-2020), each target province developed its provincial socio economic development plan setting the goals with clear indicators to achieve by 2020. The following table shows the overview and key indicators of the main sectors of the respective provinces. As shown below, the forest coverage is adopted as one of the important indicator under the environmental development sector.

**Key Indicators by 2020 in the Provincial Socio Economic Development Plans of the Four Provinces**

Province	Environmental Development	Economic Development	Social Development
Dien Bien	<ul style="list-style-type: none"> <li>- <u>Forest coverage: over 46.2%</u></li> <li>- Households with clean water: 99.5% (urban), 84% (rural)</li> <li>- Collection of solid waste: 80%</li> </ul>	<ul style="list-style-type: none"> <li>- Average economic growth rate between 2016-2020: 7.3% per year</li> <li>- Increase of GDP per capita: 7.0-9.0% per year</li> </ul>	<ul style="list-style-type: none"> <li>- Poverty rate: 10%</li> <li>- Trained laborers: 58.6%</li> <li>- Households with electricity: 98%.</li> </ul>
Lai Chau	<ul style="list-style-type: none"> <li>- <u>Forest coverage: over 58%</u></li> <li>- Rural population with access to clean water: 10%.</li> <li>- Watershed forest management for ensuring water regulation protection, connecting with hydropower project</li> <li>- Conservation and relevant use of natural resources and protection of biodiversity, especially in the area of primary forest.</li> </ul>	<ul style="list-style-type: none"> <li>- Average economic growth rate between 2016-2020: 16.1% per year</li> <li>- Increase of GDP per capita (19 million in 2015 = 2020)</li> <li>- Increase the state budget (500 billion in 2015 to 1,000 billion in 2020)</li> <li>- Increase the social investment (53 trillion in 2011-2015 to 90 billion in 2016-2020).</li> </ul>	<ul style="list-style-type: none"> <li>- Reduction of Poverty rate: 4-5% per year</li> <li>- Stability of population growth in the period of 2016-2020: 2.2% /year</li> <li>- Increase of proportion of urban population: 19% in 2015 to 21% in 2020.</li> <li>- Creation of new employment: 6,000/year</li> <li>- Improve the quality of education and training</li> </ul>
Son La	<ul style="list-style-type: none"> <li>- <u>Forest coverage: 50%;</u></li> <li>- Households with clean water: 98.5%;</li> <li>- Collection of solid waste: 90% (urban), 75%(rural);</li> <li>- Treatment of serious environmental pollution: 100%.</li> </ul>	<ul style="list-style-type: none"> <li>- Average economic growth rate between 2016-2020: 10.5% per year</li> <li>- Average GRDP per capital \$2,000 per person;</li> <li>- Revenues in the province reached 5,000 billion VND;</li> <li>- Social investment capital (2016 -2020): 80.000 billion VND.</li> </ul>	<ul style="list-style-type: none"> <li>- Poverty rate decreases 3% per year or more,</li> <li>- Trained laborers: 50- 55%;</li> <li>- Creation of jobs: 85,000 people (2016 to 2020);</li> <li>- Coverage of health insurance: 98%;</li> <li>- Communes with accessible roads: 100%;</li> <li>- Households with electricity: 98%.</li> </ul>
Hoa Binh	<ul style="list-style-type: none"> <li>- <u>Forest coverage: over 50%;</u></li> <li>- Households with clean water: 95%;</li> <li>- Management of sanitary and hazardous wastes; 95%</li> </ul>	<ul style="list-style-type: none"> <li>- Average economic growth rate between 2016-2020: 8.5-9.0% per year</li> <li>- Annual social investment capital: 35% of GRDP</li> <li>- Increase of State budget revenue: 17% per year</li> </ul>	<ul style="list-style-type: none"> <li>- Poverty rate decreases 3% per year</li> <li>- Coverage of health insurance: over 90%</li> </ul>

Source: JICA Preparatory Survey Team (2016)

## (2) FPDP

DARD of each target province has developed the Provincial Forest Protection and Development Plans (Provincial FPDPs) based on the targets set by the national FPDP (PM Decision No. 57/QD-TTg) in response to the instruction from MARD.

**Forest Protection and Development Plans prepared by DARDs**

Province	Major Documents
Dien Bien	✧ Master plan on forest protection and development for Dien Bien Province (2009-2020) (Decision No.2117/QD-UBND dated on 2 December, 2009)
Lai Chau	✧ Plan on forest protection and development for Lai Chau Province (2012-2020) (Decision No.17/QD-UBND dated on 20 August, 2012)
Son La	<ul style="list-style-type: none"> <li>✧ Plan on forest protection and development in the period of 2011-2020 (Decision No.57/QD-TTg dated on 9 November 2012)</li> <li>✧ Adjustment to master plan on forest protection and development for Son La province to 2015, with a vision to 2020 (decision No.3538/QD-UBND dated on 29 December 2014)</li> </ul>
Hoa Binh	<ul style="list-style-type: none"> <li>✧ Master plan on forest protection and development for Hoa Binh Province in the period 2010-2020 supplemented and revised based on updated forest status (including both natural and planted forests) in 2011 and 2012</li> <li>✧ Project on Forest Protection and Develop in Hoa Binh Province (2011-2020) (decision No.1032/QD-UBND dated on 26 July 2013)</li> </ul>

Source: JICA Preparatory Survey Team (2016)

As shown above, the period of the plans is not necessarily the same with the one of the national FPDP, and if anything, it is updated occasionally. DPCs/D-DARDs have further

prepared FPDs at the district level with specific targets and necessary activities at the commune level with budget estimates in accordance with the provincial FPDs.

The provincial FPDs specify: i) approaches to forest development, ii) physical targets of forest development, iii) development plans of the respective forest types (SUF, PF and Prod. F), iv) tasks of relevant stakeholders, v) approaches to operation and management of the forest development activities, vi) challenges and possible solutions, and vii) financial policy with necessary investments. The following concepts are commonly found in the provincial FPDs of the respective target provinces.

- ◆ Mainstreaming of forestry as an essential economic sector contributing to poverty reduction
- ◆ Importance of protection and rehabilitation of watershed forests
- ◆ Necessity of review and completion of forest land allocation and promotion of forest protection and lease contracts for effective and efficient forest management

The outline of the FPDs of the target provinces are summarized below.

#### Key Directions and Target Indicators in the FPD of the Target Provinces

Key Items	Key Directions and Target Indicators
Basic approach	<p><u>Dien Bien</u>: To enhance management and protection of SUF for conservation of bio-diversity</p> <p><u>Lai Chau</u>:</p> <ul style="list-style-type: none"> <li>✧ To enhance research to select effective and appropriate tree species and non-timber forest product.</li> <li>✧ To expand the linkage between farmers and business entities to promote forest protection, and afforestation through enhancing marketing activities</li> </ul> <p><u>Son La</u>: To prioritize forest protection and development in the following areas: i) areas along national road 6, ii) areas along Da river, and iii) border areas</p> <p><u>Hoa Binh</u>: To promote effective and sustainable use of forest and forest land</p>
Target of forest coverage	<p><u>Dien Bien</u>: 41.6% (2008) to 44% (2010), 55% (2015) and 65% (2020)</p> <p><u>Lai Chau</u>: 45.7% (2015) and more than 52% (2020)</p> <p><u>Son La</u>: 25.7% (2015) to 55% (2020)</p> <p><u>Hoa Binh</u>: 52%(2015) to 56% (2020)</p>
Expected economic impact	<p><u>Dien Bien</u></p> <ul style="list-style-type: none"> <li>✧ Increase of the production value in forestry sector by 6-7 % each year: VND338294-357,443 million/year for the period of 2008-2015 and VND361,974-447,138 million/year for the period of 2016-2020</li> </ul> <p><u>Lai Chau</u></p> <ul style="list-style-type: none"> <li>✧ Increase of the production value in forestry sector by 7-9 % each year</li> <li>✧ Ratio of forest sector in GDP of agriculture sector : 28-30% (2015) and 34-36% (2020)</li> <li>✧ Increase of revenues from environmental value of forests through CDM, eco-tourism, protection for preventing from soil erosion and conservation of water resource</li> </ul> <p><u>Son La</u></p> <ul style="list-style-type: none"> <li>✧ Increase of the production value in forestry sector by 5 % each year</li> <li>✧ Increase of the payment under the PFES scheme and REDD+ program: VND120-150 billion/year on average (Target PFES area is 779,595 ha)</li> </ul> <p><u>Hoa Binh</u></p> <p>Improvement of income of forest stakeholders by 10-15% per year</p>
Expected social impact	<p><u>Common for all provinces</u></p> <ul style="list-style-type: none"> <li>✧ Improvement of living conditions of rural population through privatizing and diversifying forestry activities by creating employment opportunities and raising awareness.</li> <li>✧ Job creation: 14,000 per year (Hoa Binh), 50,000 per year (Dien Bien), and 100,000 per year (Son La)</li> </ul>
SUF	<p><u>Dien Bien</u>:</p> <p>Protection of Muong Nhe Special use forest (approved in PPD decision 593 (2008) and Muong Phang cultural historic site.</p> <p>Establishment of a management board for protection and development of Muong Phan special use forests</p> <p><u>Lai Chau</u>: Assistance in natural regeneration and establishment of eco-diversified sites with indigenous species to attract eco-tourism and resort development</p> <p><u>Son La</u>: Conservation and development of forest eco-systems</p>
Protection forest	<p><u>Dien Bien</u>: Protection of watershed protection forests, environmental protection forests, and border protection forests</p> <p><u>Lai Chau</u>: Protection of watershed protection forests for several hydropower plants</p> <p><u>Son La</u>: Protection of designated areas (protection forests) by the land use plan with afforestation and regeneration</p> <p><u>Hoa Binh</u>: Continuation of maintenance of protection forests and introduction of scattered planting</p>



Key Items	Key Directions and Target Indicators
Production forest	<p><u>Dien Bien</u>: According to the location of district, focuses are set for production forest; wood production for making pulp, chipboard and finger joint board; large timber production; bamboo shoots production; Rubber plantation; orchards and forest garden.</p> <p><u>Lai Chau</u>: Development of materials for processing industry with plantation of multi-purpose trees and NTFP</p> <p><u>Son La</u>: Forest development including timber and NTFPs production in the economically prioritized areas, namely, i) areas along national road 6, ii) areas along Da river, and iii) border areas</p> <p><u>Hoa Binh</u>: Promotion of timber production</p>
Harvest of forest product	<p><u>Dien Bien</u></p> <ul style="list-style-type: none"> <li>✧ (Protection forest) <ul style="list-style-type: none"> <li>Fast growing trees: 3 m<sup>3</sup>/ha/year (equivalent to 13,500 m<sup>3</sup>/year)</li> <li>Aged tree: 15 m<sup>3</sup>/ha/year (equivalent to 3,000 m<sup>3</sup>/year)</li> </ul> </li> <li>✧ (Production forest) <ul style="list-style-type: none"> <li>Natural forest: annually 10% of the total area</li> <li>Planted forest: annually 60,000-75,000 m<sup>3</sup>/year from 1,200-1,500 ha (avg. 50 m<sup>3</sup>/ha)</li> <li>NTFPs: Bamboo, rattan, <i>Heterosmilax gandichaudiana</i>, <i>Tiliacus species</i>, <i>Fallopia multiflora/streptocaulon jurentus</i>, <i>Luccifer lacca</i>, <i>Thysanoloena maxima</i>, bamboo shoots, <i>Amomum</i>, <i>Dracaena marginata</i>, and others.</li> </ul> </li> </ul> <p><u>Lai Chau</u></p> <ul style="list-style-type: none"> <li>✧ (Protection forest) <ul style="list-style-type: none"> <li>Fast growing trees: 15 m<sup>3</sup>/ha/year (equivalent to 21,000 m<sup>3</sup>/year)</li> <li>Aged trees: about 5m<sup>3</sup>/ha/year (equivalent to 27,000 m<sup>3</sup>/year) by selective harvesting</li> </ul> </li> <li>✧ (Production forest) <ul style="list-style-type: none"> <li>Natural forest: annually 10% of the total area</li> <li>Planted forest: 108,000-120,000 m<sup>3</sup>/year from 1,800-2,000 ha (avg. 60 m<sup>3</sup>/ha)</li> </ul> </li> </ul> <p><u>Son La</u></p> <ul style="list-style-type: none"> <li>✧ (Production forest) <ul style="list-style-type: none"> <li>Round logs: approximately 273,000 m<sup>3</sup> (39,038 m<sup>3</sup>/year on average) from 11,685.7ha</li> <li>NTFPs: Pine resin. Bamboo, <i>Dendrocalamus barbatus</i>, <i>Bambusa nutans</i>, rattan, <i>Docynia indica</i>, medicinal plants and bamboo shoots</li> </ul> </li> </ul> <p><u>Hoa Binh</u></p> <ul style="list-style-type: none"> <li>✧ (Production forest) <ul style="list-style-type: none"> <li>Timber: 226,250 m<sup>3</sup>/year from 3,669 ha/year on average</li> <li>NTFPs: Bamboo (1,190,000 trees/year on average)</li> </ul> </li> </ul>
Necessary investment	<p><u>Dien Bien</u>: 1,970 billion VND (including investment for forest protection and development, infrastructure building, management cost)</p> <p><u>Lai Chau</u>: 2,772 billion VND (including the cost for forest protection, forest development, scattered plantation, building infrastructure, and management)</p> <p><u>Son La</u>: 2,158 billion VND (including investment for forest protection, forest development, administration, basic silviculture construction and forestry extension)</p> <p><u>Hoa Binh</u>: 2,285 billion VND (including cost for silviculture activities, infrastructure construction, administration, support to community development)</p>

Source: JICA Preparatory Survey Team (2016)

## Chapter 5 Review of Past and On-going Forestry Project similar to the Project

### 5.1 Major ODA Forestry Project in Vietnam

A number of ODA-funded forestry projects have been implemented in the forestry sector of Vietnam since the early 1990s. They have played an important role in the sector in terms of i) facilitation of the implementation of the government priority programs, ii) introduction of innovative silvicultural methods, iii) contribution to the formulation and development of relevant policies, and iv) development of new mechanisms and models on sustainable forest management including livelihood development. The list of completed and on-going ODA-funded forestry projects are given below.

**Past and On-going ODA-funded Forestry Projects**

Projects	Total Cost (mil. US\$)	Project Area (Provinces)	Reforestation Area	Project Duration
<b>I. Grant Projects</b>				
1. PAM 4304	33.0	20 provinces		1992-1998
2. SFDP		Son La and Lai Chau	-	1993-2005
2. MRDP	18.1	Phu Tho, Yen Bai and Lao Cai		1996-2002
3. KfW1	5.7	Lang Son, Bac Giang	12,000 ha	1995-2001
4. PAM 5322	18.4	14 provinces		1997-2002
5. KfW2	9.3		21,000 ha	1997-2002
6. KfW3	6.0	Bac Giang, Quang Ninh, Lang Son	13,500 ha	1999-2005
7. KfW3 phase 2	3.0	Bac Giang, Quang Ninh, Lang Son	7,000 ha	2001-2006
8. PACSA 1	11.5	Quang Nam, Phu Yen	3,670 ha	2001-2005
9. KfW4	12.2	Thanh Hoa, Nghe An	20,500 ha	2002-2012
10. KfW6	15.1	Quang Nam, Quang Ngai, Binh Dinh, Phu Yen	21,400 ha	2005-2014
11. KfW3 phase 3	5.0	Bac Giang, Quang Ninh, Lang Son	6,872 ha	2007-2013
12. PACSA 2	5.1	Quang Ngai	415 ha	2010-2014
<b>II. Loan Projects</b>				
1. ADB 1	53.2	Thanh Hoa, Quang Tri, Phu Yen and Gia Lai		1997-2004
2. WB 1	32.3	Thanh Hoa, Quang Tri, Lam Dong, Kon Tum, Binh Phuoc		1998-2004
3. WB 2	56.0	Tra Vinh, Soc Trang, Bac Lieu, Ca Mau	33,397 ha	2002-2008
4. SPL-III	16.5	Quang Tri, T.T. Hue, Quang Nam, Quang Ngai, Phu Yen	<u>22,000 ha</u>	2002-2008
5. WB 3	100.0+	T.T. Hue, Quang Nam, Quang Ngai, Binh Dinh	68,077 ha	2005-2013
6. KfW 7	17.2	Hoa Binh, Son La	22,000 ha	2006-2016
7. ADB 2	91.3	Kon Tum, Gia Lai, Phu Yen, Dak Lak, Dak Nong, Lam Dong	30,000 ha	2007-2015
8. JICA 2	123.5	Thanh Hoa, Nghe An, Ha Tinh, Quang Binh, Quang Tri, T.T. Hue, Quang Ngai, Binh Dinh, Phu Yen, Ninh Tuan, Binh Thuan	17,946 ha	2012-2021
9. KfW 8	30.8	Yen Bai, Lai Chau, Lao Cai, Ha Giang, Bac Kan	7,000 ha	2014-2021
10. KfW 10	13.3	Quang Nam, Kon Tum, Gia Lai	-	2014-2020

Note: Underlined figures indicate the afforestation targets/ accomplishment for protection forests. The rest are the targets for production forests.

PAM: Projects funded by World Food Programme

SFDP: Social Forestry Development Project (funded by Germany)

MRDP: Mountain Rural Development Programme (funded by Sweden)

KfW: KfW Afforestation Project (funded by Germany's Bank for Reconstruction)

PACSA: Project for Afforestation in Coastal Sandy Area

ADB1: Forestry Sector Project

WB1: Forest Protection and Rural Development Project

WB2: Coastal Wetland Protection and Development Project

SPL-III: Rural Infrastructure Development and Living Standard Improvement Project III (Sector Project Loan III) /Afforestation Sector

WB3: Forestry Sector Development Project in 4 provinces

ADB2: Forests for Livelihood Improvement in the Central Highlands Sector Project

JICA 2: Protection Forest Restoration and Sustainable Forest Management Project

KfW 7: Forest Development in Hoa Binh and Son La

KfW 8: Sustainable Forest Management and Biodiversity as a Measure to Decrease CO<sub>2</sub> Emissions

KfW 10: Protection and Inclusive Management of Forest Ecosystem

Source: Outline of ODA Investment Project (Sustainable Forest Development Project in the Northwest Sub-region) (2015)

## 5.2 Reviews of Similar Projects

The preparatory survey team made the literature reviews of the following forestry projects similar in nature to the project to draw important lessons learned from those project for the formulation of the proposed project. KfW8 project was not reviewed by the survey team in this reporting period as it was still in the initial stage of the project.

- ◆ Rural Infrastructure Development and Living Standard Improvement Project III (so-called “SPL-III Afforestation Project”);
- ◆ Protection Forests Restoration and Sustainable Management Project (so-called “JICA 2 Project”);
- ◆ Project for Sustainable Forest Management in the Northwest Watershed Area (SUSFORM-NOW); and
- ◆ Forest Development in Hoa Binh and Son La Project (so-called “KfW 7 project”).

### 5.2.1 SPL-III Afforestation Project and JICA 2 Project

SPL-III project funded by Japanese loan had been implemented from 2002 to 2008 in five (5) provinces in the central region where social infrastructures and agricultural production were severely danged by the typhoon and flood occurred in 1998. The goal of the project was to rehabilitate and protect the watershed protection forests and improve the livelihoods of local communities living nearby the forests.

JICA 2 is the succeeding project of SPL-III which started in 2012 with an aim to scale up the project activities of SPL-III to 11 provinces in the central region. The outline of these two projects is shown below.

Outline of the SPL-III and JICA2 Project

Item	Description	
Year of Agreement	SPL-III: 1998, JICA2: 2012	
Duration	SPL-III: 7 years (2002-2008), JICA2: 10 years (2012-2021)	
Target Provinces	SPL-III: 5 provinces, Quang Tri, T.T.Hue, Quang Nam, Quang Ngai, Phu Yen JICA2: 11 provinces, Thanh Hoa, Nghe An, Ha Tinh, Quang Binh, Quang Tri, T.T.Hue, Quang Ngai, Binh Dinh, Phu Yen, Ninh Thuan, Binh Thuan	
Total budget	SPL-III: Japanese Yen 1,880 million, of which: Loan: 1,600 million CP fund: 280 million	JICA 2: Japanese Yen 9,062 million, of which: Loan: 7.703 million CP fund: 1.359 million
Project Components	<p><b>i) Detection and disposal of bombs and toxics clean-up component (only JICA 2)</b> To detect and dispose bombs and clean toxics materials left in mountain areas in and around the target protection forests. This component is implemented in the target provinces except Ninh Thuan. The company which has been working with the Ministry of Defense in this field for years is the contractor hired for the component.</p> <p><b>ii) Protection Forest Development</b> To rehabilitate degraded forests in the target protection forest lands through the following silvicultural activities:</p> <ol style="list-style-type: none"> <li>1) Afforestation in bare lands;</li> <li>2) Upgrading existing plantations (only JICA2);</li> <li>3) Assisted natural regeneration with/without enrichment planting in bushes/small regenerating forests; and</li> <li>4) Protection of natural forests.</li> </ol>	

Item	Description										
	<p><b>iii) Silviculture Infrastructure construction</b> To construct, improve, and maintain silviculture infrastructure (e.g., 1) forestry road, 2) forest protection station, 3) fire watch tower, 4) fire break line, 5) nursery, and 6) information board) necessary for operating forest development activities.</p> <p><b>iv) Livelihood Development Assistance</b> To support the local communities living nearby the target protection forests in improving their livelihoods. This component provides the agricultural/forestry extension services to local communities so that they could introduce improved/innovative agricultural/forestry techniques and other livelihood activities to generate additional cash income. Such works are generally contracted out to Provincial Agriculture Extension Centers or Universities.</p> <p><b>v) Infrastructure Construction for Livelihood Development</b> To construct, improve, and maintain the small scale rural infrastructure, such as 1) rural road, 2) irrigation canal, and 3) water supply, with an aim to improve livelihoods and living conditions of local communities.</p> <p><b>vi) Forest Fire Control</b> To procure and provide a set of equipment used in fire prevention and control (e.g., pick-up type vehicle, motor bikes, motor boat, fire extinguisher) and conduct fire drills to train local stakeholders on fire prevention and extinguishing.</p> <p><b>vii) Consulting Services</b> To provide technical assistance services, such as 1) technical/managerial advice in planning, implementing and monitoring the project activity, 2) capacity building of central/local government staff and local communities, 3) assistance in livelihood development activities, (4) assistance in the preparation of phase-in/phase-out activities, and 5) project review.</p> <p>Furthermore, the following tasks are additionally attached to the services in the JICA2 Project: 6) forest inventory and mapping, 7) site selection/demarcation and participatory land use planning, 8) survey and preparation of detailed design documents, 9) planning and design of livelihood development activities, and 10) socioeconomic baseline survey. These additional works have been conducted by outsourcing to the competent organizations in central and provincial levels.</p>										
Target originally planned	<table border="1"> <thead> <tr> <th>SPL-III</th><th>JICA 2</th></tr> </thead> <tbody> <tr> <td>i) Afforestation: 20,253 ha</td><td>i) Afforestation: 17,946 ha</td></tr> <tr> <td>ii) ANR with/without enrichment planting: 3,843 ha</td><td>ii) Plantation improvement: 2,690 ha</td></tr> <tr> <td>iii) Forest Protection: 18,045 ha</td><td>iii) ANR with/without enrichment planting: 14,163 ha</td></tr> <tr> <td></td><td>iv) Forest Protection: 34,437 ha</td></tr> </tbody> </table>	SPL-III	JICA 2	i) Afforestation: 20,253 ha	i) Afforestation: 17,946 ha	ii) ANR with/without enrichment planting: 3,843 ha	ii) Plantation improvement: 2,690 ha	iii) Forest Protection: 18,045 ha	iii) ANR with/without enrichment planting: 14,163 ha		iv) Forest Protection: 34,437 ha
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Institutional Framework	<p>i) MARD is the Project Owner while PPC is the Investment Owner of the project.</p> <p>ii) Project Management Units established at central (CPMU) and provincial (PPMU) levels are the implementing bodies of the project.</p> <p>iii) Major activities in the components have been carried out by the contractors hired by the PPMUs.</p> <p>iv) Community groups and households have been involved in the project as sub-contractors for the works or employed labors for forest development or infrastructure construction. They have also been involved in the participatory planning, livelihood development, project information dissemination, etc.</p> <pre> graph TD     MARD[MARD Project Owner] --&gt; MBFPs[MBFPs]     MARD --&gt; Consultant[Consultant]     MBFPs --&gt; PPC[PPC Investment Owner]     PPC --&gt; DARD[DARD]     DARD --&gt; 5provinces[5 provinces]     5provinces --&gt; CPMU[CPMU]     5provinces --&gt; PPMU[PPMU]     CPMU --&gt; CPMU_Dir[Director 1]     CPMU --&gt; CPMU_Tech[Technical Staff 3]     CPMU --&gt; CPMU_Acc[Accountant 2]     CPMU --&gt; CPMU_Admin[Admin. Staff 3]     PPMU --&gt; PPMU_Dir[Director 1]     PPMU --&gt; PPMU_DD[Deputy Director 1]     PPMU --&gt; PPMU_Tech[Technical Staff 3-4]     PPMU --&gt; PPMU_Acc[Accountant 1-2]     PPMU --&gt; PPMU_Admin[Admin. Staff 2-3]     PPMU -- Supervision --&gt; Contractor1[Contractor]     PPMU -- Supervision --&gt; Contractor2[Contractor]     PPMU -- Supervision --&gt; Contractor3[Contractor]     PPMU -- Supervision --&gt; Contractor4[Contractor]     CPMU -.-&gt; PPMU   </pre>										

Item	Description
	v) Consultant Team are hired by the MBFPs to provide the advisory services to CPMU and PPMUs.

Source: Completion Report of the Consultancy Services for SPL-III (2008) and Annual Report of the JICA2 (2015)

Through reviews of the consultancy service reports for SPL-III and JICA2 projects, the preparatory survey team draws the following lessons which could be referred for the formulation of the proposed project. Basically lessons learnt from the SPL-III project were taken into account in designing the JICA2 project and proved effective in improving the operations of JICA2. There are also new lessons learned from the implementation of JICA2, which give the preparatory survey team insights into the implementation of a similar project in effective and efficient manners.

### Lessons learned from SPL-III

- a. Extensive information dissemination should be done for the local government and people at the commencement of the project.

Dissemination of information on the project and project policies should be done for local governments and local people before detailed planning in the field. Through providing information on the project, the local governments and the people concerned could understand the importance of forest protection and development, the benefits from the project as well as their responsibilities regarding forest protection and development.

- b. Local community should be fully involved in the preparatory and planning stage of the project.

In the SPL-III project, detailed designs of forestry development components were hastily prepared in all the provinces because there were only four years remaining to the end of the project when the project activities started in 2002 (the project was originally scheduled to end in 2006, but it was extended by 2 years later.). The “rushed preparation” was not able to ensure enough community participation in the planning of the forest development activities, which resulted in uncooperative or reluctant attitude of communities and adversely affected the project implementation throughout the project. It is, therefore, essential to fully involve local communities in the process of detailed planning of forest development activities. Among others, participatory land use planning is an essential step to lay the foundation for agreement on the project activities with local communities.

- c. Contractor of the project working in forest development component should be public institutions.

The project utilized public institutions, such as PFMBs, forest protection agency, provincial agricultural extension centers, consulting centers, universities, etc., for implementing the project activities. Because of the nature of the project, which required specific technical expertise and whose target areas were remote, not easy to access, and often scattering, it would have been difficult for private firms to implement the project activities in proper and timely manners even if they had been hired. In general, the public institutions are technically and financially capable to perform as contractors for the project activities and have sufficient experiences in conducting and managing similar activities under the contract with other government funded projects.

The procurement of those organizations was done by direct appointment in principle. This procurement method was quite appropriate and efficient, as there was no other organization competent to take the works from technical and financial points of view.

- d. Ceiling of the budget for infrastructure construction and livelihood development should be increased.

Budget ceiling rates for rural infrastructure construction and livelihood extension activities were set at 6% and 2% of the total project budget, respectively, in SPL-III. However, the budgets allocated for both components were not sufficient to make a positive impact for improvement of livelihoods of local communities. To heighten the effect of both components, the ceiling rates were re-examined and revised.

- e. Benefit sharing mechanism should be piloted during the Project period.

SPI-III developed its own benefit sharing mechanism to be applied to the protection forests developed under the project. Since the mechanism was developed in the final stage of the project, there was no time to test and pilot the mechanism in the course of the project. Hence, the mechanism ended up just as a new concept for sustainable management of protection forest as it was quite difficult for local governments to scale up the same in the field without a clear-cum-detailed guideline. It is necessary to test the benefit sharing mechanism as a pilot project in the JICA2 project for improvement and finalization of the mechanism, and institutionalize the same as an operating system with its technical guidelines over the course of the project.

#### Lessons learned from JICA 2 Project:

- a. Commencement of the consulting services should not be delayed largely.

One of the key tasks of the consulting services is to lay the foundation for smooth implementation and operation of the project by i) development of technical regulations/guidelines, ii) dissemination of the same to relevant stakeholders, iii) assistance in development of an overall project management system at CPMU, and iv) development of modalities and tools to plan, implement, monitor, and evaluate the project activities in a systematic manner for CPMU/PPMUs. Since those activities need to be completed prior to the commencement of the project activities in the field, it is necessary for the consultant team to start its services as originally scheduled. Delayed procurement of the consultant would cause the delay in the commencement of consulting services, which would further affect the progress of the project.

- b. Forest inventory data and GIS maps should be updated at the commencement of the Project.

In JICA2, forest inventory and mapping, which was programmed as an activity of the preparatory works, was skipped due to time constraints. Hence, detailed planning and designing were carried out on the basis of rather outdated data, which caused the following difficulties in implementation of the forest development activities.

- Vegetation status indicated in the plan/design did not represent the actual conditions on the ground; therefore, the design of the forestry development needed to be changed or alternative lands needed to be identified.

- The target site was already used for other purposes on the ground; therefore, alternative sites needed to be identified.

It is necessary to update the forest inventory data and maps with the latest information in the early part of the preparatory stage.

- c. PPMUs should be responsible for the conducts of the surveys and detailed designs, which are implemented by sub-contractors at the local level, during the preparatory works.

Under the JICA2 project, the consultant team is responsible for the conducts of several surveys (e.g., perimeter survey and socio-economic survey) and detailed designs of forestry development and small scale infrastructure development components. It is judged that this kind of arrangement has affected the quality of detailed designs, lowered the accountability and responsibility of PPMUs about the results of the designing works, and affected the quality of the consulting services.

In general the surveys and detail designing have been carried out by design centers under DARD in the respective provinces. Hence, PPMUs/DARDs are in the right position to efficiently and effectively supervise the contractors' works rather than the consultant team that stations at Hanoi. It is also rather unrealistic or inefficient that the consultant team should supervise all the survey and designing works in the different provinces simultaneously. Furthermore, PPMUs/DARDs have often tended to be irresponsible for or negligent of the results of the surveys and designs as they are not involved in the sub-contracting works. If PPMUs/DARDs are involved in the sub-contracting works as a contractee (as project owner), they could closely check the sub-contractors' works and be responsible for their results.

On the other hand, the experts of the consulting team got caught up in the procurement and management of the sub-contracting works in the provinces. A load of works have prevented the experts from fulfilling their original tasks as planned since there was no specialist allocated for this task under the contract for the consulting services.

- d. Physical targets of the forestry development component should not be ambitious but feasible.

MBFPs/CPMU tends to impose PPMUs to set ambitious physical targets of the forestry development component, which apparently exceed the capacity of PPMUs as well as PFMBs. As a result, the annual physical accomplishments made by PPMUs have often become far lower than the targets set by MBFPs/CPMU. It has further caused a delay in achievement of physical targets in the following years. More importantly, it might lead to indifference or irresponsibility of PPMUs to/for the achievement of the targets. It is, therefore, necessary to set realistic physical targets based on the capacity of local stakeholders and conditions in the field.

- e. It takes a certain period of time to make disbursement from the time when a payment request is submitted to CPMU.

In the beginning of the project, the payment to contractors was often delayed due to incompleteness of a payment request prepared and submitted by PPMUs. The quality of the documents has been improved gradually as the staff of PPMUs has learned the procedures and been familiar with the formats. However, it still takes more than 3 months,

sometimes 6 to 9 months in the worst case, for the verification process not only in CPMU but also in MOF.

Under the circumstances, contractors, such as PFMBs, have often obtained temporary financial assistance from DARD so that they could continue the project activities while waiting for the payment from the central level. Although they have managed a difficult situation, many of them have faced difficulties in operations of the project activities.

Considering the situations described above, the preparatory survey team learn the following lessons:

- It is essential to provide full guidance and support to PPMUs in the preparation of a payment request so as to avoid unnecessary delay in the process of disbursement.
- The contractor should be financially capable enough to continue the project activities without having the payment for 6 to 9 months, or should be public institutions which can obtain temporary financial support from the state government like in the case of JICA 2.

## 5.2.2 Forest Development in Hoa Binh and Son La Project (KfW 7 Project)

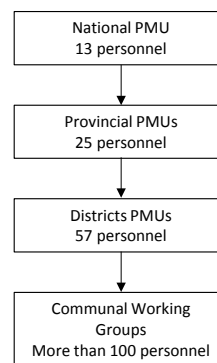
The Forest Development in Hoa Binh and Son La Project (KfW 7 Project) started in 2009 and is expected to end in the end of 2016 with one year extension. The goal of the project is to contribute to sustainable natural resource management and biodiversity conservation while improving livelihood of the poor farmers. The outline of the project is shown below.

**Outline of the KfW 7 Project**

Item	Description
Year of Agreement	2006 (December 2006)
Duration	9 years (The project is scheduled to end in December 2016 with 1 year extension.)
Target Provinces/Districts	Hoa Binh – Kim Boi, Ky Son Luong Son, Lac Son, and Hoa Binh Town Son La – Moc Chau, Thuan Chau, Phu Yen, Bac Yen
Total budget	Euro 13.8 million, of which: Loan: 7.9 million Grant: 2.1 million CP fund: 3.8 million
Project Components	i) Forest Establishment (FE) FE aimed to promote afforestation in bare lands or rehabilitation of degraded forests in the areas allocated to individual households by providing planting materials with subsidies (VND 6.5 million/ha/6 years in the original plan). ii) Community Forestry Management (CFM) CFM intended to introduce a community forest management approach and assist villages in sustainably managing existing secondary and natural forests allocated to villages. iii) Biodiversity Conservation (BC) BC aimed to strengthen the management capacity of special use forests by provision of equipment and opportunities of training. iv) Community Development (CD) CD aimed at improving the living conditions of local communities and also reducing poverty in communes relating to the other project activities. v) Training vi) Impact Monitoring
Target originally planned	i) FE: 22,000 ha ii) CFM: 10,000 ha in at least 15 communes iii) BC: 64,000 ~71,000 ha



Item	Description
Institutional Framework	<p>i) A series of guidelines, which defined the procedures for project implementation, were developed in the course of the projects.</p> <p>ii) The project has been managed and operated by all levels from national project management unit (NPMU) to the commune level (communal working groups) as shown right.</p> <p>iii) At the national level, a consultant team had been hired for assistance in the implementation of the project. The main tasks of the consultant team were to develop relevant manuals and guidelines, provide training and orientation to the project officers, monitor the project activities, and provide necessary guidance and advice to PMUs for improvement of the project implementation.</p>



Source: *The Mid-term Review Report on Forest Development in Hoa Binh and Son La (KfW 7)*, 2012 adapted by the preparatory survey team

Through reviews of the mid-term review report on the project, the preparatory survey team gleaned the following lessons that could be referred for the formulation of the proposed project. As the project is still on-going and the key source of information for the preparatory survey team was the mid-term review report made in 2012, some lessons and findings that the survey team extracted might not necessarily express the reality of the current situation of the KfW project.

a. Necessity of Guidelines and Manuals for Implementation

It is necessary to develop a set of guidelines and manuals for project implementation in the early stage of the project. The late preparation of the guidelines and manuals has hampered the implementation of the components of KfW 7. Clear and detailed guidelines/instructions could be helpful for project staff and other stakeholders (e.g., contractors and local communities) to execute project activities, especially when they are not familiar with the project activities technically and operationally.

b. Difficulty in Identification of the Project Sites

The project faced difficulties in the identification and reservation of lands for the project, since the holders of land certificates preferred not to use their lands for the project. It might not be easy to use forest lands allocated to individual households, especially those in production forests, for the proposed project, unless the project could provide substantial financial support to motivate them to use their lands for the project.

c. Cost Norms for Forest Development and Management Components

One of the recommendations and also agreements made by the mid-term review team and MBFPs for the KfW 7 Project was to increase the cost norms for FE and CFM in consideration of i) inflation, ii) increase of labor cost, and iii) adjustment with other programs. In particular, it was necessary for the project to make the cost norms more attractive to local communities as they targeted production forests allocated to individuals. The same can be said for the proposed project as part of the project sites might be the lands allocated to households/villages or those that local communities have customarily used for a long time.

d. Difficulty in Allocation of Counterpart Funds

The project structured the project management units from the national to commune levels as described above. Although the Vietnamese side has recruited sufficient staff with adequate qualifications on time, it was pointed out in the mid-term review report that a shortage of counterpart funds allocated by the provincial government had affected the operation of the project management units. It is necessary to develop the project implementation framework considering the financial capacity of the target provinces.

e. Necessity of Capacity Development

The project has conducted and arranged a number of training courses for the project staff and participating farmers covering the following topics: i) land use planning, ii) site mapping and plantation design, iii) silvicultural techniques, iv) nursery management, v) community forest management, vi) participatory community development planning, viii) participatory forest inventories, viii) project and financial management, and ix) training of staff of the special use forest management boards (NRMBs) on various topics. It was judged that capacity development was essential to effective and efficient implementation of the project as the majority of the project staff were not familiar with the principles, procedures and techniques introduced in the project. It may be true for the proposed project that sufficient and effective capacity development would be requisite to the smooth operations of the project. The experiences of the KfW 7 suggests that the following points should be taken into account in designing the capacity development component.

- ◆ Combination of Off-JT type and OJT type training courses
- ◆ Introduction of in-country study tours to help project staff have a clear picture of the project
- ◆ Identification and allocation of sufficient number of qualified trainers
- ◆ Arrangement of sufficient opportunities of quality training courses

f. Weakness in Special Use Forest (SUF) Management

The mid-term review report on the KfW 7 Project pointed out the following difficulties in management of special use forests in both provinces.

- ◆ Existence of villages and farms within the territories of the special use forests
- ◆ Limited capacity of the SUFMBs
- ◆ Lack of operational funds of SUFMBs
- ◆ Unclear boundaries of the SUFs
- ◆ Lack of the management system

As it was difficult for the project (KfW 7) to iron out all the difficulties due to time constraints, it has mainly focused on capacity development of SUFMBs and community development of villages located within the special use forests. This suggests that development of a mechanism for sustainable protection of forests in the special use forests from further encroachment and forest degradation caused by local communities would be one of challenges that the proposed project should cope with.

g. Effectiveness of the Use of Saving Account

The project helped the contractors (groups of local communities) for FE and CFM open their saving accounts in Agribank and made the payments to their accounts directly from

NPMU. This system has helped the project i) keep correct and verifiable transaction of money, ii) avoid misuse or embezzlement of project funds, iii) make the payments early, iv) reduce administrative and transaction costs, and v) provide additional incentive to local communities in the form of an interest on saving deposits.

### 5.2.3 Project for Sustainable Forest Management in the Northwest Watershed Area (SUSFORM-NOW)

The Project for Sustainable Forest Management in the Northwest Watershed Area (so-called SUSFORM-NOW) started in August 2010 and ended in August 2015. The main objective of the project was to promote participatory forest management and livelihood development in the pilot project sites through the implementation of the provincial REDD+ action plan (PRAP). The outline of the project described below.

**Outline of the SUSFORM-NOW Project**

Item	Description
Duration	5 years from August 15, 2010 to August 14, 2015
Target Provinces/Districts	Dien Bien-Dien Bien Phu City, Dien Bien, Dien Bien Dong, and Muong Cha
Type of the Project	Technical Cooperation Type Project
Project Components (Outputs)	Output 1: Development and implementation of commune REDD+ action plans (C-RAPs) Output 2: Enhancement of technical and institutional capacities of executing and partner agencies for the implementation of the PRAP Output 3: Development and preparation of necessary plans and technical documents for the implementation of PRAP
Major activities	Output 1 <ul style="list-style-type: none"> <li>◆ Assisted two (2) communes in the finalization of C-RAPs.</li> <li>◆ Assisted villages concerned with the two (2) communes in the formulation of forest management plans and livelihood development plans.</li> <li>◆ Assisted villages in the implementation of forest management and livelihood development activities.</li> </ul> Output 2 <ul style="list-style-type: none"> <li>◆ Assisted DARD in the finalization of PRAP.</li> <li>◆ Arranged and provided training courses on different subjects to counterpart government staff so that they could conduct activities programmed in PRAP.</li> </ul> Output 3 <ul style="list-style-type: none"> <li>◆ Reviewed, revised, and integrated existing guiding documents into technical guidelines for the implementation of PRAP.</li> <li>◆ Formulated and submitted recommendations on the implementation of the sub-national REDD+ pilot project.</li> </ul>
Major achievements made	Output 1 <ul style="list-style-type: none"> <li>◆ Village forest management plans and livelihood development plans were developed and officially approved in 15 villages.</li> <li>◆ C-RAPs in two (2) communes were approved.</li> <li>◆ 35 villages formed a forest patrolling team with trained villagers and started patrolling activities.</li> <li>◆ 16 villages established forest regeneration areas and 30 villages conducted reforestation activities.</li> </ul> Output 2 <ul style="list-style-type: none"> <li>◆ Various different types of training courses were conducted for project management unit members, government staff and villagers.</li> <li>◆ More than 60 % of the government officers who took the courses judged that they understood the contents of training courses.</li> <li>◆ An improved PFMS system was developed, evaluated, and finalized in the course of the project.</li> <li>◆ A set of recommendations on institutional and capacity gaps are compiled.</li> </ul>

Item	Description
	<p>Output 3</p> <ul style="list-style-type: none"> <li>◆ The PRAP was officially approved in 2014, and a set of recommendations for improvement of the PRAP were compiled and submitted to DARD and PPC.</li> <li>◆ Several technical guidelines and manuals for PRAP implementation were finalized and compiled.</li> </ul>

Source: *The Report for the Terminal Evaluation of the Project for Sustainable Forest Management in the Northwest Watershed Area, JICA (2015) adapted by the preparatory survey team*

The preparatory survey team drew the following lessons learned, which should be taken into account in designing of the proposed project.

a. Utilization of provincial forest monitoring system (PFMS)

The project improved the provincial forest monitoring system (PFMS) to reduce the burden and expenditure of forest monitoring in the field. The improved system was proved effective and considered as a potential monitoring system to be adopted for MRV of REDD+ in the future. The possibility of utilization of the improved PFMS should be sought in the planning.

b. Selection of rural development activities

The project assisted local communities in the introduction of several types of livelihood development activities. However, the results of the livelihood development support did not necessarily motivate local communities to protect and manage forests in a proper manner. It is important to set criteria to select those directly link to forest and/or land resources so that communities could be encouraged to protect and use forest and land resources in a sustainable manner.

c. Improvement of the village development fund

The project also assisted local communities in the establishment and management of the village development funds, which had dual functions as a temporal pool of PFES payment and a seed fund for revolving credit for communities. As the village development fund can be used for a funding source for forest protection activities by villagers, its aims and functions along with its operation and management methods should be examined and deliberated in designing its mechanism prior to the introduction. The necessity of the village development fund should also be examined as it is not necessary easy for communities to operate and manage such a fund in a proper manner.

d. Necessity of improvement of management of special use forest

The project had worked in communes overlapped with the Muong Phang special use forest of which significant parts were used by local communities for farming as the designation of special use forest came into effect recently. The situation is obviously the same with other special use forests; therefore, it would not be necessarily easy to manage and protect forests in the special use forests in a sustainable manner.

For instance, forest protection in special use forests is likely not attractive to local communities since extraction of forest resources, such as thinning and harvesting of forest products, even non-timber forest products, are not allowed in principle. It is, however, essential to involve them, especially those who have vested land use rights, in management and protection of forests in the special use forests. There is a need to figure out and introduce a mechanism for sharing benefits from protection of forests with local

communities so as to protect existing natural forests left in special use forest in a sustainable manner.

## 5.2.4 The Project for Afforestation in Coastal Sandy Area Phase 2 (PACSA2)

The Project for Afforestation in Coastal Sandy Area Phase 2 (PACSA 2) was a grant aid project for afforestation in coastal sandy area in Quang Ngai Province. The project had developed 92 ha of new plantations and rehabilitated 322 ha of degraded forests in five communes from 2010 to 2014.

In April 2016, the preparatory survey team conducted i) the forest survey in the plantations developed by the project and ii) the interview surveys at the five target communes as well as DARD to draw useful lessons for the proposed project. The following table summarizes lessons which may be useful for examination of the proposed project.

**Lessons Learned from the Preceding Grant Aid Project**

Category	Lessons Learned from the Preceding Project
Utilization of local resources for maintenance and protection	<ul style="list-style-type: none"> <li>◆ Quang Ngai DARD assisted the target communes in the organization of commune working groups responsible for maintenance and protection of seedlings planted in the respective communes. The working groups have engaged in protection and maintenance of plantations even with limited financial support; therefore, trees planted in the plantations showed rather high survival and growth in general.</li> <li>◆ Formation of a commune/village level group for maintenance and protection of seedlings in the post-project period contributed to the enhancement of sustainability of the project.</li> </ul>
Species and site selection	<ul style="list-style-type: none"> <li>◆ On the other hand, the survival and growth of trees planted in degraded forests were not necessarily high or good due to the following reasons:               <ul style="list-style-type: none"> <li>- Many of the sites were gaps within existing trees and significantly shaded by nearby standing trees;</li> <li>- Casuarina was selected as the dominant species planted in the gaps without due consideration of its adaptability to the site conditions</li> <li>- Trees were also planted in areas which might not necessarily be suitable for planting seedlings.</li> </ul> </li> <li>◆ Adaptability of tree species to the plantation site and land suitability of the target site for plantation should be fully examined and deliberated in the planning and designing stages.</li> </ul>
Evaluation of enrichment planting	<ul style="list-style-type: none"> <li>◆ It was hard for the preparatory survey team to precisely identify all the seedlings planted in the gaps, since there was no clear demarcation between existing and planted trees on the ground unlike new plantation.</li> <li>◆ It is likely difficult to clearly evaluate the effectiveness (such as survival rate of seedlings) of assisted natural regeneration with enrichment planting especially in the post-project period.</li> </ul>

Source: JICA Preparatory Survey Team (2016)

## Chapter 6 Results of the Study and Examination on Project Components and Scope

### 6.1 Identification of Potential Target Sites for the Project

#### 6.1.1 Basic Approach to Selection of Target Sites

##### (1) Pre-assessment of Forest Lands in the Target Provinces

Given that the majority of forest lands have already been allocated to villages, groups of households, or individual households as described in Chapter 4 of this report, the preparatory survey team made a preliminary assessment of forest lands in the target provinces in terms of suitability for an ODA-loan project prior to the field survey. In the preliminary survey, the team grouped forest lands in the target provinces into the following five types to simplify the assessment.

- Special Use Forests (SUFs) allocated to public institutions (i.e., management boards)
- Protection Forests (PFs) allocated to management boards
- Production Forests allocated to management boards
- Protection Forests (PFs) allocated to villages/households/ individuals
- Production Forests allocated to villages/households/ individuals

Each type of forest land was evaluated in terms of i) representativeness, ii) capacity of forest owners, iii) manageability, iv) effect to REDD+, and v) efficiency in implementation. The results of the preliminary assessment are shown in **Table I-6-1** attached to this report, and summarized below.

Summary of the Results of the Preliminary Assessment

Area	Share in the forest lands in the province	Capacity of forest owners		Management	Effect to REDD+	Efficiency in implementation
		Technical	Financial			
SUF allocated to MBs	Low ~ Fair	Fair-Low	Fair-Low	Manageable	High	High
PF allocated to MBs	Low ~ Fair	Fair-High	Fair	Manageable	High	High
PF allocated to HHs, etc.	High	Low	Low	Difficult (complicated)	High	Low
Prod. F allocated to MBs	Low ~ Fair	Fair-High	Fair	Manageable	Fair-High	High
Prod. F allocated to HHs, etc.	High	Low	Low	Difficult (complicated)	Fair-High	Low

Source: JICA Preparatory Survey Team (2016)

The results of the preliminary assessment are as follows:

- Forests allocated to villages and households account for major share of forest lands in the provinces;
- However, they may not necessarily be recommended as target sites since it might be difficult for the proposed project to maintain the quality of plantations and manage contracts for forest development on a timely and efficient manner due to limited capacity of forest owners and dispersion of target sites;

- c. Protection forests allocated to public institutions, namely forest management boards, are considered to be rather suitable for the proposed project in terms of technical and financial capacity of forest owners, manageability, effect to REDD+, and efficiency in implementation; and
- d. Special use forests allocated to management boards can be considered as target sites although technical and financial capability of the management board are likely lower than those of protection forests.

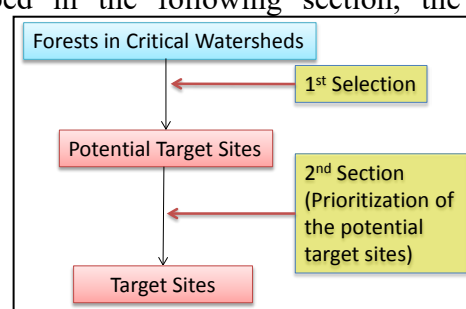
Considering the results of the pre-assessment described above, the preparatory survey team proposes that protection and special use forests allocated to management boards should be prioritized in the selection of target sites for the proposed project. However, in case that there is no or less areas allocated to management boards in protection forests and special use forests, those allocated to communities/households would be taken into account as potential target sites for the project.

## (2) Selection Method

In order to select the target sites in an effective and efficient manner, the preparatory survey team employed the following two-step selection method.

### The First Selection: Long-listing of the potential target sites

- 1) After determination of selection criteria described in the following section, the preparatory survey team requested DARDs of the target provinces to preliminarily select proposed areas according to the criteria for the 1<sup>st</sup> selection.
- 2) The survey team reviewed and assessed the proposed areas by checking the forest status, land ownership (land allocation status), site conditions (soils, slopes, and elevation) and de facto land use in the respective areas together with DARDs and management boards concerned.
- 3) The capacity of the management boards were also considered in the selection of the potential target sites.



### The Second Selection: Prioritization/Short-listing of the target sites

- 1) The survey team verified the current forest conditions in the potential target sites using the data of the National Forest Inventory and Statistics (NFI&S).
- 2) The potential target sites were further evaluated in terms of i) poverty ratio of commune relating to the sites, ii) tendency of deforestation, iii) necessity of afforestation, iv) area of natural forests, and v) proportion of the area to the target areas (protection forests or special use forests) and prioritized for the final selection.

## (3) Basic Guidelines used for Assessment of the Potential Sites

The following criteria were set by the preparatory survey team for the 1<sup>st</sup> selection prior to the field surveys in the target provinces.

- ◆ The potential target site should be protection forest or special use forest in principle.

- ◆ The potential target site should be located within the critical watersheds.
- ◆ A forest owner of the potential target site should be capable to carry out the forest development and improvement activities of the proposed project from both technical and financial points of view.
- ◆ The potential target site should have a minimum size of existing natural forests as well as areas for forest improvement activities, such as afforestation and ANR.
- ◆ There should be no possibility of causing any conflict over land use with local communities or removing opportunities to generate income from local communities.
- ◆ No possible change in the current land use or conversion of forest types is foreseen in the future.
- ◆ In Dien Bien Province, the potential target site should be part of the priority or moderate priority communes.

As a majority of forest lands have already been allocated to villages/households in the four provinces, the preparatory survey team assessed the potential of protection and special use forests allocated to households/villages but managed by the management boards in addition to those allocated to PFMBs/SUFMBs.

### 6.1.2 Assessment of the Potential Target Sites

This section described the results of the 1st selection of the potential target sites.

#### (1) Proposed Areas

DARDs of the target provinces proposed the following areas as potential target sites.

**Areas proposed/selected by DARDs in the Four (4) Provinces**

Province	Areas selected by DARDs
Dien Bien	Protection Forests under Dien Bien Protection Forest Management Board Protection Forests under Muong Cha Protection Forest Management Board Protection Forests planned to be managed by Tuan Giao Protection Forest Management Board Special Use Forest under Muong Phang Special use forest Management Board
Lai Chau	Protection Forest under Nam Na Protection Forest Management Board Protection Forest under Nam Ma Protection Forest Management Board Protection Forest under Tan Uyen Protection Forest Management Board Protection Forest under Than Uyen Protection Forest Management Board
Son La	Protection Forests under Thuan Chau Protection Forest Management Board Protection Forests under Quynh Nhai Protection Forest Management Board Special Use Forest under Copia Special use forest Management Board Special Use Forest under Xuan Nha Special use forest Management Board
Hoa Binh	Protection and Production Forests under Da River Protection Forest Management Board Special Use Forest under Ngoc Son – Ngo Luong Special use forest Management Board Special Use Forest under Hang Kia – Pa Co Special use forest Management Board Special Use Forest under Phu Canh Special use forest Management Board

Source: JICA Preparatory Survey Team (2016)

The current land allocation conditions and forest status of the proposed areas are shown in **Table I-6-2** attached to this report, and summarized below.

**Land Allocation Conditions of the Proposed Areas**

Province	No. of Districts	No. of communes	Allocated to MB	Allocated to HHs	Unallocated	Total
Dien Bien	3	8	7,258	0	13,929	21,187
Lai Chau	3	40	51,950	0	0	51,950
Son La	4	15	45,013	0	9,163	54,177
Hoa Binh	5	34	25,077	25,448	0	50,526
<b>Total</b>	<b>15</b>	<b>97</b>	<b>129,299</b>	<b>25,448</b>	<b>23,092</b>	<b>177,840</b>

Source: JICA Preparatory Survey Team (2016)



Forest Status of the Proposed Areas

Province	Existing forest (II/III)	Woodlots (Ic)	Bare land including bushes (Ia&Ib)	Others	Total
Dien Bien	13,540	2,517	4,986	144	21,187
Lai Chau	18,005	19,171	10,459	4,315	51,950
Son La	36,139	5,657	7,526	4,854	54,177
Hoa Binh	39,164	1,839	7,463	2,061	50,526
<b>Total</b>	<b>106,849</b>	<b>29,183</b>	<b>30,433</b>	<b>11,374</b>	<b>177,840</b>

Source: JICA Preparatory Survey Team (2016)

## (2) Results of the Assessment of the Potential Target Sites

The following table highlights important points to be considered for identification and selection of the potential target sites in the proposed areas.

Summary of Important Points to Consider

Province	Proposed Areas	Important Points
Dien Bien	Dien Bien Protection Forest	<ul style="list-style-type: none"> <li>◆ The proposed area is located in the communes prioritized by PRAP.</li> <li>◆ A significant part of bare land is currently used for farming; therefore, it is advisable not to use those located adjacent to existing farms for afforestation to avoid land use conflict with local communities.</li> <li>◆ The area is not located in the coverage where PFES is implemented.</li> </ul>
	Muong Cha Protection Forest	<ul style="list-style-type: none"> <li>◆ The proposed area is located in the commune prioritized by PRAP.</li> <li>◆ Accordingly, the use of bare lands for farming is likely limited although there are existing upland farms within protection forests.</li> <li>◆ Areas located above altitudes of 1,500 m are not suitable for afforestation.</li> <li>◆ The area is located in the coverage where PFES is implemented.</li> </ul>
	Tuan Giao Protection Forest	<ul style="list-style-type: none"> <li>◆ Although the proposed area is not located in the communes prioritized by PRAP, the communes concerned with the proposed area had more or less 5,000 ha of forests in 2010.</li> <li>◆ A significant part of bare lands is currently used for farming; therefore, it may not be easy to use such areas for afforestation.</li> <li>◆ The area is located in the coverage where PFES is implemented and the payment of PFES in 2015 is VND 155,000/ha/year.</li> </ul>
	Muong Phang Special use forest	<ul style="list-style-type: none"> <li>◆ The proposed area is not located in the communes prioritized by PRAP.</li> <li>◆ The area has been assisted by the former JICA-TA project, SUSFORM-NOW. The same project had assisted villages in converting abandoned bare lands into plantations; therefore, most of the remaining bare lands are currently used for farming.</li> <li>◆ The part of the area is located in the coverage where PFES will be implemented, and the payment in 2016 is expected to be more than VND 200,000/ha/year.</li> </ul>
Lai Chau	Nam Na Protection Forest	<ul style="list-style-type: none"> <li>◆ The potentials for afforestation are relatively high in the proposed areas.</li> <li>◆ Areas suitable for ANR are small (less than 10 ha in general) and scattering in the proposed area.</li> <li>◆ At present the whole area of rich natural forests are well protected by PFES; therefore, it is not necessary to protect the area by the project.</li> </ul>
	Nam Ma Protection Forest	◆ Ditto
	Tan Uyen Protection Forest	<ul style="list-style-type: none"> <li>◆ Tan Uyen is the leading district in afforestation and forest protection in the province. It has achieved about 300 ha of afforestation constantly for recent years.</li> <li>◆ The proposed area has the largest potential for ANR among the four protection forests in three districts.</li> <li>◆ Rich natural forests in the area have been well protected by the PFES scheme, but there is a need to protect about 1,600 ha of young</li> </ul>

Province	Proposed Areas	Important Points
	Than Uyen Protection Forest	<p>natural forest by additional funding sources.</p> <ul style="list-style-type: none"> <li>◆ The proposed area has large potential for afforestation as compared to the other districts.</li> <li>◆ Area suitable for ANR are concentrated in particular locations and the size of the respective areas is medium (manageable).</li> <li>◆ Rich natural forests in the area have been well protected by PFES, but there is a need to protect young natural forest by additional funding sources although its size is smaller than that of Tan Uyen PF.</li> </ul>
Son La	Thuan Chau Protection Forest	<ul style="list-style-type: none"> <li>◆ Although the remaining natural forest in the area is less than 5,000 ha, the area has potentials for afforestation except Muong Bam commune.</li> <li>◆ The MB has experienced in afforestation since 2011 with financial support of KfW 7.</li> <li>◆ The area is located in the coverage where PFES is implemented but the payment in 2015 is about VND 9,000/ha.</li> </ul>
	Quynh Nhai Protection Forest	<ul style="list-style-type: none"> <li>◆ There are more than 5,000 ha of natural forests remaining in the area. As the areas are located far from residential areas and a majority of bare lands are likely abandoned by communities except in Muong Giang and Muong Sai, it seems not difficult to use such bare lands for afforestation.</li> <li>◆ The area is located in the coverage where PFES is implemented, and the payment in 2015 is VND 211,000/ha/year.</li> </ul>
	Copia Special use forest	<ul style="list-style-type: none"> <li>◆ The area has more than 7,000 ha of natural forests, of which about 6,400 ha of natural forests are located in conservation sub-zone.</li> <li>◆ There are villages and farms in ecosystem restoration sub-zone of the area. Hence, a significant part of bare land (1a) is considered to be currently used for farming, while bushes (1b) and woodlots (1c) are expected to be used for afforestation and ANR as they are apparently abandoned by communities.</li> <li>◆ Accordingly, about 30 % of the area are located in the coverage where PFES is implemented, but the payment in 2015 ranges from VND 9,000 to 211,000/ha.</li> </ul>
	Xuan Nha Special use forest	<ul style="list-style-type: none"> <li>◆ The area has more than 17,000 ha of natural forests, of which 11,400 ha are located in conservation sub-zone of the area.</li> <li>◆ There are 11 villages of three communes located in the area. Like in the cases of other special use forests, a part of bare land is considered to be currently used for farming even in the special use forest.</li> <li>◆ The management board identified about 200 ha of potential areas for afforestation in the ecosystem restoration zone.</li> <li>◆ The area is located in the coverage where PFES is implemented, but the payment in 2015 is VND 211,000/ha.</li> </ul>
Hoa Binh	Da River Protection Forest	<ul style="list-style-type: none"> <li>◆ Almost all the protection forests are allocated to households/villages.</li> <li>◆ The area has an important role in maintaining the functions of Hoa Bin Dam. In fact, there are more than 20,000 ha of natural forests in the proposed area.</li> <li>◆ The management board has long experiences in implementing forest development and improvement activities, and the area has potential for all types of forest development activities.</li> <li>◆ Due attention should be paid to site selection as all the areas are allocated to individuals. The areas where local communities can work as a group should be prioritized.</li> <li>◆ Improvement of production forests allocated to the management board can be considered as one of the options of the project.</li> <li>◆ The area is located in the coverage where PFES is implemented, but the payment in 2015 is VND 200,000/ha.</li> </ul>
	Ngoc Son – Ngo Luong Special use forest	<ul style="list-style-type: none"> <li>◆ Although the management board is officially authorized to manage the area, the land certificates of all the areas are still with local communities. Consequently, local communities deem themselves to</li> </ul>

Province	Proposed Areas	Important Points
		<p>be legitimate land users.</p> <ul style="list-style-type: none"> <li>◆ There are more than 13,600 ha of natural forests remaining in the area. Such forests should be protected from encroachment caused by local communities.</li> <li>◆ A part of bare lands in the ecosystem restoration sub-zone of the area is considered to be used for afforestation.</li> <li>◆ The area is not located in the coverage where PFES is implemented.</li> </ul>
	Hang Kia – Pa Co Special use forest	<ul style="list-style-type: none"> <li>◆ There are about 3,500 ha of natural forest remaining in the area.</li> <li>◆ The potential areas for afforestation and ANR are estimated by the management board at 80 ha and 160 ha, respectively. Bare lands currently used for farming are excluded from the targets.</li> <li>◆ The area is not located in the coverage where PFES is implemented.</li> </ul>
	Phu Canh Special use forest	<ul style="list-style-type: none"> <li>◆ The area has about 4,000 ha of natural forests to be protected.</li> <li>◆ A significant part of bare lands in the ecosystem restoration zone of the area is considered to be used for farming, as a total of 12 villages are located in either ecosystem restoration sub-zone or buffer zone of the area.</li> <li>◆ The area is located in the coverage where PFES is implemented, but the payment in 2015 is VND 151,000/ha.</li> </ul>

Source: JICA Preparatory Survey Team (2016)

Based on the assessment made above, the preparatory survey team made the 1<sup>st</sup> selection of the potential target sites for the project as shown in **Table I-6-3** attached to this report. Its summary is shown below.

**Results of the 1<sup>st</sup> Selection of the Potential Target Sites**

Province	Proposed Areas	Protection <1	ANR <2	Afforestation <3	No. of communes
Dien Bien	Dien Bien PF	3,330	640	1,570	3
	Muong Cha PF	0	860	800	1
	Tuan Giao PF	4,850	340	790	2
	Muong Phang NR	2,220	190	0	2
<b>Sub-total</b>		<b>10,400</b>	<b>2,030</b>	<b>3,160</b>	<b>8</b>
Lai Chau	Nam Ma PF	0	1,640	1,610	13
	Nam Na PF	0	2,950	1,810	8
	Tan Uyen PF	0	3,750	1,380	9
	Than Uyen PF	0	3,560	1,810	10
<b>Sub-total</b>		<b>0</b>	<b>11,900</b>	<b>6,610</b>	<b>40</b>
Son La	Copia SUF	3,300	1,070	820	3
	Thuan Chau PF	2,890	650	1,750	3
	Quynh Nhai PF	2,960	510	500	5
	Xuan Nha SUF	3,420	280	240	4
<b>Sub-total</b>		<b>12,570</b>	<b>2,510</b>	<b>3,310</b>	<b>15</b>
Hoa Binh	Da River PF	17,490	1,000	2,130	18<4
	Ngoc Son – Ngo Luong SUF	6,090	90	520	7<4
	Hang Kia – Pa Co SUF	2,700	0	70	8
	Phu Canh SUF	3,300	150	550	4 <4
<b>Sub-total</b>		<b>29,580</b>	<b>1,240</b>	<b>3,270</b>	<b>34</b>
<b>Total</b>		<b>52,550</b>	<b>17,680</b>	<b>16,350</b>	<b>97</b>

Note: <1 The areas which are currently under PFES scheme but whose payment is rather lower are considered to be potential sites for protection of natural forest in response to the request from DARDs.

<2 ANR is to be applied to woodlots or areas categorized as 1c.

<3 Afforestation is to be applied to not only bare lands/grasslands but also bushes with an aim to restore vegetation cover smoothly and motivate local communities to take part in the project activities.

<4 Three (3) communes in Da River PF also relate to either Hang Kia-Pa Co NR or Phu Canh SUF, hence the total number of communes relating to the potential sites in Hoa Binh is 34.

Source: JICA Preparatory Survey Team (2016)

The location map of the potential target areas are shown in **Figure I-6-1 to I-6-5** attached to this report.

### 6.1.3 Forest Owners

The potential target sites are under the management of either PFMBs or SUFMBs (or SUFMBs), but the significant part of the areas are allocated to households, groups of households, and/or villages in the communes relating to the proposed areas. The ownership of forest land varies in the respective potential target sites as shown below.

Forest Owners in the Potential Target Sites in the Target Provinces		
Province	Proposed Areas	Forest Owners
Dien Bien	Dien Bien Protection Forest	<ul style="list-style-type: none"> <li>■ Dien Bien PFMB</li> <li>■ Villages and households of Na Tong, Muong Nha, and Phu Luong</li> </ul>
	Muong Cha Protection Forest	<ul style="list-style-type: none"> <li>■ Muong Cha PFMB</li> </ul>
	Tuan Giao Protection Forest	<ul style="list-style-type: none"> <li>■ Villages and households of Phinh Sang and Ta Ma</li> </ul>
	Muong Phang Special use forest	<ul style="list-style-type: none"> <li>■ Muong Phang SUFMB</li> <li>■ Villages and households of Pa Khoang and Muong Phang</li> </ul>
Lai Chau	Nam Na Protection Forest	<ul style="list-style-type: none"> <li>■ Nam Na PFMB</li> </ul>
	Nam Ma Protection Forest	<ul style="list-style-type: none"> <li>■ Nam Ma PFMB</li> </ul>
	Tan Uyen Protection Forest	<ul style="list-style-type: none"> <li>■ Tan Uyen PFMB</li> </ul>
	Than Uyen Protection Forest	<ul style="list-style-type: none"> <li>■ Than Uyen PFMB</li> </ul>
Son La	Copia Special use forest	<ul style="list-style-type: none"> <li>■ Copia SUFMB</li> </ul>
	Thuan Chau Protection Forest	<ul style="list-style-type: none"> <li>■ Thuan Chau PFMB</li> </ul>
	Quynh Nhai Protection Forest	<ul style="list-style-type: none"> <li>■ Villages and households of Ca Nang, Muong Chien, Pa Ma Pha Khinh, Muong Giang, and Muong Sai</li> </ul>
	Xuan Nha Special use forest	<ul style="list-style-type: none"> <li>■ Xuan Nha SUFMB</li> </ul>
Hoa Binh	Da River Protection Forest	<ul style="list-style-type: none"> <li>■ Da River Watershed PFMB</li> <li>■ Villages and households of Dong Nghe, Dong Chum, Don Ruong, Hien Luong, Muong Chieng, Muong Tuong, Suoi Nanh, Tien Son, Vay Nua, Yen Hoa, Ba Khan, Phuc San, Tan Dan, Tan Mai, Dong Bang, Trung Hoa, Ngoi Hoa, Thai Thinh, Thung Nai, and Binh Thanh</li> </ul>
	Ngoc Son – Ngo Luong Special use forest	<ul style="list-style-type: none"> <li>■ Villages and households of Ngoc Lau, Ngoc Son, Tan My, Tu Do, Ngo Luong, Nam Son, and Bac Son</li> </ul>
	Hang Kia – Pa Co Special use forest	<ul style="list-style-type: none"> <li>■ Hang Kia – Pa Co SUFMB</li> </ul>
	Phu Canh Special use forest	<ul style="list-style-type: none"> <li>■ Phu Canh SUFMB</li> </ul>

Source: JICA Preparatory Survey Team (2016)

### 6.1.4 Potential Communes

As shown in **Table I-6-3** attached to this report, a total of 97 communes relate to the potential target sites. The following table shows a list of communes relating to the potential target sites in the respective target provinces.

Communes relating to the Potential Target Sites		
Province	Proposed Areas	Communes
Dien Bien	Dien Bien Protection Forest	<ul style="list-style-type: none"> <li>■ Na Tong, Muong Nha, and Phu Luong (3 communes in Dien Bien)</li> </ul>
	Muong Cha Protection Forest	<ul style="list-style-type: none"> <li>■ Muong Tung (1 commune in Muong Cha)</li> </ul>
	Tuan Giao Protection Forest	<ul style="list-style-type: none"> <li>■ Phinh Sang and Ta Ma (2 communes in Tuan Giao)</li> </ul>
	Muong Phang Special use forest	<ul style="list-style-type: none"> <li>■ Pa Khoang and Muong Phang (2 communes in Dien Bien)</li> </ul>
Lai Chau	Nam Na Protection Forest	<ul style="list-style-type: none"> <li>■ Hong Thu, Lung Thang, Ma Quai, Nam Cha, Nam Cuoi, Nam Han, Nam Ma, Nam Tam, Noong Heo, Pa Khoa, Phang So Lin, Phin Ho, and Pu Sam Cap (13 communes in Sin Ho)</li> </ul>
	Nam Ma Protection Forest	<ul style="list-style-type: none"> <li>■ Chan Nua, Lang Mo, Pa Tan, Se De Phin, Ta Ngao, Ta Phin, T.T. Sin Ho, and Tua Sin Chai (8 communes in Sin Ho)</li> </ul>
	Tan Uyen Protection Forest	<ul style="list-style-type: none"> <li>■ Ho Mit, Muong Khoa, Nam Can, Nam So, Pac Ta, Phuc Khoa, Ta Mit, Trung Dong, and T.T. Tan Uyen (9 communes in Tan Uyen)</li> </ul>
	Than Uyen Protection Forest	<ul style="list-style-type: none"> <li>■ Phuc Than, Hua Na, Khoen On, Muong Kim, Muong Mit, Muong Than, Pha Mu, Ta Ga, Ta Hua, and Ta Mung (10 communes in Than Uyen)</li> </ul>
Son La	Copia Special use forest	<ul style="list-style-type: none"> <li>■ Chieng Bom, Co Ma, and Long He (3 communes in Thuan Chau)</li> </ul>
	Thuan Chau Protection Forest	<ul style="list-style-type: none"> <li>■ Bam Lam, Muong Bam, Nam Lau (3 communes in Thuan Chau)</li> </ul>
	Quynh Nhai Protection Forest	<ul style="list-style-type: none"> <li>■ Ca Nang, Muong Chien, Pa Ma Pha Khinh, Muong Giang, and</li> </ul>

Province	Proposed Areas	Communes
	Xuan Nha Special use forest	Muong Sai (5 communes in Quynh Nhai) ■ Chien Xuan, Tan Xuan, and Xuan Nha (3 commune in Van Ho) ■ Chieng Son (1 commune in Moc Chau)
Hoa Binh	Da River Protection Forest	■ Dong Nghe, Dong Chum, Dong Ruong, Murong Chieng, Muong Tuong, Suoi Nanh, Tien Phong, Vay Nua, and Yen Hoa, (9 communes in Da Bac) ■ Ba Khan, Tan Dan, Tan Mai, Dong Bang, and Phuc San (5 communes in Mai Chau) ■ Trung Hoa and Ngoi Hoa (2 communes in Tan Lac) ■ Thung Nai and Binh Thanh (2 communes in Cao Phong)
	Ngoc Son – Ngo Luong Special use forest	Ngoc Lau, Ngoc Son, Tan My, and Tu Do (4 communes in Lac Son) Tgo Luong, Nam Son, and Bac Son (3 communes in Tan Lac)
	Hang Kia – Pa Co Special use forest	Hang Kia, Pa Co, Tan Son, Bao La, Chu Pheo, Na Meo, Dong Bang, and Pieng Ve (8 communes in Mai Chau)
	Phu Canh Special use forest	Dong Chum, Tan Pheo, Dong Ruon, and Doan Ket (4 communes in Da Bac)

Source: JICA Preparatory Survey Team (2016)

## 6.2 Study on the Proposed Project Components

### 6.2.1 Project Components proposed by MARD

The following project components are enumerated in the project proposal prepared/submitted by MBFPs of MARD.

#### Outline of the Proposed Project Components

Component	Major Activities
Forest inventory and planning	<ul style="list-style-type: none"> <li>◆ Forest inventory and update of maps of forest lands covering the target sites</li> <li>◆ Set-ups of land marks in forest boundaries</li> <li>◆ Participatory land use planning</li> <li>◆ Detailed design for forest development and infrastructure</li> </ul>
Training and extension	<ul style="list-style-type: none"> <li>◆ Information dissemination</li> <li>◆ Socio-economic baseline survey</li> <li>◆ Support for consolidation and forest land allocation</li> <li>◆ Capacity building of forest owners and local people.</li> </ul>
Improvement of watershed forests	<ul style="list-style-type: none"> <li>◆ Afforestation in bare lands</li> <li>◆ Protection of natural forests</li> <li>◆ Assisted natural regeneration with/without enrichment planting</li> </ul>
Construction of silvicultural infrastructure	<ul style="list-style-type: none"> <li>◆ Construction of forest watch towers, nurseries, access roads, fire break lines, and forest guard stations</li> </ul>
Construction of small-scale infrastructure	<ul style="list-style-type: none"> <li>◆ Construction of village roads, small-scale irrigation systems, and/or water supply systems</li> </ul>
Forest fire control	<ul style="list-style-type: none"> <li>◆ Procurement of forest fire control equipment</li> <li>◆ Conduct of forest fire control training and drills</li> </ul>
Livelihood improvement	<ul style="list-style-type: none"> <li>◆ Support for livelihood improvement activities</li> </ul>
Project management	<ul style="list-style-type: none"> <li>◆ Strengthening of market chains</li> <li>◆ Project administration and monitoring</li> <li>◆ Preparation of regulations and manuals</li> </ul>
Technical assistance	<ul style="list-style-type: none"> <li>◆ Assistance to CPMB/PPMBs in i) implementing the project and ii) fulfilling the requirements of REDD+</li> </ul>

Source: Outline of ODA Investment Project (Sustainable Forest Development Project in the Northwest Sub-region) (2015)  
adapted by the preparatory survey team

### 6.2.2 Basic Approaches to the Study on the Project Components

The preparatory survey team examined the project components proposed by MARD in terms of efficiency, effectiveness for REDD+, consistency with relevant policies, practicability of the components/activities under the current circumstances, and sustainability of the project effects. In the examination, the team reviewed data and information collected in the field survey, analyzed the relevant overall policies and lessons learned from the past and on-going

forestry projects, and referred the ideas and opinions given by DARDs in the target provinces. The following basic approaches are employed to the examination and study on the project components.

- ◆ The project components should be based on those proposed by MARD.
- ◆ The project components should be in line with the policies, decrees, and overall plans relevant to the project.
- ◆ The project components may be reformulated in consideration of logical framework, efficiency, and effectiveness of the project activities.
- ◆ The scope of the project components should be as realistic/practical as possible, taking into account the capacities of stakeholders as well as foreseeable difficulties in the field.
- ◆ The experiences and lessons learned from the past and on-going forestry projects similar to the proposed project, such as SPL-III, JICA 2, KfW7, and SUSFORM-NOW, should be used and referred.
- ◆ Due consideration should be given to safeguard aspects as the majority of the potential target sites are already allocated to households/villages or customarily used by local people.

### 6.2.3 Results of the Study on the Project Components

The results of the assessment of the project components are shown in **Table I-6-4** attached to this report, and summarized below.

Summary of the Results of the Study on the Project Components	
Components	Key Points
Forest Inventory	<ul style="list-style-type: none"> <li>◆ It is necessary to identify and demarcate the target sites for forest development/improvement activities in a participatory manner especially in the areas where forest owners are households/groups of communities/villages or land allocation has yet to be completed.</li> <li>◆ Hence, the process of the planning and designing of forest development activities in the areas owned by households/communities should differ from the same in the areas owned by the management board.</li> <li>◆ Participatory land use planning will be the essential step to identify and determine the target sites for forest development/improvement activities. The results of the land use planning should also be used for determination of livelihood development options.</li> </ul>
Training and extension	<ul style="list-style-type: none"> <li>◆ Prior consent to the project activities must be taken from forest owners (villages/communes) and/or de facto land users of the potential target sites.</li> <li>◆ Enhancement of the capacity of key players is essential for implementation of the respective project components.</li> <li>◆ There is a need to introduce a collaborative management system with a benefit sharing mechanism, especially in SUFs where no PFES payment is expected, so that the target sites could be protected in collaboration with local communities. DARDs, SubDFPs, and MBs concerned should be fully guided and given necessary tools and guidelines for them to properly collaborate with communities.</li> <li>◆ In principle, provision of training in management of the project should be covered by the counterpart fund in accordance with the new decree on management and use of ODA and concessional loans granted by foreign sponsors (Decision No. 16/2016/ND-CP dated March 16, 2016).</li> </ul>
Improvement of watershed forest	<ul style="list-style-type: none"> <li>◆ It may not be easy to convert the areas currently categorized as “bare lands” into forests, as the majority of them are used or have been used for farming purposes. Hence, it is likely unrealistic to use all the available bare lands for afforestation in the proposed areas in the target provinces except Lai Chau, where land use conflict seems to be rather less likely to happen.</li> <li>◆ Support for regeneration of degraded forests and protection of natural forests are considered</li> </ul>

Components	Key Points
	essential for sustainable forest management in the field. Furthermore, such activities are judged as “low risk ones” from the safeguard point of view. ◆ The unit costs for forest development and improvement activities should be reviewed and revised.
Construction of silvicultural infrastructure	◆ There is a need to strengthen the existing silvicultural infrastructure of the target sites for effective operations and management.
Construction of small scale rural infrastructure	◆ All communes in the districts have high needs of small scale rural infrastructure development, such as i) rehabilitation/construction of rural roads, ii) rehabilitation/construction of small scale irrigation system, and iii) rehabilitation/installation of water supply system.
Forest Fire Control	◆ As forest fire is one of the main drivers of forest degradation in the target provinces, it is essential to strengthen the capacity for forest fire control at the local level. ◆ The component should put its focus on the capacity at the commune/grass-root level since the community-based approach is effective in forest fire control and in line with the government strategies.
Livelihood development	◆ Support for livelihood improvement is requisite for sustainable forest management in the target provinces as the main drivers of forest degradation are likely linked to socio economic conditions of local communities. ◆ It is also important to develop a benefit sharing mechanism synchronized with effective livelihood support in SUFs/PFs, especially where the PFES payment is expected to be limited.
Project Management	◆ The establishment of DPMUs should be carefully deliberated as some DARDs pointed out that the establishment of DPMUs would cause additional financial burden for the provincial government. One of the difficulties observed in KfW 7 was also the allocation of the counterpart funds for operations of PPMUs and DPMUs. ◆ It is essential to arrange training courses and workshops for the project officers to implement the project in an efficient and effective manner based on the lessons learned from JICA 2.
Consulting services	◆ Roles, responsibilities, and scope of the consulting services should be defined and clarified through reviews of those for JICA 2, their performance, and lessons learned from their activities.
Project Cost	◆ Cost and work norms for forest development, silviculture infrastructure development, and small scale infrastructure development should be reviewed and formulated in consideration of the geographical constraints, latest labor cost, and recent inflation rate.

Source: JICA Preparatory Survey Team (2016)

Furthermore, the preparatory survey team examines the recommendable scopes of the respective components/activities as shown below.

#### Activities recommended in the Project Components

Component	Recommendable Activities	Remarks
Survey and detailed planning (originally named “Forest Inventory”)	<ul style="list-style-type: none"> <li>◆ The component should include the following activities: <ul style="list-style-type: none"> <li>✓ Procurement of high resolution satellite images covering the target sites</li> <li>✓ Participatory land use planning and determination of target sites for the forest development/improvement activities as well as small scale rural infrastructure development</li> <li>✓ Group formation of local communities who hold land use certificates of the target sites and are willing to participate in the project through a series of consultations and meetings with local communities</li> <li>✓ Development of rules on the use of the areas allocated to households and communities</li> <li>✓ Perimeter surveys with set-ups of land marks</li> <li>✓ Ground surveys of the proposed areas for small scale rural development infrastructure</li> <li>✓ Detailed designing of forest development and small scale infrastructure development</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>◆ The latest NFI&amp;S can be used as the bases for the survey and designing of the project areas instead of an additional forest inventory survey.</li> <li>◆ Group formation of land use certificate holders is proposed as a part of the entry activities to determine the target sites for the project in the areas allocated to households/villages.</li> <li>◆ This activity aims to identify a certain size of consolidated area (as one block) which can be used for forestry development (e.g., afforestation) to minimize the transaction costs for planning,</li> </ul>

Component	Recommendable Activities	Remarks
Extension and Information Dissemination	<ul style="list-style-type: none"> <li>◆ The component should be renamed from “Training and Extension” to “Extension and Information Dissemination” which should consists of the following activities: <ul style="list-style-type: none"> <li>✓ Information dissemination</li> <li>✓ Socio-economic baseline survey</li> <li>✓ Training needs assessment of key players</li> <li>✓ Coordination with JICA-TC (SNRMP) or JICA2 Project to arrange study tours for key players</li> <li>✓ Introduction of project guidelines and manuals developed by the CPMU with technical assistance from the consultant</li> </ul> </li> <li>◆ It, however, might be difficult to be considered as a component eligible to be financed by ODA loan. In case that this component can not be considered as an eligible component, it should be incorporated into the project management component.</li> </ul>	<p>management, and monitoring of the forest development activities in such areas.</p> <ul style="list-style-type: none"> <li>◆ As ODA loan should not be used for training of the project officers, the component should focus on public awareness among local communities.</li> <li>◆ It is important to effectively use the expertise as well as experiences of JICA TA (SNRMP) and JICA 2.</li> <li>◆ Day-to-day coaching by CPMU with technical consultants should be combined with the respective components so that key stakeholders could learn to implement, operate, and manage the project activities through on-the-job training (OJT).</li> </ul>
Improvement of watershed forests	<ul style="list-style-type: none"> <li>◆ The major activities to be carried out in the component are as follows. <ul style="list-style-type: none"> <li>✓ Afforestation in bare lands and bushes in 3 types of forest</li> <li>✓ Protection of natural forests in protection and special use forests</li> <li>✓ Assisted natural regeneration without enrichment in degraded forests in protection and special use forests</li> </ul> </li> <li>◆ The initial assessment of the potential target sites for the respective activities are: <ul style="list-style-type: none"> <li>✓ Afforestation: 16,350 ha</li> <li>✓ Protection of natural forests: 52,550 ha</li> <li>✓ ANR: 17,680 ha</li> <li>✓ Potential targets of the forest development activities in the respective proposed areas in the target provinces are shown in <b>Table I-6-3</b> attached to this report.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>◆ Design of afforestation in bare land should be different from that in bushes.</li> <li>◆ Afforestation in production forest should be considered as a model for production of value-added timbers. Hence it should be combined with the assistance in prolonging a harvesting period in the areas allocated to the management board in Hoa Binh.</li> </ul>
Construction of silvicultural infrastructure	<ul style="list-style-type: none"> <li>◆ Ground surveys and designing of silviculture infrastructure should be conducted.</li> <li>◆ The proposed silviculture infrastructure and the estimated volume of works are as follows: <ul style="list-style-type: none"> <li>● - Forest roads: 173 km</li> <li>● - Foot paths: 9 km</li> <li>● - Forest fire watch tower: 27 units</li> <li>● - Forest management offices: 7 units</li> <li>● - Forest guard stations: 32 units</li> <li>● - Nurseries: 11 units</li> <li>● - Information boards: 41 units</li> <li>● - Fire breaklines: 215 km</li> <li>● More details of needs for improvement of silvicultural infrastructure in the respective proposed areas in the target provinces are shown in <b>Table I-6-5</b> attached to this report.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>◆ Due consideration should be given to soil and slope protection when forest roads are designed, rehabilitated, and/or constructed.</li> <li>●</li> </ul>
Construction of small-scale infrastructure	<ul style="list-style-type: none"> <li>◆ Construction of small scale rural infrastructure development according to the detail designs of the same.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Likewise, due consideration should be given to slope and soil protection as well as other environmental aspects when rural roads are designed,</li> </ul>



Component	Recommendable Activities	Remarks
Forest fire control	<ul style="list-style-type: none"> <li>◆ Procurement of forest fire equipment, which will be placed at CPCs concerned.</li> <li>◆ Arrangement and conduct of forest fire fighting drills for local communities as well as forest rangers</li> </ul>	<ul style="list-style-type: none"> <li>◆ The government has formed a forest fire fighting group at the village level; therefore, communes are considered as front-lines for controlling forest fires.</li> </ul>
Livelihood improvement	<ul style="list-style-type: none"> <li>◆ Provision of a series of hands-on training courses on priority income generating activities selected by local communities</li> <li>◆ Provision of tools and materials so that local communities can conduct the priority income generating activities by replicating the techniques that they learn through the training courses without difficulties.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Identification of the priority income generating activities and formation of income generating groups can be based on the results of the activities under Forest Inventory and Planning, especially Participatory Land Use Planning and Group Formation.</li> </ul>

Source: JICA Preparatory Survey Team (2016)

### 6.3 Study in Institutional Arrangement for Project Implementation

#### 6.3.1 Review of Institutional Arrangements made for Implementation of Similar Forestry Projects

In order to examine the institutional arrangement for implementation of the proposed project, the preparatory survey team reviewed and studied the institutional set-ups of the following forestry projects.

- ◆ SPL III Afforestation Project
- ◆ Forest Sector Development Project (WB)
- ◆ KfW 7
- ◆ JICA 2 Project

The results of the reviews are summarized below.

#### Reviews of the Institutional Arrangement for Implementation of the Past and Ongoing Forestry Projects

##### a. SPL-III Afforestation Project

Organizational set-ups	Outline
Executing agency (Project Owner)	MARD
Implementing Agency at the National Level	<ul style="list-style-type: none"> <li>- The Central Project Management Unit (CPMU) was established under MBFPs as a standing body to implement the project-related tasks assigned by MARD. The major tasks of CPMU were:               <ol style="list-style-type: none"> <li>To manage and coordinate the project implementation under MARD's instruction;</li> <li>To guide the Provincial Project Management Units (PPMUs) to develop the project plans;</li> <li>To compile annual plans of provincial projects for the submission to MARD for approval;</li> <li>To issue instructions on project management and of standard forms to PPMUs;</li> <li>To supervise technical and financial aspects of the provincial projects;</li> <li>To compile periodical reports to be submitted to JBIC, MPI, MoF and MARD; and</li> <li>To check and consolidate the payment proposals from the provinces.</li> </ol> </li> </ul>

Organizational set-ups	Outline
	<pre> graph TD     subgraph MARD_Box [MARD]         Depts[Depts.] -.- MBFPs[MBFPs]         CPMU[CPMU]     end     MPI[MPI]     MoF[MoF]     JBIC[JBIC]     subgraph PPC_Box [PPC]         OtherAg[Other Agencies] -.- DARD[DARD]         PPMU[PPMU]     end     DPC_CPC[DPC/CPC]     C1[Contractors]     C2[Contractors]     C3[Contractors]      MARD_Box --- PPC_Box     MARD_Box --- MPI     MARD_Box --- MoF     MARD_Box --- JBIC     PPC_Box --- DPC_CPC     PPMU --- C1     PPMU --- C2     PPMU --- C3 </pre>
Implementing Agency at the Provincial Level	<p><b>Institutional framework of the Project under SPL-III Afforestation Project</b></p> <ul style="list-style-type: none"> <li>- PPC was the investment owner of the provincial project and responsible for the overall implementation. The tasks given to PPC were:             <ol style="list-style-type: none"> <li>To decide on the project organization and implementation mechanism in line with the regulations of MARD;</li> <li>To approve the project plan, total cost estimation and relevant investment procedures;</li> <li>To arrange sufficient amount of counterpart fund for project activities in the province;</li> <li>To approve the annual operational and financial plan of the provincial project;</li> <li>To use the project budget in accordance with the approved plans; and</li> <li>To check and evaluate the performance of PPMU.</li> </ol> </li> <li>- The Provincial Project Management Unit (PPMU) established under Department of Agriculture and Rural Development (DARD) by the decision of Chairman of PPC was a representative of the investment owner (PPC). PPMU had the following tasks:             <ol style="list-style-type: none"> <li>To prepare annual operational and financial plan of the provincial project and its submission to PPC and CPMU for approval;</li> <li>To implement the provincial project in accordance with the approved plan and target as well as the implementing procedures of the prevailing regulations;</li> <li>To implement all decisions related to the project;</li> <li>To instruct the contractors on the procedures of management;</li> <li>To sign contracts with winning contractors;</li> <li>To supervise and check the quality of project outputs and certify the payment proposals by the contractors;</li> <li>To prepare and submit reports and documents on project performance as required by authorities concerned;</li> <li>To carry out liquidation as required by prevailing State regulations; and</li> <li>To cooperate and coordinate with CPMU on annual audit of project performance and inspection of the project by CPMU staff, the Consultant and other higher authorities.</li> </ol> </li> </ul>

Source: Completion Report on the Consultant Services for SPL-III Afforestation Project (2008)

#### b. Forest Sector Development Project (WB)

Organizational set-ups	Outline
Executing agency	MARD
Implementing Agency at the National Level	<ul style="list-style-type: none"> <li>- The Project Steering Committee (PSC) was organized under the 5MHRP Steering Committee to provide direction and guidance, and ensure coordination among and between agencies.</li> <li>- The Central Project Coordination Unit (CPCU) is responsible for overall coordination between central government agencies/units and between central government and provincial ones.</li> </ul>
Implementing Agency at the Provincial Levels	<ul style="list-style-type: none"> <li>- The Provincial Project Management Units (PPMUs) established at the four target provinces have the direct responsibility for field implementation of the project.</li> </ul>
Implementing Agency at the District and Commune Levels	<ul style="list-style-type: none"> <li>- The District Implementation Units (DIUs) and Commune Working Groups were established at 21 districts and 120 communes, respectively. They have been directly involved in delivery of services and implementation of the project activities.</li> </ul>

Source: Appraisal Report on Forest Sector Development Project (2004)

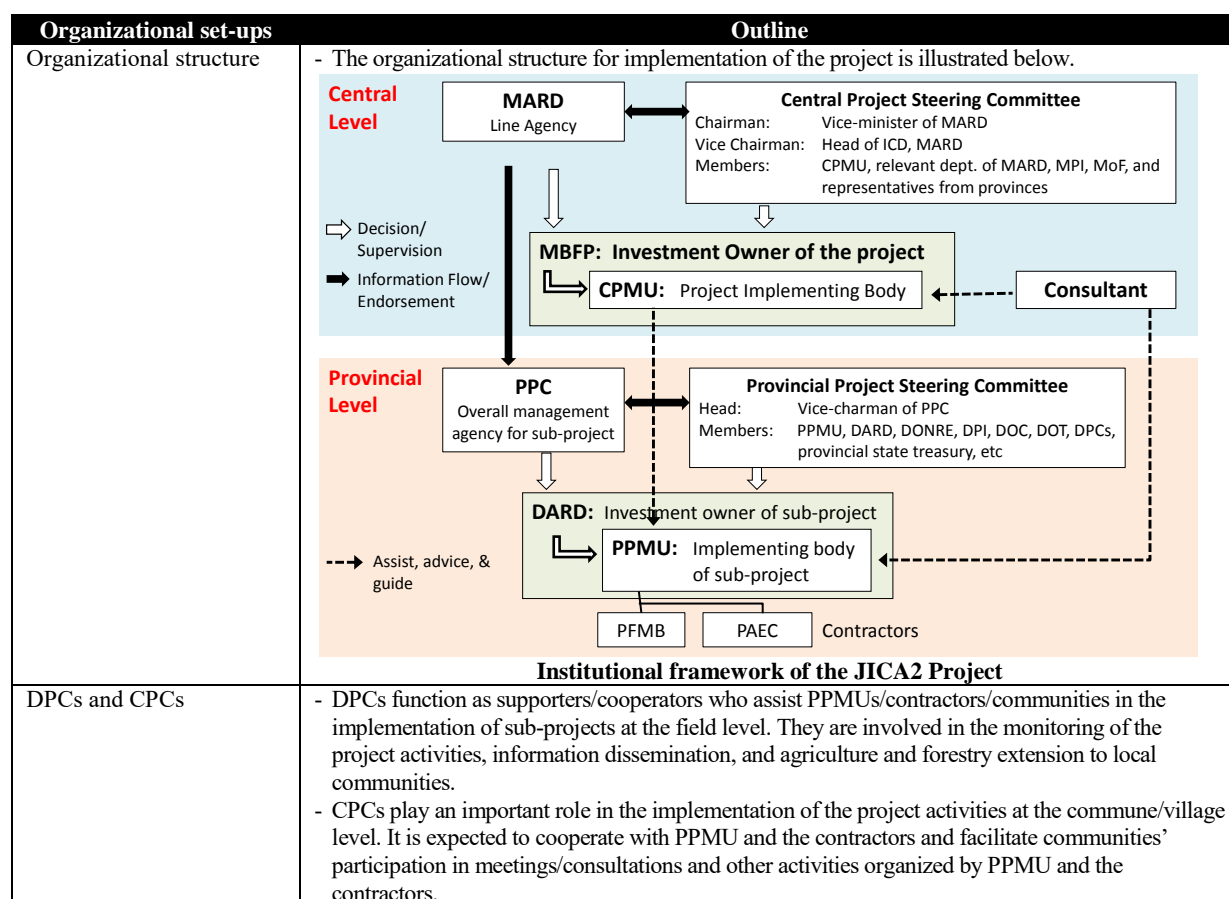
**c. KfW 7: Afforestation Project**

Organizational set-ups	Outline
Executing agency	MARD/MBFP
Implementing Agency at the National Level	<ul style="list-style-type: none"> <li>- The National Project Steering Committee (NPSC), chaired by the Vice Minister of MARD or Director General of FD, was established with participation of the line departments of MARD and other ministries concerned.</li> <li>- The National Project Management Board (NPMB) was also established under MBFP. The main tasks of NPMB were to i) develop technical, financial and management guidelines, ii) manage project funds, iii) coordinate with relevant organizations for implementation, iv) procure facilities and equipment, v) develop/plan training programs, and vi) establish and implement the monitoring system.</li> </ul>
Implementing Agency at the Provincial Levels	<ul style="list-style-type: none"> <li>- The same organizational set-up was also applied to the provincial level structure. The Provincial Project Steering Committee (PPSC) chaired by Vice Chairman of PPC was organized for overall management of the project.</li> <li>- The Provincial Project Management Unit (PPMU) headed by Vice Director of DARD was established. PPMU was responsible for operational and financial planning, accounting, preparation of technical, financial and management guidelines, monitoring of district activities, organization of training courses, and reporting of project progress to NPMU.</li> </ul>
Implementing Agency at the District Level	<ul style="list-style-type: none"> <li>- The District Project Management Unit (DPMU) headed by Vice Chairman of DPC was established at district level. The main tasks of DPMU were to i) develop annual operational plans, ii) appraise results of land use planning and forest development planning and iii) supervise forest development / management activities.</li> </ul>
Implementing Agency at the Commune Level	<ul style="list-style-type: none"> <li>- The project coordinated with Chairman or Vice Chairman of CPCs, the commune forest staff and extension staff, village chiefs, and heads of village support groups.</li> <li>- The field staff assigned to the project communes at one staff per commune or one staff per 150-200 ha was the focal point of the project with local communities. Its tasks and responsibilities included, but not limited to, the following: i) briefing on the project, ii) organization of farmers, iii) guidance and coordination with local households, and iv) transfer technologies.</li> <li>- The Village Support Groups were formed to develop a link between field staff and commune extension staff and small households. VSG functioned as a management body for forest development and management activities in the village.</li> </ul>

Source: Feasibility Study on Forest Development in Hoa Binh and Son La provinces (2006)

**d. JICA 2 Project**

Organizational set-ups	Outline
Line agency Project owner	MARD MBFPs
Project management unit at the central level	<ul style="list-style-type: none"> <li>- The central project management unit was established as a unit responsible for management and implementation of the project at the central level. Its tasks are to:               <ol style="list-style-type: none"> <li>Prepare and develop overall and detailed annual plans of the entire project;</li> <li>Manage the entire project;</li> <li>Provide technical guidance and orientation to PPMUs and DARDs;</li> <li>Manage the project budget as well as assets.</li> <li>Coordinate with relevant agencies (e.g., MoF and MPI) and JICA; and</li> <li>Monitor, evaluate and report the project implementation.</li> </ol> </li> </ul>
Project management unit at the provincial level	<ul style="list-style-type: none"> <li>- PPCs concerned are project investment owners of sub-projects concerned with the respective provinces and have responsibilities for overall management of sub-projects at the provincial level, approval of investment plans of sub-projects, arrangement of lands and counterpart fund for implementation of the sub-project. Under the PPCs, the provincial project management units (PPMUs) were also established to assist PPCs in the operations and management of sub-projects. PPMUs have the following tasks:               <ol style="list-style-type: none"> <li>To manage and implement project activities in accordance with relevant plans and regulations;</li> <li>To formulate annual operation plans of sub-projects according to the guidance of MBFPs;</li> <li>To obtain approval on annual operation plans from the Provincial Steering Committee and PPC;</li> <li>To formulate annual and quarterly budget estimation for PPC approval;</li> <li>To sign contracts with competent contractors of sub-projects;</li> <li>To instruct and monitor contractors so that the contracted works are implemented effectively and properly;</li> <li>To check and monitor the results of project activities;</li> <li>To prepare and submit reports on accomplishments made through sub-project implementation;</li> <li>To coordinate with CPMU, relevant agencies, and the consultant for preparation and implementation of sub-projects.</li> </ol> </li> </ul>



Source: *Inception Report on the Consulting Services for Protection Forest Restoration and Sustainable Management Project (May 2014)*

Based on the reviews of the institutional arrangements for the past and on-going forest projects, the preparatory survey team judged that the following points should be taken into account in the examination of the organizational set-up for the proposed project.

- The establishment of steering committees is commonly found in the structures except for SPL-III. As pointed out in the lessons learned from SPL-III, it is apparently effective in facilitation of inter-ministerial or sectoral coordination and arrangement at both central and provincial levels.
- Forest Sector Development Project (WB) and KfW 7 Project established the management units at the district level, while SPL-III and JICA 2 just established the project management units at the provincial level. As the former projects targeted production forests allocated to individual households for afforestation with financial assistance (subsidies) from the projects, it was necessary to establish the project management units at the district level to closely monitor and manage the project activities. However, SPL-III and JICA 2 have hired the public institutions (e.g., forest management boards) as contractors for forest development activities, therefore, such an arrangement was not necessarily required.
- Likewise, Forest Sector Development Project (WB) and KfW 7 Project also developed commune level working group or allocated field officers to contribute to the smooth implementation of the projects. Formation of community groups at the village level for forest development and/or income generating activities should be

considered in the examination of the organizational set-up of the proposed project in addition to the involvement of DPCs and CPCs in the implementation of the project activities.

### **6.3.2 Review of the Government Regulations on ODA Management**

The following government regulations were also reviewed to grasp the principles on the management of the projects funded by ODA.

- ◆ Decree on Management and Utilization of Official Development Assistance (ODA) and Concessional Loans from Donors (No. 38/2013/ND-CP on April 23, 2013)
- ◆ Decree on Management and Utilization of Official Development Assistance (ODA) and Concessional Loans granted by Foreign Sponsors (No. 16/2016/ND-CP on March 16, 2016)

In fact, the former decree was replaced by the latter in March 2016. Hence, the emphasis of the review was put on the latter decree. Some findings are highlighted below.

- a. The proposed project can be regarded as an eligible project as it can contribute to socio-economic, environmental, and sustainable development, which is one of the criteria for selection of projects/programs funded by ODA or concessional loan.
- b. The proposed project will be categorized as a “joint program/project” implemented in coordination with other governing bodies that participate in the management, execution, operation of component projects of the joint program/project.
- c. Hence, MARD will be called “the governing body of the joint project”, while PPCs concerned will be called “the governing bodies of the component projects”.
- d. Likewise, MBFPs will be “the project owner of the joint project”, while DARDs will be the same of the component projects.
- e. The governing bodies, or MARD and PPCs, shall issue decisions on the establishment of the specialized project management board at the respective levels. At the same time, they shall decide the organizational structure for the implementation and management of the project including the steering committee.
- f. Project management boards shall be established at the respective levels to assist the project owners in managing and implementing the joint project and component projects in the respective provinces. Hence, the Central Project Management Board (CPMB) and the Provincial Project Management Board (PPMB) will be set up at both the central and provincial levels for implementation, operation, and management of the project in the beginning of the project.

Overall, the project structure for the proposed project can be similar to that of JICA 2, although the names of the organizations in the structure need to be changed and adjusted with the new decree.

### **6.3.3 Initial Examination of Institutional Set-up for Implementation of the Proposed Project**

The preparatory survey team examined the possible institutional set-up for implementation of the proposed project putting the emphasis on the following points:

- a. Applicability of the structure used for JICA 2;
- b. Necessity of the establishment of steering committee at the central and provincial levels;
- c. Possibility/necessity of the establishment of the project management units at the district level; and
- d. Necessity of development of an enabling mechanism for facilitation of community participation in the project activities, especially those who currently hold land use certificates over the target sites for forest development activities.

The results of the initial examination are summarized below.

- a. As the proposed project is to be considered as an umbrella project managed by the project owners at the central and provincial levels, the organizational structure should be composed of at least two layers: central and provincial levels.
- b. As described in lessons learned from the SPL-III and JICA 2 project, the establishment of steering committees at both the central and provincial levels has been proven effective in smooth operations of the project, as the committees could function as a platform where the different departments/sub-departments relevant to the project could cope with inter-sectoral issues in a collaborative manner. It is, therefore, important to introduce the steering committees at the central and provincial levels in the organizational structures for the proposed project.
- c. The establishment of the project management units at the district level is expected to help the PPMUs operate, manage, and monitor the project activities at the commune/village level, especially those carried out in the areas allocated to households/groups of communities. However, it is judged that the district project management unit (DPMU) is not necessarily required for implementation of the proposed project because of the following reasons:
  - All the target areas are currently under the management of the forest management boards (either PFMBs or SUFMBs) and the management boards could be hired as contractors for the project activities;
  - The management boards could fulfill the roles that the DPMUs are supposed to play; and
  - The forest management boards are considered as appropriate public institutions to coordinate/collaborate with local communities who own and use the areas assigned to the forest management boards.
- d. The establishment of commune or village working groups should be taken into account for implementation of the forest development and improvement activities especially in the areas allocated to households/groups of villagers, such as Da River Protection Forests in Hoa Binh where the lands have already been segmentalized into small pieces, since internal coordination among communities is requisite to the efficient and effective implementation of the forest development activities on the ground.

### 6.3.4 Capacity of the Government Agencies as Service Providers for the Proposed Project

In Vietnam, many government agencies and institutions have been involved in a number of forestry, agriculture and rural development projects funded by ODA and the state budget as contractors/service providers for several project activities, such as socio-economic survey, training and seminars, agriculture and forestry extension services, ground surveys, detailed designing, and forestry and agriculture development. In fact, the government agencies have played important roles in the conducts of the project activities in SPL-III and JICA 2, namely, detailed designing of forestry development and small scale rural infrastructure, socio economic surveys, forestry development activities, and extension services for livelihood development.

This is because the number of competent and capable private firms in the agriculture and forestry sector is limited. There are some NGOs capable and reliable to do some surveys and extension activities, but they are few and rather small in size to handle large scale project activities. It is also speculated that it would be difficult for private firms/NGOs to work in remote and mountainous areas at the same rates/fees that the government agencies/institutions offer.

Consequently, a significant part of the project activities will be contracted out to such government agencies/institutions in consideration of their capabilities, experiences, financial reliability, and efficiency in operation and management of the forestry development activities. The following table shows the outline of the key agencies and organizations to be involved in the implementation of the proposed project.

**Outline of the Key Government Agencies/Organizations**

<b>Government agencies</b>	<b>Functions and Experiences</b>
NAEC (National Agriculture Extension Center)	NAEC was established in May 2008 (as National Agriculture and Fisheries Extension Center/NAFEC) by merging National Agriculture Extension Center under MARD and National Fishery Extension Center under the former Ministry of Fishery. It is a non-profit organization under MARD. The Center has played a leading role in technical transfer of agriculture, forestry, animal husbandry and fishery sectors over years. Main tasks of the center are (i) development of policies, plans and technical materials, (ii) capacity building of field extension workers, (iii) implementation of key extension activities, (iv) provision of guidance for organizations and agencies regarding extension and training activities, and (v) provision of extension services under the contracts with domestic and foreign organizations. NAEC is the largest extension service organization in the country which hold a number of experts in a wide range of technical fields relating to agriculture, forestry and fisheries development.
PAEC (Provincial Agriculture Extension Center)	PAEC is an agency under DARD and responsible for planning and implementing agriculture, forestry and fishery extension activities including provision of training and guidance to extension staff at the district and commune levels. PAFEC has field extension officers as well as experts who can function as subject matter specialists.
FIPI (Forest Inventory and Planning Institute)	FIPI is an institution under MARD and specialized for forest inventory and planning works aiming at supporting forest management and development in the country. FIPI has carried out the national forest inventory every five years since 1990 by analyzing satellite images for forest classification along with ground truth surveys. FIPI has six (6) sub-offices spread throughout Vietnam's six eco-regions and 4 research centers with the total staff of more than 700, which consists of more than 40 post-graduate staff (10 PhD and 30 MSc holders), 264 BSc holders, and 415 technicians and technical workers.
PFMB (Protection Forest Management Board) and SUFMB (Special Use Forest Management Board)	PFMB and SUFMB are agencies under PPC and responsible for protection and management of protection forests or special use forests (e.g., nature reserve and national park). Since PFMBs and SUFMBs were used to be the state forest enterprises (SFE) in the past, their staff, especially that of PFMBs, have generally knowledge and experience of forest development and management. Nevertheless, the capacity and experience of SUFMBs is rather limited as compared to those of PFMBs since SUFMBs have been rarely involved in the forestry development programs, such as 661 program, due to constraints on forestry activities in special use forests.

Source: JICA Preparatory Survey Team (2016)

## ***Tables***



**Table I-1-1 Scope of Work of the Preparatory Survey**

Work Items	Tasks
1) Examination of necessity, relevance, and background of the proposed project	<ul style="list-style-type: none"> <li>a. Review and analyze policies and development plans relevant to the project;</li> <li>b. Review and analyze current situations and major issues of the forest sector in Vietnam;</li> <li>c. Extract good practices gained and lessons learnt from the past projects related to the project, especially “Rural Infrastructure Development and Living Standard Improvement Project III,” “Protection Forests Restoration and Sustainable Management Project,” and “Sustainable Forest Management in the Northwest Watershed Area;”</li> <li>d. Examine the necessity and relevance of the project by analyzing the results of the reviews; and</li> <li>e. Evaluate the project effects made by the past afforestation project implemented in the Quang Ngai Province under the Japan grant aid scheme.</li> </ul>
2) Review of the target four (4) provinces, determination of criteria for selection of the target areas, and selection of target areas	<ul style="list-style-type: none"> <li>a. Review of the current natural and socio-economic conditions of the target four (4) provinces;</li> <li>b. Propose and determine criteria for selection of target sites by reviewing the national guidelines on development of PRAP, the existing PRAP of Dien Bien Province, the project proposal developed by MARD, and the results of socio-economic surveys conducted by SNRMP as well as the preparatory survey;</li> <li>c. Carry out a socio-economic survey in sampled communes concerned with the potential target sites to further dig into drivers of forest degradation; and</li> <li>d. Selection of the target sites by using the selection criteria.</li> </ul>
3) Examination of the scope of the project	<ul style="list-style-type: none"> <li>a. Identify and propose project components;</li> <li>b. Examine standard specifications and designs of proposed small-scale rural and silvicultural infrastructure;</li> <li>c. Assess capacities of relevant organizations and institutions to implement the project;</li> <li>d. Examine and study appropriate methods and procedures for implementation of the project;</li> <li>e. Confirm and review necessary permits/approvals (e.g., approval of the project implementation and EIA) to be obtained prior to the project implementation along with the processes of and procedures for obtaining the permits/approvals including responsible organizations as well as timeframes; and</li> <li>f. Examine and study the scopes and sizes of project components in the respective target provinces.</li> </ul>
4) Examination of consulting services and construction and procurement methods	<ul style="list-style-type: none"> <li>a. Identify and propose necessary consulting services along with draft terms of reference; and</li> <li>b. Examine and propose construction and procurement methods of the project components.</li> </ul>
5) Examination of institutional arrangements for implementation, operation, and maintenance of the project	<ul style="list-style-type: none"> <li>a. Propose a project implementation schedule;</li> <li>b. Examine and propose an institutional framework for the project implementation based on the review of the existing organizational and institutional set-ups developed for the existing projects similar in nature to the project; and</li> <li>c. Examine and propose a/an system and institutional set-up for operation and maintenance (O&amp;M) including a training plan for organizations responsible for O&amp;M.</li> </ul>
6) Review of environmental and social consideration	<ul style="list-style-type: none"> <li>a. Confirm and assess the present environmental and social conditions (e.g., land use, natural environment, socio-economic conditions of minority groups, etc.) of the potential target sites;</li> <li>b. Review the existing policies, laws, regulations, and systems relevant to environmental and social consideration along with i) compatibility or discrepancy with the JICA’s guidelines and ii) roles/responsibilities of the relevant organizations;</li> </ul>

Work Items	Tasks
	<ul style="list-style-type: none"> <li>c. Assess possible environmental impacts by reviewing the draft scopes and sizes of the respective project components, locations of the target sites, activities associated with the components, existence of protected areas and important forests/habitats, existence of indigenous people, etc.;</li> <li>d. Conduct environmental screening and scoping;</li> <li>e. Assess potential environmental and social impacts and examine alternatives including a zero option;</li> <li>f. Examine and propose appropriate mitigation measures against the potential adverse environmental and social impacts;</li> <li>g. Develop a draft environmental and social management and monitoring plan;</li> <li>h. Examine and propose a structure for implementation of the plans;</li> <li>i. Estimate the costs necessary for implementation of the plan and determine the possible sources of fund;</li> <li>j. Support for convening consultation meetings with stakeholders;</li> <li>k. Develop an indigenous people plan (if necessary); and</li> <li>l. Develop and prepare a simple resettlement plan (if necessary).</li> </ul>
7) Estimation of project cost including annual fund requirement	Same as left
8) Formulation of an optimum project implementation plan	Same as left
9) Assessment of the financial status and ability of the target provinces	<ul style="list-style-type: none"> <li>a. Examine the current financial plans and financial status of the target provinces to verify whether or not the target provinces can afford to shoulder the estimated costs of the non-eligible portions;</li> <li>b. Assess the financial soundness of the target provinces to examine and assess the repayment capacity of the target provinces in case part of the loan is on-lent to the provinces in accordance with the government regulations.</li> </ul>
10) Examination of project effects and assessment of potential risks	<ul style="list-style-type: none"> <li>a. Analyze qualitative and quantitative effectiveness of the project (e.g., economic rate of return (EIRR) and financial benefits);</li> <li>b. Set baselines and targets of operation and effect indicators; and</li> <li>b. Assess and analyze potential project risks.</li> </ul>

Source: The Preparatory Survey Team (2016)

**Table I-3-1 Comparison between the JICA Guidelines and Vietnamese EIA Framework**

<b>Content</b>	<b>JICA Guidelines (2010)<sup>1</sup></b>	<b>Vietnam's Framework for EIA<sup>2</sup></b>	<b>Measure to fill the gap</b>
<b>Principles</b>	<ol style="list-style-type: none"> <li>1. Potential project environmental impacts must be assessed and examined in the earliest possible planning stage. Alternatives or mitigation measures must be examined and incorporated into the project plan.</li> <li>2. Such examinations must be conducted in close harmony with the economic, financial, institutional, social, and technical analyses of projects.</li> <li>3. The findings must include alternatives and mitigation measures.</li> <li>4. For projects that have a particularly high potential for adverse impacts or that are highly contentious, a committee of experts may be formed so that JICA may seek their opinions, in order to increase accountability.</li> </ol>	<ol style="list-style-type: none"> <li>1. Environmental impacts of projects are assessed and examined before approval. Alternatives/ mitigation measures are included and incorporated.</li> <li>2. EIA requires detailed assessment of possible environmental impacts including environmental components and socio-economic elements to be impacted by the project. Vietnamese legislation is criticised for prescribing EIA too late in the planning process</li> <li>3. EIA must include specific measures to minimize bad environmental impacts, prevent and respond to environmental incidents and commitments to take environmental protection measures during project construction and operation.</li> <li>4. EIA reports shall be appraised by appraisal councils formed of appropriate experts as required and as determined by the relevant (depending on project categorisation).</li> </ol>	<ol style="list-style-type: none"> <li>1. No significant gap between the JICA Guidelines and Vietnam's EIA legislation is detected.</li> <li>2. The inclusion of environmental and social considerations during the preparatory survey was in line with both guidelines so that any potential environmental and social issues could be addressed in the project planning process.</li> </ol>
<b>Examination of Measures</b>	<ol style="list-style-type: none"> <li>1. Multiple alternatives must be examined in order to avoid or minimize adverse impacts and to choose better project options in terms of environmental and social considerations.</li> <li>2. Appropriate follow-up plans and systems, such as monitoring plans and environmental</li> </ol>	<ol style="list-style-type: none"> <li>1. Alternatives are not compulsory in the environmental assessment procedure.</li> <li>2. Environmental Management Plans are required.</li> </ol>	<ol style="list-style-type: none"> <li>1. Alternatives at the site-level including a zero option have been considered in the design and as part of the environmental and social considerations.</li> <li>2. Environmental management and monitoring plans proposed in this ESMF shall be implemented accordingly.</li> </ol>

<sup>1</sup> The full terms have been abridged and edited to keep the table concise

<sup>2</sup> Primarily the Law on Environmental Protection (2014) & Decree 18/2015

Content	JICA Guidelines (2010) <sup>1</sup>	Vietnam's Framework for EIA <sup>2</sup>	Measure to fill the gap
	management plans, must be prepared; the costs of implementing such plans and systems, and the financial methods to fund such costs, must be determined.		
<b>Scope of Impacts to be assessed:</b>	1. The impacts to be assessed include: impacts on i) the natural environment, that are transmitted through air, water, soil, waste, accidents, water usage, climate change, ecosystems, fauna and flora, including trans-boundary or global scale impacts; ii) social impacts, including involuntary resettlement, employment and local livelihoods, utilization of land and resources, social institutions such as social capital and local decision-making institutions, existing social infrastructures and services, vulnerable social groups (e.g. poor and indigenous peoples), equality of benefits and losses and equality in the development process, gender, children's rights, cultural heritage, local conflicts of interest, infectious diseases, and working conditions.	1. Vietnamese legislation does not specify the scope of impacts to be assessed. The LEP broadly indicates that environmental and socio-economic elements are to be considered. 2. In general, the following social impacts are not properly considered: impacts to local economy (employment, livelihood, utilization of land, etc.), local resources, social institutions, local decision-making institutions, vulnerable social groups (the poor, indigenous peoples, etc.), equality of benefits and losses, equality in the development process, gender, children's rights, and local conflicts of interest.	1. A full range of potential impacts as indicated in the JICA Guidelines were first assessed and considered. 2. Among them, those which identified as likely or possible impacts were further assessed for scoping. 3. The extents of possible impacts were assessed and the necessary measures/interventions to either avoid or minimize the adverse impacts were designed and incorporated in the project plan.
<b>Compliance with Laws, Standards and Plans</b>	1. Projects must comply with the laws, ordinances, and standards related to environmental and social considerations established by the governments that have jurisdiction over project sites. 2. Projects must, in principle, be undertaken outside of protected areas.	1. All projects must comply with the relevant policies, laws and ordinances established by national and local governments.	1. There is no significant gap. 2. The project is in accordance with national and provincial/local policy objectives and priorities. 3. In this case the project will be implemented in certain designated protected areas but the objective is to promote forest protection and restoration at these sites, and will not include any adverse environmental impacts.
<b>Social Acceptability</b>	1. Projects must be adequately coordinated so that they are accepted in a manner that is	1. Under LEP and implementing Decree 18/2005, provisions are made for the appraisal of	1. Initial information disclosure was conducted during the consultation

Content	JICA Guidelines (2010) <sup>1</sup>	Vietnam's Framework for EIA <sup>2</sup>	Measure to fill the gap
	<p>socially appropriate to context.</p> <ol style="list-style-type: none"> <li>1. Appropriate consideration must be given to vulnerable social groups, such as women, children, the elderly, the poor, and ethnic minorities, all members of which are susceptible to environmental and social impacts and may have little access to decision-making processes within society.</li> </ol>	<p>projects to ensure their appropriateness considering environmental and socio-economic aspects. Disclosure and consultation with affected communities and local stakeholders is also required as part of the process.</p> <ol style="list-style-type: none"> <li>2. As above, there are no specific requirements for special consideration of vulnerable social groups in Vietnamese EIA legislation.</li> </ol>	<p>meetings held by the preparatory survey team.</p> <ol style="list-style-type: none"> <li>2. The project will require an EIA to be appraised by MoNRE. The law requires public disclosure of this report at the PPCs.</li> <li>3. In addition, the ESMF itself as well as the Consultation and Participation Guidelines developed as part of this ESMF aim to ensure that site-level planning and implementation includes special considerations for vulnerable groups. These guidelines include further disclosure and consultation at local levels prior to implementation of activities; hence, CPMB/MARD and PPMBs/DARDs shall follow the ESMF in general and CPGs (Consultation and Participation Guidelines) in specific to address social issues in an appropriate manner.</li> </ol>
<b>Ecosystems and Biota</b>	<ol style="list-style-type: none"> <li>1. Projects must not involve significant conversion or degradation of critical natural habitats and forests.</li> <li>2. Illegal logging of forests must be avoided.</li> </ol>	<ol style="list-style-type: none"> <li>1. Vietnamese EIA legislation as well as biodiversity and forest legislation also prohibits significant conversion of critical natural habitats and forests. However, conversion of natural forest is still possible under Vietnamese law.</li> </ol>	<ol style="list-style-type: none"> <li>1. Since this project also aims to contribute to REDD+ implementation, any conversion of natural forest cannot be accepted. Hence, any activities that would cause clearance or conversion of forests in special use forests were eliminated. The activities can be further controlled and eliminated by using the Negative Checklist developed in the ESMF (Annex-A).</li> </ol>
<b>Involuntary Resettlement</b>	<ol style="list-style-type: none"> <li>1. Involuntary resettlement and loss of means of livelihood are to be avoided by exploring all viable alternatives.</li> <li>2. Affected persons must be sufficiently compensated and supported by project proponents etc. in a timely manner.</li> </ol>	<ol style="list-style-type: none"> <li>1. Involuntary resettlement is also avoided wherever possible for development projects in Vietnam. Issues on land acquisition, compensation, resettlement, etc. are regulated by the Land Law (2013) If a development project needs to acquire land,</li> </ol>	<ol style="list-style-type: none"> <li>1. The survey team has carefully considered the issue of involuntary resettlement. This ESMF includes a summary description of potential involuntary resettlement related issues.</li> <li>2. There will be no physical relocation nor formal land acquisition under this project.</li> </ol>

Content	JICA Guidelines (2010) <sup>1</sup>	Vietnam's Framework for EIA <sup>2</sup>	Measure to fill the gap
	<p>3. Appropriate participation by affected people and their communities must be promoted in the planning, implementation, and monitoring of resettlement action plans and measures to prevent the loss of their means of livelihood. In addition, appropriate and accessible grievance mechanisms must be established.</p> <p>4. For projects that will result in large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public.</p>	<p>then this law and implementing regulations are applied, an inventory-of-loss (IOL) will be carried out, and people who lose lands, properties, means of livelihood, etc. will be compensated and/or supported in relocation and resettlement. The Land Law also includes mechanisms for the redress of grievances.</p> <p>2. However, it needs further efforts to improve legal framework on involuntary resettlement and strengthen capacity of local agencies responsible for planning and implementing the livelihood restoration plan.</p>	<p>3. The project will not engage in forest land allocation. It is also recommended that ongoing or proposed land acquisition for certain FMBs funded by the GoV is halted or the sites be removed from the project.</p> <p>4. At other sites where project activities such as afforestation could conflict with areas of land customarily or traditionally used by upland ethnic groups but where they do not have formal land rights, village-level consultations and participatory discussions based on the concept of FPIC must be conducted. These activities shall be carried out in a proper and timely manner to avoid and mitigate potential losses of access to assets and livelihoods.</p>
<b>Indigenous Peoples (IPs)</b>	<p>1. Any adverse impacts that a project may have on IPs are to be avoided when feasible by exploring all viable alternatives.</p> <p>2. When projects may have adverse impacts on IPs, all of their rights in relation to land and resources must be respected in accordance with the spirit of relevant international declarations, including UNDRIP – FPIC is required.</p> <p>3. Measures for the affected IPs must be prepared as an IP plan and must be made public in compliance with the relevant laws and ordinances of the host country.</p>	<p>1. The term IP is not used with respect to any group of peoples in Vietnam. However, it is accepted that ethnic minority (EM) groups share many similar characteristics with those of IPs. However, EMs nor anyone else in Vietnam have collective rights over lands and territories.</p> <p>2. As mentioned, EIA law does not include special provisions for vulnerable groups. However, the Constitution does respect many relevant IP/EM rights (self-determination, non-discrimination), and the GoV implements a number of programs aimed at supporting such groups.</p>	<p>1. EMs comprise the majority of the peoples to be affected by the project. Therefore, ethnic minorities and their traditional ways of life has been strongly considered in designing the project as well as in the development of appropriate safeguard measures to ensure their consultation and participation, and that they receive culturally-appropriate benefits.</p> <p>2. This ESMF intends to integrate EM considerations throughout and through the Consultation and Participation Guidelines in particular aims to ensure that indigenous peoples planning requirements are met.</p>
<b>Monitoring</b>	<p>1. Project proponents etc. should make efforts to make the results of the monitoring process</p>	<p>1. There is no provision on the project owner's obligation to publicize results of monitoring process even though the</p>	<p>1. The monitoring and reporting plan is included in the ESMF. Such a plan shall be implemented accordingly.</p>

Content	JICA Guidelines (2010) <sup>1</sup>	Vietnam's Framework for EIA <sup>2</sup>	Measure to fill the gap
	available to local project stakeholders	EMP disclosure is mandatory after completion of EIA approval	

Source: JICA Preparatory Survey Team (2016)

Table I-4-1 Production of Wood and Non-Timber Products by Type in the Target Provinces (2014)

Types of forest products	Unit	Dien Bien		Lai chau		Son La		Hoa Binh		Total	
		2011	2014	2011	2014	2011	2014	2011	2014	2011	2014
<b>【Wood】</b>											
Timber	m3	24,402	19,876	7,890	8,449	43,989	42,428	146,639	200,845	222,920	271,598
Firewood	Staples	923,184	929,911	826,061	526,077	1,381,186	1,342,272	15,323,639	1,922,379	18,454,070	4,720,639
Wood pulp	m3	-	-	-	-	-	-	93,139	113,801	93,139	113,801
<b>【NTFP】</b>											
Bamboo	1000 poles	7,719	8,352	7,758	4,178	7,719	8,352	26,105	26,794	49,301	47,676
Flow , cane	1000 poles	1,326	754	133	123	-	-	10706	10,439	12,165	11,316
Flow, cane, bambo	1000 poles	-	-	-	-	4,018	4,456	-	-	4,018	4,456
Jiang	1000 poles	-	42.6	8	25	1,405	1,771	664	656	2,077	2,495
Cork	1000 poles	3,430	1,895	402	155	2,290	2,125	8981	9,125	15,103	13,300
Rattan	Ton	80	60	23	23	301	326	7.3	6.95	411	416
Resin	Ton	-	4	-	-	9	10	-	-	9	10
Cinnamon	Ton	-	-	-	-	-	-	-	46	-	46
Cardamom	Ton	49	37	1,096	1,648	-	-	-	-	1,145	1,685
Palm leaf	1000 leaves	-	-	-	-	-	-	92	93.32	92	93
Paper material	Ton	-	-	-	-	-	-	3,004	3,192	3,004	3,192
Line leaves	1000 leaves	-	4,375	500	1,101	39,900	46,946	4,412	4,601	44,812	57,023
Lac	Ton	100	40	1	-	-	1	-	-	101	41
Bamboo shoot (Fresh Asparagus)	Ton	3,515	3,450	335	222	8,930	9,957	11,504	12,383	24,284	26,012
Wood ear	Ton	-	10	-	18	43	36	-	8.22	43	72

Source: Provincial Statistical Year Book of each province 2014



**Table I-4-2 Major Wood Business Companies in the Target Provinces**

Province	Name of enterprise	Location of the company	Product and processing capacity	Major market	Note
Dien Bien	Rung Viet Tay Bac Joint Stock Company (established in 2010)	Ket village, Quai Cang commune, Tuan Giao District	Output capacity: 42,157 m <sup>3</sup> /year Of which: - Finger join product: 8,400 m <sup>3</sup> /year - Wood Chipboard: 33,757 m <sup>3</sup> /year		Started operation since 2013, however, unstable operation in 2015 to present due to lack of raw material.
	Hoang Lam Dien Bien Company Limited	Phù Ngam village, Núa Ngam commune, Điện Biên District	Output capacity: 100,000 m <sup>3</sup> /year Of which: - Wood chipboard: 5,000 m <sup>3</sup> /year - Bamboo products: 95,000 m <sup>3</sup>		Not in operation
	Đỗ Thị Lành, Quang Lanh Limited Company	Hợp Thành Village, Núa Ngam commune, Điện Biên district	-False cardamom (Cây máu chó) -Cibotium barometz (cây cau tích, long cu ly) -Indigenous ginseng - Homalomena pierreana (thiên niên kiện)	inside commune	
	Mrs.Thu	Tan Thuy Block, Tuan Giao town	-Uncaria (Cây Đẳng) 15-20ton/year - Rauwolfia (Cây ba gác) 20-30ton /year - Acanthopanax (đẳng sâm) 1-2ton /year	inside commune	
	Mrs.Loan	Tan Thuy Block, Tuan Giao town	-False cardamom (Cây máu chó) 20-30ton/year - Cibotium barometz (Củ cau tích, cu ly) 30-50ton/year	inside commune	
	Mrs.Lien	Truong Xuan block, Tuan Giao town	-Tiger grass (bóng chít) 50-100ton/year -False cardamom (Cây máu chó)30-50ton/year	inside commune	
Lai Chau	Minh Son Limited Company	Son Binh commune, Tam Duong District	Output capacity: 100,000m <sup>3</sup> /year		On-going investment of facility
	Mr. Lù A Pao (Local main collector)	Tam Duong district	Cardamom	inside commune	
	Mrs. Lai (small facility)	Sin Ho Sub-town	Atiso	inside commune	
	Mr. S ù ng A P á o (small facility)	Sin Ho Sub-town	indigenous mixed medicinal herbals for body soaking	inside commune	
Son La	Mường La forestry state-owned Co. Ltd	Mường Bú commune, Mường La district,	wood for furniture and firewood	inside province	
	Sông Mã forestry state-owned Co. Ltd	Chiềng Khoang commune, Sông Mã district	wood for furniture and firewood	inside province	
	Sốp Cộp forestry state-owned Co. Ltd	Sốp Nậm village, Sốp Cộp commune, Sốp Cộp district,	wood for furniture and firewood	inside province	State company
	Phù Yên forestry state-owned Co. Ltd	Phù Yên town, Phù Yên district	wood for furniture and firewood	inside province	State company
	Son Trang investment and export JSC	Chiềng Lễ district, Son La city	wood for furniture and firewood	inside province	
	Sustainable forest JSC	Moc Chau ecotourism central area, Moc Chau farm town, Moc Chau district	wood for furniture and firewood	inside province	
	Moc Chau industrial bamboo production joint stock company	Bồ Bùn zone, Mọc Châu farm town, Moc Chau district	Bamboo rig mats (plywood) production (2,000tons/year)	40% for domestic market, 60% export to Canada and Germany market	established in 2014
	Bac Son Co. Ltd	No.597, Phiêng Ban III village, Bắc Yên town, Bắc Yên district	Producing fruit drink, wine and alcohol from medlar fruits (120tons/year)	Northwest provinces	established in 2006
	Phong Van private company	Văn Hồ commune, Văn Hồ district	Purchasing and trading the medicinal plants/products (350tons/year)	Ha Noi (80%) and China (20%)	established in 2010
Hoa Binh	Mai Châu BWG JSC	Chiềng Châu industry cluster, Mai Châu district	- Strand Woven Bamboo: 100.000 m <sup>3</sup> /year; - Wood pallets: 144.000 tons/year	Export to EU market	300 employees
	Hapaco Northeast Hapaco JSC	Vạn Mai commune, Mai Châu district	Taiwan Votive paper (annual capacity: 4.000-6.000 tons)	Export to China, Taiwan	120 employees
	Quốc Đại JSC	Đồng Bàng commune, Mai Châu district	- Bamboo chopsticks, Taiwan votive papper (annual capacity: 5.000-7.000 tons)	Export to China, Taiwan, Japan	110 employees
	Thuan Phat manufactures and trade Co., Ltd	Hảo Lý commune, Đà Bắc district	Taiwan Votive paper (annual capacity: 4.000-6.000 tons)	Export to China, Taiwan, Japan	150 employees
	HP Wood Energy Co. Ltd	Phủ Thành II industry cluster, Lạc Thủy district	Wood pallets: 10.000 tons/year)	Export to EU market	100 employees
	MDF vinafor Tân An Hoà Bình Co. Ltd	Lạc Thịnh commune, Yên Thủy district	MDF (capacity 54.000 m <sup>3</sup> /year)	Domestic and export	250 employees
	Ba Nhất paper Co. Ltd	Thành Lập commune, Lương Sơn district	Taiwan Votive paper (annual capacity: 4.000-6.000 tons)	Export to China, Taiwan	120 employees
	Tâm Phúc pharmaceutical manufacture and trade Co. Ltd	Dương Liễu commune, Hòa Đức district, Hà Nội city	Buying the fresh medicinal and herbal plants, preliminary treatment, and selling the processed medicinal products	Domestic market	45 employees
	Hoa Binh Agriculture Development and Investment JSC	Zone 11, Hàng Trạm town, Yên Thủy district, Hoa Binh province	Buying the fresh medicinal and herbal plants, preliminary treatment, and selling the processed medicinal products	Domestic market	113 employees
	Hoa Binh Biopharm JSC	No. 187, sub-zone 10, Tân Thịnh ward, Hoa Binh city	Buying the fresh medicinal plants, processing, and selling the processed medicinal products	Domestic pharmaceutical companies and national pharmaceutical institute	48 employees
	Phuong Huyền seedling production and business Co. Ltd	Group No.18, Tân Thịnh ward, Hoa Binh city	Buying, processing and selling the processed medicinal products	Domestic pharmaceutical companies	46 employees
	Vietnam natural active ingredients JSC	No. 15, Lane 61, Giáp Nhị street, Thịnh Liệt ward, Hoàng Mai district, Hà Nội city	Producing mushroom, herbal, forest plants, processing and selling processed products	Domestic and export market	50 employees
	Dũng Tấn rattan production and trade JSC	Thượng Hiền commune, Kiến Xương district, Thái Bình province	Buying the fresh rattan, providing rattan material to the bamboo and rattan craft villages and collecting its products for export	Domestic and export market	40 employees

Source: (Hoa Binh) Hoa Binh Trade and Industry department, unofficial data, 2016,  
(Son La) Rural development sub-department, Son La DARD, 2016 and JICA3 preparatory survey team,  
(Dien Bien) Announcement NO.75/TB-UBND dated 29th Dec 2015, Office of DB PPC,  
(Lai Chau and Son La) Survey result of the Preparatory survey team

**Table I-4-3 REDD+ Activities to be stipulated in the REDD+ Action Plan**

<b>Component</b>		<b>Basic activities</b>
1. Forest protection and management activities	<ul style="list-style-type: none"> <li>a) Forest plantation: Afforestation, Post-harvesting reforestation, Replacement forests</li> <li>b) Forest caring, Forest rehabilitation and regeneration</li> <li>c) Forest protection, Zoning for regeneration</li> <li>d) Plantation of scattered trees</li> <li>e) Construction of silvicultural works</li> <li>f) Other related activities</li> </ul>	
2. Prioritized activities (additional activities)	a) Reducing deforestation	<ul style="list-style-type: none"> <li>1) Review land use planning to avoid overlapping</li> <li>2) Review and develop stable land use planning for road construction, mining and resettlement</li> <li>3) Strictly manage the conversion of natural forests</li> <li>4) Support land and forest allocation to HHs, individuals and communities</li> <li>5) Improve livelihood</li> <li>6) Support intensive agricultural development</li> <li>7) Establish small-scale micro credit fund</li> <li>8) Strengthen the effective execution of the law on forest protection and development</li> </ul>
	b) Reducing forest degradation	<ul style="list-style-type: none"> <li>1) Limit and prevent the illegal use of natural forest timber; develop wood alternatives and fuels (scattered tree plantation) to reduce illegal logging</li> <li>2) Support the establishment of technical and administrative monitoring system for timber exploitation, identification and traceability of timber sources</li> <li>3) Develop sustainable NTFP models</li> <li>4) Conduct public awareness raising activities</li> <li>5) Support agricultural and forest products to get access to markets</li> <li>6) Support the development and effective implementation of law enforcement of forest protection and development</li> <li>7) Implement incentive programs to create jobs</li> </ul>
	c) Sustainable management of natural forests	<ul style="list-style-type: none"> <li>1) Support the development and implementation of sustainable forest management plans and provision of forest certification</li> <li>2) Support to build capacity on forest governance for forest owners</li> </ul>
	d) Forest carbon stock conservation	<ul style="list-style-type: none"> <li>1) Enhance forest quality: Natural forest enrichment, Diversification of plant structure</li> <li>2) Combine biodiversity conservation in special use and protection forests</li> </ul>
	e) Carbon stock enhancement	<ul style="list-style-type: none"> <li>1) Support high-tech application in seedling production, intensive afforestation, create and select new varieties with high yield, resistance to diseases</li> <li>2) Reforestation in devastated and degraded forests, previous mining lands</li> <li>3) Enrich plantation forests in degraded lands</li> <li>4) Restore degraded coastal forests</li> </ul>

Sources: MARD Decision No. 5414/QĐ-BNN dated on 25 December 2015

**Table I-4-4 Production of Upland Crops produced in the Target Provinces in 2010 and 2014**

	Dien Bien		Lai Chau		Son La		Hoa Binh		Total/Average	
	2010	2014	2010	2014	2010	2014	2010	2014	2010	2014
<b>Maize</b>										
Planted area (ha)	29,083	29,803	19,440	22,150	132,700	162,510	35,854	38,887	217,077	253,350
Production (tons)	67,378	74,521	49,660	62,130	417,410	657,660	145,999	164,004	680,447	958,315
<b>Sweet potatoes</b>										
Planted area (ha)	569	698	430	390	531	328	5,299	4,890	6,829	6,306
Production (tons)	3,564	7,782	2,140	2,110	3,560	2,200	26,709	26,619	35,973	38,711
<b>Cassava</b>										
Planted area (ha)	7,198	7,247	5,380	442	24,640	30,540	11,294	11,682	48,512	49,911
Production (tons)	54,740	56,961	46,740	36,480	295,110	371,290	123,837	150,700	520,427	615,431
<b>Peanut</b>										
Planted area (ha)	1,641	1,580		1,757	1,661	1,221	5,726	4,558	9,028	9,116
Production (tons)	1,905	1,934		1,896	1,584	1,277	8,417	8,125	11,906	13,232
<b>Sugar cane</b>										
Planted area (ha)	22	29	87	105	3,265	5,213	8,067	9,507	11,441	14,854
Production (tons)	461	632	4,064	5,292	174,664	350,504	527,375	652,601	706,564	#####
<b>Soybean</b>										
Planted area (ha)	7,729	5,500		2,491	7,380	2,086	1,439	423	16,548	10,500
Production (tons)	9,955	7,076		2,730	10,644	2,646	2,061	657	22,660	13,109
<b>Tea</b>										
Planted area (ha)	238	295	3,052	3,273	3,745	4,003	2,448	1,633	9,483	9,204
Production (tons)	78	78	18,327	22,635	23,899	33,138	7,043	5,522	49,347	61,373
<b>Sesame</b>										
Planted area (ha)	79	51			167	17			246	68
Production (tons)	38	29			93.11	651			132	680
<b>Vegetables</b>										
Planted area (ha)					4,918	6,156			4,918	6,156
Production (tons)					67,869	82,546			67,869	82,546
<b>Cotton</b>										
Planted area (ha)	696	346			692	371			1,388	717
Production (tons)	947	512			614	348			1,561	860
<b>Coffee</b>										
Planted area (ha)	891	2,263			7,259	11,296			8,150	13,559
Production (tons)	2,208	3,718			7,544	12,102			9,752	15,820
<b>Mulberry</b>										
Planted area (ha)					105	106			105	106
Production (tons)					640	795			640	795
<b>Apricot</b>										
Planted area (ha)					413	233			413	233
Production (tons)					1,964	1,240			1,964	1,240
<b>Plum</b>										
Planted area (ha)					2,574	2,784			2,574	2,784
Production (tons)					17,988	24,036			17,988	24,036
<b>Longan</b>										
Planted area (ha)	414	428			7,490	7,569			7,904	7,997
Production (tons)	906	1,511			9,923	40,478			10,829	41,989
<b>Mango</b>										
Planted area (ha)	248	345			3,510	3,440			3,758	3,785
Production (tons)	550	641			8,307	10,950			8,857	11,591
<b>Macadamia</b>										
Planted area (ha)		37							N.A	37
Production (tons)		-							N.A	N.A
<b>Rubber</b>										
Planted area (ha)	3,583	5,065	6,311	12,593					9,894	17,658
Production (tons)	-	-	-	-					N.A	N.A
<b>Orange</b>										
Planted area (ha)	202	217							202	217
Production (tons)	1,058	859							1,058	859

**Table I-4-5 Needs of Managerial Trainings at the Provincial Level**

<b>Topics</b>	<b>Sub-topics</b>	<b>Dien Bien</b> Questionee: Deputy Director of SubDoF	<b>Lai Chau</b> Questionee: Direct or of SubDoF	<b>Son La</b> Questionee: Director of SubDoF	<b>Hoa Binh</b> Questionee: Deputy Director of DARD
1) Project management	<ul style="list-style-type: none"> <li>- Project regulation preparation</li> <li>- Financial planning</li> <li>- Fund management</li> <li>- Reporting etc.</li> </ul>	Needs: <b>High</b> Reason: Little experience in project management, and the first time for the implementation of a loan project.	Needs: <b>Middle</b> Reason: Most of the officers have experience however the system differs from project to project.	Needs: <b>High</b> Reason: Capacity for financial management and project management need to be enhanced.	Needs: <b>Middle</b> Reason: The officers have experience in project management.
2) Monitoring & evaluation of the project operation	<ul style="list-style-type: none"> <li>- Monitoring of the financial and physical progress</li> <li>- Evaluation of the progress based on the plan/ indicators</li> <li>- Review of the project progress</li> <li>- Reporting etc.</li> </ul>	Needs: <b>High</b> Reason: Same as above.	Needs: <b>Middle</b> Reason: Same as above.	Needs: <b>High</b> Reason: Capacity for monitoring of financial progress and evaluation shall be enhanced.	Needs: <b>High</b> Reason: Most of the officers have limited experience.
3) Procurement	<ul style="list-style-type: none"> <li>- Understanding of the Procurement law</li> <li>- Bidding procedure</li> <li>- Contract procedure</li> <li>- Contract management</li> </ul>	Needs: <b>Middle</b> Reason: Many officers have the experience in procurement.	Needs: <b>Middle</b> Reason: Same as above.	Needs: <b>Middle</b> Reason: Those who worked for KfW7 have enough experience.	Needs: <b>Low</b> Reason: Procurement work shall be outsourced to the consultants.

*Source: The Preparatory Survey Team (2016)*

**Table I-4-6 Capacity Gaps/Training Needs of PFMBs/SUFMBs**

Training topics	Sub-topics in the trainings	Dien Bien	Lai Chau	Son La	Hoa Binh
1) Forest inventory and planning	<ul style="list-style-type: none"> <li>- Forest inventory survey in the field</li> <li>- Application of GPS and GIS skills to forest management</li> <li>- Forest boundary delineation</li> <li>- Land consolidation</li> </ul>	Needs: <b>High</b> Reason: Many of the MB has limited officers who can use GIS, and these skills are essential.	Needs: <b>High</b> Reason: Same as left.	Needs: <b>High</b> Reason: Same as left.	Needs: <b>High</b> Reason: Same as left.
2) Participatory land use planning (PLUP)	<ul style="list-style-type: none"> <li>- Concept &amp; steps of PLUP</li> <li>- Facilitation skill of the participatory meetings etc.</li> <li>- Land use planning</li> </ul>	Needs: <b>Middle</b> Reason: Some of the officers have experience in village planning with villagers.	Needs: <b>High</b> Reason: Same as right.	Needs: <b>High</b> Reason: Facilitation skills shall be strengthened.	Needs: <b>High</b> Reason: Many of the officers need to improve facilitation skill.
3) Forest protection contracts with the local people	<ul style="list-style-type: none"> <li>- Procedure of forest protection contracts</li> <li>- Inspection of the contracted work achievement and payment procedure etc.</li> </ul>	Needs: <b>Middle</b> Reason: Most of the officers are not familiar with inspection.	Needs: <b>Low</b> Reason: Most of the officers are familiar with the procedure.	Needs: <b>High</b> Reason: Inspection skill needs to be strengthened.	Needs: <b>Middle</b> Reason: Most of the officers have enough experience.
4) Protection forest development (silvicultural techniques)	<ul style="list-style-type: none"> <li>- Nursery operation</li> <li>- Land preparation</li> <li>- Pitting</li> <li>- Plantation</li> <li>- Tending etc.</li> <li>- Methodology: ANR/ Enrichment Reforestation/ Afforestation etc.</li> </ul>	Needs: <b>Middle</b> Reason: Many of the officers have enough skills and experience.	Needs: <b>Middle</b> Reason: Same as left.	Needs: <b>High</b> Reason: New officers need to be trained.	Needs: <b>Middle</b> Reason: Most of the officers have limited experience.
	<ul style="list-style-type: none"> <li>- O&amp;M of forestry road, nursery, watch tower and other silvicultural facilities and equipment etc.</li> </ul>	Needs: <b>High</b> Reason: Many officers have limited experience.	Needs: <b>High</b> Reason: Same as left.	Needs: <b>High</b> Reason: Same as left.	Needs: <b>High</b> Reason: Same as left.

Source: The Preparatory Survey Team (2016)

**Table I-6-1 Results of Pre-assessment of Forest Land in the Target Provinces**

Type of potential sites	Advantages	Disadvantages	Remarks
1. Special Use Forests (SUFs) allocated to public institutions (i.e., management board)	<ol style="list-style-type: none"> <li>1. The organizations (i.e., management boards) which the areas (SUFs) are allocated to might be able to function as contractors for forest development and management activities under the project although their capacity is not always high.</li> <li>2. The organizations might be able to continue the project activities with the budgetary support of the provincial government especially when facing the delay of payment.</li> <li>3. As forests in SUFs could be maintained as forests after the project, the project interventions (restoration, rehabilitation, and protection) in the areas are considered consistent with the objectives of PRAP.</li> </ol>	<ol style="list-style-type: none"> <li>1. Such areas account for a rather small proportion of the entire forest lands in the provinces.</li> <li>2. There may be some limitations in afforestation/reforestation in terms of species and the way to plant trees.</li> <li>3. The areas that SUFMBs can effectively manage and control might be rather restricted due to limited allocation of forests to MBs.</li> <li>4. The threats to forests in SUFs may be less than those to natural forests allocated to individuals/communes.</li> <li>5. In general, local communities living around SUFs may have less incentive for afforestation and rehabilitation of SUFs.</li> </ol>	Areas that are currently used or will be used for farming or any other purposes by local communities who have legalized or de facto land use rights will not be targeted by the project in principle.
2. Protection Forests (PFs) allocated to public institutions (i.e., management board)	<ol style="list-style-type: none"> <li>1. Ditto</li> <li>2. The organizations might be able to continue the project activities with the budgetary support of the provincial government especially when facing the delay of payment.</li> <li>3. As forests in PFs could be maintained as forests after the project, restoration, rehabilitation, and protection of the areas could be consistent with the objectives of PRAP.</li> <li>4. The threats to forests in PFs may be higher than those to SUFs but less than those to natural forests allocated to individuals/communes.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ditto</li> </ol>	Ditto
3. Production Forests allocated to public institutions (i.e., management board)	<ol style="list-style-type: none"> <li>1. Ditto</li> </ol>	<ol style="list-style-type: none"> <li>1. Ditto</li> <li>2. The threats to forests in production forests allocated to the management boards may be less and the effect to reduce GHG emission may</li> </ol>	Ditto

Type of potential sites	Advantages	Disadvantages	Remarks
		also be limited.	
4. Protection Forests (PFs) allocated to villages/households/ individuals	<ol style="list-style-type: none"> <li>1. The areas may be larger than those allocated to public institutions.</li> <li>2. Threats to forests in PFs that are allocated/ will be allocated to villages/individuals/ households are higher; therefore, rehabilitation, restoration, and protection of forests in the areas are highly consistent with the objectives of PRAP.</li> </ol>	<ol style="list-style-type: none"> <li>1. Villages/individuals /households may not be capable enough to perform as contractors for the project in terms of its technical and financial capabilities; therefore, the quality of works may not be assured.</li> <li>2. It would take a considerable amount of time for PPMBs to obtain prior consent from people who have land use rights and to carry out a perimeter survey of every single plot of individual holders who concur with the project.</li> <li>3. It would be difficult for PPMUs to carry out the validation/verification activities in a timely manner if they need to check a large number of plots.  Late validation/verification might affect the disbursement of households, which might further affect the progress of forest management and development activities, since many of households are not financial capable to use their own money to carry out the activities without payment.</li> </ol>	Likewise, no activity will be carried out in existing farms without having prior consent from people who have land use rights.
5. Production Forests allocated to villages/households/ individuals	<ol style="list-style-type: none"> <li>1. Ditto</li> <li>2. As land use right holders of the areas may be the ones who have caused forest degradation of natural forests in the surrounding areas, reforestation in the areas is considered effective in reduction of threats to natural forests in other areas.</li> </ol>	1~3 Ditto	Ditto

Source: The Preparatory Survey Team

**Table I-6-2 Present Land Use and Forest Cover and Land Allocation Status of the Proposed Areas in the Target Provinces**

MB	Communes	District	Land Use and Forest Classification (2012)					Land Allocation Status				
			Existing forests (II/III)	Woodlot (1c)	Bushes and bare land (1a & 1b)	Others	Total	Allocated to FMBs	Allocated to Households	Unallocated	Total	
Dien Bien												
Dien Bien PFMB	Na Tong	Dien Bien	1,050	85	688	0	1,822	567	0	1,256	1,822	
	Phu Luong	Dien Bien	220	227	726	0	1,174	234	0	940	1,174	
	Muon Nha	Dien Bien	2,697	249	570	0	3,516	501	0	3,015	3,516	
	Sub-total	1 district	3,966	561	1,985	0	6,512	1,301	0	5,211	6,512	
Muong Chau PFMB	Muong Tung	Muong Cha	2,315	1,205	1,767	119	5,406	4,953	0	453	5,406	
Tuan Giao PFMB	Phinh Sang	Tuan Giao	1,434	38	113	0	1,584	0	0	1,584	1,584	
	Ta Ma	Tuan Giao	3,423	396	1,095	0	4,914	0	0	4,914	4,914	
	Sub-total	1 district	4,856	434	1,208	0	6,498	0	0	6,498	6,498	
Muong Phang SUFMB	Muong Phang	Dien Bien	900	216	3	13	1,132	37	0	1,095	1,132	
	Pa Khoang	Dien Bien	1,504	101	23	13	1,640	967	0	673	1,640	
	Sub-total	1 district	2,403	317	26	26	2,772	1,004	0	1,768	2,772	
Total	8 communes	3 districts	13,540	2,517	4,986	144	21,187	7,258	0	13,929	21,187	
Lai Chau												
Nam Ma PFMB	Hong Thu	Sin Ho	198	321	462	10	991	991	0	0	991	
	Lung Thang	Sin Ho	567	62	94	-	723	723	0	0	723	
	Ma Quai	Sin Ho	169	143	0	-	312	312	0	0	312	
	Nam Cha	Sin Ho	61	33	0	-	94	94	0	0	94	
	Nam Cuoi	Sin Ho	642	159	585	-	1,387	1,387	0	0	1,387	
	Nam Han	Sin Ho	185	47	224	0	456	456	0	0	456	
	Nam Ma	Sin Ho	160	176	0	0	336	336	0	0	336	
	Nam Tam	Sin Ho	1,933	214	27	0	2,174	2,174	0	0	2,174	
	Noong Heo	Sin Ho	793	350	280	0	1,424	1,424	0	0	1,424	
	Pa Khoa	Sin Ho	603	139	27	0	769	769	0	0	769	
	Phang So Lin	Sin Ho	840	146	572	6	1,564	1,564	0	0	1,564	
	Phin Ho	Sin Ho	739	-	-	6	745	745	0	0	745	
	Pu Sam Cap	Sin Ho	1,395	518	37	1	1,951	1,951	0	0	1,951	
	Sub-total	1 district	8,286	2,308	2,309	22	12,925	12,925	0	0	12,925	
Nam Na PFMB	Chan Nua	Sin Ho	330	408	214	2	954	954	0	0	954	
	Lung Mo	Sin Ho	2,518	207	0	782	3,507	3,507	0	0	3,507	
	Pa Tan	Sin Ho	1,540	656	564	813	3,572	3,572	0	0	3,572	
	Sa De Phin	Sin Ho	232	464	168	563	1,427	1,427	0	0	1,427	
	Ta Ngao	Sin Ho	515	366	0	652	1,533	1,533	0	0	1,533	
	Ta Phin	Sin Ho	79	174	60	363	547	547	0	0	547	
	TT. Sin Ho	Sin Ho	0	73	108	106	287	287	0	0	287	
	Tua Sin Chai	Sin Ho	496	1,577	1,080	1,162	4,315	4,315	0	0	4,315	
	Sub-total	1 district	5,710	3,925	2,194	4,130	15,958	15,958	0	0	15,958	
	Tan Uyen PFMB	Ho Mit	Tan Uyen	218	697	0	2	917	917	0	0	917
Tan Uyen PFMB	Muong Khoa	Tan Uyen	32	1,047	0	-	1,079	1,079	0	0	1,079	
	Nam Can	Tan Uyen	0	270	1,335	-	1,605	1,605	0	0	1,605	
	Nam So	Tan Uyen	722	753	546	5	2,025	2,025	0	0	2,025	
	Phac Ta	Tan Uyen	0	547	0	-	547	547	0	0	547	
	Phuc Khoa	Tan Uyen	65	342	0	6	413	413	0	0	413	
	Ta Mit	Tan Uyen	0	615	1,221	34	1,870	1,870	0	0	1,870	
	Trung Dong	Tan Uyen	398	127	0	11	536	536	0	0	536	
	TT. Tan Uyen	Tan Uyen	976	1,446	0	14	2,436	2,436	0	0	2,436	
	Sub-total	1 district	2,411	5,844	3,102	71	11,429	11,429	0	0	11,429	
	Than Uyen PFMB	Phuc Than	Than Uyen	902	760	0	0	1,662	1,662	0	0	1,662
Than Uyen PFMB	Hua Na	Than Uyen	78	640	0	3	721	721	0	0	721	
	Khoen On	Than Uyen	287	1,391	0	35	1,712	1,712	0	0	1,712	
	Muong Kim	Than Uyen	0	696	0	0	696	696	0	0	696	
	Muong Mit	Than Uyen	0	256	1,150	0	1,406	1,406	0	0	1,406	
	Muong Than	Than Uyen	0	957	0	0	957	957	0	0	957	
	Pha Mu	Than Uyen	55	278	804	16	1,154	1,154	0	0	1,154	
	Ta Gia	Than Uyen	157	793	0	10	960	960	0	0	960	
	Ta Hra	Than Uyen	79	348	244	21	692	692	0	0	692	
	Ta Mung	Than Uyen	40	976	656	6	1,678	1,678	0	0	1,678	
	Sub-total	1 district	1,598	7,094	2,855	91	11,638	11,638	0	0	11,638	
Total	40 communes	3 districts	18,005	19,171	10,459	4,315	51,950	51,950	0	0	51,950	
Son La												
Copia-SUFMB	Son La	Thuan Chau										
	Chieng Bom	Thuan Chau	1,188	1,211	1,167	0	3,567	3,567	0	0	3,567	
	Co Ma	Thuan Chau	5,288	1,839	2,261	0	9,388	9,388	0	0	9,388	
	Long He	Thuan Chau	1,146	378	250	0	1,773	1,773	0	0	1,773	
Thuan Chau PFMB	Sub-total	1 district	7,622	3,428	3,677	0	14,728	14,728	0	0	14,728	
	Nam Lau	Thuan Chau	2,022	593	1,446	148	4,210	4,210	0	0	4,210	
	Muong Bam	Thuan Chau	805	52	364	365	1,586	1,586	0	0	1,586	
	Bam Lam	Thuan Chau	676	217	653	0	1,546	1,546	0	0	1,546	
Quynh Nhai PFMB	Sub-total	1 district	3,503	863	2,463	514	7,343	7,343	0	0	7,343	
	Ca Nang	Quynh Nhai<1	4,067	145	25	0	4,237	0	0	4,237	4,237	
	Muong Giang	Quynh Nhai<1	1,026	24	153	118	1,321	0	0	1,321	1,321	
	Muong Sai	Quynh Nhai<1	512	102	278	225	1,117	0	0	1,117	1,117	
Xuan Nha SUFMB	Muong Chien	Quynh Nhai<1	1,123	0	0	0	1,123	0	0	1,123	1,123	
	Ma Pha Kinh	Quynh Nhai<1	1,028	245	90	0	1,364	0	0	1,364	1,364	
	Sub-total	1 district	7,758	516	546	344	9,163	0	0	9,163	9,163	
	Chieng Xuan	Van Ho	4,586	25	30	20	4,662	4,662	0	0	4,662	
Xuan Nha SUFMB	Tan Xuan	Van Ho	8,710	632	652	3,138	13,132	13,132	0	0	13,132	
	Xuan Nha	Van Ho	1,539	165	151	612	2,467	2,467	0	0	2,467	
	Chieng Son	Moc Chau	2,421	29	6	226	2,682	2,682	0	0	2,682	
	Sub-total	2 districts	17,257	851	839	3,997	22,943	22,943	0	0	22,943	
Total	15 communes	4 districts	36,139	5,657	7,526	4,854	54,177	45,013	0	9,163	54,177	
Hoa Binh												
Ngoc Son-Ngo Luong SUFMB	Hoa Binh	Lac Son										
	Ngoc Lau	Lac Son	1,741	0	144	3	1,888	1,888	0	0	1,888	
	Ngoc Son	Lac Son	2,340	0	144	16	2,500	1,597	903	0	2,500	
	Tan My	Lac Son	424	0	112	0	536	536	0	0	536	
	Tu Do	Lac Son	4,279	127	46	12	4,463	4,463	0	0	4,463	
	Ngo Luong	Tan Lac	2,819	0	815	16	3,649	2,831	818	0	3,649	
	Nom Son	Tan Lac	1,204	0	383	15	1,601	514	1,087	0	1,601	
	Bac San	Tan Lac	717	0	273	0	990	990	0	0	990	
Sub-total	2 districts	13,523	127	1,916	61	15,627	12,818	2,809	0	15,627		
HANG KIA - Pa Co SUFMB	Hang Kia	Mai Chau	1,130	0	68	416	1,614	1,614	0	0	1,614	
	Pa Co	Mai Chau	804	1	47	497	1,349	1,349	0	0	1,349	
	Tan Son	Mai Chau	317	4	78	379	777	777	0	0	777	
	Bao La	Mai Chau	445	0	0	92	537	537	0	0	537	
	Cun Pheo	Mai Chau	375	10	3	131	518	518	0	0	518	
	Na Meo	Mai Chau	199	0	0	9	208	208	0	0	208	
	Dong Bang	Mai Chau	190	0	0	0	190	190	0	0	190	
	Pheng Ve	Mai Chau	39	5	6	8	58	58	0	0	58	
	Sub-total	1 district	3,498	20	201	1,533	5,252	5,252	0	0	5,252	
	Phu Canh SUFMB	Dong Chum	Da Bac	1,051	152	354	0	1,557	1,557	0	0	1,557
Phu Canh SUFMB	Tan Pheo	Da Bac	667	161	204	0	1,032	1,032	0	0	1,032	
	Dong Ruong	Da Bac	1,374	54	217	0	1,645	1,645	0	0	1,645	
	Doan Ket	Da Bac	805	0	259	6	1,070	1,070	0	0	1,070	
	Sub-total	1 district	3,898	366	1,035	6	5,304	5,304	0	0	5,304	
	Dong Nghe	Da Bac	1,637	141	389	25	2,192	0	2,192	0	2,192	
	Dong Chum	Da Bac	1,092	151	49	4	1,297	0	1,297	0	1,297	
	Don Ruong	Da Bac	801	2	528	9	1,339	0	1,339	0	1,339	
	Muong Chieng	Da Bac	689	238	292	15	1,234	0	1,234	0	1,234	
	Muong Tuong	Da Bac	88	0	530	37	655	0	655	0	655	
	Suoi Nanh	Da Bac	811	147	383	4	1,345	0	1,345	0	1,345	
Da River Watershed PFMB	Tien Phong	Da Bac	2,092	187	343	56	2,678	0	2,678	0	2,678	
	Vay Nua											



**Table I-6-3 Results of the 1st Selection of the Potential Target Sites in the Four Provinces**

Provinces / FMBs	Communes	District	Land Allocation Status	Potential Target Sites			
				Forest Protection	ANR without Enrichment	Afforestation	Total
Dien Bien							
Dien Bien PFMB	Na Tong	Dien Bien	Lands allocated to PFMB and those unallocated	970	80	430	1,480
	Phu Luong	Dien Bien	ditto	0	270	650	920
	Muong Nha	Dien Bien	ditoo	2,360	290	490	3,140
	Sub-total	1 district	-	3,330	640	1,570	5,540
Muong Cha PFMB	Muong Tung	Muong Cha	Lands allocated to PFMB and those unallocated	0	860	800	1,660
Tuan Giao PFMB	Phinh Sang	Tuan Giao	Land unallocated and managed by CPC	1,430	30	30	1,490
	Ta Ma	Tuan Giao	ditto	3,420	310	760	4,490
	Sub-total	1 district	-	4,850	340	790	5,980
Muong Phang SUFMB	Muong Phang	Dien Bien	Lands allocated to SUFMB and those unallocated	830	130	0	960
	Pa Khoang	Dien Bien	ditto	1,390	60	0	1,450
	Sub-total	1 district	-	2,220	190	0	2,410
Total	8 communes	3 districts	-	10,400	2,030	3,160	15,590
Lai Chau							
Nam Ma PFMB	Hồng Thu	Sin Ho	Lands allocated to PFMB	0	150	450	600
	Lùng Thàng	Sin Ho	ditto	0	0	0	0
	Ma Quai	Sin Ho	ditto	0	110	0	110
	Nậm Cha	Sin Ho	ditto	0	30	0	30
	Nậm Cuối	Sin Ho	ditto	0	80	530	610
	Nậm Hăn	Sin Ho	ditto	0	0	220	220
	Nậm Mạ	Sin Ho	ditto	0	160	0	160
	Nậm Tầm	Sin Ho	ditto	0	150	0	150
	Noong Hèo	Sin Ho	ditto	0	310	0	310
	Pa Khóa	Sin Ho	ditto	0	70	20	90
	Phảng Sô Lin	Sin Ho	ditto	0	90	390	480
	Phìn Hồ	Sin Ho	ditto	0	0	0	0
	Pu Sam Cáp	Sin Ho	ditto	0	490	0	490
	Sub-total	1 district	-	0	1,640	1,610	3,250
Nam Na PFMB	Chăn Nưa	Sin Ho	Lands allocated to PFMB	0	380	210	590
	Làng Mỏ	Sin Ho	ditto	0	80	0	80
	Pa Tân	Sin Ho	ditto	0	380	410	790
	Sả Dề Phìn	Sin Ho	ditto	0	320	160	480
	Tả Ngáo	Sin Ho	ditto	0	240	10	250
	Tả Phìn	Sin Ho	ditto	0	80	0	80
	TT. Sín Hồ	Sin Ho	ditto	0	30	60	90
	Tủa Sín Chải	Sin Ho	ditto	0	1,440	960	2,400
Sub-total	1 district	-	0	2,950	1,810	4,760	
Tan Uyen PFMB	Hồ Mít	Tan Uyen	Lands allocated to PFMB	0	320	10	330
	Mường Khoa	Tan Uyen	ditto	0	970	0	970
	Nậm Cắn	Tan Uyen	ditto	0	270	910	1,180
	Nậm Sỏ	Tan Uyen	ditto	0	470	220	690
	Pắc Ta	Tan Uyen	ditto	0	370	0	370
	Phúc Khoa	Tan Uyen	ditto	0	110	0	110
	Tả Mít	Tan Uyen	ditto	0	180	240	420
	Trung Đông	Tan Uyen	ditto	0	0	0	0
	TT. Tân Uyên	Tan Uyen	ditto	0	1,060	0	1,060
Sub-total	1 district	-	0	3,750	1,380	5,130	
Than Uyen PFMB	Phúc Than	Than Uyen	Lands allocated to PFMB	0	280	0	280
	Hua Nà	Than Uyen	ditto	0	130	0	130
	Khoen On	Than Uyen	ditto	0	1,170	0	1,170
	Mường Kim	Than Uyen	ditto	0	130	0	130
	Mường Mít	Than Uyen	ditto	0	0	720	720
	Mường Than	Than Uyen	ditto	0	670	0	670
	Pha Mu	Than Uyen	ditto	0	0	540	540
	Tả Gia	Than Uyen	ditto	0	660	0	660
	Tả Hừa	Than Uyen	ditto	0	160	0	160
	Tả Mung	Than Uyen	ditto	0	360	550	910
Sub-total	1 district	-	0	3,560	1,810	5,370	
Total	40 communes	3 districts	-	0	11,900	6,610	18,510
Son La							
Copia-SUFMB	Chiềng Bôm	Thuan Chau	Lands allocated to SUFMB	880	1,050	610	2,540
	Co Mạ	Thuan Chau	ditto	1,840	0	150	1,990
	Long Hẹ	Thuan Chau	ditto	580	20	60	660
	Sub-total	1 district	-	3,300	1,070	820	5,190
Thuan Chau PFMB	Nam Lau	Thuan Chau	Lands allocated to PFMB	1,930	430	1,150	3,510
	Muong Bam	Thuan Chau	ditto	510	30	110	650
	Ban Lam	Thuan Chau	ditto	450	190	490	1,130
	Sub-total	1 district	-	2,890	650	1,750	5,290
Quynh Nhai PFMB	Ca Nang	Quynh Nhai	Lands allocated to HHs<1	1,420	140	20	1,580
	Muong Giang	Quynh Nhai	ditto	400	20	110	530
	Muong Sai	Quynh Nhai	ditto	560	110	300	970
	Muong Chien	Quynh Nhai	ditto	110	0	0	110
	Ma Pha Kinh	Quynh Nhai	ditto	470	240	70	780
	Sub-total	1 district	-	2,960	510	500	3,970
Xuan Nha SUFMB	Chiềng Xuân	Van Ho	Lands allocated to SUFMB	1,690	0	20	1,710
	Tân Xuân	Van Ho	ditto	470	260	150	880
	Xuân Nha	Van Ho	ditto	670	0	0	670
	Chiềng Sơn	Moc Chau	ditto	590	20	70	680
	Sub-total	2 districts	-	3,420	280	240	3,940
Total	15 communes	4 districts	-	12,570	2,510	3,310	18,390

Note: <1 The land allocation status in Qunh Nhai is bit unclear, although the areas are allocated to villages, communities, and households. The lands may include unallocated areas.

**Table I-6-3 Results of the 1st Selection of the Potential Target Sites in the Four Provinces**

Provinces / FMBs	Communes	District	Land Allocation Status	Potential Target Sites			
				Forest Protection	ANR without Enrichment	Afforestation	Total
<b>Hoa Binh</b>	<b>Hoa Binh</b>						
Ngoc Son-Ngo Luong SUFMB	Ngoc Lau	Lac Son	Lands allocated to HHs/villages	930	0	10	940
	Ngoc Son	Lac Son	Lands allocated to SUFMB and HHs/villages	330	0	10	340
	Tan My	Lac Son	Lands allocated to HHs/villages	420	0	50	470
	Tu Do	Lac Son	Lands allocated to HHs/villages	1,770	90	0	1,860
	Ngo Luong	Tan Lac	Lands allocated to SUFMB and HHs/villages	950	0	210	1,160
	Nam Son	Tan Lac	Lands allocated to SUFMB and HHs/villages	1,080	0	150	1,230
	Bac Son	Tan Lac	Lands allocated to HHs/villages	610	0	90	700
	<b>Sub-total</b>	<b>2 districts</b>	<b>-</b>	<b>6,090</b>	<b>90</b>	<b>520</b>	<b>6,700</b>
HANG Kia - Pa Co SUFMB	Hang Kia	Mai Chau	Lands allocated to SUFMB	1,000	0	0	1,000
	Pa Co	Mai Chau	ditto	800	0	0	800
	Tan Son	Mai Chau	ditto	200	0	70	270
	Bao La	Mai Chau	ditto	250	0	0	250
	Cun Pheo	Mai Chau	ditto	300	0	0	300
	Na Meo	Mai Chau	ditto	0	0	0	0
	Dong Bang	Mai Chau	ditto	125	0	0	125
	Pieng Ve	Mai Chau	ditto	25	0	0	25
	<b>Sub-total</b>	<b>1 district</b>	<b>-</b>	<b>2,700</b>	<b>0</b>	<b>70</b>	<b>2,770</b>
Phu Canh SUFMB	Dong Chum	Da Bac	Lands allocated to SUFMB	1,000	150	200	1,350
	Tan Pheo	Da Bac	ditto	500	0	200	700
	Dong Ruong	Da Bac	ditto	1,000	0	100	1,100
	Doan Ket	Da Bac	ditto	800	0	50	850
	<b>Sub-total</b>	<b>1 district</b>	<b>-</b>	<b>3,300</b>	<b>150</b>	<b>550</b>	<b>4,000</b>
Da River Watershed PFMB	Dong Nghe	Da Bac	Lands allocated to HHs/villages	1,600	100	190	1,890
	Dong Chum	Da Bac	ditto	1,000	100	20	1,120
	Dong Ruong	Da Bac	ditto	800	0	260	1,060
	Muong Chieng	Da Bac	ditto	600	200	140	940
	Muong Tuong	Da Bac	ditto	50	0	260	310
	Suoi Nanh	Da Bac	ditto	800	100	190	1,090
	Tien Phong	Da Bac	ditto	2,000	100	170	2,270
	Vay Nua	Da Bac	ditto	1,500		260	1,760
	Yen Hoa	Da Bac	ditto	1,450	400	30	1,880
	Trung Hoa	Tan Lac	ditto	1,110	0	170	1,280
	Ngoi Hoa	Tan Lac	ditto	1,110	0	110	1,220
	Ba Khan	Mai Chau	ditto	1,600	0	70	1,670
	Tan Dan	Mai Chau	ditto	1,400	0	140	1,540
	Tan Mai	Mai Chau	ditto	900	0	30	930
	Dong Bang	Mai Chau	Lands allocated to PFMB	720	0	40	760
	Phuc San	Mai Chau	ditto	70	0	0	70
	Thung Nai	Cao Phong	ditto	440	0	50	490
	Binh Thanh	Cao Phong	ditto	340	0	0	340
	<b>Sub-total</b>	<b>4 districts</b>	<b>-</b>	<b>17,490</b>	<b>1,000</b>	<b>2,130</b>	<b>20,620</b>
<b>Total</b>	<b>34 communes &lt;2</b>	<b>5 districts</b>	<b>-</b>	<b>29,580</b>	<b>1,240</b>	<b>3,270</b>	<b>34,090</b>
<b>Grand Total</b>	<b>97 communes</b>	<b>15 districts</b>		<b>52,550</b>	<b>17,680</b>	<b>16,350</b>	<b>86,580</b>

Note: <2 Two (2) communes, namey, Dong Chum and Dong Ruong, relate to two different target areas, namely Da River Watershed Protection Forest and Phu Canh Nature Reserve, and another one (1) commune named Dong Bang relates to Hang Kia-Pa Co Nature Reserve. Hence, the total number of communes in Hoa Binh is 34.

**Table I-6-4 Results of Assessment of the Scope of the Project Components**

Components	Activities	Results of Assessment
1. Forest inventory and planning	<ul style="list-style-type: none"> <li>◆ Forest inventory and update of maps of forest lands covering the target sites</li> <li>◆ Set-ups of land marks in forest boundaries</li> <li>◆ Participatory land use planning</li> <li>◆ Detailed design for forest development and infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>■ It is necessary to identify and demarcate the target sites for forest development/improvement activities in a participatory manner since significant parts of the potential target sites have already been allocated to households/villages.</li> <li>■ There was a request from one SUFMB for the demarcation of its boundaries with land marks.</li> <li>■ Land use plans should be developed and agreed on by local communities who will take part in forest improvement activities and/or have used target sites for farming before.</li> <li>■ Land use plans developed by communities should also be used as a basis for determination of livelihood development support.</li> </ul>
2. Training and extension	<ul style="list-style-type: none"> <li>◆ Information dissemination</li> <li>◆ Socio-economic baseline survey</li> <li>◆ Support for consolidation and forest land allocation</li> <li>◆ Capacity building of forest owners and local people</li> </ul>	<ul style="list-style-type: none"> <li>■ Prior consent to the project activities must be taken from de-facto land users or holders of land certificates.</li> <li>■ It is necessary to heighten awareness of the project as well as its guidelines among key actors of the project in the beginning of the project to ensure smooth operations of the project. In fact, JICA 2 had faced delays in the implementation of the sub-projects in some provinces due to a lack of local stakeholders' understanding of the project.</li> <li>■ Key players in the provinces as well as districts (e.g., DARD officers, FP-division in the districts, and PF/SUFMB officers) showed their needs to enhance their project management skills, facilitation skills, and other technical aspects relating to the project.</li> <li>■ Some SUF/PF-MBs in the provinces have less experience in forest development and improvement activities in the past; therefore, capacity building of forest owners would be essential to the smooth, effective, and efficient project implementation.</li> <li>■ There is a need to introduce a collaborative management system with a benefit sharing mechanism in some SUFs where no PFES payment is expected, so that SUFs could be protected in collaboration with local communities. DARD, District FP division, and MBs concerned should be fully guided and given necessary tools and guidelines on this matter.</li> </ul>
3. Improvement of watershed forests	<ul style="list-style-type: none"> <li>◆ Afforestation in bare lands</li> <li>◆ Protection of natural forests</li> <li>◆ Assisted natural regeneration with/without enrichment planting</li> </ul>	<ul style="list-style-type: none"> <li>■ It may not be easy to convert the areas currently categorized as "bare lands" into forests, as the majority of them are used or have been used for farming purposes. Hence, it is likely unrealistic to plan a large scale of afforestation in the target provinces except Lai Chau where land use conflict seems to be rather less likely to happen.</li> <li>■ On the other hand, regeneration ("ANR: Assisted Natural Regeneration") and protection of natural forests are likely easy to introduce as they could be considered as additional sources of income for land user/owners.</li> <li>■ It is, however, important to make "protection of natural forests" more beneficial to local communities to attract their interest in forest protection.</li> <li>■ The unit costs for afforestation, ANR with enrichment, ANR without enrichment, and protection of natural forests should be reviewed and revised, and optimal costs should be determined in consideration of the government</li> </ul>

Components	Activities	Results of Assessment
		regulations (Decision No. 75) as well as cost norms used by KfW7 and other projects.
4. Construction of silviculture infrastructure	◆ Construction of forest watch towers, nurseries, access roads, fire break lines, information boards, and forest guard stations	<ul style="list-style-type: none"> <li>■ In general, SUFMBs/PFMBs in the provinces lack facilities needed for management of their assigned areas as the majority of them have been established in the past 10 years.</li> <li>■ Building of guard stations, set-up of information boards, and development of foot paths are the major activities proposed by SUFMBs, while PFMBs proposed the construction of forest roads in addition to those requested by SUFBs.</li> </ul>
5. Construction of small-scale infrastructure	◆ Construction of rural roads, small-scale irrigation systems, and/or water supply systems	<ul style="list-style-type: none"> <li>■ In general, all the communes in the districts surveyed by the Team have high needs of the following infrastructure development even on a small scale. <ul style="list-style-type: none"> <li>- rehabilitation/expansion or new construction of rural roads (commune to commune, village to village, and village to farms)</li> <li>- rehabilitation or new construction of a small scale irrigation system (paddy/ upland field)</li> <li>- rehabilitation/installation of a village water supply system</li> </ul> </li> <li>■ There were also proposals on the installation of an electricity supply and building of community houses in the long-lists prepared by DPCs.</li> <li>■ It is important to assess and evaluate development needs in terms of the necessity, effectiveness for livelihood improvement, and potential environmental impacts.</li> </ul>
6. Forest fire control	<ul style="list-style-type: none"> <li>◆ Procurement of forest fire control equipment</li> <li>◆ Conduct of forest fire control training and drills</li> </ul>	<ul style="list-style-type: none"> <li>■ Forest fire is considered as one of the major drivers of forest degradation in the target provinces except Hoa Binh.</li> <li>■ In 2011/2012, MARD provided forest fire control equipment to communes in the target provinces; however, most of them need to be replaced.</li> <li>■ Heavy equipment, such as wind blower, has not been effectively used in the field as it was difficult to carry in the mountainous areas.</li> <li>■ The government has promoted a community-based approach to forest fire control; therefore, the enhancement of communities' capacity by provision of forest fire control drills with necessary equipment is judged as rational.</li> </ul>
7. Livelihood improvement	<ul style="list-style-type: none"> <li>◆ Support for livelihood improvement activities</li> <li>◆ Strengthening of market chains</li> </ul>	<ul style="list-style-type: none"> <li>■ As the main drivers of forest degradation and deforestation are likely linked to socio-economic conditions of local communities residing in and around PFs/SUFs, support for livelihood improvement is requisite for sustainable forest management</li> <li>■ Livelihood support which directly or indirectly contributes to sustainable land and/or forest management in the localities should be identified and selected in a participatory manner. The results of the participatory land use planning could be used for identification and selection of livelihood support options.</li> <li>■ As PFES payment is limited or nil in some SUFs/PFs, a benefit sharing mechanism synchronized with effective livelihood support is essential for ensuring the project effects after the end of the project.</li> </ul>

Table I-6-5 Needs for Improvement of Silviculture Infrastructure in the Proposed Areas in the Target Provinces

Province	District	Management Body	Forestry Road	Foot pass	Fire Breakline	Fire watch tower	Forest Guard Office	Forest Guard Station	Information board	Sign board	Nursery
Unit			km	km	km	no.	no.	no.	no.	no.	no.
Dien Bien	Dien Bien	Dien Bien PFMB	-	-	N.A	-		2	3	-	1
		Muong Phang SUFMB	-	-	N.A	-	-	4	-	-	-
	Muong Cha	Muong Cha PFMB	13.8	-	N.A	-	-	2	3	-	1
		Muong Cha PFMB (Unallocated)	20.6	-	N.A	-	-	3	-	-	-
	Tuan Giao	Tuan Giao PFMB	13.6	-	N.A	4	-	3	4	-	-
	Total		48	0	0	4	0	14	10	0	2
Lai Chau	Sin Ho	Nam Ma PFMB	10	-	70	6	-	2	-	15	1
		Nam Na PFMB	27	-	42	2	-	2	-	4	2
	Than Uyen	Than Uyen PFMB	17	-	24	4	-	1	-	2	1
	Tan Uyen	Tan Uyen PFMB	25	-	65	2	-	3	-	3	2
	Total		79	0	201	14		8		24	6
Son La	Thuan Chau	Copia SUFMB	5.0	5.0	N.A	3	-	2	9	-	-
		Thuan Chau PFMB	-	4.0	N.A	2	-	1	-	-	2
	Moc Chau Van Ho	Xuan Nha SUFMB	18.0	-	N.A	2	-	1	4	-	-
	Quynh Nhai	Quynh Nhai PFMB			N.A		-				
	Total		23	9	0	7	0	4	13	0	2
Hoa Binh	Da Bac	Phu Canh SUFMB	-	-	14	1	2	1		-	1
	Da Bac and others	Da river PFMB	23	-	N.A	-	1		18	59	-
	Lac son Tan Lac	Ngoc Son - Ngo Luong SUFMB	-	-	N.A	1	4	5		-	-
	Mai Chau	Hang Kia - Pa Co SUFMB		-	N.A						
	Total		23	0	14	2	7	6	18	59	1
Overall			173	9	215	27	7	32	41	83	11

## ***Appendix***

## **Appendix-1**

### **Overview of Actions against Climate Change and for REDD+ in Vietnam**

This appendix summarises the context and current status of Vietnam's efforts to mitigate climate change and in particular to reduce emissions from deforestation and forest degradation.

#### **1. Climate Change Trends and Impacts in Vietnam**

Vietnam's long coastline, geographic location, and diverse topography and climates contribute to its being one of the most hazard-prone countries of the Asia-Pacific region, with storms and flooding, in particular, responsible for economic and human losses (GFDRR, 2011). Climate change is in general expected to increase the frequency and intensity of hazard events. Given that a high proportion of the country's population and economic assets (including irrigated agriculture and especially wet rice) are located in coastal lowlands and deltas, numerous studies on climate change modelling for Vietnam and anticipated impacts have concluded that Vietnam is likely to be one of the countries most severely affected by climate change in Asia (IPCC, 2014, 2010; ADB, 2013; MoNRE, 2012; GFDRR, 2011; IsPONRE, 2009; Dasgupta, 2007).

Overall climate change trends for Vietnam indicate increased average temperatures over large parts of the country, a notable increase in the number of days with temperatures over 35°C, changes in precipitation are likely to increase the occurrence of drought conditions in Northern and Central Coast regions, and a combination of increased precipitation and sea level rise for the Mekong Delta region (ADB, 2013; MoNRE, 2012).

Vietnam's unique geography however means that climate change trends and their intensity vary across the seven different climatic zones of the country. For the North-west mountainous region of specific concern for this project, the area is expected to be affected by a general increase in average temperatures and the increased occurrence of exceptionally hot days. However, there may also be an increase in anomalous cold surges. Rainfall patterns are expected to be disrupted with increasing unpredictability but a general trend of longer and hotter dry seasons and more intense rainfall events (MoNRE, 2012, 2009).

The North-west mountainous region is recognised as one of the most climate vulnerable regions of Vietnam along with the delta areas. One of the main reasons for this is that local populations are highly dependent on agriculture and in already marginal upland environments, the changes in climate are likely to have serious consequences for agriculture-based livelihoods, including impacts on water demand and scarcity, crop growth rates, growing seasons and yields, types of crops grown, increased likelihood of spread of diseases and detrimental pests with warmer temperatures affecting both arable production and animal husbandry, meanwhile increases in anomalous cold surges can also increase risks of cattle dying (FAO, 2011). It is also one of the poorest parts of the country and the poor are considered to be the group most vulnerable to climatic changes.

#### **2. National Efforts to Reduce GHG Emissions**

The climatic trends and anticipated impacts across large parts of the country mean that the Government of Vietnam (GOV) is taking climate change seriously. Vietnam ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1994, and the Kyoto Protocol in 2002 and continues to be a highly active participant in the international negotiations. Whilst adaptation to the likely impacts of global climate change in Vietnam is perhaps unsurprisingly prioritised, the GoV also notes the need to take advantage of opportunities to develop a low carbon economy and to join international efforts to mitigate climate change.

Ahead of the most recent UNFCCC Conference of Parties (CoP) in Paris, Vietnam submitted its Intended Nationally Determined Contribution (INDC) which includes both a mitigation and

an adaptation component. The INDC pledges to reduce Vietnam's Greenhouse Gas (GHG) emissions by 8% by 2030 compared to a Business as Usual scenario (BAU). The above-mentioned contribution could be increased up to 25% with international support. The mitigation component indicates that GHG emission intensity would be reduced over time through policy initiatives to improve energy efficiency, reduce energy consumption, shifts to renewable energies, promote sustainable agriculture and enhancement of forest carbon sequestration (including through the development of REDD+).

At the national level, the primary policy documents laying out the GoV response to climate change are the National Target Programme Responding to Climate Change (NTP-RCC) (2008) and the National Climate Change Strategy (2011).

The stated strategic objectives of the NTP - RCC are to assess climate change's impacts and develop feasible action plans to effectively respond in both the short and long - term to ensure sustainable development. The plan includes near term (to 2010) and longer term (to 2020) priority activities to address 8 sub-objectives or programme areas:

- 1) Assessing the impacts of climate change
- 2) Identifying appropriate responses
- 3) Developing a scientific-technical program
- 4) Strengthening capacity and the policy framework in the relevant organizations and institutions
- 5) Raising awareness across the country
- 6) Enhancing international cooperation
- 7) Mainstreaming the NTP across all sectors
- 8) Developing specific action plans to respond to climate change

In addition, climate change has been mainstreamed into the National Socio-Economic Development Strategy (2011-2020) and Socio-Economic Development Plan (2011-2015), as well as various strategies on green growth, disaster risk reduction, coastal zone management, and energy supply and use. Economic sectors and provinces have also developed Action Plans to respond to climate change.

### **3. Status of REDD+ Development in Vietnam**

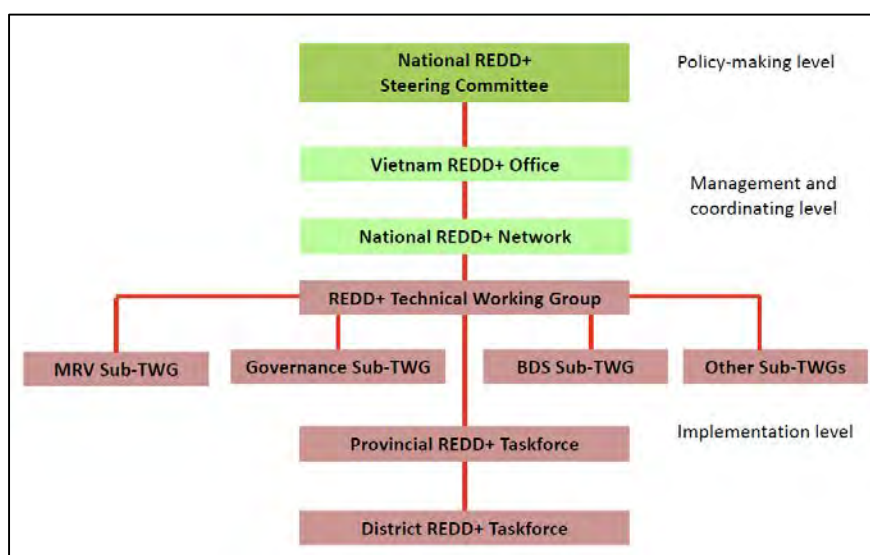
The GoV, through their INDC have indicated that the forestry sector is expected to play a considerable role in climate change mitigation, in particular with reference to the National Forest Sector policy goal of restoring forest cover to 45%. The INDC as well as GoV forest sector policy emphasize the role of Payments for Forest Ecosystem Services (PFES), including the development of REDD+ as a means towards achieving this ambitious target.

In the international climate negotiations the GoV has clearly indicated its interest in REDD+ to the UNFCCC secretariat in February 2008. As such, the country has received considerable international financial and technical support for the development of REDD+. Vietnam became one of the original UN-REDD pilot countries in 2010, with support subsequently extended into a second phase (2014-2018). At the same time, Vietnam was also one of the first countries to be supported by the World Bank's Forest Carbon Partnership Facility (FCPF). Both programmes provide technical and financial support for REDD+ 'Readiness' i.e. determining and filling the gaps between Vietnam's existing social, technical and institutional capacities and those that may be required for participation in an eventual international mechanism providing results-based payments for REDD+. Additionally, several bilateral development agencies have also provided significant investment support for the development of REDD+ at national level as well as in piloting REDD+ 'on the ground' at sub-national levels, notably GIZ, JICA and the United States Agency for International Development (USAID).



In Vietnam, Ministry of Natural Resources and Environment (MoNRE) takes the lead in overall management of climate change programs. It is also the focal agency of the UNFCCC and CBD. The NTP-RCC is the main overall programme for responding to climate change and MoNRE is the lead agency responsible. The NTP-RCC is approved by the Prime Minister in December 2008, in which REDD+ is an important component. Under the NTP-RCC structure, VNFOREST/ MARD is responsible for all climate change activities in forestry sector, including REDD+.

The institutional arrangements for REDD+ in Vietnam In January 2011, the Vietnam REDD+ Steering Committee is established under authorization of the Prime Minister chaired by Minister of MARD to coordinate all efforts and activities among government agencies at central and local levels, private organizations, NGOs, CSOs and international development partners in the REDD+ implementation. The REDD+ Steering Committee includes representatives from MoNRE, Ministry of Planning and Investment (MPI), Ministry of Finance (MoF), Ministry of Foreign Affairs (MOFA), Ministry of Science and Technology (MoST) and the National Committee for Ethnic Minority Affairs (CEMA). In addition to the steering committee, the National Network and Working Group for REDD was established in 2009 by GoV decision<sup>1</sup>. The diagram below outlines the institutional arrangements for REDD+ in Vietnam.



Source: Vietnam REDD+ Website/ [www.vietnam-redd.org](http://www.vietnam-redd.org)

**Fig. 1: Institutional Arrangements for REDD+ in Vietnam**

In terms of progress to date, a key milestone in REDD+ development in Vietnam was the elaboration of a National REDD+ Action Plan (NRAP) in 2012. The NRAP confirmed that it is designed in compliance with policies and laws of Vietnam, and consistent to the provisions of the UNFCCC and relevant treaties and international conventions Vietnam has joined. The NRAP identified a various REDD+ readiness objectives and associated key tasks for the periods 2011-2015 and 2016-2020, including;

- a) Capacity building and institutional development for REDD+ management
- b) Conducting surveys to compile necessary data and define the baseline emission level and future trends as a basis for monitoring and evaluating the outcomes of REDD+ implementation, and for negotiation with international donors

<sup>1</sup> Decision 2614/QĐ-BNN- LN

<sup>2</sup> Prime Ministerial Decision 799/QĐ-TTg on "Approval of the National Action Program on Reduction of Greenhouse Gas Emissions through Efforts to Reduce Deforestation and Forest Degradation, Sustainable Management of Forest Resources, and Conservation and Enhancement of Forest Carbon Stocks" 2011 – 2020.

- c) Establishment and operation of the system of measurement, reporting and verification (MRV)
- d) Formulation of a financial management mechanism applicable for National REDD+ Action Program
- e) Implementation of REDD+ pilot projects
- f) Promotion of cooperation and sharing experience with the countries in the region on the implementation of REDD+, strengthening forest law enforcement, governance and trading (FLEGT)
- g) Review and drawing of the experience from REDD+ implementation in the pilot provinces and newly introduced international practices for revising and improving the Program that will be expanded at the nation-wide scale in the next phase

Since 2014, there has been a considerable increase in the level of REDD+ planning and implementation at sub-national levels, including the JICA-funded SUSFORM-NOW project in Dien Bien which is of particular relevance to the proposed loan project. With support from JICA, Dien Bien became the first province in Vietnam to develop a Provincial REDD+ Action Plan (PRAP) in 2014. Lam Dong followed shortly after with support from the USAID Lowering Emissions in Asia's Forests (LEAF) project. UN-REDD is currently supporting PRAP development at a further five provinces (at the time of writing Ca Mau's PRAP has just been approved). Meanwhile another five provinces in Vietnam's North-Central Agro-ecological zone are also in the process of finalising their PRAPs as part of efforts to prepare a proposal for the World Bank's Carbon Fund with support from various donors and implementing agencies. Actual on the ground implementation of pilot initiatives has also finally begun in earnest in the six UN-REDD pilot provinces.

A recent review of NRAP implementation (McNally & Nguyen, 2015) concluded that there has been important progress in the development of the four design elements of REDD+: the National REDD+ Action Plan, the Forest Reference Emission Level (FREL/FRL), the Measuring, Reporting and Verification (MRV) system and the Safeguard Information System (SIS). The review however also made reference to certain shortcomings in NRAP implementation to date and in particular called for the better integration of REDD+ in the broader context of green growth and sustainable development as well as highlighting the need define appropriate and more targeted REDD+ policies and measures (PaMs) based on more thorough analysis of the drivers of deforestation and forest degradation. Such analyses would also help Vietnam to be more focused in determining the scale and scope of REDD+, rather than covering all five REDD+ activities (avoided deforestation, avoided degradation, forest conservation, sustainable forest management, and forest stock enhancement). To this end, a 'drivers' assessment covering each of Vietnam's eight agro-ecological zones has just started as part of a process to revise the NRAP accordingly.

#### **4. REDD+ Safeguards**

REDD+ as a concept has evolved over time and it is now widely acknowledged that in addition to climate change mitigation or the 'carbon benefits' it could present various environmental and social risks, as well as a range of 'non-carbon co-benefits'. Box 1 below summarises some of the main environmental and social risks in REDD+.

### Box 1: Key environmental and social risks in REDD+

Environmental Risks	Social Risks
<ul style="list-style-type: none"> <li>• Biodiversity loss resulting from the introduction/promotion of inappropriate forest management methods (e.g. conversion of natural forests to mono-crop plantations and use of non-native species)</li> <li>• Loss of ecological linkages and creation of ecosystem disturbances and imbalances due to land/resource use changes motivated by carbon stock values of forests</li> <li>• Encouraged or spontaneous intensification of agricultural use with methods that are harmful to biodiversity</li> <li>• Disturbance or loss of natural ecological functions and services due to afforestation of non-forest ecosystems of high biodiversity value or importance for landscape connectivity</li> <li>• Loss of traditional ecological knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• Misappropriation and inequitable distribution of REDD+ funds (particularly in weak governance systems)</li> <li>• Displacement/relocation of indigenous peoples and forest-dependent communities from their customary or traditional territories</li> <li>• Loss of access, use, tenure and ownership rights over land and resources</li> <li>• Loss of livelihoods and reduced livelihood security (increased vulnerability)</li> <li>• Social exclusion and elite capture (increased inequity)</li> <li>• Loss of traditional cultures and knowledge</li> <li>• Exclusion of women in forest management and planning (with raised profile and income-earning potential from REDD+)</li> </ul>

At the same time, environmental and social non-carbon co-benefits could include:

### Box 2: Environmental and social co-benefits in REDD+

Environmental Co-benefits	Social Co-benefits
<ul style="list-style-type: none"> <li>• Biodiversity conservation</li> <li>• Enhanced ecosystem services (such as coastal or watershed protection, increased soil fertility)</li> </ul>	<ul style="list-style-type: none"> <li>• Pro-poor rural development</li> <li>• Improved forest and natural resource governance</li> <li>• Improved human rights for forest-dependent communities</li> <li>• Climate change adaptation</li> </ul>

In recognition that social and environmental risks associated with REDD+ must be addressed (REDD+ does no harm), and that multiple benefits are important (REDD+ does good), parties to the UNFCCC agreed to a set of seven safeguards for REDD+ at COP 16 in Cancun, referred to as the ‘Cancun safeguards’.

### Box 3: The UNFCCC REDD+ (Cancun) Safeguards

<p>When undertaking REDD+ actions... the following safeguards should be promoted and supported:</p> <ol style="list-style-type: none"> <li>a) Actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements;</li> <li>b) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;</li> <li>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;</li> <li>d) The full and effective participation of relevant stakeholders, in particular, indigenous peoples and local communities</li> <li>e) Actions are consistent with the conservation of natural forests and biological diversity, ensuring that actions 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;</li> <li>f) Actions to address the risks of reversals;</li> <li>g) Actions to reduce displacement of emissions</li> </ol>
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The Cancun Agreement states that “when undertaking [REDD+] activities, the...safeguards should be promoted and supported”. However, the UNFCCC has provided limited guidance on how countries will report on the application of this set of safeguards. “A system for providing

information on how the safeguards...are being addressed and respected throughout the implementation of [REDD+] activities” is required, and that this system should: be country driven; implemented at the national level; be built on existing systems; recognise international conventions and agreements; and respect gender considerations.

Importantly, the Durban Decision also links the disbursement of REDD+ finance with the effective implementation of the Cancun safeguards. Thus, to receive results-based financing from REDD+, countries will need to demonstrate that they have addressed and respected the Cancun safeguards.

NRAP (2012) states that it is ‘designed in compliance with policies and laws of Vietnam, as well as being consistent to the provisions of the UNFCCC and relevant treaties and international conventions Vietnam has joined’. This includes environmental and social safeguards provisions under the UNFCCC text on REDD+ as well as other relevant international conventions and treaties such as CBD, CITES, UNDRIP among others

In 2012, the GoV also approved the establishment of the STWG on REDD+ Safeguards. This group has been relatively active (co-chaired by the VRO & SNV) and has met to discuss various relevant issues and to develop a country-led approach to REDD+ safeguards. Central to this idea is that rather than adopting or appropriating external safeguards policies and standards (such as those of the World Bank or other donors), Vietnam can respond to the international requirements through it’s own existing policy and legal framework. Such a country-led approach has numerous advantages, including; control over the safeguards that are implemented, retention of national sovereignty, greater country ownership, cost-effectiveness and flexibility to integrate the requirements (Rey et al, 2013). The main elements of a country-led safeguards approach are depicted below in Fig. 1.



Source: Rey & Swan (2014)

**Fig 1: Main elements of a country safeguards approach**

An important output developed through SG-STWG consultation was the elaboration of a ‘Safeguards Roadmap’ in 2014 which provides an initial analysis of options, priorities, milestones and recommendations on all aspects related to REDD+ safeguards in Vietnam, consistent with national regulations, capacities and circumstances.

A preliminary analysis of Vietnam’s policy, laws and regulations in comparison with the UNFCCC safeguard requirements

was also carried out to inform the roadmap. This analysis produced a range of gap-filling recommendations as part of developing a country-led approach to REDD+ safeguards. In addition to recommending further development national legislation, the roadmap outlined the further steps towards development of the safeguards framework for REDD+ and SIS i.e. the assessment of institutional and compliance frameworks for implementing the existing policies, laws and regulations. The UN-REDD Programme Phase II now supports these next steps as key readiness activities.