LAM DONG PEOPLE COMMITTEE

DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT

REPORT

ACTION PLAN 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"

IN LAM DONG PROVINCE, PERIOD 2014-2020

Da Lat, December 2014

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ABBREVIATIONS

ANR	Assisted Natural Regeneration
BDS	Benefit Distribution System
COP	Conference of the Parties
CSO	Community Service Organisation
DARD	Department of Agriculture and Rural Development
DoLISA	Department of Labour, Invalids and Social Affairs
EF	Emission Factor
FIPI	Forest Inventory and Planning Institute
FMS	Forest Monitoring System
FPD	Forest Protection Department
FPDP	Forest Protection and Development Plan
FREC	Forest Resources and Environment Center
GHG	Greenhouse Gas
ha	Hectares
MARD	Ministry of Agriculture and Rural Development
MRV	Measurement, Reporting and Verification
NFIMP	National Forest Inventory and Monitoring Programme
NGO	Non-Government Organisation
NRAP	National REDD+ Action Program
NTFP	Non-Timber Forest Product
ODA	Official Development Assistance
PaMs	Policies and Measures
PFES	Payments for Forest Environmental Services
PFM	Participatory Forest Monitoring
PPC	Provincial People's Committee
PRAP	Provincial REDD+ Action Plan
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RL	Reference Level
SFC	State Forest Company
SNV	Netherlands Development Organization
UNFCCC	United Nations Framework Convention on Climate Change
USAID-LEAF	United States Agency for International Development-Lowering Emissions in Asia's Forests Program
VND	Vietnam Dong

FOREWORD

Lam Dong and Son La are two provinces in Vietnam that are proactively implementing payment for forest environmental services (PFES) programs. Following the successful piloting of PFES in Lam Dong and Son La provinces, the Vietnam government has institutionalized an officially decree launched across the country for 5 years. Nowadays, there is financial benefit distribution from the provision of forest environmental services, such as water supply, prevention of sedimentation and erosion for hydropower production, water production and landscaping ecotourism. However, there is still PFES which is not paid because the approachment and readiness preparation are taking place to be fit with the conditions at national and provincial levels in management and use of forest resources to meet payments in accordance with international practices and policies and the laws of the country. It is the REDD + payment mechanism of ecosystem services, environmental services of forests via implementation of *reduce emissions from deforestation and forest degradation* activities.

In this context, approachment and readiness to exploit financial resources from REDD + is very necessary to support people and communities living near forests to implement poverty reduction which is associated with benefits from forest environment protection, dealing with climate change. Besides the deployment the plan of forest protection and develop with REDD + intergration to 2020 (PPC approved by Decision No. 18 / QD-UBND 05/01/2013), local government and forestry sector in Lam Dong province determined to develop REDD + action plan for long-term strategic to operational deployment of reducing emissions from deforestation and forest degradation.

This is the task that Government required the provincial government to implement following national REDD + actions program under Decision 799 / QD-TTg dated 27/06/2012. However, Vietnam in general and Lam Dong province in specific need to prepare the necessary conditions with the stakeholders' efforts to implement REDD + initiatives successfully.

REDD + is a new complex problems, is in the process of negotiations at the international level, many of the concepts and implementation methods are gradually improved. Besides, during the implementation of REDD + activities, limiting the direct and indirect negative impacts to the community and ecosystem is a difficult problem. However, because of the common objectives and the support of the province, departments, REDD + programs, international organizations, especially the support of the LEAF project, Department of Agriculture and Rural Development has developed the *"Lam Dong REDD+ Action Plan REDD +"* with the following specific content.

LEGAL BASIS FOR THE ACTION PLAN

National legal documents

- Land Law promulgated by the National Assembly on 26th November, 2003;

- Law on Forest Protection and Development promulgated by the National Assembly on 12th December, 2004;

- Law on Environmental Protection promulgated by the National Assembly on 29th November, 2005;

- Decree No. 99/2010/ND-CP, dated 24th September, 2010, of the Government of Vietnam on Payments for Forest Environmental Services (PFES);

- Decision No. 1462/QD-TTg, dated 23rd August, 2011, of the Prime Minister on approving the Socio-economic Development Master Plan of Lam Dong Province until 2020;

- Decision No. 2139/QD-TTg, dated 5th December, 2011, of the Government of Vietnam on approving the National Strategy on Climate Change;

- Decision No.799/QD-TTg, dated 27th June, 2012, of the Prime Minister on approving the National Reducing Emissions from Deforestation and Forest Degradation (REDD+) Action Program (NRAP);

- Decision No. 57/2012/QD-TTg, dated 9th January, 2012, of the Prime Minister on approving the Forest Protection and Development Plan (FPDP) for 2011-2020;

- Decision No. 3119/QD-BNN-KHCN, dated 1st December, 2011, of the Ministry of Agriculture and Rural Development (MARD) and Ministry of Science and Technology on approving the proposal on greenhouse gas (GHG) emissions reduction in the agriculture and rural development sector up to 2020;

- The legal basis for the implementation of gender equality is provided by: Article 26 of the 2013 Constitution of the Socialist Republic of Vietnam; Law on Gender Equality 2006; and Decision No. 2351/QD-TTg, dated 24th December, 2010, of the Prime Minister on approving the 2011-2020 National Strategy for Gender Equality.

Provincial legal documents

- Decision No. 450/QD-UBND, dated 19th February, 2008, of the Lam Dong Provincial People's Committee (PPC) on approving the planning for three forest types in Lam Dong province for 2008-2020;

- Decisions of the Lam Dong PPC on approving land use planning until 2020 and district land use plans for 2011-2015;

- Decision No. 18/QD-UBND, dated 5th January, 2013, on approving the Lam Dong Province FPDP for 2011-2020;

- Decision No. 67/QD-UBND, dated 13th January, 2014, of Lam Dong PPC on approving the Framework Document of the Lam Dong Provincial REDD+ Action Plan (PRAP);

- Decision No. 1338/QD-UBND, dated 22nd March, 2011, of Lam Dong PPC on issuing the Plan of Action for the implementation of the 2011-2020 National Strategy for Gender Equality.

Provisions in international law

- Decisions adopted at the 16th, 17th, 18th, and 19th Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC).

PART ONE
CURRENT STATUS OF DEFORESTATION, FOREST DEGRADATIONAND REDD+ IN LAM DONG PROVINCE

1. Evaluation of the current status of deforestation and forest degradation, enhancement and conservation of forests, in Lam Dong province

With the support of the United States Agency for International Development-funded Lowering Emissions in Asia's Forests Program (USAID-LEAF), and in collaboration with the Forest Resources and Environment Center (FREC) and Lam Dong Agriculture-Forestry Consulting Company, Lam Dong province conducted an assessment of the drivers of deforestation, forest degradation and afforestation/reforestation during the period 1990-2010. The results of this assessment are important in providing the practical basis for the development of appropriate policies and measures (PaMs) for REDD+ implementation.

1.1. Drivers of deforestation

1.1.1. Conversion to agriculture

The illegal conversion of forest to agricultural land by individual farmers, combined with the government endorsed conversion of forest to land used for socio-economic development, is the biggest driver of deforestation in Lam Dong.

During the period 1990-2010, this driver accounted for 158,499 ha or 71.52% of the total deforestation in the province. Establishing appropriate interventions to address this driver is, therefore, highly important for reducing deforestation rates in the future.

Generally speaking, male members of the province's population harvest timber for use in the construction of housing, while its women more often collect smaller pieces of wood and forest products for the production of coal and illegal sale. The illicit activities of both men and women contribute to deforestation; therefore, awareness raising aimed at reducing such negative impacts must also target both male and female members of the community.

1.1.2. Hydropower plant construction, irrigation, slash and burn, and logging activities

Hydropower plant construction, irrigation, slash and burn, and logging activities are collectively the second biggest driver of deforestation in Lam Dong. From 1990 to 2010, these activities were responsible for 62,615 ha or 28.25% of the total area of deforestation in the province.

The impact of this group of drivers, however, will be reduced in the coming time. This is because, during the period 2011-2020, planned hydropower developments and conversion of land for infrastructure will be completed, and only

4,854 ha will be converted, mostly for settlements and public buildings. From 2006 to2010, the use of slash and burn, along with illegal logging, were also reduced, with only 933 ha deforested through these activities during the period.

In the future, forest management will still need to be improved, however, to control the illegal harvesting of forest products to convert forest to agricultural land.

1.1.3. Residential and infrastructure development

Residential and infrastructure development in Lam Dong from 1990 to 2010 has been reasonably well researched, with the results indicating that only 493 ha of forest land was converted for these purposes over the period. This driver is, subsequently, not considered as big a threat in comparison with other causes of deforestation in the province.

1.1.4. Other factors causing deforestation

- A rising population due to, among other reasons, the free migration of people to Lam Dong province is increasing the demand for land for use in food production and the construction of housing, resulting in the illegal conversion of forest land for these purposes. Ethnic minority people, in particular, have been carrying out deforestation and converting forest land to settlements and agricultural land to support their traditionally very large families. Awareness raising amongst both male and female members of the community is needed to reduce population growth and the deforestation associated with it;

- The productivity of agriculture and perennial tree plantations is not improving, with the current low levels resulting in declining household incomes and the livelihoods of communities. This is further contributing to the conversion of forest land to agricultural land and for perennial tree crops;

- The expansion of cities, and associated increase in demand for energy, have resulted in new infrastructure developments, such as hydropower plants, roads and basic utilities;

- Fire is another, secondary driver of deforestation, linked to subsistence slash and burn and commercial agriculture activities, which is facilitating the conversion of forest land to agricultural land;

- The high level of demand for agricultural products also continues to place pressure to convert forests to agricultural uses;

- Finally, forest law enforcement remains weak. Forest protection forces are generally small in number and possess old, outdated equipment. In many locations, staff also lack capacity, while their passion for work is often low.

1.2. Drivers of forest degradation

1.2.1. Selective logging in natural forests

Logging activities have been identified as the main driver of forest degradation in Lam Dong. Selective logging slows restoration during the rehabilitation cycle, thereby, negatively affecting the amount of carbon sequestered by natural forests. During the period 2000–2010, 282,803 m^3 of timber was logged from 8,164.6 ha of the province's natural forests.

1.2.2. Illegal logging

Map overlays show that forest degradation due to illegal logging is high and widespread across Lam Dong, with it affecting 298,411 ha of the province's natural forests.

1.2.3. Improper use of silvicultural methods

The improper use of silvicultural methods is another major driver of degradation in Lam Dong province's natural forests, and is likely to lead to deforestation if its management remains inadequate.

1.2.4. Other factors causing forest degradation

- Not yet adjust the structure of the forest, forest growth included increases biomass and carbon absorption;

- Controlled burning which emits carbon dioxide and reduces the biodiversity of the forest floor;

- The conversion of natural bamboo forests to plantation forests, such as rubber, resulting in monocultures with less biodiversity;

- Control of the over exploitation and sale of illegal forest products in a number of localities in Lam Dong remains inadequate, while the connection between illegal logging and enforcement officials is complicated in a number of areas of the province, leading to ongoing forest degradation.

1.3. Drivers of forest enhancement

The main drivers of forest enhancement in Lam Dong are activities specifically aimed at enhancing forest carbon stocks and quality, thereby, contributing to their regeneration and enrichment.

From 2000 to 2010, 11,449 ha of the province's forest was subjected to assisted natural regeneration (ANR), representing 99.1% of the 11,551 ha planned for ANR during the period. The area under ANR has subsequently regenerated well and is now categorized as either IIa or IIb forest.

The implementation of ANR is currently wholly dependent on the state budget, and requires long-term investment and significant technical expertise, particularlyin relation to itsconductionon state managed land.

Approved by Decision No. 18/QD-UBND, Lam Dong's FPDP sets aside 33,102 ha of forest for either regeneration or enrichment during the period 2011-2020, accounting for 20.11% of the total area planned for forest development.

However, the budget earmarked for this activity only accounts for 1.53% of the estimated implementation cost, meaning that the area identified for regeneration and enrichment is too great for the limited funding currently available. The province will need to maximize state funds and local resources if the implementation of this solution is to be successful.

1.4. Drivers of afforestation/reforestation

77,630 ha of land was afforested/reforested during the period 1990-2010, mainly consisting of afforestation, reforestation, agro-forestry and regeneration activities. Activities implemented by the state, private firms, organizations, and joint venture programs and projects, however, only accounted for 59,766 ha of the total area of land afforested during the period.

By 2020, Lam Dong province will have implemented 79,538 ha of afforestation and/or plantation development in priority areas, at a total cost of nearly 2,198 billion Vietnam Dong (VND). Of this, 32,140 ha of afforestation will be focused on upland areas, accounting for 40.40% of the total targeted area. This is a highly feasible solution that will be sustainable over the long-term.

1.5. Drivers of forest conservation

Lam Dong's forest conservation efforts are implemented on the special-use forest land of Bi Doup–Nui Ba and Cat Tien national parks, under the responsibility of the management authorities of these two protected areas, which encompass a total area of 82,208 ha or 20.5 % of the total area of forest under protection in the province.

Forest conservation involves the protection and management of forests, as well as the close monitoring of natural changes in forest restoration and regeneration. It prohibits all acts that alter the natural landscape and, in particular, the introduction of exotic plant and animal species.

Existing factors negatively affecting the effectiveness of forest conservation efforts in Lam Dong's special-use forests include the illegal exploitation of endemic forest products and forest encroachment by unauthorised agricultural production. In the future, more research is needed to support improvements in the effectiveness of forest conservation and management in the province.

2. Results, lessons learned and potential implementation of REDD+ in Lam Dong province

The REDD+ mechanism may provide additional, performance-based incentives for countries to further protect and sustainably manage their forests, as well as allow for increased benefits to flow to forest dependent people and communities. REDD+ is essentially a PFES scheme and potentially an important economic tool for forest conservation in Lam Dong province.

Lam Dong has a total area of 977,354ha, encompassing the second largest amount of forest coveramong the provinces of the Central Highlands (after Kom Tum province), and the fifth largest among all of Vietnam's provinces.With their high levels of biodiversity, Lam Dong's forests play a very important role in the socio-economic development of, and environmental protection in the province. They also provide valuable watershed and soil protection services to the province, as well as climate regulation services to the region, including the Central Coastal and South-eastern provinces, Ho Chi Minh City and the Mekong River Basin.

With its endowment of forest resources, advantageous natural conditions and significant experience implementing programs and projects, Lam Dong was the first province in Vietnam chosen topilot and implement REDD+ activities in 2008. Over the past six years, numerous results andlessons learned have been generated, which, along with the future potential implementation of REDD+ in Lam Dong province, are detailed below.

2.1 Results

- With the support of international organizations, a number of REDD+ programs and projects are currently being, or have already been, implemented in Lam Dong province including: UN-REDD Vietnam Phase I and II programmes, implemented with the support of the Government of Norway and three United Nations agencies, namely the Food and Agriculture Organisation, United Nations Development Programme and United Nations Environment Programme; USAID-LEAF,implemented by a consortium of partners including Winrock International, Netherlands Development Organization (SNV), Climate Focus, and The Center for People and Forests; technical assistance activities, implemented by Winrock International as part of theUSAID-funded Asia Regional Biodiversity Conservation Programme; and activities implemented by SNV under the High Biodiversity REDD+ and Delivering Multiple Benefits from REDD+ in Southeast Asia projects (further details of the implementation of REDD+ programs and projectsinLam Dong province are provided in the Appendix);

- The financial and technical support provided to Lam Dong by the aforementionedprograms and projects has helped raise awareness of REDD+ amongst forestry officers, households and communities, and agencies and units, in the province. These stakeholder groups have also had the opportunity to access REDD+ information through the many trainings, conferences and consultations that the programs and projects have facilitated;

Forest governance and related infrastructure in Lam Dong has been developed, in order for the province to be REDD+ ready in accordance with international requirements and the laws of Vietnam. Specifically, REDD+ programs and projects have supported the:development of a forest

referencelevel (RL); analysis of historical forest cover change and calculation of historical emissions; evaluation of emission reduction scenarios; completion of a participatory forest monitoring (PFM) trial; establishment of a benefit distributionsystem (BDS); and site level planning;

With the support of the UN-REDD Programme, Lam Dong has mainstreamed REDD+ into its FPDP. This is in line with the province's commitment to integrate climate change responses into such plans,in accordance with Directive No. 809/CT-BNN-KHCN of MARD.

2.2 Lessons learned and potential implementation of REDD+ in Lam Dong province

- The technical and financial support that international organizations provide through REDD+ programs and projects, such as the ones mentioned above, is still required;

- The implementation of capacitybuilding activities in Lam Dong in recent years has been remarkable. However, in the future, trainings conducted in the province will need to include the increased participation of officers and technical staff from the grassroots level. Capacity building trainings should avoid duplication and focus mainly on developing localforest monitoring skills, and connecting them with the provincial forest monitoring system (FMS) and the national measurement, reporting and verification (MRV) system, which will be both developed in the coming time;

- Currently, the Decree of the Government of Vietnam on PFES allows for payments to be made for the provision water regulatory, and sediment and erosion control, services, in addition to those that maintain landscape beauty. The implementation of REDD+ activities in Lam Dong, however is challenged by the lack of financial resources that are currently available for the provision of incentive-based payments. As a result, pilot models of local benefit sharing systems should be implemented in the province;

- Lam Dong is one of the eight provinces located within Vietnam's Central Highland forest eco-region that has the potential to reduce its GHG emissions. REDD+ activities have been implemented in Lam Dong since 2008. It was the first province selected by the UN-REDD Programme for the implementation of REDD+ pilot activities. Lam Dong was also one of the first provinces in the country (along with Son La province) to pilot the PFES program. The success of the pilot PFES program, along with the successful integration of REDD+ into the province's FPDP, demonstrates the potential that Lam Dong has to successfully implement a PRAP.

PART TWO
CONTENTS OF THE LAM DONG PROVINCE REDD+ ACTION PLAN

I. OBJECTIVES, SCOPE AND SUBJECTS

1. General objectives

To integrate the Lam Dong PRAP into the province's FPDP in order to: enhance the carbon sequestration capacity of Lam Dong's forests; reduce the threats of deforestation and forest degradation; conserve the province's biodiversity; contribute to the successful implementation of the NRAP; and respond to climate change, reduce poverty and sustainably develop forests.

2. Specific objectives

2.1 Period 2014-2015

By the end of 2015, Lam Dong province will have the capacity to implement REDD+ and have completed REDD+ pilot activities. To advance the completion of activities proposed for the REDD+ readiness phase and the implementation of REDD+ pilot interventions, specific development activities include:

Policy development and institutional capacity building: Design and implement activities necessary for the development of management institutions, mechanisms and policies, and be prepared to ensure the management and coordination of an operational and effective REDD+ mechanism. This should be done in accordance with domestic law, while taking into consideration the specific conditions of the province;

Technical capacity building: In order to mobilise the active participation of all available human resources in REDD+ activities, build on the technical capacity that REDD+ projects have developed in the pilot areas of the province in recent years by scaling them up and including all relevant authorities;

Implementation: Tasks include: strengthening the implementation of the FPDP over the medium term (2013-2015) in accordance with Decision No. 57/2012/QD-TTg, dated 1st September, 2012, of the Prime Minister; implementing integrated REDD+ activities and fully exploiting the resources generated through the PFES program; implementing measures to protect and sustainably develop forest resources; improving the quality and value of forests by reducing GHG emissions; creating more jobs and income for the local people through the implementation of REDD+ pilot projects; and prioritizing the participation of women, ethnic minority groups and local communities to ensure that they benefit during the implementation phase.

2.2 For the period 2016-2020

- Evaluate, summarise and generate lessons learned from the implementation of REDD+ during the period 2014–2015;

- Improve mechanisms, policies, and organizational and technical capacity, to ensure the PRAP is coordinated and implemented effectively, based on the results of negotiations on REDD+ at the global and regional levels, and consistent with national REDD+ strategies, policies and guidelines, including social and environmental safeguards;

- Integrate REDD+ into the FPDP to improve forest cover and, by 2020,reduce total emissions from the forestry sector by 27%compared with 2010 levels;

- Contribute to environmental protection, biodiversity conservation, and improved livelihoods of local people and communities, paying special attention to women and ethnic minority groups.

3. Scope and subjects

a) Scope: All areas of forest and forest land in Lam Dong province.

b) Subjects: The state, private institutions and households, and individuals and communities, participating in the management, protection and development of forests.

II. ACTIVITIES

1. For the period 2014-2015

1.1 Capacity building for managing and implementing REDD+

- Communicate and raise awareness of REDD+ amongst the participating organizations (i.e., relevant authorities, businesses, forest owners and specialized agencies), households and individuals;

- Enhance institutional capacity to manage and implement REDD+ activities;

- Organize technical trainings on REDD+ including: forest resource monitoring; establishing an RL; analysis of emission reduction scenarios; REDD+ financial management; gender mainstreaming; and integrate climate change curriculum into university courses. Those participating in the trainings should include forest managers at the provincial and district levels, and forest owners and village representatives, with particular attention focused on ensuring gender balance in participation.

1.2 Development of the forest RL

Lam Dong’s forest RL has been established based on the actual situation in relation to forest resources management and local monitoring efforts in the province.

1.2.1 RL development decisions

Key decisions made in the development of the forest RL that are consistent with national and provincial implementation regulations and capacity included:

+ Scope: The RL to include deforestation and forest degradation, as well as reforestation and afforestation, activities;

+ Scale: The RL was set at the provincial level, taking advantage of the many pilot REDD+ projects in Lam Dong and the data available to assess changes in forest cover;

+ Forest definition: The definition of forest is consistent with Circular No. 34/2009/TT-BNNPTNT, dated 10th June,2009, of MARD on criteria for forest identification and classification;

+ Carbon pools: Above ground live tree biomass was measured using National Forest Inventory and Monitoring Programme (NFIMP) Cycle IV data. Default values were used for other carbon pools. Further data collection and analysis will be needed to inform the estimation of five additional carbon pools, namely: living biomass above ground; living biomass below ground; dead organic matter–dead wood; dead organic matter–litter; and soil;

+ Forest and land use change: Was calculated based on an assessment of forest and land use change for 13 basic forest and land use types over four time periods between 1990 and 2010. This was completed by FREC. (Historical forest and land use change is detailed in the Appendix).

1.2.2. Key steps

(1) Calculation of activity data based on information collected on forest change over four time periods (five year intervals) between 1990 and 2010;

(2) Development of emission factors (EFs) and removal factors based on national forest inventory data;

(3) Estimation of historical emissions by combining the activity data with the EFs/removal factors;

(4) Projecting future emissions and setting the RL based on historical average emission levels.

1.2.3. Historical emissions results

Following the basic technical steps outlined above, and with the support of local and international experts, the following activities were implemented: workshop on forest RLs; training on measuring biomass; analysis of forest carbon stocks; and a workshop on forest stratification and RL development.

After collecting and analysing the data, calculations were made to estimate carbon emissions over a 20 year period from 1990 to 2020, as detailed below:

- Emissions from deforestation amounted to 46.05 million tonnes of CO_2e; equal to an average of 2.30 million tonnes of CO_2e emitted annually;

- Emissions from forest degradation amounted to21.23 million tonnes of CO_2e; equal to an average of 1.06 million tonnes of CO_2e emitted annually;

- Absorption from afforestation and reforestation equalled 10.12 million tonnes of CO_2e; equal to an average of 0.51million tonnes of CO_2e absorbed annually;

- Total net emissions, therefore, equalled 57.16 million tonnes of CO_2e; equal to average annual net emissions of 2.86 million tonnes of CO_2e.

(Full details are provided in the Appendix).

1.2.4 Setting the Lam Dong provincial RL

Based on the calculation of historical carbon dioxide emissions and removal in Lam Dong, a RL is set from which future emissions and removal can be measured against. The start date for REDD+ implementation in the province is 2010 following a stakeholder consultation process, a RL of 2.86 million tonnes of CO_2e per year was selected for the 2010-2020 period (details are provided in the Appendix).

1.3 Analysis of emission reduction scenarios

1.3.1 The need to analyse carbon emissions reduction

Lam Dong has set the goal of achieving a 27% reduction in carbon emissions by 2020, as measured against 2010 levels, taking into consideration various factors, such as: socio-economic development; management of forest resources; the need to ensure the full and effective participation of stakeholders; livelihoods of the people; and biodiversity conservation. Therefore, emission reduction and removal scenarios are needed to assist planners and decision makers in considering and choosing the best and most plausible scenario that balances the social economic and environment goals of the province.

1.3.2 Reporting unit to analyse carbon emissions reduction

The reporting unit for the scenario analysis was based on technical considerations and stakeholder inputs. Consequently, reporting units were a combination of district boundaries, forest use and forest ownership.

1.3.3 Scenarios analysis methodology

- The scenario analysis tool was constructed from spatial analysis tools based on ArcGIS and computational tools for data analysis utilising Microsoft Excel. The tool was developed to be open and flexible, allowing planners to change and update the input variables as desired.

- The four steps involved in building the scenarios included: Step 1,develop the reporting unit; Step 2, identify priority locations(which integrated

poverty, biodiversity and potential for deforestation); Step 3, develop emissions data for past and future scenarios; and Step 4, analyse and compare scenarios using trade-off analysis to synthesis carbon and non-carbon benefits.

(Full details are provided in the Appendix)

1.3.4 Proposed scenarios and selection results

1.4.4.1 Proposed scenarios

- Scenario 1: Existing rate from historical data to 2020 with analysis of forestry measures in 5 years of FPDP implementation.

- Scenario 2: This scenario simulated carbon emissions and removal to 2020 based on the PaMs outlined in the FPDP.

- Scenario 3: Alternative scenarios in which planners can change the input variables.

The input variables included percentage change in plantation activities, actions to reduce deforestation and forest degradation, and actions to enhance forest biomass stocks.

Adjustments were made in accordance with the current status of forest resources management, implementation of forest protection and development actions, financial capability, and adherence to social and environmental goals and safeguards.

1.4.4.2 Results of the scenario analysis

The following emission reductions were calculated for each scenario:

CONTENTS	Emissions ($tonnesCO_2$/year)	Reduction rate (%)
Emissions reduction target for Lam Dong province	2,056,277	-27%
Scenario 1	2,300,557	-18%
Scenario 2	1,526,517	-46%
Scenario 3	1,881,262	-33%

As can be seen in the results calculated above, the emissions reduction rate as a percentage when implementing the solutions and policies under scenario 1 is lower than Lam Dong province's emissions reduction target. Scenario 1 is based on historical rates of forest loss in Lam Dong; however, simulation results emissions through local efforts in Lam Dong province in the past years (from 1990 to 2010). But the input data to analyse spatial data are not

available, there are no changes, update policies as well as the solution to deflate efforts than in the past. Under scenario 1, a total of 2,300,557 tonnes of CO2e will be reduced by the year 2020, which corresponds to an 18% reduction, significantly less than the targeted 27%. Although Lam Dong province in the years to mobilize financial resources in the program countries and international projects to support, but have not been off set to share financial benefits from REDD+.

So, the choice then becomes between scenario 2 and scenario 3, which are analysed and evaluated below.

- Scenario 2 integrates REDD+ into forest protection planning and development up to 2020. The advantage of this scenario is that it will achieve a high emissions reduction rate of 46% (relative to the 1,526,517 tonnes of CO2e that will be reduced each year up to 2020), and the input data required is non-spatial, which should enable greater flexibility in the analysis of the computational tool.

- In saying this, there is no consideration of the non-carbon elements in scenario 2. At the same time the current status of forest resources as a basis to build and operate solutions forest policy inaccurate (has changed compared to the current state of the investigation, forest resource inventory at present); not updated connect with new forest policy; the adjusted contents are three types of forest planning in the context of Lam Dong economic and social development today. From a realistic assessment of the first year of implementation of the period 2011-2015 (i.e., from 2011 to the present), it is predicted that the mass deployment of forest policy in excess of the target, as planned under the FPDP, will not be feasible due to the lack of financial resources available for mobilisation.

It is, therefore, proposed that scenario 3, which will result in an emissions reduction rate (i.e., 33%) that is greater than Lam Dong province's target rate (i.e., 27%), and a total of 1,526,517 tonnes of CO2e emissions reduced each year up to 2020, be selected based on the following considerations:

(1) Ensure the implementation of operational and policy measures in forest protection and development planning can integrate REDD+, achieving emission reductions expected and consistent with the financial resources mobilized.

Scenario 3 based deployment solutions forestry activities aligned to the planning of the Provincial Forest Protection and Development 2020 to integrate REDD+. However, by analysing the actual deployment of the first years of the planning period (from 2011 to present) with the goal of reaching out but not yet deployed to rate allowed by not raising sufficient and timely resources financial resources. Initial funding support from the REDD+ program has made significant contributions to the budget, budget and other sources of water to

make. But special services paid under the present results do not, we must be prepared to synchronize the system infrastructure approach to REDD+ has met with international practices, ensuring compliance with the conditions Vietnam from the provincial to national. Therefore need a roadmap and time to access financial resources to pay as a result of REDD+. So the scenario 3 with changing the input variables while adjusting volume reduction implementation activities, forestry solutions will conform to actual mobilization in recent years. This solution is financially feasible to achieve emissions reductions expected to achieve a common commitment to respond to climate change.

Since then, with the result that the emission reduction / absorption targets of carbon achieved, expected to assess and pay later from financing payments based on the results of reducing carbon emissions.

(2) In accordance with the current forest policy, consistent with the current state of the existing forest resources and refers to non-carbon elements:

Currently, compared with the planning, protection planning and development of the province in 2011-2020 can integrate REDD+, government, central ministries have policies requiring new consider exploiting local economic benefits from forests, but must be linked to environmental protection, limited conversion of natural forests to plantations economy, focused on biodiversity conservation.

Should scenario 3 with the analysis of spatial data and non-spatial input in regulating the protection and development of forests; factors to consider non-basin; consider adjusting the planning of land use related, including 03 types of forest planning scenario is consistent with reality. Adjust the input variables is the rate of change of the volume of forestry activities from the past under the planning forest protection and development based on a number of changes in policy and the current state of the forest resources of local such as: limited transfer convert natural forests into rubber plantation; only natural regeneration of forests into plantations of poor economic subjects while renovating actually reached criterion "poor"; adjust the plan based on 03 types of forest inventory survey results show the current state of forest resources.

(3) The solution proposed policy and ensure community consensus with farmers and stakeholders when there are field test and implement public consultation:

The scenario 3 proposed on the basis of field inspection and consultations community members to plan activities and solutions forest policy consistent with reality.

Through community consultation, the people, the stakeholders, the plantation focused on forest land in agricultural production as FPDP build necessary adjustments to the form developed to implement effectively. If we

only deploy right direction clearance cultivated agricultural crops and forest trees such scenarios focused on livelihoods of agricultural production is tied to community households. Lead to other consequences as people continue to search deforestation production land. So people, communities agree with the solutions proposed scenario 3 is: to implement the model in the direction of forestry and agriculture combined low-density planting in the area are agriculture, forest trees is multi-purpose trees to improve the livelihoods of farmers.

With the consideration of the content above, select Scenario 3 (Scenario emissions / absorption of carbon build up on the basis of the orientation of Planning Forest Protection and Development 2020 to integrate REDD+, but with adjustments for accordance with the policies and status of forest resources at the local reality) is the appropriate choice scenarios and feasible to implement.

1.4. Improving the provincial FMS for REDD+

1.4.1 The objective of the PRAP is to reduce and control carbon dioxide emissions from deforestation and forest degradation, and increase carbon dioxide removal through afforestation and reforestation. Lam Dong's existing FMS, however, it does not currently meet all the requirements of REDD+ and subsequently needs to be improved.

1.4.2 Principles:

An improved provincial FMS must:

- Build on the existing system, in accordance with national and provincial regulations, but also in line with international REDD+ requirements;

-Provide accurate information that is transparent and consistent over time, and suitable for monitoring, measuring and reporting forest carbon dioxide emissions and removal;

- Be consistent with the provincial andnational RL, the developing MRVsystem and the local context;

- Be consistent with the national forest monitoring program and related programs;

- Be flexible and able to be further improved overtime.

1.4.3 Responsibilities for implementing the FMS

1.4.3.1 Identify the lead and coordinating agencies responsible for the implementation and operation of the FMS.

a) Lead agency:

* Provincial Level: Forest Protection Department (FPD)

- Main Duties: Lead, guide, inspect and report on forest changes, and determine the drivers of deforestation and forest degradation;

- Coordinate with professional agencies to update forest status maps (at the provincial, district and commune levels every two years) and develop technical guidelines;

- Be the focal agency responsible for the calculation of total carbon dioxide emissions andremoval (every two years);

- Coordinate with relevant professional bodies and organizations in the provision of technical training.

* District level: Forest Protection Unit

- Main Duties: Coordinate with other stakeholders to guide forest owners and local communities in the monitoring of their forest resources;

- Receive guidelines, maps and other relevant documents from the provincial level for use in the field;

- Gather and analyse data and maps at the commune and district levels, and report the contentsas required to higher levels.

b) Coordinting agencies:

- Forest Inventory and Planning Institute (FIPI): Provide technical assistance in the development of the FMS implementation guidelines; implement the NFIMP; collect and interpret satellite images, and conduct ground truthing to verify the images; map forest status biennially at the provincial, district and commune levels; provide updates to the province on the results of field inventory work; update and provide data on EFs, and calculate total carbon dioxide emissions and removalevery two years for the FPD;

- Forest owners (i.e., organizations, households, individuals and communities): Provide information on changes to forest resources in their forest areas.

1.4.3.2 Collate information and input data required to calculate carbon dioxide emissions and removal: Interpret forest status and forest change maps, and the forest change matrix; determine emission and removal factors; and conduct quality control and quality assurance.

1.4.3.3 Calculate the total amount of carbon dioxide emissions and removal in the province, and report the results according to the regulations.

1.5 Development of REDD+ financial management mechanisms

1.5.1 Strengthening the Forest Protection and Development Fund’s ability to receive and manage funds for REDD+: add functions and responsibilities, strengthen its organizational management, and ensure at least 30% of its members are women.

1.5.2 Identify sources of finance for PRAP implementation

(see diagram in the Appendix):

- International Sources: Financial resources mobilized from international organizations, including Official Development Assistance (ODA) and Non-government organisations (NGOs); and financial resources provided based on the results of carbon emissions reduction (from regulated and voluntary carbon markets);

- Domestic Sources: Revenues generated from PFES programs; financial resources mobilised from organizations and private enterprises; budget resources; and voluntary contributions of organisations and individuals.

1.5.3 Management of REDD+ financing

1.5.3.1 Method of disbursement

a) State budget source (national and local):

- Continue to apply mechanisms and policies for forest development and protection during the period 2011-2015, in compliance with: Decision No. 60/2010/QD-TTg, dated 30th September, 2010, of the Prime Minister on the principles, criteria and norms for the allocation of capital resources provided by state budgets in the period 2011-2015; Decision No.147/2007/QD-TTg, dated 10th September, 2007, on policies for the development of production forests from 2007 to 2015; and, Decision No. 66/2011/QD-TTg, dated 9th December, 2011, on amendments to certain provisions of Decision No. 147/2007/QD-TTg of the Prime Minister;

- Continue to apply: Existing policies providing food assistance to mountainous communities to deter the burning and/or conversion of forest for cultivation, and the conversion and cultivation of plantations on forest land; Resolution No. 30a/2008/NQ-CP, dated 27th December, 2008, on government programs supporting rapid and sustainable poverty reduction in 62 poor districts; Decision No. 73/2010/QD-TTg, dated 15th November, 2010, of the Prime Minister on regulations on silvicultural investment; and Decree No. 117/2010/ND-CP, dated 24th December, 2010, of the Government of Vietnam on the organization and management of the special use forest system;

- Apply: Policies to encourage enterprises to invest in agriculture and rural development outlined in the provisions of Decree No. 61/2010/ND-CP, dated 4thJune, 2010; and credit policies for the development of agriculture and rural development under Decree No. 41/2010/ND-CP, dated 12thApril, 2010, of the Government of Vietnam to attract investment from other economic sectors to meet development and protection goals.

b) ODA sources for REDD+ should be focused on: Supporting the development of pilot REDD+ activities and programs operating in Lam Dong province; and capacity building in relation to REDD+ at the local level.

c) Funds from the PFES program should be focused on: Implementation of forest protection actions, especially measures to improve the ability of forests to provide forest environmental services. The K-coefficient should be applied in order to ensure payments are made for improving the quality of the supply of forest environmental services and to build consensus amongst stakeholders.

d) Capital provided by private enterprises and households should be focused on: Investing in economic forest development and ecotourism.

1.5.3.2 Establish a mechanism for REDD+ benefits sharing

a) Establish systems to share REDD+ benefits: Establish an incentives-based system for forest environmental services that is supplemented with mandates to meet the requirements of REDD+ (see Diagram 2 in the Appendix).

b) Payment principles:

- Timeliness: Quick to implement improvements based on payment approval procedures;

- Proportionality: Payment levels to direct and indirect stakeholders must be commensurate with the costs they have incurred to implement REDD+ activities;

- Fairness: Payment rates for beneficiaries must be commensurate with their efforts in implementing REDD+, taking into account their socio-economic differences and natural conditions encountered;

- Flexibility: Payments must be based on the actual situation of each locality participating in one or more active REDD+ sites. Therefore, mechanisms must be designed in response to patterns of diversity and the distribution of rights to participate in local decision making;

- Efficiency: Resource management costs of REDD+ must be minimized and monitored, in order to maximize financial resources available to pay the final beneficiaries;

-Productivity: Implement mechanisms to save time and increase the amount of finance available through direct and indirect payments to improve the efficiency of the REDD+ program;

- Transparency: Finance mechanisms must comply with the principles and standards of consistency, efficiency and transparency, in addition to being publicly verifiable and including the participation of civil society organizations (CSOs);

- Compliance: Finance mechanisms should be institutionalized by legal provisions for the enforcement of sanctions.

c) Subjects:

- Direct objects include those directly contributing to carbon dioxide emission reductions and removal (i.e., forest owners and contracted households);

- Subjects covered include objects indirectly affected by direct or indirect efforts to reduce or remove carbon dioxide emissions (including communities and local people living near forest, but not on allocated forest land).

d) Subjects operating REDD+ (i.e., those involved in the monitoring of forest resources, and the monitoring and verification of emissions).

e) Payment methods:

- Direct payments: Forest Protection and Development Fund makes payments directly to the beneficiaries;

- Indirect Payments: Forest Protection and Development Fund makes payments to beneficiaries through intermediaries.

Payments include indirect payments in the form of projects for local communities (i.e., for improving livelihoods and the implementation of livelihood models, etc.).

f) Determination of payment levels:

- Determine the level of payments for forest owners;

- Determine the level of payments for contracted households.

g) Activities covered:

+ *Channel 1:* Direct actions taken to reduce emissions or increase the ability of forests to absorb carbon (measured in tonnes of CO2e);

+ *Channel 2:* Indirect action through activities not measured in tonnes of CO2e, but which directly or indirectly lead to a reduction in emissions or the absorption of GHG, such as policies and activities that: Encourage sustainable forest management; support and enhance forest governance; alleviate poverty and improve livelihoods; protect biodiversity and build resilient forest ecosystems; link adaptation and mitigation to natural disasters; and promote and support the protection measures mentioned under Decision No. 01-COP16 (non-carbon benefits);

+ Channel 3: Technical assistance, capacity building and institutional and operational strengthening.

h) Methods of payment: Payments for participation and results-based payments.

i) Payments for market mechanisms: Implementation of an agreement between sellers and buyers of carbon credits and/or emission reduction units in accordance with international practices (see charts 3 and 4 in the Appendix).

REDD+ financial management mechanisms in Lam Dong province will be updated and supplemented in accordance with financial management provisions at the national level.

1.6. Piloting REDD+ activities

1.6.1. Principles for the selection of REDD+ pilot models

Selection is based on:

- Results of recent surveys and inventories of forest resources, including priority areas of the selected scenarios (see section 1.3.4), and in accordance with the FPDP;

- Results of consultations with local stakeholders on the implementation of forestry activities in priority areas to reduce emissions from deforestation and forest degradation;

- The location of different types of forest management, forest types and deforestation pressures across the province;

- Implementation of successful REDD+ models in recent years;

- Financial ability for actions to be implemented during the pilot phase.

1.6.2. Integration of REDD+pilot activities

Considering the general objectives of the PRAP, the pilot activities proposed for the 2014-2015 period are as follows:

- Develop and implement REDD+ site level planning;

- Continue to improve the legal framework for implementing REDD+ at the local level and enhance communication activities;

- Support the development of sustainable forest management plans (SFMP) and Forest Stewardship Council (FSC) certification for eligible forest owners;

- Continue to contract forest protection likages with PFM system with stakeholders, local communities and houesholds;

- Conduct zoning for natural regeneration with additional planting, and zoning for natural regeneration with no additional planting;

- Implement silvicultural practices for forest enrichment;

- Continue scattered tree planting and forest plantation development to promote more forests and green growth;

- Implement agroforestry models consistent with the actual conditions;

- Enhance the forest fire prevention system, and models on forest fire material handling, in order to reduce carbon emissions and their impact on the environment;

- Implement activities that support agricultural production, livelihood development for people living near forests and their participation in forestry activities.

The summarization and evaluation of the results of the pilot year (2014-2015) is a prerequisite for the implementation of the next phase (2016-2020). Priority will be given to activities directly leading to the achievement of the objectives of the PRAP. Attention should be focused on integrating the preservation of forests in the implementation of specific activities in the PRAP concerned with biodiversity in the province.

1.7. Implementing REDD+ environment and social safeguards

1.7.1 The need to implement measures to ensure social and environmental safeguards in REDD+

REDD+ has the potential to generatemultiple environmental and social benefits and risks, with the UNFCCC requesting that countries promote and support the seven safeguards adopted at the COP 16 in Cancun. The UNFCCC also requires countries implementing REDD+ to provide a summary of how the safeguards will be met in the design and implementation of REDD+before they can receive results-based payments. Whether financial or paid in kind, and at any scale, REDD+ can also encourage improved planning at the local level, which contributes to capacity building for adaptive management and forest governance.

Decision 799/QD-TTg, dated 27th June, 2012, of the Prime Minister on the approval of the NRAP identified requirements to implement safeguards, but, as of yet, no specific guidelines exist at the national level. Therefore, new approaches have been tested to assess the social and environmental risks and benefits of implementing REDD+ in the province, and contribute to the development of a national safeguards information system.

1.7.2 Approach to applying safeguards while implementing REDD+

The Sustainable Livelihoods Framework has been used to analyse the benefits and potential negative impacts of the PaMs listed in the PRAP. The approach is based on a set of ‘assets’ or ‘capitals' that help to determine the sustainability of a livelihood over time. The approach will be used to consider the potential impact of the PRAP PaMs on five basic forms of capital’: i) human capital; ii) natural capital; iii) physical capital; iv) financial capital; and v) social capital.

The evaluation of the environmental impact and social potential is based on a literature review and analyses the effectiveness and impact of the programs

and projects completed in relation to the forestry sector in Lam Dong province over 20 years. The institutional analysis has been compiled from the study completed by the UN-REDD Programme analysing and evaluatingthe Participatory Governance Assessment. The initial results were presented at a stakeholder consultation workshop in Lam Dong province to verify them and gather additional information.

1.7.3 Impact assessment of potential environmental and social policies and measures in thePRAP:

a) Review the PaMs to assess their potential environmental and social impact:

The PaMs proposed in the PRAP can be divided into five groups as follows:

1. Development of human resources;
2. Restoration of forest land under encroachment and support for livelihood improvements of people living near forests;
3. Revise planning related to forestry land use;
4. Complete forests contracting and leases, and develop forest resources;
5. Sustainable forest management and development of plans for sustainable forest management.

These PaMs proposed in the PRAP are aimed at achieving reduced GHG emissions. Therefore, evaluating their impact (both positive and negative) on the environment and society will ensure that the requirements in relation to safeguards, during the implementation of REDD+ at the provincial level, are met.

b) Potential impacts on the environment, vulnerable communities and proposed solutions:

* Potential positive impact

All five groups of PaMs listed in the proposed PRAP have the potential to generate environmental and social benefits. These activities enhance the management, protection and development of forest resources, especially natural forests, and can contribute to the conservation of flora and fauna, particularly natural medicinal species. In addition, these activities contribute to increasing the quality of ecosystem services, and preserve and increase the productivity of land. The local community is also expected to enjoy greater economic benefits from their participation in these activities. The capacity and cognitive skills of the local community, as well as other stakeholders, are additionally expected to be enhanced;

* Potential negative impact

The goals of most of the five groups of PaMs mentioned above is environmental protection and/or the sustainable management of natural resources, so they should not have negative impacts on the environment. In social terms, without the effective participation and commitment of stakeholders and local communities during the preparation, implementation and deployment stages, negative impact may occur, such as conflicts arising in the community due to only some groups receiving benefits. Law enforcement can directly affect the demand for non-timber forest products (NTFP) or people cultivate the cultivated area could not convert invasive plant structure can also cause the social unrest.

c) Proposed measures to enhance the benefits and minimize the risks:

A number of measures can be considered to enhance the benefits and minimize the risks as follows:

- To enhance the environment and social benefits, advocacy needs to be strengthened to raise awareness, and promote the role and skills needed to participate in the planning process, in order to implement community participation in an integrated way during deployment;

- Plan all activities in accordance with economic and social principles, and associated goals for economic development at the local level;

- More efficiently use funding sources to pay for forest environmental services and rapidly offset the efforts involved during the pilot implementation phase of applying the K coefficient;

- Promote the exchange of forest management and protection of forest areas with poor natural objects, as the previously planned conversion to rubber plantations is now kept under the PRAP.

2. Period 2016-2020

2.1 Continue to improve coordination mechanisms, management and operation of the program and projects at the provincial scale, in accordance with the NRAP.

The system developed during 2014-2015 will be assessed during the pilot phase and adjusted according to the results, if necessary. The system will also be adjusted after REDD+ implementation in different geographical areas of the province, as well as its continued implementation in pilot areas.

2.2 Continue to improve the legal framework for REDD+

The legal framework developed during 2014-2015 will be evaluated on the basis of practical requirements arising during the pilot phase, as well as in compliance with the provisions of the law of Vietnam.

2.3 Continue building the capacity and raising the awareness of staffs and locals people

The increased awareness and capacity of staffs will be evaluated during the 2014-2015 pilot phase, especially at the district and commune levels, with the implementation plan drawing on experience gained from the pilot.

2.4 Adjust and improve the forest RL

The provincial forest RL will be updated, if necessary, on the basis of the implementation of an additional survey or in consideration of developments in UNFCCC negotiations.

2.5 Improve the provincial FMS

Changes to the provincial FMS made during 2014–2015 will be assessed throughout the pilot phase, and the findings reflected in revisions of the system.

Following the establishment of the RL, the total amount of emissions in the future will be calculate from the FMS and published. The FMS will be consolidated, and where necessary, updated to be consistent with the national MRV system. Using a combination of approaches, including remote sensing technology, GIS applications, information technology, and forest owner surveys, a forestry management information system will be developed and connected to the internet. This will measure and report changes in forest resources from the forest management unit at commune, district and provincial levels, in accordance with state regulations.

2.6 Complete the financial management mechanism and payment policies based on the results of REDD+ implementation

Financial management mechanisms piloted during 2014–2015 will be revised taking into consideration the results of the pilot activities.

2.7 Improving the monitoring activities and grievance mechanisms to solve problems in implementing REDD+

During the pilot phase, REDD+ activities and associated complaints will be monitored. The issues raised during the pilot phase will be detected and mechanisms for the resolution of the issues will be applied during the implementation of REDD+ across all areas of the province.

2.8 Continue to implement REDD+ forestry activities and integrate into forest protection and development in 2016-2020

During 2016-2020, funding from the PFES program will be used to contract 428,000ha of forest to households per year, specifically for the provision of water supply, sediment and erosion control, tourism and landscape services. As outlined in Section 2.7, financial benefits will also be paid through the REDD+ mechanism based on measured performance. Experiences gained

implementing forestry activities in the 2014-2015 pilot phase will also continue to be accumulated.

Consideration should be also given to making adjustments to the planned use of forest land, existing use of forest resources, forest sector planning, and development planning of other sectors related to forest ecology, particularly economic development planning at the local level.

2.9 Approaches to promote and support safeguards

Approaches to promote and support safeguards in this period of operation will be reviewed in light of any new national level guidance forthcoming during the PRAP's implementation.

III. MEASURES FOR PRAP IMPLEMENTATION

1. Review and improve land use planning, and strengthen the implementation of the provincial FPDP

1.1 Adjust the three kinds of forests planning in the province

Adjust the three kinds of forests found in the province in the direction of their management, protection, development, and efficient and sustainable use, in accordance with the national land use classification which Lam Dong has assigned for use in land use planning during the periods 2011-2015 and 2016-2020. Specifically, adjust the three kinds of forests planning, but still maintain the structure of the province's three kinds of forests (591,476 ha of forest land, of which 84,153 ha is special use forest, 172,800 ha is protection forest and 334,523 ha isproduction forest).

The adjustment of the forest structure must ensure synergy between economic and social development and stable rural development balanced with environmental protection. The adjustment must also: Ensure forestry land development is consistent with reality; create stability in the development of production forests and agriculture; provide a basis to develop management measures for forest protection that are coherent and sustainable; and restrict the transfer of protection forest and special use forest, so that the requirements for forest protection and biodiversity conservation are met.

Ensure that local communities and ethnic minority groups, including both men and women, are fully and effectively consulted during the process of reviewing the three kinds of forests planning, rubber development planning, and the planning of other sectors that impact on the management of forest resources and livelihoods. Also ensure that livelihood improvement options are included in land use planning processes.

1.2 Review rubber development planning in the province:

- Review and adjust rubber development planning to avoid some conversion of poor natural forests that can be restored through protecion and

regeneration. Also review possible disruptions over a longer period of 7-8 years, especially in relation to loss of forest cover that provides forest environmental services;

- Encourage households to plant rubber on agricultural land to improve the environment and support green growth, focusing on improving the production yield of latex per hectare. Rubber development, however, should only be promoted in relation to poor natural forests with low biodiversity and appropriate nuturing conditions;

- Rubber development planning to be reviewed and adjusted up to 18,000 ha in the province (compared with the previously plan for a reduction of 22,000 ha of natural forest conversion).

1.3 Review hydropower development planning in the province

Review hydropower development planning in the direction of reducing the number of new construction projects. Prioritise the construction of small and medium hydropower plants serving rural electrification programs (there remain 22 planned constructions).

2. Review and improve the contracting, allocation, leasing, and use of forests and forest land

2.1 Forest contracting:

- Priority should be given to contracting ethnic minority groups, household's lacking production land and those affected by poverty;

- Contract with groups to improve the effectiveness of patrolling, and particularly with households near residential areas to take advantage of favourable patrolling conditions;

- Contract households over the long-term, but conduct annual reviews to ensure commitments to provide forest environmental services are being met;

- The costs of contracting activities should be mainly covered by the revenues generated by PFES, with a reduced amount of funding coming from the state budget;

- In addition to the exploitation of PFES for the supply and regulation of water resources, soil conservation, erosion control and landscape beauty, revenue from REDD+ results-based payments should also employed;

- Replicate PFM. The data on provincial forest area changes, along with feedback and regular updates from households and communes, should be connected to the Lam Dong FMS to enhance the monitoring of forest resources by the FPD;

- Continue the provision of training for contracted protection staffs, and increase payment rates for forest protection in key areas;

- Prepare the necessary conditions for the access and payment of future revenue through a REDD+ mechanism.

Work plan and breakdown:

- For 2014-2015: In 2014,397,797 ha of forest area was under protection contracts of which 349,913 ha was included in the PFES program (accounting for 88%); and in 2015, an additional 90,033ha will be contracted;

- For 2016-2020: The area of forest under annual maintenance contracts will increase to 487,330 ha, which will include both natural forests and plantations.

2.2. Forest allocation:

- There is a need to urgently implement the community forest allocation model, and support forestry activities on land for which land use certificates have been granted or stable long-term contracts have been signed. Land that is not currently being properly used also needs to be reviewed, adjusted or withdrawn, according to the regulations;

- For State Forest Companies (SFCs), Forest Management Boards and national parks, the focus should be on the management of production forests, special-use forests and critical protection forest areas that have a direct effect on the ecological environment, the economy, society and national security. At the same time, incorporate policies, including investment credit policies, extension policies and those that facilitate market opportunities, to support forest allocation processes to households in relation to forest engineering, production and the forestry business.

2.3. Forest leasing:

- Encourage the involvement of economic sectors in the development of approved forestry investment projects and on leased forest land. Enterprises that rent land must be responsible for training their labour in relation to forest management, protection and reforestation, and the implementation of forest environmental services;

- Stop enterprises that operate illegally. Mobilize financial resources from businesses outside the province to implement reforestation and forest protection actions to improve the quality of forests.

3. Integrate REDD+ activities in the implementation of forests protection and development tasks

3.1 Implement silvicultural actions for the regeneration and restoration of natural forest, and combine with additional plantings to improve the quality of forests

a) The objective is the regeneration and restoration of natural forests, combined with additional plantings: Bare land that forest regeneration, state Ib, Ic, regeneration density greater than 600 trees/ha and height> 1.5 m of 03 kinds of forests.

b) Subjects: Households and individuals from ethnic minority groups and rural communities living near regeneration sites, in order to also improve livelihoods. Special attention should be paid to increasing female labour participation by matching capacity with alternate practices for small timber collection for firewood and charcoal.

c) Implementing measures: Raise awareness and develop a poster-based communications system on such things as forest fire prevention, cattle grazing, fire break systems, and forest and vegetation clearing, etc. Implement this in order to meet social and environmental safeguards.

During the process of implementing methods of forest regeneration with additional plantings, trees, including indigenous ones, grow and regenerate naturally, while silvicultural measures further facilitate the absorption of carbon emissions. Special priority will be given to the regeneration of bamboo-enriched protection and special-use forests that are showing signs of decline for the conservation of biodiversity. Contributions may also play a role in implementing REDD+ to conserve biodiversity. Finally, an inventory will be conducted to assess the quality of bamboo forests after their regeneration.

d) Work plan and breakdown:

- During the 2014-2015 pilot phase: Carry out regeneration of 130 ha of forest, including with additional plantings of 80 ha of forest, and with no additional plantings of 50 ha of forest. The 130 ha of forest to be regenerated will be conducted in districts selected using the priority map and corresponding to the optimal emissions scenario. Specifically, 50 ha in Dam Rong district, 50 ha in Lac Duong district, and 30 ha in Da Huoai district, will be regeneration;

- During the period 2016-2020: Carry out regeneration with supplementary plantings of 1,900 ha of forest, and with no additional plantings of 1,900 ha of forest, for a total area of 3,800 ha of forest regenerated in the areas of Duc Trong, Dam Rong, Us Duong Lam Ha, Don Duong, Da Huoai and the City; average area of 760 ha of forest regenerated in the province per year.

(Details are provided in the Appendix)

3.2 Afforestation/Reforestation of bare land

a) Subjects: Development of afforestation on bare land not subject to regeneration in areas of special use, protection and production forest. The area for afforestation to be designed to be connected, not fragmented.

Actively promote reforestation in the recovery of forests after encroachment or illegal deforestation. This is an activity necessary to reverse forest loss and increase carbon dioxide removal after a loss caused by deforestation.

b) The technical measures applied: Select species in accordance with the ecological conditions of the kinds of forests.

c) Work plan and breakdown:

- During the 2014–2015 pilot phase: Afforestation will be implemented over a total area of 260 ha, primarily in the priority districts of Dam Rong, Lam Ha, Lac Duong and Da Huoai;

- During the period 2016–2020: Afforestation will be implemented over a total area of 5,350 ha in 12 districts in the province; an average of 1,070ha of bare land afforested per year.

(Details are provided in the Appendix)

3.3 Implement forestry planting in perennial agricultural crop areas under forestry planning

After analysing the historical drivers of deforestation, concern now is focused on putting the appropriate PaMs in place to limit deforestation through people's encroachment of forest land for the purposes of agricultural production. Through community consultations carried out to analyse and evaluate social pressures and concerns species of forest trees and planting methods were selected to both harmonize the interests of the people's livelihoods, and to ensure environmental improvements on forest land occupied by perennial agricultural production.

a) Technical measures

Solutions for organizing low-density planting in the form of agroforestry plantations based on the consensus of the people. Forest species planted will be multi-purpose tree species that perform multiple functions, including increasing forest canopy cover, soil protection and nitrogen fixation.

Density is expected to reach 300 trees per ha. Technical support will be provided to the people in relation to planting, seedlings and fertilizers.

c) Work plan and breakdown:

- During the 2014–2015 pilot phase: Agroforestry plantations will be implemented over a total area of 510ha, primarily in the priority districts of Dam Rong, Lam Ha, Lac Duong, Bao Lam and Da Huoai;

- During the period 2016-2020: Agroforestry plantations will be implemented over a total area of 11,450 ha in 12 districts in the province; an average of 2,290 ha of agroforestry plantations per year.

(Details are provided in Appendix)

3.4 Implement activities to improve the livelihoods of people living near forests, in order to reduce the negative impacts of deforestation and forest degradation:

- Support the renovation of agricultural land with the aim of increasing crop yields to improve the livelihoods and incomes of farmers, thereby, reducing the spontaneous expansion of illegal encroachment. The support activities will focus on the provision of training and guidance to promote and support agriculture and forestry crops, and investment loans for high yielding crops, as well as fertilizer and pesticides;

- Support livestock training and maintain traditional village livestock systems. Support livestock development loans and, depending on the gender of participants, support loan deployment of livelihood development activities as appropriate;

- Combine established village and commune development funds, and mobilize financial resources, to support household demand for loans for livestock development, seedling and fertilizer purchases, and agroforestry development that improves livelihoods. During the pilot phase, mobilize financial support from REDD+ programs to implement these actions;

- Also encourage and support people to use clean energy sources to reduce emissions, such as alternative energy sources for firewood, and limit the use of timber for house construction. This will reduce the pressure of encroachment and illegal exploitation of natural forests;

- Work plan and breakdown:

- During the 2014-2015 pilot phase: Support the renovation of 70 ha of household gardens in the pilot districts of Dam Rong, Lac Duong and Da Huoai. Support livestock development loans in three communes; two communes in Bao Lam district and one commune in Dam Rong district;

- During the period 2016-2020: Support 2,000 ha of agriculture development across the districts of Dam Rong, Lam Ha, Lac Duong, Don Duong, Duc Trong, Di Linh, Bao Lam, Huoai Da, Da Teh and Cat Tien; an average of 400 ha per year.

3.5 Implement sustainable forest management:

- Under the guidance of the Prime Minister, restrict logging of natural forests. Actions to focus on effective plantation establishment and management, and the production of bamboo products. Thinning’s to be managed and included in the processing chain to enhance product value and attract local workers;

- Focus logging of natural forests in critical conditions must be converted to the purpose of construction of public welfare, standing dead fallen trees.

However, to expeditiously implement immediate replacement planting tasks in the area of conversion;

- Exploitation of natural forests must comply with SFMPs and certification processes. REDD+ financial and technical resources should be mobilized to support the development and implementation of SFMPs and certification processes for the SFCs in the province;

Financial and technical support from the REDD+ program, during the 2014-2015 pilot phase should be used to help the Don Duong, Bao Lam and Di Linh SFCs to develop and seek approval for their SFMPs.

3.6 Fire prevention to effectively conserve and enhance biodiversity

a) Forest fire prevention:

- Improve fire prevention equipment and measures, such as fire lookout towers and fire breaks, and provide training to the community in fire prevention;

- Continue to improve fire risk indicators and build fire warning systems for all forest areas of the province;

- In the short-term, prioritize the finding of solutions to control forest fires before finding solutions to the financial situation. However, in the long-term, use REDD+ payments to research alternative solutions for sustainable and effective actions to minimize environmental impacts and carbon emissions from forest fires.

b) Biodiversity preservation:

- Conduct surveys to evaluate the status of biodiversity;

- Continue to promote conservation corridor initiatives to connect high biodiversity and conservation areas;

- Coordinate the implementation of the Biodiversity Action Plan in the province.

4. Support and strengthen foreign and domestic investment and international cooperation in order to diversify financial resources:

- Mobilize capital from all economic sectors to support the financing of loans, increase the equity capital of forest enterprises and owners, and support declining state budgets;

- Enlist the aid of national and international programs and projects to support the forestry sector (i.e., use of central and local budgets, ODA, foreign direct investment, natural resource fees and royalties, PFES, forest eco-tourism taxes, and the REDD+ program), and especially payments from the emerging REDD+ mechanism for use in the protection and development of forests;

- Use appropriate funds from domestic and foreign investment projects to develop clear, equitable, science-based investment plans, and avoid investment unnecessary spread or dispersion and low investment returns;

- Continue to allocate funds from the state budget for the on-going operation of the forest rangers and owners;

- Develop social models for households and communities to use village development funds for seedlings purchases, livestock production and other livelihoods activities that will reduce their need to encroach on forests. Efforts should positively empower women and the Women's Union, and respect the community's experiences, context and cultural practices;

- Actively support the mobilization of financial and technical resources to implement REDD+ programs and projects;

- Strengthen information sharing on REDD+ implementation experiences with international organizations;

- Improve credit policies to attract investment from private businesses and households in the reforestation of barren land;

- Harmonize national and international financial institutions to simplify payment processes. Consider the efficiency of each project and the relationship between the financial resources of the local and national activities in the protection and development of forests.

IV. CAPITAL REQUIREMENTS FOR IMPLEMENTATING THE PRAP

1. Summary of total investment requirements

The total investment required to implement the Lam Dong PRAP from 2014 to 2020 is 1,749,275 million VND, of which:

- 234,772 million VND of investment is required during the 2014-15 pilot phase;

- 1,113,847 million VND is required during the period 2016–2020; an average of 222,769 million VND per year.

2. Allocation of investment capital to PRAP activities

2.1 Protection of forests:

- 1,175,294 million VND will be invested in activities focusing on forest management and protection. This will be mainly allocated from funds entrusted to pay for forest environmental services, and outside of the state budget. This money will be transferred to the National Forest Protection and Development Fund and the Lam Dong provincial Forest Protection and Development Fund. Generally speaking, the use of the state budget will be limited. Every effort will also be made to meet the necessary conditions in expectation that, after 2015, payments from either voluntarily or regulated carbon markets, or some other

mechanism, will be based on the results of PRAP implementation as measured by carbon dioxide emissions and removal;

- Investment phases:

+ 2014-2015: 199,634 million VND, of which 195,132 million VND in payments will be made for forest management and protection, and 4,502 million VND in funds will be allocated to new management designs in the protection of forests;

+ 2016-2020:1,170,792 million VND; an average of 234,158 million VND per year.

2.2 Development of Forests:

- A total of 544,033 million VND will be invested in activities primarily aimed at enhancing and developing forests through silvicultural practices, such as plantation development, regeneration with additional planting and no additional planting, and planting trees on low productivity agricultural land located on designated forest lands. The capital allocated will come primarily from the provincial budget, with additional support provided from the central budget, ODA projects and programs, equity of forest owners, and capital investment currently supported by the budget;

- Investment phases:

+ 2014-2015: 23,980 million VND;

+ 2016-2020: 520,053 million VND; an average of 104,011 million VND per year;

- By activities:

+ 420,127 million VND for afforestation on barren land;

+ 18,717 million VND for planting trees on agricultural land that is under forest planning;

+ 36,473 million for zoning for regeneration involving no additional planting;

+ 68,716 million for zoning for regeneration with additional planting.

2.3 Livelihoods support for community households:

- 20,948 million VND will be invested in activities aimed at improving community livelihoods and household operations, primarily through loans, the renovation of gardens and livestock development. The capital allocation from loans will be mobilized through village development funds;

- Investment phases:

+ 2014-2015: 2,158 million VND;

+ 2016-2020: 20,948 million VND; an average of 4,189.6 million VND per year.

2.4 Support for sustainable forest management:

- During the 2014-2015 pilot phase, 9,000 million VND from REDD+ programs and projects will be used to establish and implement SFMPs for three SFCs, namely Di Linh, Bao Lam and Don Duong.

(Details on the allocation of investment capital are provided in the Appendix)

V. IMPLEMENTATION PLAN

1. To strengthen the provincial REDD+ steering committee

To strengthen the Steering Committee responsible for the implementation of the REDD+ program in Lam Dong province:

- A representative from each of the provincial Department of Labour, Invalids and Social Affairs (DoLISA), Women's Union and Farmers Union will be given membership of the Steering Committee, while at least 30% of all members will be women;

- Regulations directing the implementation of provincial REDD+ activities will be developed and promulgated;

- Coordination between stakeholders participating in the process of implementing REDD+ plans will be improved.

2. Responsibilities of the departments and other relevant agencies

2.1 Department of Agriculture and Rural Development (DARD):

- DARD will take the lead in implementing the PRAP, under the supervision of Lam Dong PPC acting through the Provincial REDD+ Steering Committee.

- Responsibilities of DARD include:

+ Organizing propaganda and education on REDD+;

+ Developing measures, mechanisms and guidelines on management, governance and implementation for submission to the PPC for approval;

+ Developing, submitting for approval and implementing the provincial plan and the annual plan;

+ Advising the PPC and coordinating with related agencies to support the central level in developing appropriate REDD+ incentive and benefit systems that are consistent with international standards. Mobilizing funds provided by the relevant programs and projects and international aid organizations;

+ Taking the lead in establishing and completing the forest RL;

+ Advising the PPC on the establishment of financial mechanism for REDD+ at the provincial level that are integrated with the Provincial Forest Protection and Development Fund, and in accordance with the guidelines of the central level, laws of Vietnam and international regulations;

+ Conducting periodic monitoring and evaluation (M&E) of REDD+ implementation. Annually review the implementation of the PRAP and report the results to the PPC;

+ Guiding the provincial Department of Forestry in its collaboration with state forest units, including Forests Management Boards, forestry companies and other forest owners, to implement REDD+ activities. Guiding, urging and assisting, in addition to providing technical support, on the integration of REDD+ activities into the FPDP;

+ Guiding the FPD in its implementation of the annual forest monitoring program through the Sub–FPDs and Commune People's Committees, and reporting the results to DARD according to their provisions and guidelines emphasising collaboration with communities and farmers in conducting PFM.

2.2 District People Committees:

- The District People's Committees is the agency responsible for leading the implementation, under the guidance of the Steering Committee and the Lam Dong PPC of the PRAP at the district level;

- The District People's Committees also direct the Commune People's Committees, which is the agency responsible for leading the implementation of the PRAP at the commune level, by coordinating with the Commune Forestry Board and other participating organizations, such as the police and civil protection groups, and women's, farmer's, youth and veterans associations.

2.3. Related Departments

a) Department of Natural Resources and Environment (DoNRE)

Coordinate with DARD to synthesize data and develop progress reports on the results of implementation for submission to the REDD+ Steering Committee and lead the integration of REDD+ activities into land use management at all levels. DoNRE will also coordinate with DARD to develop the monitoring mechanism and forest RL, and evaluate the results of the program to reduce GHG emissions under the PRAP.

b) Department of Planning and Investment

The Department of Planning and Investment is responsible for arranging and considering counterpart contribution funds provided to implement the programs and projects, and coordinating with DARD and the Department of Finance to develop mechanisms and policies for managing and implementing programs.

c) Department of Finance

The Department of Finance will coordinate with DARD to develop mechanisms and policies relating to the financial management of the PRAP. In addition, it will develop guidelines to manage and use REDD+ financial resources at all levels, and monitor related stakeholders and actors on their use of those financial resources to ensure compliance with financial management regulations.

d) Department of Labour, Invalids and Social Affairs (DoLISA)

DoLISA will coordinate with DARD to develop a database of gender equality in the management and implementation of REDD+, and in the maintenance of this database.

e) Related departments and agencies

Within the scope of their assigned functions and tasks, disseminating information, and raising the awareness and capacity of ethnic minority groups to actively participate in REDD+ activities; and integrating REDD+ projects in to programs related to people who live near forests and people within the assigned state management.

2.4. CSOs, NGOs and the private sector

Encourage the active participation of CSOs, NGOs and the private sector in the completion of activities related to the program, particularly in relation to information dissemination and education, supporting and advocating for community participation, dissemination of experiences in implementing REDD+, and in inspecting and supervising the implementation of the program.

PART THREE
MONITORING AND EVALUATION (M&E)

Lam Dong DARD will lead the M&E of the PRAP's implementation, in coordination with other relevant departments.

1. Content of the M&E system

a) Monitoring the implementation of REDD+ activities:

- Monitoring of PaMs aimed at limiting deforestation and forest degradation;

- Monitoring of land use planning, the protection of land use and forest use rights, and the implementation of forestry activities proposed for reducing deforestation and forest degradation, and the restoration and enhancement of forest reserves;

- Monitoring communication activities aimed at raising awareness about REDD+ in the community and amongst families, local authorities and forest owners;

- Monitoring the outcomes of training and technical capacity building activities, and participation in the management of REDD+;

- Monitoring the implementation of pilot forestry models related to forest protection and development, and improving livelihoods, during the pilot phase in 2014. Summarizing the experiences during 2015, and the complete implementation of REDD+ during the period 2016–2020;

- Organizations involved in monitoring include: Lam Dong DARD, social and political institutions at all levels, NGOs, communities and individual people.

b) Monitoring GHG emissions and removal:

- Monitoring the operational performance of the MRV system and the safeguard information system. Monitoring of changes in forest resources, as well as progress in meeting GHG emission reduction targets through the efforts to limit deforestation and forest degradation;

- Monitoring of carbon and non-carbon benefits through the national FMS and the safeguards information system;

- Organizations involved in monitoring include: Lam Dong DARD, Institute of Forest Sciences, University of Forestry and the Lam Dong Agriculture-Forestry Consulting Company.

c) Oversee the management and use of REDD+ financial resources:

- To oversee the disbursement and implementation of financial resources related to the implementation of the PRAP;

- Supervising the sharing of benefits in the form of REDD+ revenues amongst the beneficiaries, including participating local communities, ethnic minority groups, women and men. Promoting the role of the Women's Union at all levels in the monitoring of financial management and disbursement, equitable sharing of resources, and in resolving complaints and inquiries;

- To oversee the management and use of financial resources from REDD+ funds in forest protection and development through internal auditing, international auditing and financial reporting;

- Organizations involved in monitoring include: Lam Dong DARD, independent auditing organizations, social and political organisations, individuals and communities.

d) Monitoring and other contents:

-Money: Regular monitoring and evaluation of security policies, including gender equality, and making recommendations based on the monitoring plan framework and monitoring results.

e) Evaluate the implementation of the PRAP:

- Evaluation of the PRAP's implementation will be conducted annually, along with recommendations to improve the program.

2. Monitoring and evaluating the implementation of PaMs to ensure safeguards

The participatory M&E of REDD+ implementation activities will help meet safeguard standards, and is an important part of the process of implementing the PRAP, and helping to achieve the goal of developing the national safeguards information systems at a later date. The main principles of this system include:

- Key stakeholders are actively involved and not only used as a source of information;

- Strengthening the capacity of local people to analyse, reflect and take actions;

- Mutual learning between stakeholders at different levels;

- Promoting commitment to corrective action.

Suggested steps in the participatory monitoring process include:

- Scheduling: Discussions with stakeholders are conducted to define objectives and key principles of participatory monitoring, defining joint interests and goals, implementation scheduling and the results for the service object;

- Develop indicators: All stakeholders must participate actively in the process of developing a set of indicators based on the SMART (specific, measurable, achievable, realistic and time-bound) principles;

- Data collection: Once the targets and indicators are set, the development of an information collection methodology is the next important step in participatory monitoring. While there are various tools and mechanisms to collect different data, specific actions are needed for the context, information needs and expected outcomes;

- Data analysis: The focus of this activity is to analyse and determine the relevance of the PRAP, the needs and interests of stakeholders, impact of the activities implemented, and to review the PRAP implementation process and decide what to replicate;

- An analysis of the data collection and monitoring system should be conducted by all stakeholders' at all local levels (excluding external factors). Therefore, it is recommended that resources be allocated to operating capacity and data analysis by local participation;

- Reporting, feedback and information sharing: Due to the diversity of groups and stakeholders involved in this process, the report should be clear, simple, make use of images, familiar and accessible, and in adherence to the very clear rules about sharing information. To reach a local audience, the form of information sharing (apart from written reports), and investing in the dissemination of the results to the end users, needs to be in place. This step will allow the parties to respond if local structures and forums for sharing information are combined with other communities;

3. The scope of M&E:

- M&E will be performed in the province.

4. M&E implementation requirements:

- The M&E system should be transparent and clear;

- It should involve the participation of all stakeholders, including provincial agencies, district authorities, NGOs, CSOs, other relevant organizations and communities;

- Monitoring should respect the rights and aspirations of households and communities to ensure that it is in accordance with the socio-economic development objectives at the local level.

APPENDIX: LIST OF ACTIVITIES TO BE IMPLEMENTATED UNDER THE LAM DONGPRAP