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IMPLEMENTATION COMPLETION AND RESULTS REPORT

(P066051, P074414, IDA-39530, IDA-50700, GEF-053397-VN, TF-54122, TF-54523, TF-54524)

ON

CREDITS IN THE AMOUNT OF SDR 46.3 MILLION (US\$69.50 MILLION EQUIVALENT)

AND A

GLOBAL ENVIRONMENT FACILITY GRANT IN THE AMOUNT OF US\$ 9.00 MILLION

TO THE

SOCIALIST REPUBLIC OF VIETNAM

FOR A

FOREST SECTOR DEVELOPMENT PROJECT

December 23, 2015

Global Environment and Natural Resource Practice Socialist Republic of Vietnam East Asia and Pacific

CURRENCY EQUIVALENTS

(Exchange Rate Effective March 31, 2015)

Currency Unit =	Vietnam Dollar (VND)
VND 1.00 =	US\$ 0.000046
US\$ 1.00 =	VND 21,687

FISCAL YEAR January 1 – December 31

ABBREVIATIONS AND ACRONYMS

5MHRP	5 Million Hectare Reforestation Program
ACIAR	Australian Centre for International Agricultural Research
BSM	Benefit Sharing Mechanisms
CAS	Country Assistance Strategy
CNA	Conservation Needs Assessment
CPCU	Central Project Coordinating Unit
CPS	Country Partnership Strategy
CWG	Commune Working Group
DARD	Department of Agriculture and Rural Development
DCA	Development Credit Agreement
DIU	District Implementation Unit
EC	European Commission
EMDP	Ethnic Minority Development Plan
EMP	Environmental Management Plan
ENPV	Economic Net Present Value
FFG	Farm Forest Group
FM	Financial Management
FMR	Financial Monitoring Report
ERR	Economic Rate of Return
FPD	Forest Protection Department
FRR	Financial Rate of Return
FSC	Forest Stewardship Council
FSDP	Forest Sector Development Project
FSDS	Forest Sector Development Strategy
FSSP	Forest Sector Support Partnership
GDP	Gross Domestic Product
GEF	Global Environment Facility
GEO	Global Environment Objective
GOV	Government of Vietnam
GPS	Global Positioning System
ICR	Implementation Completion Results Report
IDA	International Development Association
IRR	Internal Rate of Return
ISM	Implementation Support Mission
ISR	Implementation Status and Results Report
KPI	Key Performance Indicators
LURC	Land-use Rights Certificate
M&E	Monitoring and Evaluation

MARD	Ministry of Agriculture and Rural Development
MB	Management Board
MBFP	Management Board of Forestry Projects
METT	Management Effectiveness Tracking Tool
MOF	Ministry of Finance
MONRE	Ministry of Natural Resources and Environment
MTR	Mid-term Review
NGO	Non-Governmental Organization
NP	National Park
NPV	Net Present Value
NR	Nature Reserve
NRUA	
	Natural Resource Use Agreement
NWFP	Non-wood Forest Products
ODA	Overseas Development Assistance
OM	Operational Manual
OMP	Operational Management Plan
OP	Operational Program
PA	Protected Area
PAD	Project Appraisal Document
PDO	Project Development Objective
PIM	Project Implementation Manual
PPC	People's Provincial Committee
PPMU	Provincial Project Management Unit
PSC	Project Steering Committee
QEA	Quality at Entry
QSA	Quality of Supervision
REDD	Reducing Emissions from Deforestation and Forest Degradation
RF	Results Framework
RTA	Regional Technical Assistance
SDR	Special Drawing Rights
SEV	Soil Expectation Value
SFE	State Forest Enterprise latterly known as State Forest Company
SHCA	Special Habitat Conservation Area
SSR	Social Screening Report
SUF	Special Use Forest
TA	Technical Assistance
TFF	Trust Fund for Forests
TRG	Technical Review Group
TSP	Technical Service Provider
UOM	Unit of Measure
US\$	United States Dollar Vietnem Deule für Social Policy
VBSP	Vietnam Bank for Social Policy
VCF	Vietnam Conservation Fund
VND	Vietnam Dong
VNFF	Vietnam Fund for Forests
5MHRP	5 Million Hectare Reforestation Programme

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SOCIALIST REPUBLIC OF VIETNAM FOREST SECTOR DEVELOPMENT PROJECT

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A. Basic Information					
Country:	Vietnam	Project Name:	Forest Sector Development Project		
Project ID:	P066051,P074414	L/C/TF Number(s):	IDA-39530,IDA- 50700,TF-50865,TF- 54122,TF-54523,TF- 54524,TF-53397		
ICR Date:	12/23/2015	ICR Type:	Core ICR		
Lending Instrument:	SIL,SIL	Borrower:	VIETNAM		
Original Total Commitment:	USD 39.50M,USD 9.00M	Disbursed Amount:	USD 66.40M,USD 8.00M		
Environmental Category: B,B Focal Area: B					
Implementing Agence Ministry of Agricultur	ies: re and Rural Developme	nt			
Co-financiers and Ot	her External Partners:				

B. Key Dates

Forest Sector Development Project - P066051				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	02/07/2002	Effectiveness:	08/04/2005	08/04/2005
Appraisal:	10/14/2003	Restructuring(s):		03/28/2011 03/22/2012 03/28/2012
Approval:	07/08/2004	Mid-term Review:	05/15/2007	01/23/2007
		Closing:	03/31/2011	03/31/2015

VN - GEF Forest Sector Development Proj - P074414					
Process	Process Date Process Original Date Revised / Actuality Date(s) Date(s) Date(s)				
Concept Review:	02/07/2002	Effectiveness:	05/31/2005		
Appraisal:	10/14/2003	Restructuring(s):			
Approval:	07/08/2004	Mid-term Review:	05/15/2007	01/23/2007	
		Closing:	03/31/2011	03/30/2013	

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes	Satisfactory
GEO Outcomes	Satisfactory
Risk to Development Outcome	Moderate
Risk to GEO Outcome	Moderate
Bank Performance	Satisfactory
Borrower Performance	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)				
Bank	Ratings	Borrower	Ratings	
Quality at Entry	Satisfactory	Government:	Moderately Satisfactory	
Quality of Supervision:	Satisfactory	Implementing Agency/Agencies:	Satisfactory	
Overall Bank Performance	Satisfactory	Overall Borrower Performance	Moderately Satisfactory	

C.3 Quality at Entry and Implementation Performance Indicators				
Forest Sector Developmen	nt Project - P06605	51		
Implementation Performance	Indicators	QAG Assessments (if any)	Rating:	
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA)	None	
Problem Project at any time (Yes/No):	Yes	Quality of Supervision (QSA)	None	
DO rating before Closing/Inactive status	Satisfactory			

VN - GEF Forest Sector Development Proj - P074414				
Implementation Performance	Indicators	QAG Assessments (if any)	Rating:	
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA)	None	
Problem Project at any time (Yes/No):	No	Quality of Supervision (QSA)	None	
GEO rating before Closing/Inactive Status	Satisfactory			

D. Sector and Theme Codes						
Forest Sector Development Project - P066051						
	Original	Actual				
Sector Code (as % of total Bank financing)						
Forestry	100	100				
Theme Code (as % of total Bank financing)						
Land administration and management	17	17				
Other environment and natural resources management	33	33				
Other rural development	33	33				
Rural policies and institutions	17	17				

VN - GEF Forest Sector Development Proj - P074414						
	Original	Actual				
Sector Code (as % of total Bank financing)						
Forestry	100	100				
Theme Code (as % of total Bank financing)						
Biodiversity	33	33				
Other environment and natural resources management	33	33				
Other rural development	17	17				
Participation and civic engagement	17	17				

E. Bank Staff

Forest Sector Development Project - P066051 Positions At ICR At Approval Axel van Trotsenburg Vice President: Jemal-ud-din Kassum Country Director: Victoria Kwakwa Klaus Rohland Practice Iain G. Shuker Hoonae Kim Manager/Manager: Project Team Leader: Lan Thi Thu Nguyen Susan S. Shen ICR Team Leader: Robert Ragland Davis ICR Primary Author: James B Carle

VN - GEF Forest Sector Development Proj - P074414						
Positions	At ICR	At Approval				
Vice President:	Axel van Trotsenburg	Jemal-ud-din Kassum				
Country Director:	Victoria Kwakwa	Klaus Rohland				
Practice Manager/Manager:	Iain G. Shuker	Mark D. Wilson				
Project Team Leader:	Lan Thi Thu Nguyen	Susan S. Shen				
ICR Team Leader:	Robert Ragland Davis					
ICR Primary Author:	James B Carle					

F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document)

The objective of the project is to achieve sustainable management of plantation forests and the conservation of biodiversity in special use forests.

Revised Project Development Objectives¹ (as approved by original approving authority) The objective of the project is to achieve sustainable management of plantation forests and the conservation of biodiversity in special use forests.

Global Environment Objectives (from Project Appraisal Document)

The GEO of the PAD was "to improve conservation of biodiversity of international importance in up to 50 Special Use Forests".

Revised Global Environment Objectives (as approved by original approving authority)

Original Target Actual Value Formally Values (from Achieved at Indicator **Baseline Value** Revised approval **Completion or Target Values** documents) **Target Years** 50 percent of the smallholder plantation area in each project province is certifiable Indicator 1 : according to international standards for sustainable forestry. Value (quantitative or 0%) 50% N/A Achieved (73%) Qualitative) Date achieved 07/31/2004 07/31/2004 03/31/2015 Comments Target exceeded by 23%. Some 76,571 ha planted of which 56,050 ha of (incl. % certifiable standard by independent audits using FSC guidance. Audits include achievement) financial, social and environmental aspects of forest management.

(a) PDO Indicator(s)

¹ The PDO was incorrectly stated in the DCA and differed from the PDO stated in the PAD. In order to ensure consistency with the PDO in all the documents, the PDO was formally changed in 2012 at the time of the Additional Financing approval to reflect the PDO as stated in the PAD.

(b) GEO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years		
Indicator 1 :	Management effectiveness Management Effectiveness		· · · ·	neasured by using the		
Value (quantitative or Qualitative)	0	% change in management effectiveness in SUFs	N/A	Achieved. METT scores for Management Boards increased by 33% to 52% between 2005 and 2012 (regional averages)		
Date achieved	07/31/2004	07/31/2004		03/31/2013		
Comments (incl. % achievement)	Project areas cover four of WWF's 200 Globally Important Ecoregions and four Endemic Bird Areas and 63 Important Bird Areas identified by Birdlife International. Revised targets were used since 23 January 2007.					

(c) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years			
Indicator 1 :	Plantation management, land allocation guidelines, investment procedures and institutional models for smallholder plantation management developed in participating provinces.						
Value (quantitative or Qualitative)	0	Procedures developed and applied in participating provinces	N/A	Achieved. Updated VBSP Credit Manual, PIM, guidelines, investment procedures, quality standards & criteria developed & applied in all (incl new) provinces			
Date achieved	07/31/2004	07/31/2004		07/31/2015			
Comments (incl. % achievement)	Revised VBSP Credit Manual & PIM 2012-2015, new procedures & quality standards for land measurement, allocation & plantation design. Successful institutional model derived – DIU, Working Groups, Plantation Design Units, Extn Services						
Indicator 2 :	Compliance checks by provincial DARDs meet prescribed project implementation standards for approximately 70 percent of the project plantation area.						
Value	0	70%	N/A	Achieved. 73.2%			

(quantitative or Qualitative)						
Date achieved	07/31/2004	07/31/2004		03/31/2015		
Comments (incl. % achievement)	4 Internal Plantation Qua international & national f & DARDs.					
Indicator 3 :	Rotation yields at the end (in % of model yield).	of first cycle are in li	ne with project	plantation models		
Value (quantitative or Qualitative)	0	100% of prescribed yields are met		Achieved. 100% of prescribed yields are met or exceeded.		
Date achieved	07/31/2004	07/31/2004		03/31/2015		
Comments (incl. % achievement) Indicator 4 :	Final analyses confirmed yields of short rotation plantations of Acacia hybrid, Acacia mangium and Eucalyptus urophylla. Yields exceeded projections in terms of m3 of timber per ha and tons of wood produced. Special Use Forests are managed and protected according to international conservation standards.					
Value (quantitative or Qualitative)	30 supported Special Use Forests are implementing management plans Achieved. 69 SUF received 100 gram in accordance with					
Date achieved	07/31/2004	07/31/2004		03/31/2013		
Comments (incl. % achievement)	100%. 30 of the SUFs have management plans meeting international standards according to the Management Effectiveness Tracking Tool (METT). By increasing management effectiveness in conservation areas, increased levels of protection for biodiversity.					

-							
No.	Date ISR Archived	Date ISR Archived DO	GEO	IP	Disburg	Actual Disbursements (USD millions)	
					Project 1	Project 2	
1	08/25/2004	S	S	S	0.00	0.00	
2	04/21/2005	S	S	S	0.00	0.00	
3	11/14/2005	S	S	MS	1.50	0.50	
4	07/09/2006	MS	MS	MU	1.81	0.50	
5	02/24/2007	MS	MS	MS	2.85	0.50	
6	07/28/2007	MS	MS	MS	5.62	0.58	
7	05/08/2008	S	S	MS	8.64	0.71	
8	05/18/2009	S	S	MS	13.57	1.23	
9	01/15/2010	S	S	MS	16.66	1.97	
10	11/06/2010	S	S	S	23.03	3.73	
11	11/13/2011	S	S	S	30.56	5.25	
12	09/16/2012	S	S	S	36.71	6.74	
13	05/27/2013	S	S	S	43.29	8.01	
14	02/19/2014	S	S	S	51.90	8.00	
15	12/08/2014	S	S	S	61.94	8.00	
16	03/31/2015	S	S	S	65.62	8.00	

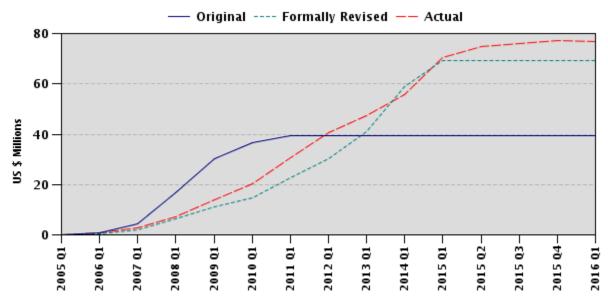
G. Ratings of Project Performance in ISRs

H. Restructuring (if any)

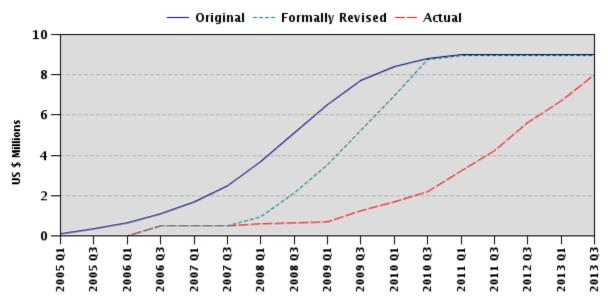
Restructuring	Board A	Approved		Rating tructu	ngs at uring Amount Disbursed at Restructuring in USD millions		cturing in	Reason for Restructuring & Key
Date(s)	PDO Change	GEO Change	DO	GEO	IP	Project1	Project 2	Changes Made
03/28/2011			S		S	26.42		(i) Replacement of original M&E logframe included in the PAD with a Results Framework (ii) Extension of GEF grant closing date to March 30, 2013 and Credit Closing Date to March 31, 2012 (iii) Introduction of Consultants' Services Category in Schedule 1 of the GEF Grant Agreement (iv) Reallocation of proceeds to eliminate category overdraws and account for adjusted funding needs during the extension period and (iv) Revision of Schedule 3 – Procurement to include the procurement method for the selection of Individual Consultants.
03/22/2012	N		S		S	32.52		Additional Credit of SDR19.0 million (new closing date March 31, 2015).
03/28/2012	N		S		S	32.52		Extension of Credit closing date from March 31, 2012 to February 27, 2013.

I. Disbursement Profile





P074414



1. Project Context, Development Objectives and Design

1.1 Context at Appraisal

1. Sector and Project Background. Vietnam's forest cover was 10.7 million ha (34 percent) down from 14.3 million ha (43 percent) in 1943. The forestry sector contributed 1.4 percent of GDP however 25 million forest dependent poor and ethnic minority groups used forests for subsistence livelihoods, energy and safety net in times of hardship. Additionally forests were protecting soil and water resources and conserving biodiversity² but their capacity to provide environmental functions had declined. Forest and watershed degradation and fragmentation destroyed wildlife habitat and environmental, social and economic hardship from floods, soil erosion, silting and reduced agricultural productivity.

2. Concurrently, demand for subsistence and commercial forest products increased due to rapid population growth and economic development. The supply of logs from domestic natural forests declined so industrial wood products were increasingly imported which negatively impacted the trade balance and threatened sustainable management of natural forests in Laos and Cambodia. In Central Vietnam, imported logs supplied 80 percent of log input for 60 large, export-oriented sawmills/furniture factories.

3. As State Forest Enterprises (SFEs) contributed to deforestation and increased degradation of forest land the Government of Vietnam (GOV) introduced reforms to restructure SFEs into viable commercial entities and reallocate land to smallholder households for more effective management that required cooperation between national and provincial Governments and reform-minded SFEs.

4. The 327 Program, 1993, offered better tenure security and cash incentives to replant and protect forests but the gap between demand and supply for forest products and services widened. At that time plantation forests contributed little to meet increasing wood demands, reduced over-exploitation of forests, or economic development in rural areas, because of low productivity, survival and harvest yields. In 1998, GOV launched the "5 Million Hectare Reforestation Program" (5MHRP)³ aimed to reforest 5 million ha by 2010 and restore national forest cover to 43 percent. The Forest Sector Support Partnership (FSSP)⁴, founded in 2001, provided the framework and partnership for GoV, donor and NGO cooperation and dialogue in 9 key 'result areas'⁵.

² Lay within 4 of WWF's 200 Globally Important Ecoregions and contained 4 Endemic Bird Areas and 63 Important Bird Areas identified by Birdlife International

³ 5MHRP also known as Program 661, 1998

⁴ The World Bank was a founding partner of the Forest Sector Support Partnership, 2001 and together with the Netherlands and Finland provided the framework for strengthening forest & TFF coordination/reporting.

⁵ The nine FSSP result areas were: (a) effective systems for collaborative planning and monitoring; (b) policy, legal and institutional framework to harmonize national-provincial policies; (c) macro land-use planning; (d) integrated micro (decentralized) land-use planning; (e) SFE renovation; (f) sustainable forest management planning and implementation; (g) sustainable use and conservation of indigenous forest flora and fauna; (h) integrated system of demand-driven research, extension, education, and training; and (i) marketing and processing of forest product at a sustainable rate.

5. Poor plantation results were caused by: inadequate incentive framework; insufficient market orientation; heavy top-down planning; weak extension capacity; limited technological and managerial capacity; and inadequate investment. Insufficient land was available for planting by the non-state sector exacerbated by delayed allocation of Land Use Rights Certificates (LURCs) that caused insecure forest land tenure.

6. To enhance the contribution of plantation forests to rural livelihoods, standards had to be improved; the area under market-oriented plantation forests greatly expanded; and forest management options widened. Issues that had to be addressed: (a) The policy and legal frames had to provide an investment and market environment that promoted commercial tree growing by investors, including households, communities, and the private sector; (b) The role of SFEs and non-state sectors in commercial forestry had to be clarified, including for provision of market-driven extension services; (c)) The processes of land classification and issuance of LURCs had to be accelerated and forest management capacity improved; (d) Financing and technical support mechanisms for communities and smallholders had to be introduced in a transparent and cost-effective way; and (e) The international competitiveness of the forest industry to pay market prices for wood grown by investor households, had to be improved.

7. GOV's Forest Sector Development Strategy, 2001 (FSDS) focused on protection of crucial watersheds, biodiversity conservation, and expansion of production forests. Other related strategies included the National Biodiversity Action Plan, the National Environmental Action Plan, and Vietnam's GEF Strategy (2001-2010). A nationwide system of 121 SUFs had been established over 2.5 million ha, but lacked effective management, despite forest protection being a priority under the "661 Program". Limited funding and capacity within MARD and the provincial and district forest protection units were serious constraints.

8. Conservation faced challenges: (a) Increasing demands on national and provincial budgets for socio-economic development and poverty alleviation starved SUFs of funds; (b) SUF management regulations prohibited sustainable use of natural resources that could incentivize local communities to support conservation; (c) Limitations in GOV institutional capacity to manage SUFs; (d) Lack of understanding of the objectives and values of SUFs among decision makers; and (e) A conservation financing system that directed funds to a small number of sites, rather than to conservation field activities on a system-wide basis.

9. Rationale for Bank Involvement. This project was formulated under the FSSP to support implementation of the 5MHRP and GOV's FSDS, 2001 and key production and conservation issues. The project activities cross-cut all nine FSSP result areas. There had been little donor support for smallholder plantation forestry, despite being a high GOV priority. None focused on bringing degraded, unused land under more efficient use and improving land tenure security by allocating land to poor rural households for commercial forestry. The plantation component advocated a policy and market environment that supported investment in tree growing by smallholders; accelerated forest land allocation; and provided support to plantation and mixed forestry-agriculture crop establishment and management. Land allocation in the project adopted a demand-driven approach with extensive community consultation. Additionally strengthened extension and technical plantation management capacity, especially at province and forest management levels, were provided. Strengthened linkages between wood production and end-users were supported by

new Farm Forestry Groups (FFGs) and group certification pilots to improve market access, increase financial profitability and reduce dependence on chipwood markets.

10. The fragmented nature of Vietnam's SUF system required a financing mechanism to deliver more flexible support to a larger number of SUFs of international importance. The SUF component aimed to provide SUF managers access to funds and tools to strengthen planning and management capacity for conservation and co-management.

11. The project was consistent with the main goal of the Bank's Country Assistance Strategy (CAS) of assisting Vietnam in poverty reduction and promotion of equitable growth⁶. The project supported these themes through (a) encouraging restructuring of SFEs and creation of FFGs managed by smallholders; (b) promoting tree growing in poor rural areas to diversify farm economies and improve rural livelihoods, including ethnic minorities; and (c) enhancing technical and financial management capacity in plantation forestry and SUFs.

12. The project was fully consistent with the GEF: (a) Operational Strategy for Biological Diversity;⁷ (b) Second Biodiversity Program Study; (c) Second Overall Performance Study;⁸ (d) Strategic approach to biodiversity conservation as articulated in its FY04-06 Business Plan;⁹ and (e) Strategic directions and targets for biodiversity in FY04-06¹⁰.

1.2 Original Project Development Objectives (PDO) and Key Indicators

13. As stated in the Project Appraisal Document (PAD): "*The PDO of the Project was to achieve sustainable management of plantation forests and the conservation of biodiversity in Special Use Forests*". The PDO was to be attained by (a) improved environment for sustainable forestry development and biodiversity conservation, (b) attractive packages to poor farming households to plant trees on a sustainable basis for generating additional income and employment, (c) competitive grants for effectively managing priority SUFs of international importance, and (d) capacity strengthening at all to provide support services and to monitor and evaluate impact and outcomes.

14. The PDO in the Development Credit Agreement (DCA) differed from the PAD and stated that "*The PDO was to assist the Recipient to enhance the contribution of forestry to:*

⁶ Bank's Country Assistance Strategy (CAS) through: (a) high growth transition to a market economy; (b) an equitable, socially inclusive, and sustainable pattern of growth; and (c) adoption of a modern public administration, legal and governance system.

⁷ GEF Operational Strategy for Biological Diversity, Operational Programs on (a) Forest Ecosystems; (b) Mountain Ecosystems; (c) Integrated Ecosystem Management; (d) Sustainable Land Management

⁸ GEF 2nd Overall Performance Study:(a) funding that consistent with absorptive capacity; (b) pilot and promote a sustainable conservation funding mechanism; (c) encourage flexibility and innovation; (d) directly involve local communities and reflect their development needs; and (e) measure results.

⁹ GEF 2004-06 Business Plan: (a) adopted a strategic and system-wide approach to conserving biodiversity;
(b) built local capacity; (c) promoted sustainable use and benefit sharing; (d) systematically addressed stakeholder participation, and (e) emphasized sustainability and replication.

¹⁰ GEF Strategic Directions and Targets, FY04-06: (a) catalyzing the sustainability of protected areas; (b) mainstreaming biodiversity conservation in IA sector programs; and (c) generating and disseminating best practices.

(a) rural poverty reduction and (b) global environmental protection, through the sustainable management of plantation forests and the conservation of biodiversity in Special Use Forests (SUFs)". The project design, activities, and key performance indicators (KPIs) reflected the scope of the PDO stated in the PAD, which also encompassed the provision of competitive grants and institutional capacity building.

15. It was recognized early during implementation that the incorrect PDO was included in the DCA. The PAD's PDO provided a better articulation of the project's outcomes than the PDO formulation in the DCA in terms of what would be achieved by the project and for which it could reasonably be held accountable. The PAD's PDO was also more closely aligned with the project's activities, confirming the discrepancy with the PDO stated in the DCA was an oversight. In July 2009, the World Bank's Country Director for Vietnam formally recognized that the PDO of the PAD should guide the project and, in February 2012, the Additional Finance Agreement was approved, reflecting the exact wording of the PDO from the PAD. Given the higher relevance of the PAD's PDO to the project over the one in the DCA and its long-term application during the project's tenure, this ICR utilizes the objective statement from the PAD.

16. The Project Design Summary in the PAD is based on a Log-Frame developed during project preparation before the Bank introduced the Results Framework approach as part of its efforts to strengthen the focus on measuring development results.

17. Achievement of the PDO was monitored by the following key performance indicators (KPIs) as detailed in the PAD: (a) Institutional and financial arrangements for promoting smallholder plantation forestry developed and available for replication; (b) Environmentally, socially, and economically viable smallholder forestry sector established and benefiting rural households in the original four project provinces; (c) Financial arrangements for funding of SUFs in place; (d) Improved conservation management of approximately 30 Special Use Forests; (e) Reduced threats to areas with ecosystems of international conservation importance; and (f) Procedures for functional management information and monitoring and evaluation system for plantation forest and Special Use Forests developed and operational.

1.3 Original Global Environmental Objective (GEO) and Key Indicators

18. Global Environment Objective (GEO) of the GEF component of the Project in the PAD also differed from that stated in the Grant Agreement (GA)¹¹. The GEO of the PAD was "to improve conservation of biodiversity of international importance in up to 50 Special Use Forests". The GEO in the GA was the same as the PDO in the DCA: "to assist the Recipient to enhance the contribution of forestry to: (i) rural poverty reduction and (ii) global environmental protection, through the sustainable management of plantation forests and the conservation of biodiversity in special use forests". As was the case for the PDO, the GEO in the PAD provided a better articulation of the project's outcomes, and global objectives, than the PDO formulation in the DCA (and GA). The PAD GEO reflected more clearly what would be achieved by the GEF component and activities, for which it could reasonably be

¹¹ GEF Trust Fund Grant Agreement No: 053397-VN between GEF and IBRD, dated 4 April, 2005

held accountable. Therefore, in preparing the ICR for the VCF/GEF component a decision was made to use the GEO in the PAD, as well as the revised PDO.

19. This objective was to be achieved by: (a) establishing a Vietnam Conservation Fund, a new financing mechanism to provide small amounts of finance to initiate and improve management of SUFs of high biodiversity value on a competitive basis; and (b) mobilizing international and local technical assistance to build the capacity of the SUF management boards and the local communities at these sites to plan and implement priority conservation activities with a focus on developing and promoting the use of co-management based approaches to planning and management.

1.4 Revised PDO and Key Indicators

20. A World Bank Country Portfolio Review, 2006 reviewed the PAD Log-Frame and concluded the original Key Performance Indicators were not sufficiently results-oriented and overly focused on physical outputs. The review recommended formalizing the change from a Log-Frame to a Results Framework through a project restructuring. The review recommended reducing the number of indicators, modifying key indicators to better reflect the two different elements of the PDO, and measuring project outcomes and intermediate outcomes at a more aggregate level. Per guidance of this review, the original Monitoring and Evaluation (M&E) Log-Frame analysis included in the PAD (included in Annex 2(a) of this ICR) was replaced with a Results Framework (Annex 2(b)).

21. The Results Framework (RF) was formulated by the Task Team in close consultation with the implementing agency during the first Mid-term Review (MTR) carried out in 2007 and had four Outcome Indicators at the PDO level and four Intermediate Outcome Indicators at the project component level. Since the MTR of 2007, the implementing agency monitored the new RF and tracked progress against this RF. However, formalization was delayed until the project was restructured in March 2011 to combine the introduction of the new RF with the closing date extension.

22. In order to ensure consistency with the PDO in all the documents, the PDO was formally changed in 2012 at the time of the Additional Financing approval as follows: "to achieve sustainable management of plantation forests and the conservation of biodiversity in Special Use Forests".

1.5 Revised GEO and Key Indicators

23. The GEO remained unchanged. However, the KPIs of the GEF component were revised. The original KPIs of the GEF component were i) ratio of budget spent on capital investments versus operational management, ii) improvement of management effectiveness of SUFs, and iii) Improved engagement of local communities and ethnic minorities in SUF planning and management. In March 2011 when the project was restructured, the KPI was revised to *Management effectiveness in SUFs will improve (percent) and measured by using the Management Effectiveness Tracking Tool (METT).*

1.6 Main Beneficiaries

24. The project beneficiaries were 19,000 poor or medium income households from 120 communes with high poverty rates in 21 districts in Thua Thien Hue, Quang Nam, Quang Ngai and Binh Dinh provinces with particular focus on ethnic minority communities in upland areas where poverty levels were higher. Seventy three project communes had more than 50 percent poor households and twenty one had poverty levels less than 40 percent. Participation in the smallholder plantation component was voluntary and selection based on technical, economic and environmental criteria. The project proposed household access to LURCs, low interest loans from the Vietnam Bank for Social Policy (VBSP), extension services and access to markets and benefits from 66,000 ha of smallholder plantation forests to strengthen wood markets and create a competitive plantation sector.

25. For the SUF component, the protected area managers and staff and local populations, previously excluded from SUF management were targeted beneficiaries. The VCF sought to support SUF planning and management and greater levels of community participation and pilot co-management, particularly with ethnic minority communities in remote mountainous areas.

1.7 Original Components

26. The project had four components¹².

27. Component 1: Institutional Development (UD\$1.20 million) aimed to assist GOV in strengthening the enabling environment for sustainable forest management and biodiversity conservation by (a) revising selected policies and regulations based on field implementation experiences of production plantation forest and SUFs; (b) establishing FFGs to facilitate the development of smallholder forestry; and promoting certification of plantation forests in selected pilot areas to ensure sustainability, premium prices and secured market access.

28. Component 2: Smallholder Plantation Forest (US\$52.56 million) aimed to establish plantation forests based on different cropping systems in Quang Nam, Quang Ngai, Binh Dinh, and Thua Thien Hue provinces through: (a) Participatory site selection involving village consultations and technical and environmental screening of proposed sites; (b) Land allocation and land use right certificate (LURC) as eligibility criteria for an investment credit; (c) Extension and services delivery to improve smallholders of plantation forest standards; (d) Plantation design and management; (e) Plantation investments by access to low interest credits to farmers in a revolving fund until 2036.

29. Component 3: Special Use Forest (US\$15.97 million) aimed to improve the conservation and sustainable use of biodiversity resources in priority SUFs and increase the reliability of SUF funding through the establishment of an innovative financing mechanism by (a) establishing and operating the Vietnam Conservation Fund (VCF) of a competitive small grants program for SUFs; and (b) improving SUF planning and implementation based on site-specific conservation needs assessment (CNA), development of operational management plans (OPMs), strengthening of capacity of SUF MBs to reach co-management

¹² Details and US\$ estimates from the PAD, which varied subsequently due to SDR fluctuations

agreements with local communities; and strengthening of field implementation capacity; and M&E system.

30. Component 4: Project Management and Monitoring and Evaluation (US\$4.86 million) aimed to facilitate efficient project implementation and coordination of GOV agencies at central, provincial, district and commune levels and undertake project-specific M&E and collaboration with partners in the FSSP in accordance with related principles.

1.8 Revised Components

The components of the project remained the same. However, the costs increased as a result of the Additional Financing. The original and revised component costs are provided in Annex 1.

1.9 Other significant changes

31. The project was approved by the Board on July 8, 2004 with a closing date of March 31, 2011. The project experienced implementation delays of nearly 2 years due to setbacks in procurement at the central level due to time-consuming GOV approval procedures. Up to December 31, 2010, the Multi-donor Trust Fund for Forests of Vietnam co-financed the project with a grant of US\$12.71 million. Up to July 31, 2010, the project had also received grant co-financing of US\$2.56 million from the European Commission (EC). To allow sufficient time for implementation and institutionalization of plantation development and biodiversity conservation, IDA Credit (3953-VN) was extended to March 31, 2012 and the GEF Grant of US\$9 million to March 30, 2013¹³. The same Level 2 restructuring replaced the original M&E Log-Frame with a Results Framework per guidance of a Bank Country Portfolio Review conducted in 2006 and reallocated GEF Grant proceeds across categories. The project was extended to February 27, 2013¹⁴ to allow sufficient time for processing the Additional Financing for components 1, 2 and 4.

32. An Additional Financing Agreement between GOV and IDA, dated 15 June, 2012, for the Credit No 5070-VN was approved for an additional 19 million SDR (about US\$30 million), closing, 31 March 2015¹⁵. The additional credit financed (a) continuation and expansion of smallholder plantations in Quang Nam, Quang Ngai, Binh Dinh, and Thua Thien Hue; (b) scaled-up the plantation program into Thanh Hoa and Nghe An; (c) continued institutional development, training, technical assistance and policy analysis at the national level to deepen project impacts; and (d) piloted independent certification of smallholder plantations. *The inconsistency in the PDO formulation between the PAD and the original DCA was corrected in the Additional Financing Agreement*.

¹³Level two Restructuring was approved on March 30, 2011 extending the IDA Credit (3953-VN) to March 31, 2012 and the GEF Grant (TF53397) to March 30, 2013.

¹⁴ Level two Restructuring was approved on March 28, 2012 extending the IDA Credit (3953-VN) to February 27, 2013.

¹⁵ An Additional Financing Agreement was approved by the Board on March 22, 2012 for IDA additional Credit No 5070-VN, closing on March 31, 2015.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

33. <u>Soundness of Background Analysis and Strategic Context:</u> The project built on ten years of established World Bank-GOV and partner experiences in forest and conservation support, analyses of lessons learned and built upon established relationships and mechanisms in implementation of the Forest Sector Development Strategy, 2001 (FSDS), GOV's *327 Program* and initial years of the *5MHRP* and former biodiversity conservation projects supported by the GEF and the Netherlands. The project was formulated under the Forest Sector Support Partnership (FSSP)¹⁶ in support of the GOV for the project to support high priority activities and key sector issues in implementation of the 5MHRP and forest conservation strategies. The smallholder plantation forest development and strengthening SUF planning and management were high priorities in the FSSP, but not supported substantially by other donors. FSSP partners shared issues and achievements of their respective projects from time to time. Project preparation was supported by comprehensive safeguards documents¹⁷ prepared by MARD for the original project (disclosed in 2003) and revised for the Additional Financing (disclosed in 2011).

34. The project was financed by an original IDA Credit for US\$39.5 million and a GEF Grant of US\$9 million, supplemented by a co-financing grant from the Vietnam Trust Fund for Forests (TFF) under the FSSP of US\$12.71 million (Netherlands, US\$6.91 million and Finland, US\$5.80 million) and a co-financing grant from the European Commission of US\$2.56 million. All grants were channeled via the Bank.

35. <u>Assessment of Project Design</u>: The components, KPIs and output indicators were considered realistic at entry, despite a complex institutional setting within the Forest Management Board and the Forest Protection Department of MARD. At the 2006 review of the PAD Log-Frame¹⁸ the original KPIs were considered insufficiently results-oriented and too focused on physical outputs. The review recommended reducing the number of indicators, modifying key indicators to better reflect the smallholder plantation forests and SUF components of the PDO, and measuring project outcomes and intermediate outcomes at a more aggregate level. Formalization of the transition from the Log-Frame to a Results Framework and review of indicators was delayed until project restructuring in March 2011.

36. The project took a comprehensive and systematic forestry sector-wide approach, focusing on support to policy and regulatory frameworks; new funding mechanisms, new institutional modalities and technical tools; transfer of knowledge and technology; capacity building and scaling-up of smallholder plantation and SUF components rather than focus on implementing pilots as had been done previously by other donors and the Bank. The project

¹⁶ Forest Sector Support Partnership included Australia, Denmark, Finland, Germany, Japan, the Netherlands, Sweden, Switzerland, European Union, Asian Development Bank, FAO, UNDP, the World Bank and international and national NGOs and Associations

¹⁷ Original (2003) and Revised (2011) Safeguards documents prepared: (a) Environmental Impact Assessment and Impact Management and Monitoring Plan; (b) Environmental Protection Guidelines for Plantation Management; (c) Ethnic Minority Development Strategy.

¹⁸ World Bank Country Portfolio Review, 2006

demonstrated innovative mechanisms for smallholder plantation forest development and SUF financing and integrated co-management for scaling-up throughout Vietnam. The primary target groups of the smallholder plantation forest component were the rural poor and ethnic minorities on steeply sloping, denuded or barren lands in Central Vietnam. The primary target groups of the SUF component were the management boards and local communities in national parks and protected areas throughout Vietnam.

37. The Forest Sector Development Project (FSDP) approach, supported policy, technical, financial and institutional support to all levels of governance (Central, Provincial, District and Commune) to build capacities at the commune and household levels and to strengthen self-reliance. Funding, technical support, institutional mechanisms, standards, guidelines and other tools supported smallholder plantation forest investment benefits and SUF MBs and local communities into benefit sharing mechanisms (BSMs) to achieve improved biodiversity conservation management. New funding mechanisms to both smallholders and SUF MBs facilitated a culture of ownership and commitment. Smallholders were required to secure LURCs and to meet high technical standards in planation design to secure low interest loans for plantation forest investment. SUF MBs had to undertake Social Screening Reports (SSRs) and Conservation Needs Assessments (CNAs), prepare Operational Management Plans (OMPs), undertake Management Effectiveness Tracking Tools¹⁹ (METTs) and encouraged to enter into BSMs with local communities. The design introduced more transparent and participatory approaches that encouraged FFGs and communes to participate in preparation of Ethnic Minority Development Plans (EMDPs) and create alliances with SUF MBs to prepare OMPs and BSMs.

38. At the central and provincial levels the Project Steering Committees (PSCs) were established to provide policy guidance, review of annual work plans and budgets and coordinate with relevant agencies. For the smallholder plantation forest component, the PSC was established under the National 5MHRP Steering Committee. The credit for smallholder plantation forest component was managed by a project implementation unit within the VBSP. The SUF component had a separate Management Committee established to oversee the policy and operations of the Vietnam Conservation Fund (VCF), endorse grant proposals and authorize fund disbursements. A Technical Review Group (TRG) of international and national conservation specialists independent of GOV reviewed and advised on proposals sent to the VCF Secretariat assisted by Regional Technical Assistance (RTA) teams in the North, Center and South. The SUF component and the VCF Secretariat were institutionalized under the Forest Protection Department of MARD.

39. A Central Project Coordinating Unit (CPCU) within the Management Board of Forestry Projects within MARD coordinated FSDP overall administration, report consolidation, M&E, and centralized procurement and liaison with the FSSP. The FSDP was guided by a comprehensive Project Implementation Manual (PIM), VBSP's Credit Manual and VCF's Operational Manual.

¹⁹ WWF-World Bank, monitoring tool used by managers to provide a quick overview and report progress in their achievement of protected area management effectiveness. Reference: WWF-World Bank, 2007. Management Effectiveness Tool: Measuring Progress at Protected Area Sites. Second Edition, ISBN 978-2-88085-281-8, WWF, International, Gland Switzerland

40. At the field level of the smallholder plantation component, coordination of the implementation, land allocation and LURCs, technical standards, financial management and procurement were the direct responsibility of Provincial Project Management Units (PPMU) in each province, District Implementation Units (DIU) in each district and Commune Working Group (CWG) in each commune. The CWGs played a pivotal role in facilitating participatory planning and information dissemination and for working in close collaboration with existing District Extension Centers and FFGs to meet the needs and support of householders in smallholder plantation forest investments. The VBSP at central, provincial and district levels served smallholder household credit needs through services at the commune level in accordance with the Credit Manual.

41. In the SUF component field implementation strengthened planning and management in SUFs nationally. Individual SUF MBs were responsible for implementation in collaboration with the related provincial Forest Protection Department and local communities. GEF experience²⁰ in conservation financing influenced the SUF and VCF design as a nationwide, competitive and performance-based financing mechanism. Past conservation projects had shown that community access to natural resources was important both for local livelihoods and conservation. A Resettlement Policy Framework was put in place to mitigate potential adverse impacts of restricted community access or use and stronger enforcement capacity of MBs.

42. At the commune level the foundation of the smallholder plantation forest component was the household orientation to opportunities; registration and initial social screening to target poor and ethnic minority groups; inputs to landscape and commune level plantation planning and mapping; access to VBSP low interest credits, contracts; and plantation models; and preparing proposals for land allocation, survey and mapping in the LURC process. On issuance of LURCs, extension services were planned to meet priority smallholder needs; individual smallholder plantation designs prepared; VBSP credit applications submitted and secured; quality seedlings from accredited nurseries procured; and FFGs established. Smallholders considered that the provision of extension services and technical training were fundamental for the success of their plantation forest investments and pivotal in their transforming from an aid-dependent mentality to self-reliant, plantation forest investors.

43. In communes where ethnic minorities were prevalent, the project targeted smallholder plantation forest to support their needs. Additionally, modalities were established for communes to submit Ethnic Minority Development Plans (EMDPs) to mitigate risks associated with new smallholder plantation forest investment and associated market risks and to transfer knowledge and technology in priority needs, including animal husbandry, handicrafts, vegetable growing, horticulture, bee keeping and other practices to diversify household incomes and livelihoods.

²⁰ GEF experience highlighted (a) limited state budgets or donor funds for conservation activities on-theground; (b) no link of conservation to investment plans and (c) conflicts prevailed between communities striving to meet livelihoods needs and SUF managers committed to meet conservation goals.

44. In the SUF component, protected area specialists engaged with and partnered with, local communities where low impact use of protected areas (extraction of NWFPs, fuel, food, medicines) was compatible with protected area management resources. Communities were surveyed through SSRs to identify livelihoods needs; conservation priorities were assessed through CNAs and communities participated in preparation of OMPs. When SUF MBs and community leaders agreed the formal partnership was achieved through BSMs that shared responsibilities and benefits.

45. Technical Service Providers (TSPs) were both beneficiaries and part of the project implementation design. TSPs included technical institutions and individuals supported to strengthen their technical services in accordance with best practices standards to become more effective at working with smallholder plantation forest investors, ethnic minority groups, and assist SUFs MBs and communities. When TSPs had attained pre-requisite standards they were included on a roster of qualified service providers that strengthened the capacity of CWGs, FFGs and smallholders to improve their investment in quality plantation forests. Key services included land survey, mapping, landscape and plantation design, LURC processing, application for VBSP loans, extension services, technical training, scientific research, nursery seedling production, ethnic minority development planning, special studies, internal assessments, and pilots in FSC certification, co-management and thinning trials.

46. Within the SUF component specialist services supported SUF MBs in the preparation of SSRs, CNAs, METT analyses, OMPs, negotiation of BSMs and the RTA evaluation of SUF proposals for VCF grants. The institutional and technical design strengthened SUF MBs and local communities to better understand the delicate balance between conservation and livelihoods issues and threats and through participatory processes, explored opportunities to work together to achieve improved planning, financing, management and monitoring of conservation and protected areas.

47. <u>Adequacy of Government Commitment:</u> The project built on a long-term partnership between the Bank and MARD in the forestry sector and through the FSSP strategic planning and donor coordination mechanisms. Project preparation enjoyed strong GOV support and a high level of mutual trust and commitment. This included policy and institutional commitments as well as the provision of qualified staff to the CPCU, PPMUs, DIUs, VBSP and VCF Secretariat within MARD and processing of LURCs by the Ministry of Natural Resources and Environment (MONRE).

48. <u>Assessment of Risks:</u> The assessment of recognized risks was generally sound and the designed risk mitigation measures proved generally effective. The risks identified during preparation of the original project were (a) insufficient GOV commitment to smallholder investment in plantation forests resulting in insufficient reclassification of SFE land for smallholder land allocation, (b) GOV would allow development activities that would negatively and irreversibly impact conservation values of SUFs, (c) lack of participatory land-use planning and allocation procedures by MARD & MONRE; (d) decline in chipwood markets resulting in unprofitable plantation forest investment; (e) availability and retention of qualified project staff at all levels, (f) insufficient VBSP experience in forestry credits, and (g) insufficient counterpart financing to implement project initiatives on a timely basis. 49. The risk of delays caused by initial procurement processing and approvals, weak institutional capacity, and lack of initial TA support were not fully anticipated at project entry.

50. Effective risk mitigation measures adopted respectively were (a) SFE reforms were linked to the SOE reform progress of other Bank policy-based lending instruments to promote faster progress and on-going dialogue to remove constraints; (b) VCF OMPs were linked to 5-10 year investment plans to minimize damage to conservation values; (c) project staff were trained in and adopted the participatory methods and framework for the smallholder plantation forest component; (d) smallholder plantation forest investors were provided market information to strengthen negotiation capacity through FFGs and encouraged to grow sawlog rotations to diversify production and pursue FSC certification to access markets, increase prices and spread risks; (e) early identification, recruitment and training of project staff were undertaken and a mix of GOV staff and national consultants was secured for project implementation; (f) VBSP credit officers, as former employees of Vietnam Bank for Agriculture, had extensive banking experience and received training for unique forestry issues; (g) timely work plans and budgets were prepared and pre-financing requiring counterpart funds was formalized by written commitment by provinces.

51. The Additional Financing (2012-2015)²¹ identified risks based upon experiences in project implementation in 2005-2011: (a) Project Stakeholder Risk: - willingness of households to borrow for smallholder plantation forest investment if market conditions declined; (b) Implementing Agency Risk: - weak capacity of Thanh Hoa and Nghe An provinces in Bank procedures on financial management, procurement and social and environmental provisions and safeguards; (c) Project Risk/Design: - difficulties in institutional coordination between MARD and MONRE at provincial levels to schedule project activities such as land allocation prior to loan disbursement; (d) Project Risk/Social and Environmental: - low levels of literacy and understanding of safeguards provisions at the household level may cause difficulties in implementing the PIM and the Environmental Management Plan; (e) Project Risk/M&E: - new provinces may not adhere to procedural, technical and environmental standards of the smallholder plantation forest program.

52. Effective risk mitigation measures in the Additional Financing (2012-2015) were respectively (a) comprehensive support services (VBSP credit provisions, extension services, technical assistance training, infrastructure provision, nursery accreditation and improved seedling quality, improved silviculture and livelihoods training), reduced smallholder risks; (b) the CPCU provided targeted support, training and international technical assistance on all technical and safeguards aspects of the project in the new provinces and districts; (c) CPCU and PPMUs led coordination of agencies at provincial level, with particular focus on new provinces; (d) simplified guidelines for smallholder plantation forests, including environmental guidelines developed and transfer of knowledge to smallholder households were monitored by Internal Assessments of Plantation Performance and CPCU and IDA missions; (e) start-up capacity building, cross-province learning and exchanges between old and new project provinces were undertaken, supported by an external TA support program.

²¹ Project Paper on the Proposed Additional Credit

2.2 Implementation

53. **Start-up Delays:** The project experienced initial implementation delays due to: (a) GOV approval on the FSDP procurement plan delayed until July, 2006; and (b) processing delays on key individual procurement packages such as critical TA support and field vehicles. Despite delays, field implementation of smallholder plantation forests continued in 2005 and 2006 at a smaller scale. Through the provision of extension services, TA training, combined with FFG coordination and the provision of TSPs for plantation design, improved seedlings and silviculture, the scaling-up and improved quality of planting was achieved incrementally as capacity improved. Due to a lack of TA support to the FPD at provincial and regional levels and to SUF MBs in the first 2 years, the SUF component was implemented on a pilot basis in three SUFs in each of North, Central and South regions, to test the selection process and implementation procedures. This start-up delay made a project extension until March 2013 necessary and contributed to the low disbursement rate of the EC Grant Agreement²².

54. Progress at Mid-Term Review (MTR), January 2007: The first MTR highlighted that the PDO remained achievable, thus, no restructure of the project components or activities was necessary. Strong demand from farmers to participate in the smallholder plantation forest component and a broad understanding of the project, its objectives and its procedures were observed. The manuals, guidelines, standards and procedures and associated extension and training had been prepared and tested but it was too early to observe substantive quality improvements in plantation standards. Similarly there was a strong demand from SUF MBs across the country to receive VCF grants, but because of delays, the VCF operated on the 3 pilot SUFs only in the first two years. The lack of TA support contributed to implementation delays in all four components, constraining the initial control of technical quality and implementation. Better MARD/DARD and MONRE coordination and collaboration was flagged to ensure timely delivery of LURCs to householders in the smallholder plantation forest component. MARD was requested to improve their staff's understanding of the Bank's procurement guidelines and strengthen staffing arrangements to speed up procurement documentation and processing.

55. **Progress at MTR, January 2009:** A second MTR was conducted to assess FSDP responses to recommended actions from the First MTR, 2007 and to re-focus the achievement of both quantity and quality results through further strengthening of capacity, LURC issuance, M&E, procurement and financial management. Despite promising results being achieved from smallholder plantation forest development and in management of SUFs, a refocus was necessary to achieve improvements on the ground. Better performance was stressed for compliance with plantation forest standards and technical prescriptions, environmental guidelines and management plans; and strengthening of commune-level planning, site selection and plantations, higher productivities and volume and product yields, financial returns and environmental sustainability within and beyond the project. The CPCU and PPMUs were requested to establish a comprehensive M&E system for the

 $^{^{22}}$ The low disbursement rate of the EC grant was due to (a) the small size of the initial grants, which made it difficult to disburse all the funds in only 2 years, and (b) the GOV reticence to fully disburse the EC grant before the GEF grant.

plantation forest component to monitor reliable data on quality and compliance with regulations and standards. There was a critical need to address the apparent shortage of land available for smallholder plantation forest investment by reallocation from SFE land. As a result of delays and reduced rate of smallholder plantings significant potential savings were identified for possible redistribution to additional communes in existing project districts. GOV Production Forest Policy (Decree 147, 2007) recognized smallholder plantation forest investment as a legitimate new mechanism that needed a LURC as a pre-condition for investment and promoted further decentralization to district, commune and village levels, and called for improvements in the quality of planting materials and seed sources as well as M&E systems. This was an important departure from the former GOV policies that supported public subsidy models rather than private sector/smallholder driven commercial production forestry.

56. The VCF was established as an effective, competitive financing mechanism for SUFs in Vietnam. Support was provided in (a) implementation of best practices in protected area management; (b) capacity improvements of SUF MBs; and (c) development of comanagement approaches with local communities within or around SUFs. VCF management and governance were functioning well and VCF Management Committee, TRG and VCF Secretariat were operating effectively. By December 2008, 46 SUF grants had been approved and under implementation. SUF management and monitoring and reporting of threats to biodiversity were considered effective. Taking into account resource needs of SUFs, review of individual grants to three funding levels was approved for implementation in 2009: (a) up to US\$50,000 for conservation actions identified in a CNA; (b) US\$50,000-100,000 to fund implementation of OMPs; and (c) US\$100,000-200,000 for critical conservation priorities. Concerns were raised that the project co-financing agreements with the EC Trust Fund for VCF grants (12 percent disbursed) and the FSSP Second Trust Fund for TA support to VCF MBs (29 percent disbursed) were scheduled to close in May 31, 2009 and August 31 2009 respectively. Extensions to these co-financing agreements were recommended.

57. The MTR, 2009 rated the overall project implementation performance as Moderately Satisfactory.

58. Additional Financing, Project Extension and Scaling-up, approved March 2012: Responding to a GOV request the Bank approved US\$30 million Additional Financing for the smallholder plantation forest component in June, 2012. The Additional Financing supported the extension of commercial, smallholder plantation forest development in Thua Thien Hue, Quang Nam, Quang Ngai and Binh Dinh provinces and scaled-up the project to Thanh Hoa and Nghe An provinces. The Additional Financing built upon existing project design, existing and well-functioning project institutions, and implementation experience. The overall project design remained unchanged except for the Institutional Development component, which additionally focused on forest policy issues, including studies on forest enterprise reform, natural forest protection, forest land allocation, biodiversity conservation and REDD as well as piloting of community forest management in the field. Counterpart funding for the 2005-2015 implementation period was estimated at US\$4.32 million, excluding contributions by project households (primarily labor), estimated at US\$10.9 million. 59. **Completion of SUF Component, March 2013:** By the end of the SUF component, the VCF had been established as a proven financial mechanism that provided 100 grants to 69 SUFs. The revision of grant size in 2009 improved cost effectiveness of VCF grants and rewarded well-performing SUF MBs. Second grants were received by 26 SUF MBs (31 percent) and a third grant to 5 SUF MBs. The total value of VCF grants was US\$7.7 million of which US\$4.2 million were approved for 29 larger grants of US\$100,000-200,000, making up the majority of the repeat grants. Given the continued strong demand from SUF MBs, the VCF secured additional financing from the Vietnam TFF in 2013 and provided 11 more grants beyond the project. New planning and implementation procedures were established with the VCF Operations Manual and SUFs conducting SSRs and CNAs to assist in preparing and implementing OMPs and the introduction of BSMs to partner with local communities. Balancing conservation of biodiversity with sustainable livelihoods of SUF dependent communities introduced a new approach in SUF management.

60. Final Implementation Support Mission, March 2015: The project had made steady progress toward achieving the PDO and overall implementation was rated as Satisfactory. The smallholder plantation component focused more on improved plantation quality and institutionalization of its good practices with smallholders. Plantation designs were completed for 45,701 households on 81,985 ha; LURCs were granted to 36,044 households covering 67,912 ha; and 43,743 households established and managed 76,571 ha of smallholder plantation forests. Under the certification pilot program, the project obtained Forest Stewardship Council (FSC) certification on 850 ha of plantation forests owned by 354 households. FSC certified plantations obtained a wood product price premium of 20-30 percent higher than wood products from uncertified plantations. In some plantations, smallholders had diversified forest products by thinning trees to produce larger diameter sawlogs. However, there was little enthusiasm by smallholder investors to plant higher valued hardwood species during the project due to significantly longer rotations with implications for management, exposure to risks and return on investment. This is likely to change as smallholders seek diversification and wood industries seek locally grown high valued species.

61. The VBSP cumulatively disbursed loans to over 28,000 farmer households with a 98 percent repayment rate. Plantations heavily damaged by wind, fire or insects had repayments deferred, or written off. Farmers were able to repay their loans, replant, renovate their homes, invest in family education and develop other business activities with returns from their harvests. According to the Subsidiary Loan Agreement between MOF and the VBSP, the revolving fund will continue to finance plantations through 2036, which adds a high-degree of sustainability to the project activities. Many more plantations will be established and many more poor farmers will have the opportunity to improve their livelihoods from the plantation forest business. The modality of on-lending for plantation forests has proven to be profitable and sustainable (refer to Section 3.3).

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

62. **M&E design:** The project design detailed in the PAD included project M&E in accordance with an original Log-Frame format. During the first MTR (2007) an M&E Workshop was hosted by the CPCU for PPMUs, DIUs and SUF MBs to revise the original

project's outcome indicators, re-cast the Log-Frame into a Results Framework²³ and strengthen M&E capacity and staffing at all levels of project implementation. The Results Framework revised the higher level impacts and outcomes expected of the project, but retained the activities and outputs detailed in the original Log-Frame and compliance monitoring as detailed in the PIM, VCF Operations Manual and VBSP Credit Manual. The SUF component including the VCF, were embedded in the FPD in MARD, while the other three components of the FSDP and the CPCU were embedded in the Management Board of Forestry Projects within MARD, but not mainstreamed in the Forest Department. As a consequence, the implementation structures were designed to function independently. This made the CPCU task of integration of the two M&E systems challenging for joint semi-annual and annual reports. Cooperation improved over time, but greater integration of M&E and reporting from the outset, could have provided more effective reporting and feedback to management decision-makers earlier in the project.

63. **M&E implementation and utilization:** Because of the large scale of smallholder plantings, large numbers of households and small individual plantation plot sizes, detailed computer based monitoring systems were designed to measure key field parameters (LURC, survey coordinates, area, species, seedlings, planting date, harvesting etc.) for every smallholding plantation forest. A computer based M&E system, integrated from the grassroots to the central level was introduced following the MTR in 2009. Technical service providers surveyed and measured smallholdings in the field and data was consolidated at the commune, DIU, PPMU and CPCU levels. Monitoring of performance allowed redeployment of technical support to those areas that required strengthening to meet indicators. Additionally, the CPCU recruited independent, international and national professional forest certification specialists who designed a comprehensive and robust Internal Assessment of Plantation Performance with standards and report relevant information for the new Results Framework indicators.

64. Within the SUF component, the METT process²⁵ helped MBs assess their performance relative to a baseline, identify capacity gaps and needs, set priorities and identify the main issues and threats (refer Annex 10). The METT scores were a useful guide to changing circumstances and threat levels but proved subjective and enumerator dependent. Biodiversity monitoring activities were carried out in the stronger SUFs with the necessary technical skills, to monitor key endangered species and to update existing biodiversity inventories. Although not yet consolidated across SUFs the biodiversity monitoring was usually designed as a regular task linked to patrolling and recording of GPS locations that enabled MBs to continue these activities beyond the project.

65. The SSR was an important assessment tool for SUF MBs that provided important socio-economic, food-insecurity and SUF dependence information of communities living in, and around, the SUFs. These findings helped the GOV to justify Decision 126 to balance

²³ In accordance with the Bank's M&E Results Framework guidelines

²⁴ Internal Assessment of Plantation Performance reports completed in May 2010, November, 2011, September, 2013 and December, 2014

²⁵ WWF-World Bank, 2007. Management Effectiveness Tool: Measuring Progress at Protected Area Sites. Second Edition, ISBN 978-2-88085-281-8, WWF, International, Gland Switzerland

biodiversity conservation with sustainable livelihoods and food security of communities. SSRs also provided justification and guidance on BSMs between SUF MBs and local communities.

66. During field visits and regular supervision missions, physical verification of activities was carried out by the Bank teams to verify progress, compliance with standards, and to provide feedback to the FSDP, GOV, partners and the Bank.

2.4 Safeguard and Fiduciary Compliance

67. Safeguard compliance. The project was classified as an Environmental Category B project and safeguards triggered were: Environmental Assessment (OP 4.01), Natural Habitat (OP 4.04), Forestry (OP 4.36), Indigenous People (OP 4.20), and Involuntary Resettlement (OP 4.12). Most social and environmental concerns were central to the PDO and fully integrated into the design and incorporated in operational guidelines. Compliance with safeguards policies was monitored regularly but no significant issues were observed.

68. <u>Environmental Assessment (OP4.01)</u>: Environmental Impact Assessment and Impact Management and Monitoring Plan (August, 2003); Environmental Protection Guidelines for Plantation Management (October, 2003); Environmental Impact Assessment and Updated Environmental Management and Monitoring Plan for Additional Financing and Extension (October, 2011) and Updated Environmental Protection Guidelines for Plantation Management for Additional Financing and Extension (October, 2011) provided the environmental safeguard framework for the FSDP project.

69. Project environmental safeguards and standards as specified in the PIM and Environmental Protection Guidelines for Plantation Management (2003 and 2011) were adhered to. Average smallholder plantation holdings of less than 2 ha/household were dispersed across the landscape forming a land-use mosaic of agriculture with smallholder plantings of mixed species (no carpet planting) on formerly bare or degraded land. Following the first rotation, smallholders had options to diversify genetic stock and species (including indigenous species), rotation length and returns on investment. Landscape planning exercises identified locations for potential biodiversity corridors to connect fragmented natural forests.

70. The FSDP's overall environmental impacts were considered highly positive. The smallholder plantation forest component increased the environmental awareness of stakeholders; improved soil conditions; slowed excessive water runoff, soil erosion and flooding; restored landscapes, protected down-stream agriculture; increased biodiversity; increased sequestration and storage of carbon; reduced foraging and harvesting of natural forests and wildlife for wood, fuelwood, NWFPs and food; and greater livelihoods options for participating households that reduced forest dependence.

71. The primary focus of the SUF component was to reduce over-exploitation of SUFs, introduce a conservation financial mechanism through the VCF Secretariat and formalize planning and implementation tools and mechanisms to balance biodiversity conservation with sustaining livelihoods of local communities. The environmental impacts of the SUF component were very positive, with less illegal and unsustainable practices, improved SUF

planning and management and introduction of BSM partnerships between SUF MBs and local communities.

72. <u>Forestry (OP 4.36) and Natural Habitat (OP 4.04)</u>: The smallholder component restored former forested and denuded or barren hills into a landscape mosaic of land-covers including smallholder plantation forests and naturally regenerating, fragmented indigenous forests in the hills and croplands in the valley bottoms and plains. The plantation forests provided wood for sale, local use and fuelwood, which was formerly foraged or harvested from indigenous forests. There is evidence that natural regeneration of indigenous species is occurring in natural forests and habitats. The project put the plantation forests on the path to certification and 73 percent were considered of certifiable standard at project closure.

73. The focus of the SUF component was on financing, planning, management and monitoring measures to improve forest ecosystems and natural habitats of international importance. The establishment of the VCF financial mechanism through the TFF was to ensure sustainability beyond the project.

74. <u>Indigenous People (OP 4.20)</u>: An Ethnic Minority Development Strategy (2003), and Social Impact Assessment (October, 2011), and Revised Ethnic Minority Development Strategy (October, 2011) were prepared for the smallholder plantation forest component. Additionally, an Ethnic Minority Development Plan Manual and an Ethnic Minority Development Plan Template (February, 2009) were prepared to incorporate the provisions of OP 4.20 by providing supplementary TA support to communities with ethnic minorities, to address their priority livelihoods needs activities. Within the SUF component a process framework was developed to assess and address any restrictions in access and use of SUFs faced by local communities or ethnic minorities and provided remedies on a case-by-case basis. An Ethnic Minority and Social Impact Specialist visited the FSDP project regularly to monitor and report compliance with social and ethnic minority safeguards and to strengthen technical capacity. The EMDPs, PPMUs, DIUs and CWGs complied with the EMDP manual and proposals.

75. <u>Involuntary Resettlement (OP 4.12)</u>. A Resettlement Policy Framework (2003) and Resettlement Policy Framework for Additional Financing and Extension (2011) were prepared to address compensation, resettlement or rehabilitation of any persons adversely affected by the FSDP. Involuntary resettlement was flagged as a potential issue at project design and carefully monitored, but never materialized. The smallholder plantation forest component prepared abbreviated resettlement plans but no problems were experienced. Each SUF appointed a social coordinator to support participation of communities in planning and implementation of SSRs, OMPs and BSMs and provided capacity building in small-scale livelihood and income generating activities. These became valuable tools to develop mitigation measures for restricted access and use of SUFs.

76. Fiduciary compliance. <u>Financial Management</u> (FM) overall was maintained in a <u>moderately satisfactory</u> manner. FM supervision missions were carried out during MTRs in January, 2007 and January 2009 and the Final ISM mission, March 2015. Early delays in disbursement were experienced, so that by the end of 2006, less than 7 percent of the project's total budget had been disbursed. In August 30, 2006, the Ministry of Finance (MOF) issued

instruction²⁶ detailing the FSDP FM mechanism and MARD issued the Decision on Cost Norms on December 26, 2006. The Bank stressed the importance of timely disbursements to maintain technical delivery in the field. Despite start-up delays by nearly two years the FM performance of MARD was considered adequate and grant proceeds were being used as intended; disbursements were progressing; FM staffing was adequate; accounting software and reporting were well established; and internal control and internal supervision and auditing were being properly maintained. By December, 2008, only 27 percent (US\$46.30 million) of the IDA, GEF and TFF funds had been disbursed. An estimated US\$20.8 million of primarily IDA and GEF funds were projected to be unspent by 2010, the original project closure. To facilitate faster disbursement, in 2009 the IDA approved the VCF Secretariat increased ceiling for grants and simplified the VBSP sub-loan procedures. In 2012, through an Additional Financing Agreement, the smallholder plantation forest component was extended in the 4 existing provinces and scaled-up into 2 new provinces, until March, 2015.

77. An external auditor undertook annual audits. The Bank FM team reviewed and commented on the Bank loan audit reports each year. One audit identified an ineligible US\$800,000 expenditure for civil servants which occurred due to a misunderstanding of the expenditure eligibility – the amount was refunded to the Bank. Throughout the life of the project, MARD prepared and submitted Financial Monitoring Reports (FMR), which were accepted by the Bank. Some weaknesses in FMRs included delays in their preparation and in clarifying Bank observations.

78. Questions arose on the VBSP practice of monitoring and classifying performing/nonperforming loans. In 1-2 percent of loans, repayments were extended where damage had impacted the ability of smallholders to maintain timely repayments. For the revolving credit fund extension to 2036, the mitigation measures to protect smallholder borrowers and the VBSP should be further clarified in the Credit Manual. Options for smallholder plantation forest insurance should be studied.

79. <u>Procurement</u> was assessed as moderately satisfactory at closing. Generally, bidding processes under the project at the CPCU and PPMU levels and VCF Secretariat applied methods and procedures consistent with legal documents and in compliance with the Bank's Procurement Guidelines. The bidding processes for technical assistance, vehicle and civil works packages were overall considered to be effective, resulting in savings compared to the pre-bid cost estimates. However, an investigation by the Bank's Integrity Vice Presidency (INT) found acts of fraud and corruption affected procurement of two consultancy contracts financed under the project. Its findings were shared following a standard protocol. The completion of the civil works packages resulted in increasing income for local people in the project area. Future procurement planning of technical assistance and civil works need to take into account time-bound seasonal constraints due to the nature of forestry activities, such as the timing of planting and harvesting.

²⁶ Ministry of Finance (MOF) issued a Circular No.80/2006/TT-BTC, August 30, 2006 issuing FSDP FM instructions

2.5 Post-completion Operation/Next Phase

80. The MOF and MARD provision for the VBSP credit revolving fund mechanism until 2036 is pivotal in scaling-up of smallholder plantation forest investment within and beyond the FSDP provinces. MARD, MONRE and VBSP are reviewing the policies, plans, priorities and procedures for extension of the revolving fund and scaling-up the smallholder plantation forest investment in the future. MARD recognize that the package including LURCs, plantation design, VBSP credit; access to quality planting materials, maintenance and protection, extension and training, and free access to markets are fundamental in giving smallholder investors the confidence to invest in plantation forests.

81. The GOV had the VCF financing mechanism under MARD integrated under the new Vietnam Fund for Forests (VNFF) that will fund future payments for environmental services, REDD+ and the TFF. MARD need to clarify the VCF structure and funding mechanisms under the VNFF. Additionally, the SUF MBs learned to identify, monitor and address conservation needs and threats and to engage local communities using the FSDP planning, management and monitoring tools. However, future SUF conservation and community comanagement will depend upon continued technical support and funding, including from the GOV.

82. Emerging from the FSDP the GOV identified two new potential projects: (a) Forestry Restructuring and Sustainable Development; and (b) Rehabilitation and Development of Mangroves in Coastal Forests in Vietnam to Strengthen Adaptive Capacity to Climate Change. The GOV has requested the Bank to mobilize scoping missions to help formulate the project.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

85. <u>Relevance of Objectives</u>: The PAD's PDO, which was eventually formally adopted, was to achieve sustainable management of plantation forests and the conservation of biodiversity in SUFs. The *relevance of the PDO is considered high* and consistent with country development priorities, as reflected in the World Bank-Vietnam Country Partnership Strategies (CPSs), 2007-2011 and 2012-2016 (i.e.at closure). Both CPSs included separate pillars for sustainable management of natural resources and the environment, poverty reduction and strengthening institutions to which the project has directly contributed. Both the smallholder plantation forest component and SUF component were directly linked to the five programs²⁷ of the GOV's Vietnam Forestry Development Strategy 2006-2020.

²⁷ Vietnam Forestry Development Strategy 2006-2020 5 Programs include: (a) Forest management and development; (b) Forest protection, biodiversity conservation and environmental services development; (c) Forest products processing and trade; (d) Research, education, training and extension; (e) Renovating the forest sector institutions, policy, planning and monitoring

86. <u>Relevance of Design and Implementation</u>: In 2012, the smallholder plantation forest component approach was scaled-up by MARD to expand its extent in the original four provinces and include two new provinces, reflecting the growing relevance and high priority accorded by the GOV. Based upon the success and strengths of the smallholder plantation forest approach, MARD is pursuing a new Forestry Restructure and Sustainable Development project that will build on the new approach to plantation development introduced by the FSDP. Additionally, MARD, MOF, MONRE and VBSP are currently designing the policies, plans and procedures for continuance of the low interest loans from VBSP, LURCs from MONRE and technical support services from MARD and DARDs beyond the project, until 2036, based upon the best practices tools and lessons learned from implementation procedures, availability of low interest VBSP loans, access to quality seedlings, provision of extensions services, targeted technical support and access to markets has become a model for up-scaling beyond the project.

87. The innovative VCF provided a small but reliable source of funding for conservation activities and capacity building to the Vietnam protected area network. The project area included four of WWF's 200 Globally Important Ecoregions and four Endemic Bird Areas and 63 Important Bird Areas identified by Birdlife International By allocating grants on a competitive basis, the VCF promoted 'value for money' in improving conservation management and reducing threats to SUFs with ecosystems of international conservation importance. It also assessed performance of each SUF and provided the opportunity to access more funding as long as SSRs, CNAs, OPMs, METT scores and BSMs met required standards. The VCF provided an effective, stepwise approach to build capacity and provide extensive technical assistance to improving conservation management and reducing threats to SUFs.

88. The Log-Frame was output oriented and could not adequately capture progress towards the objectives. The project addressed the shortcomings in the Log-Frame and the inconsistency of the PDO in documents with a restructuring, new Results Framework and Additional Financing to retain the relevance of the original design and implementation. The relevance of the design and implementation of the revised PDO is rated *high*.

3.2 Achievement of Project Development Objectives

89. The PDO "to achieve sustainable management of plantation forests and the conservation of biodiversity in Special Use Forests" as stated in the PAD and AF Agreement was linked to a restructured Results Framework along with revised PDO Level Results Indicators that were more results-oriented, in phase with the PDO and allowed measuring project outcomes and intermediate results at a more aggregated level (March 2011). The Results Framework detailing the achievements with respect to the PDO Level Results Indicators and the Intermediate Results Indicators are available in Annex 2b. A summary of achievements in meeting the Revised PDO and PDO Level Results Indicators is given in Table 2.

Revised PDO	PDO Level	Achievements to 2015
	Results Indicators	
PDO "to achieve sustainable management of plantation forests and the conservation of biodiversity in Special Use Forests"	50 percent of the smallholder plantation area in each project province is certifiable according to international standards for sustainable forestry	 According to four Internal Assessments of Plantation Performance, 76,571 ha of smallholder plantation forests were established by 43,743 householders, of which 56,050 ha (73.2%) were of a certifiable standard; Other key achievements: 41,545 households received LURCs for 75,559 ha of smallholder forest planting; VBSP issued 700 billion VND of low interest loans to smallholder plantation forest investors; 47 accredited nurseries provided tissue culture, cuttings and improved seedlings; 806 FFGs established and trained to provide extension to 26,968 households in smallholder plantation forests investment; 850+ ha of FSC group certification got 20-30 percent premium prices for 354 households; 427 km of upgraded access tracks provided improved access to harvest and market; 203 project communes prepared commune landscape (land-use) plans; 163 ethnic minority development plans received livelihoods support in 6 provinces;
	Management effectiveness in SUFs will improve (%) measured by using the METT tool	 19-39% increases in management effectiveness as measured by the METT tool were achieved <u>Other key achievements:</u> 100 grants (US\$7.7 million) issued to 69 SUF MBs to implement improved OMPs; 40 biodiversity inventories together with CNAs, SSRs and METT surveys by all SUF MBs identified threats and impacts, priorities and endangered species that were incorporated into OMP and BSM planning, implementation and monitoring; and 396 villages entered into 63 BSMs with SUF MBs that resulted in a three-fold increase in livelihoods support funding 2009-2012 and GOV Decree on BSMs.

90. PDO Level Result Indicator 1: 50 percent of the smallholder plantation area in each project province is certifiable according to international standards for sustainable forestry. According to an independent international forest certification report, *Internal Assessment of Plantation Performance*, over 73 percent (PDO Level Results Indicator 50 percent) of the smallholder plantation forest area in the FSDP were certifiable by international standards. Certification means that the project plantations were considered sustainable in financial, social and environmental terms by independent third party auditors. Within the time constraints and rigorous procedures for FSC group certification, the project established 6 pilots for certification, totaling about 850 ha, involving 354 households that achieved access to international and domestic markets and 20-30 percent price premiums over non-certified

plantations. The results of improved plantation management in accordance with international best practices and certification standards were achieved by improved planning and design procedures, increased quality of seedlings, survival, growth rates, harvest yields, market prices and increased returns on investment for smallholder investors. The increased plantation forest production, prices achieved, and returns on investment allowed repayment of loans, replanting after harvesting, home improvements, funding of family education and investment in small business activities. According to smallholders interviewed in several communes, more than 50 percent of household income was from plantation forest investments.

91. <u>PDO Level Result Indicator 2: Management effectiveness in Special Use Forests will</u> improve (percent), measured by using the Management Effectiveness Tracking Tool (METT). About a half of the funding by the VCF grants supported capacity building at the MB level that impacted the METT scores prepared for all SUF MBs between 2005 and 2012 that increased in the Northern Region by 39 percent, Southern Region, by 32 percent and the Central Region, by 19 percent. METT processes helped SUF MBs to identify key issues and threats, which, when combined with application of new management tools, including the preparation of CNAs, SSRs and OMPs allowed MBs of 42 SUFs to establish BSMs to reduce threats to biodiversity and support alternative livelihoods activities with local SUF dependent communities.

92. The VCF was established as a sustainable funding mechanism for biodiversity conservation, protected area management and SUF planning and management through the TFF. The VCF issued 100 grants to 69 SUFs to improve operational management effectiveness. The procedures and tools (SSR, CNA, OMP and BSM) were standardized for SUF planning and management, including 30 SUFs having OMPs assessed to an international conservation standard. Communities and ethnic minorities were engaged as stakeholders in planning and implementation of OMPs and BSMs and became beneficiaries of SUF comanagement. The VCF funding mechanism, the SUF planning and management tools and BSM approaches were strongly supported by MARD and Prime Minister Decision 126, February, 2012 on BSMs demonstrated a marked shift in Government policy allowing the piloting of BSMs in three SUFs as a first step towards introducing more participatory comanagement across Vietnam's protected area system. Decree 117, March 1, 2011 on SUF organization and management directly built on the SUF planning and management tools developed under the VCF, most notably the OMPs supported by the SSRs and CNAs.

93. The strengthened regulations and policy and improved capacity for planning, management and monitoring of biodiversity conservation by SUF MBs, and availability to competitive funding for conservation of biodiversity management, coupled with introduction of co-management with local communities provided a multi-tiered approach to reduce threats, improve management and the conservation of biodiversity in SUFs. This was an especially important achievement for conservation of SUFs which cover four of WWF's 200 Globally Important Ecoregions and contain four Endemic Bird Areas and 63 Important Bird Areas according to Birdlife International.

94. The achievement against the PDO is rated *Substantial*.

3.3 Efficiency

95. Both pre- and post-project financial and economic analyses were conducted at the household (individual plantation) level and for the project as a whole. The pre-project costbenefit analysis was conducted in 2004. Eight potential plantation types were considered including short and long rotation exotic species, native species and agroforestry systems, using a 10 percent discount rate.²⁸

96. The post-project analysis aimed to compare actual findings with the projections made before the project. The analysis estimated financial and economic returns to plantations per hectare (plantation level), and to investments in the entire project. Data for the financial and economic analysis (for example: input levels; yields by species, site, and age; product mixes; market prices; etc.) were primarily taken from MARD (2013c, 2014) which were developed based upon 400 observations of smallholder plantations, as well as other documents²⁹. Multiple field visits were made to validate the data and to interview project staff and participants. Data were consolidated into spreadsheet models with costs and returns by year. These covered expenses and revenues over (a) 4-7 year time periods of individual plantations; and (b) 2005-2035.

97. In contrast to the pre-project analysis, the actual FSDP project supported principally three main species for plantations: Acacia hybrid (*A. mangium* x *A. auriculiformis*), *A. mangium*, and *Eucalyptus urophylla*. However, there was variability in rotation length (4 to 7 years), and soil quality types (Classes I-IV). Therefore, financial and economic estimates included 48 different plantation types (3 species x 4 rotation lengths x 4 soil classes). When estimating average or project-level returns, weighted values were applied by the estimated distribution of plantations by species, rotation length, and soil class.

98. The project outcomes compared favorably to the pre-project estimates. During preparation, the eight potential plantation models were estimated to be financially viable, with NPVs from 135,000 to 18,800,000 Vietnam Dong (VND) per hectare in 2004 VND, the equivalent of about 350,000 to 48,800,000 VND per hectare in 2014 after considering inflation, and FRRs ranging from 10 to 27 percent. However, the assumed alternative uses of land (opportunity cost) were actually zero or negative, so FRRs after subtracting opportunity costs were higher – 13 to 49 percent. Post-project, when excluding loans, returns on plantation models had a much wider range of NPVs and FRRs, but the weighted averages were about 65,000,000 VND/ha and 23.3 percent. These results varied due to different plantation scenarios, costs and timber prices.

99. Returns per day of labor were also estimated as an important indicator of profitability for households that provided their own labor. Pre-project Returns per day ranged from 15,500 to 61,500 VND/day in 2004, the equivalent to 40,000 to 160,000 VND/day in 2014, after considering inflation. The post-project estimate found higher returns to labor ranging from

²⁸ An economic and financial analysis was not prepared for Component 3 on SUF given the nature of its financing (GEF) and that it was primarily focused on forest conservation and capacity building.

²⁹ Other sources include: Dalmacio, 2012; Institute of Rural and Community Development and VAPECO Vietnam Join-Stock Company, 2015; Kim Hoang Co Ltd, 2015; MARD 2004b, 2010f, 2011a, 2011h; and World Bank 2004, 2012a, 2015a, 2015b

69,000 to 460,000 VND/day. Most of the plantation scenarios returned higher value per day of labor than the assumed average market wage rate of 159,579, and higher than the 2014 value of 180,000 VND/day.

100. The pre-project analysis also projected total project costs and benefits to 2035 to estimate an economic rate of return (ERR) for the whole project. An economic NPV (ENPV) of 176 billion 2004 VND (equivalent to 457 billion 2014 VND), and an ERR of 17 percent was estimated. This was based on the original anticipated project area and duration (4 provinces, 2005-2011), not the area or period included in the additional financing. The postproject ENPV estimate is significantly higher at 816 billion VND, although the ERR is somewhat lower at 13.2 percent. The higher ENPV is in large part due to the additional financing of the project, which added two new provinces and raised IDA funding from US\$ 39.50 million to US\$69.50 million. The post-project ERR is lower in large part because the pre-project ERR estimate assumed a much lower cost of labor, and used zero or negative opportunity cost of land, whereas this post-project analysis assumed positive opportunity cost of land based on poor plantation forests. If the post-project analysis followed the approach of the pre-project analysis by reducing opportunity costs to zero and eliminating the benefit of the "Red Book" value, the post-project estimate of ERR would be 17.4 percent. Returns to labor in the pre-project analysis ranged from about 40,000 to 160,000 VND/day in 2014 terms. In contrast, the post-project analysis found much higher returns to labor ranging from 69,000 to 460,000 VND/day.

101. While no economic analysis was conducted for Component 3 (SUF) the completion reporting indicated the TA transaction costs for the VCF were initially high due to startup costs required to set up a new financing mechanism and to develop procedures and guidelines for the VCF. Given the small original size of the grants and two-year start up delay, Component 3's cost effectiveness was low at first. However, efficiency and cost effectiveness improved over time with the increase of the grant size, the effective establishment of the VCF, the expansion of the number of eligible SUFs and the downscaling of TA towards the end of the project³⁰.

	Pre-Project Estimates *		Post-Project Estimates		
Plantation Level	NPV (Millions VND/ha)	IRR (%)	NPV (Millions VND/ha)	SEV (Millions VND/ha)	IRR (%)
Financial (w/ loans)	-	-	30.4	76.2	44.1
Financial (w/ loans) for FSC certified	-	-	79.8	173.2	54.2
Financial (no loans)	12.1	18.3	23.2	64.9	23.3
Financial (no loans) for FSC certified	-	-	63.2	137.2	31.5
Economic	-	-	39.3	78.7	24.9

Table 1: Financial and Economic Analyses: Key Findings

³⁰ The three RTAs were replaced by a central TA team in August 2011.

Project Level	NPV (Billions VND)	NPV (Millions US\$)	IRR (%)	NPV (Billions VND)	NPV (Millions US\$)	IRR (%)
Financial	59.5	1.9	10.6	1,266.1	60.3	15.3
Economic (w/ opp. cost of land)**	457.2	14.3	17.0	816.4	50.8	13.2
Economic (no opp. cost of land)	-	-	-	1,710.2	91.2	17.4

* World Bank (2004). 2004 values adjusted to 2014 terms to account for inflation.

** Estimated opportunity cost of land in the pre-project analysis was zero or negative.

102. In conclusion, the FSDP, according to the economic analysis, was highly successful in financial and economic terms. Post-project analyses and results, as well as interviews with project staff and participants indicated that returns were good and most were satisfied with the outcomes. The results compared favorably with other countries both in terms of IRRs and NPVs.

103. Some factors that could affect future returns should be considered, and risks mitigated. First, the risk of future forest fires, typhoons, and diseases and pests should be managed. Some risk management, particularly for forest fires, already exists, but more could be done. Second, part of the reason for high returns is the low cost of labor and high price of chipwood. Exploring and experimenting with alternative management strategies that economize on labor and produce more sawn timber might help mitigate the risk of higher future labor costs or lower future chipwood prices.

104. Loans were important in getting smallholders to make the initial investment in plantation forestry, but technical assistance was also an important factor in improving yields and in the long run, maybe even more important than the low-interest loans in terms of generating beneficial returns for smallholders. As Vietnam prepares for a post-project future, the potential for continued forestry loans to smallholders is being considered. Technical assistance will be as important for ensuring good smallholder returns.

105. Based on the above analysis, efficiency is rated *high*.

3.4 Justification of Overall Outcome Rating

Rating: Satisfactory

106. The project was successful in achieving the PDO for *Sustainable management of plantation forests and conservation of biodiversity in SUFs*. Additionally the project achieved the PDO Level Results Indicators. In excess of 73 percent (PDO Level Results Indicator 50 percent) of the smallholder plantation forest area within the FSDP met international certifiable standards. Furthermore, the METT scores of SUF MBs increased between 2005 and 2012 in the Northern Region by 39 percent, Southern Region, by 32 percent and the Central Region, by 19 percent. Capacity building activities focused on introducing international management approaches and best practices that led to the increases in METT scores.

107. The GEO to support long-term protection of globally important forest and mountain ecosystems was achieved. Despite a slow start, the well-functioning VCF provided 100 grants to 69 SUFs and pioneered a competitive financing mechanism through the VCF and new SUF MB planning and management tools (SSRs, CNAs, OMPs, METT scores and partnerships with local communities in BSMs) to improve conservation management. The VCF supported preparation of 39 OMPs to international standards of which 22 were endorsed by PPCs The innovative design of the VCF, the first of its kind in Southeast Asia, encouraged MB change by offering performance-based funding and capacity building to improve planning and step-wise approach to improved SUF conservation management.

108. The VCF also engaged local communities more effectively in the planning and comanagement of the SUFs in a new process that led to the funding of a range of activities, including participatory planning and development of OMPs, joint patrols, boundary demarcation and awareness raising and training. The project also provided small-scale livelihood support to a range of households and supported SUF MBs to develop BSMs with local communities. This engagement led to a significant change in Government policy through Decision 126, which, for the first time, allowed the piloting of BSMs in three SUFs. This was a marked departure from previous Government policy.

109. The relevance of the objectives, design and implementation of the PDO is rated high, the efficacy substantial, and efficiency high, therefore, the outcome is rated *satisfactory*.

3.5 Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

110. The project supported 43,743 households to achieve positive financial returns on smallholder plantation forest investments and positive livelihoods outcomes. LURCs were issued jointly to the husband and wife in each household so benefits were shared and decisions jointly decided. Shared activities included LURC negotiations, landscape planning, plantation design, extension services, TA, training and marketing. Men predominately undertook site preparation, thinning, harvesting and trucking while women undertook nursery work, planting, weeding, fertilizer application and family finances. Overall, employment was about 60 percent male, 40 percent female.

111. The improved smallholder knowledge and investment returns provided householdbased economic stability that contributed to economic development in the project area. Additionally plantation based jobs and contracting were created, forest landscapes were restored, biodiversity was conserved, soil and water values were protected, carbon was sequestered and stored; and businesses grew.

112. In the SUF component 25 percent of households lived below the official poverty line and 71 percent of villages suffered seasonal food insecurity. Ethnic minorities (38 percent of project households) were vulnerable and lived in remote communities where few projects or NGOs supported them. Households were dependent on forests for wood and NWFPs to balance income. As SUF activities restricted access and use of protected forests potential negative impacts on households were mitigated by implementing small-scale conservationoriented livelihood activities. Additionally, BSMs were introduced as co-management approaches to SUF management. Both these activities were introduced later in the project, were of small-scale and fragmented, so impacts difficult to quantify.

113. The SUF component did not have a specific gender focus but from CNAs and SSRs there were marked differences in forest use by gender - women collected NWFPs and fuelwood; men did heavier work like collection of wood, rattan and cardamom. Women were concerned about over-exploitation of NWFPs, requiring them to spend more time collecting diminishing supplies. Ethnic minorities often used ancestral land inside SUFs for agricultural use (tree crops), a practice often tolerated by MBs.

(b) Institutional Change/Strengthening

114. Within the smallholder plantation forestry component major impacts were achieved in changing the culture of poor households to pursue plantation forest investment through access to LURCs, VBSP low interest loans, improved planning and plantation design, quality seedlings, skilled extension services and TA training, better maintenance and protection practices, and market access. Positive investment returns were achieved. Furthermore, by meeting FSC certification technical, institutional social, environmental and economic criteria, 20-30 percent price premiums were achieved.

115. The model was scaled-up during the project to Thanh Hoa and Nghe An provinces and has the potential to be replicated and scaled up in other new provinces. There is potential for foresters, planners, extension officers, technical service providers and authorities to transfer knowledge and technology to new areas using the skill sets, experience and technical and institutional capacity built up within the FSDP. Additionally, the GOV decision for VBSP to continue the revolving credit fund to poor smallholder farmers for plantation forest investments until 2036 and technical support in new areas, would ensure that smallholder plantation forestry can continue beyond the project.

116. The SUF component strengthened SUF MB capacity in participatory and integrated planning that incorporated local community voices and livelihoods needs of communities into OMPs and their implementation. Balancing biodiversity conservation goals while meeting livelihoods needs of communities was the basis of SSRs, CNAs, OMPs and BSMs.

117. The VCF was demonstrated as a viable, small-scale, competitive, nation-wide financing mechanism for SUF planning and management. The VCF has been integrated into the new VNFF, but on-going funding to maintain the momentum gained will increasingly depend upon the GOV.

118. The FSDP experiences lead to, or supported, the GOV to strengthen their legal, regulatory and policy framework and institutionalized reforms in both smallholder plantation forestry and SUF planning and management. Policies were researched, improved and adopted

based on lessons learned and analytical studies from the FSDP project³¹. Relevant Decrees and Decisions of the GOV are detailed in Appendix 9b.

(c) Other Unintended Outcomes and Impacts

119. The smallholder plantation forest component helped non-FSDP households to view plantation forest investment in a new light. Some borrowed outside the project to plant allocated land using accredited nursery seedlings and emulated the FSDP smallholder plantation activities. Through support from DARDs, CWGs, FFGs and extension services and by learning from neighbours, smallholders outside the project were influenced to replicate the FSDP smallholder plantation forest activities to other families, villages and communes. The project facilitated a strong exchange of knowledge informally at the grassroots level, but also demonstrated to communities and authorities that smallholder plantation forests not only helped to restore degraded landscapes, improve environmental conditions, reduce poverty and improve livelihoods, but also provided a catalyst for wider rural development by creating new business opportunities.

120. New business opportunities created by the smallholder plantation development that attracted new investment: (a) Bee keeping expanded rapidly where Acacia plantings were in close proximity of good roads and tracks; (b) New nurseries were established to cope with new seedling demand; (c) Contract teams were set up to undertake the increased demand for site preparation, planting, thinning, harvesting, trading and trucking; (d) New trucking businesses, chipwood plants and sawmills were established to transport and process the increased wood volumes harvested; and (e) Small business development, such as handicrafts, catering, animal husbandry, poultry etc., flourished.

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

Not Applicable

4. Assessment of Risk to Development Outcome

Rating: Moderate

125. The FSDP demonstrated that smallholders need not be dependent on donor funded grants for plantation forest developments. Low interest loans, together with a comprehensive support package, encouraged the development of a new investment-minded forestry culture. The availability of low interest loans from the VBSP until 2036 is a strong GOV commitment to the sustainability of development outcomes and VBSP maintains offices in the provinces that have good access to growers and can manage the new loans. Because VBSP requires that future loans conform to the same high technical standards required during the project's implementation, new plantations are being put on a good track toward sustainability. The financial analysis shows that the loan value would be sufficient to cover technical assistance

³¹ (a) Typical experience in commercial plantation forest at household scale; (b) Regulations on managing and providing plantation forest materials; (c) Support and tax policy; (d) Wood price and market; (e) Benefits and risks on plantation forests; (f) The best typical sample in performing the process of land classification and allocation; (g) Evaluating potentials and restrictions on the issue in co-managing special-use forests

in many if not most cases. High technical standards at the time of plantation establishment, and incentives for higher returns will help keep future plantations standards high.

126. For the duration of the project, smallholders have enjoyed buoyant market prices and no trade restrictions for both chipwood and sawlogs. While this may not always be the case, regional markets for chipwood are strong and there is a high demand for Vietnamese chipwood in Asia and the Pacific for the foreseeable future. The country currently enjoys some of the highest chipwood prices in the world at US\$50 to US\$55 per ton delivered. Financial returns in the project plantations are also some of the highest in the world, with average FRRs ranging from 23 to 31 percent at the plantation level. Individual FSC certified plantations had FRRs up to 38 percent.

127. With over US\$1.7 billion of timber imported annually (2014), Vietnam is actively promoting forest plantations to reduce its reliance on foreign wood sources, especially for sawtimber. Demand for sawlogs is almost limitless, which is stimulating increased production, and expansion of the sector, along with new opportunities for growers to diversify their production and sources of income. While there are some risks from pests, mainly cankers and rusts, Vietnam has had no major problems or outbreaks in their Acacia plantations. To help avoid problems with cankers, pruning should be avoided, unless sawtimber is an objective. If pruning is carried out, it should be performed carefully with cuts made flush with the trunk. Typhoons pose risks but even wind damaged wood from storms can still be sold as salvage for chipwood. Diversification of species in a mosaic of different rotations and small harvesting coupes is an effective way to mitigate these risks and has been recommended to MARD.

128. Because the Europe Union and the United States, among others, recently introduced legislation that require proof of legality and sustainability of imported wood products, third party certification is becoming increasingly important for producers such as Vietnam to access these markets. The project laid a strong foundation for Vietnam's future exports of certified wood by ensuring over 73 percent of the plantations were of a certifiable standard, and by piloting actual group certification with 354 producers. Vietnam's certified wood is sold at 20 to 30 percent higher than non-certified wood. Capitalizing on these excellent price premiums for certified wood will be key to helping growers offset the costs of audits and associated corrective actions needed for certification, and still improve profits. Vietnamese wood exporters actively seek out certified producers, promoting certification through active markets and fostering its expansion.

125. In summary, the promising economic prospects for the sector and access to regional markets, along with favorable conditions for tree growth, low labor costs, good government support and high demand for the country's products, including certified timber, provides a solid framework for the future of sustainably-managed plantation grown wood in Vietnam and moderates the risks. The project has proven timely and helped to provide the technical knowhow and instruments for the country to carry out the development of the sector in a sustainable manner, reaffirming the achievement of "…sustainable management of plantation forests…"

126. The project successfully established the VCF as an effective financing mechanism to support conservation and included strong GOV support in continuing integrated management

of the PA network in Vietnam. The TFF funded the VCF until the end of 2013, financing US\$7.7 million through 100 grants to 69 SUF MBs to improve their operational management plans (OMPs). This is especially important for SUFs which cover four of WWF's 200 Globally Important Ecoregions and four Endemic Bird Areas and Important Bird Areas identified by Birdlife International. The grants helped to increase management effectiveness from around 19 to 39 percent, based on the METT. The underpinning legislation was improved by the project and drafted or contributed to 1 law, 3 decrees, 3 circulars and 1 decision. This policy framework provides the long-term backbone for biodiversity conservation, environmental services, organization and management of SUFs, among others. While donor support for biodiversity in Vietnam is declining, the VCF secured 11 additional grants beyond the project's tenure. The VCF has been integrated into the new VNFF and the government is taking on the need for on-going funding to maintain the momentum established by the project. These accomplishments reaffirm the sustainability of the achievement of "...*the conservation of biodiversity in Special Use Forests...*"

5. Assessment of Bank and Borrower Performance

5.1 Bank Performance(a) Bank Performance in Ensuring Quality at Entry

Rating: Satisfactory

127. The Bank's performance in identifying, preparing and appraising the FSDP project was *satisfactory*, despite some initial M&E issues. The resulting project was highly relevant to both the Bank and GOV priorities. Based on 10 years of prior forestry sector experience and strong GOV partnership in Vietnam the Bank conducted appropriate analytical work and diagnosis of smallholder plantation forest development and biodiversity conservation issues, challenges and alternatives to address them, highlighting the need to introduce new mechanisms, adopt transparent and participatory approaches and adapt project activities, outputs and outcomes from lessons learned from proven approaches and experiences in the forestry sector in Vietnam. The project design was complex yet provided the right mix of incentives, such as LURCs, access to credit and technical assistance, which proved highly effective in promoting sustained forestry development over the long term. The high financial returns and continued rates of engagement of the beneficiaries bears this out.

128. Project preparation was undertaken by an experienced team with the right skills and ample country experience with the GOV (central, province, district, commune, village), donors, NGOs, SFEs/SFCs and private sector. It involved detailed field investigation, workshops and stakeholder involvement with intensive client interaction and cooperation that led to a joint project design. The Bank team worked effectively with donors and partners within the FSSP to ensure effective coordination and harmonization of initiatives. The PDO was clear and the smallholder plantation forest and SUF components, inputs, activities and outputs supported the achievement of project outcomes and objectives. The Log-Frame and latterly, the Results Framework and associated indicators provided a solid basis for implementing and assessing progress. Most risks were adequately assessed and mitigated. The Bank team paid particular attention to guiding the preparation of the PIM, VBSP Credit Manual, VCF Operational Manual, guidelines and management tools to detail technical,

safeguard and fiduciary procedures. The Bank conducted regular Implementation Support Missions (ISM) to assess progress, issues and recommend actions.

129. Within the smallholder plantation forest component, the Bank support to new GOV policies, establishment of the VBSP credit system, introduction of best practices for landscape planning, streamlined LURCs, new plantation design, accredited nurseries and quality seedling production, strengthening of extension services and technical support, upgrade of access tracks and construction of fire towers, introduction of community based fire management approaches and free access to markets were valuable to ensuring quality design and support services at entry.

130. Within the SUF component the Bank supported the establishment of the innovative VCF competitive funding mechanism, introduction of the SSRs and CNAs to comply with the Bank's social and environmental safeguards and incorporated the social, environmental and economic dimensions into OPMs that triggered a new culture in SUF MB management, including the introduction of the new BSMs to balance biodiversity conservation goals with local community livelihoods. However, the decision to comply with multiple donor reporting created an undue burden on the project, while different time lines led to an inefficient use of funds. However, these arrangements did not jeopardize the SUF component outcome.

(b) Quality of Supervision

Rating: Satisfactory

The Bank supervision team was effective in informing and working with Bank 131. management, the GOV, the implementing agency and the donors about the project situation and triggered the necessary actions to bring the project back on track from time to time. The revised PDO and RF were identified in 2006-07 and M&E issues identified in the MTR 2009, but restructuring to reflect the revised PDO, the new RF and introduction of the International Assessment of Plantation Performance was not done until 2010-2011. Specialists in forest management, sociology, biodiversity, economics, rural development, safeguards and fiduciary measures made up the Bank supervision team. These were joined from time to time by donor representatives from the TFF (the Netherlands and Finland). The project had three highly qualified Task Managers during the life of the project who built a strong relationship and trust with the Government and implementing agency. The Bank kept the focus on the new mechanisms and standards of best practices and compliance with safeguard policies and fiduciary measures of the project within MARD, CPCU, PPMUs, DIUs, VBSP, VCF and SUF MBs. The Bank managed the FSDP programmatically to enable team members to learn from each other and ensure continuity when TTLs changed. The Bank team's expertise and experience with best practices and mechanisms proven in other countries contributed to success of the project.

132. Supervision missions were carried out 2-3 times per year, with 26 supervision missions, including two MTRs (2007 and 2009). Most missions involved extensive field visits to link policies, plans, manuals and best practices guidelines and safeguards with institutions and delivery at the field level. In addition, and on a continuous basis, the Bank carried out fiduciary supervision through country office based staff. Regular supervision identified and addressed implementation issues and problems in a timely manner. For

example, the first MTR was advanced to address the initial implementation delay and determine whether a project restructuring was necessary. The second MTR highlighted the slow rate of disbursement and leveraged the simplification of VBSP disbursement procedures and increased the VCF Secretariat grant ceilings to rectify this. ISM missions justified project extension and Additional Financing for the smallholder plantation forest component. Similarly, problems with the VCF Secretariat FM were addressed promptly through appropriate mitigation measures. The quality of aide memoires, MTRs, management letters and project reports was high and agreed actions were described concisely and comprehensively.

(c) Justification of Rating for Overall Bank Performance

Rating: Satisfactory

133. In consideration of the ratings for preparation and supervision, the overall rating is considered Satisfactory. The Bank team generally pro-actively supported the project that was innovative in approach and fostered participation, organization and empowerment of poor farmers and local communities, particularly ethnic minorities. The Bank managed the risks and the challenges and addressed issues. The project was guided to a successful closure in collaboration with key stakeholders to meet or exceed most targets. The operation should be considered a best practice and is already being considered for replication in other provinces in Vietnam and neighboring Lao PDR.

5.2 Borrower Performance

(a) Government Performance

Rating: Moderately Satisfactory

134. The GOV, MONRE, VBSP, VCF, MOF and MARD worked in collaboration in project preparation and implementation. They collaborated with most work required by the Bank and demonstrated strong leadership and financial contributions. There were delays of up to 2 years in procurement at project outset pending GOV approvals. The GOV provided the platform for successful implementation of the FSDP by review of policies and passing of decrees, decisions and implementing regulations for smallholder plantation forestry (land allocation and land certificates as preconditions for investment; VBSP credit mechanism; decentralization to district, commune and village levels; accreditation of nurseries for quality seeds and seedlings production and M&E control methods) and SUF planning and management (VCF funding mechanism; introduction of SSRs, CNAs, OMPs and BSMs; and integration of the VCF into the VNFF.

135. The project promoted coordination and collaboration between MONRE, MARD, Management Board of Forestry Projects (MBFP), Forest Protection Department (FPD), VBSP and PPMU, DIU and other state authorities responsible for forestry and protected area management. The clear lines of authority and responsibility and technical and fiduciary manuals, guidelines and procedures ensured achievement of the project's financial and technical deliverables. The MOF maintained liaison with the Bank for high-level discussions related to the loan agreements, reallocation, amendments and additional financing. Despite

initial disbursement and project implementation delays, these were addressed in a collaborative manner with the Bank.

136. In summary, the government's agencies involved provided strong support to the project. However, an INT investigation found acts of fraud and corruption affected procurement of two consultancy contracts. The INT findings temper the ratings and the Government's performance is therefore considered *Moderately Satisfactory*.

(b) Implementing Agency or Agencies Performance

Rating: Satisfactory

137. The performance of the implementing Agency is rated as *satisfactory*. The Project Steering Committee established under the National 5MHRP Steering Committees at the central and provincial levels was effective in providing guidance in policy, annual work plans and high-level links to relevant agencies. The separate Management Committee for the SUF component was effective in overseeing the policy, operations and grant disbursement of the VCF Secretariat.

The CPCU within MARD was staffed with qualified technical professionals and 138. administrative staff that coordinated project activities through both the MBFP and FPD, provided institutional development, liaised with the FSSP, supervised administration, consolidated reports, executed centralized procurement, maintained routine contact with the Bank team and participated in supervision missions. The CPCU had outreach through PPMUs in each province and DIUs in each district participating in the smallholder plantation forest component. The smallholder component of the project benefited from counterpart funding from provinces and districts (budgetary, office space, logistics, financing and other support). The VBSP credits and loan administration proved successful as a new funding mechanism for smallholder plantation forest investment. They provided outreach to commune and household levels, conducted training and institutional strengthening, disbursed 100 percent of credit monies available in the sub-loan agreement, achieved a 98 percent level of performing loans, participated in supervision missions and with MARD, MOF and MONRE are exploring new policies, plans and procedures for the new VBSP credits under the revolving fund to 2036.

139. The VCF Secretariat worked in partnership with the Bank team to manage a complex pilot nation-wide and collaborated closely with the TA on overall coordination and implementation of new procedures and requirements. The VCF Secretariat effectively managed and monitored SUF activities. As the number of eligible SUFs expanded, the VCF Secretariat expanded its staff most notably on FM to deal with the increasing number of grants and FM issues and mitigation measures required.

(c) Justification of Rating for Overall Borrower Performance

Rating: Moderately Satisfactory

140. Overall borrower performance is considered *moderately satisfactory* given the level of GOV commitment to funding for execution, satisfactory performance of responsible

agencies, including the high level of results obtained and the sustainability of impacts generated under both the original and AF operations. The moderately satisfactory rating is based on a split assessment between the government performance, which was moderately satisfactory; and the implementing agency performance, which was satisfactory overall.

141. The main results from the project included (a) plantation designs completed for 81,985 ha owned by 45,701 households; (b). small-holder plantation forests established, 76,571 ha, owned by 43,743 households; (c) Land-use Rights Certificates issued for 67,912 ha, owned by 36,044 households; (d) VBSP disbursed loans to over 28,000 farmer households with over 98 percent successful performance rate; (e) VBSP credits available through a revolving fund until 2036; (f) FSC Certification granted for over 850 ha of plantation forests owned (354 households); (g) EMDP and CFM pilots established and proven successful; (h) VCF financial mechanism proved successful, with 100 grants worth US\$7.7 million provided to 69 SUFs; (i) new SUF planning and implementation procedures established including SSRs and CNAs, preparation and implementation of OMPs and partnerships between SUF MBs and local communities through BSMs; and (j) FSDP demonstration of new mechanisms for smallholder plantation forestry and SUF planning and management influenced new GOV decrees, decisions, policies and strategic plans for the future.

6. Lessons Learned

General

142. Integrated, inter-sectoral, participatory approaches can restore degraded forest landscapes and create a mosaic of productive land-uses that can sustain livelihoods. MARD provided the support through policy, planning (plantation design, EMDPs, management plans), technical and extension services and access to markets; MONRE, the survey and LURCs; VBSP, the low interest credits – all pillars for successful smallholder plantation forest investment that transformed barren hills into restored productive landscapes and sustained household livelihoods. A lack of coordination between GOV institutions had prior impaired investment, restoration and livelihoods activities.

143. Balancing forest conservation goals with meeting the livelihoods needs of local communities can strengthen environmental, social and economic sustainability. CNA methods and participatory approaches to SSRs, OPMs, BSMs and METTs provided a platform to balance biodiversity conservation with livelihoods for forest dependent communities. Previously participatory approaches were not in use by SUF MBs and livelihoods approaches generally were not included in their management.

Project Level

144. The issuance of rights and benefits to households and communities need to be done in an agreed, transparent and a participatory manner. The project established formal, transparent and participatory approaches for issuance of rights and benefits to smallholder plantation forest households and communities within SUF environs. Prior to introduction of these mechanisms, there was insufficient understanding, trust, confidence and commitment for smallholder plantation forest investment and protected area co-management approaches. 145. The project provided valuable models for engaging with poor members of rural communities and ethnic minorities in forestry and alternative livelihoods activities. The project targeted poor farmers and ethnic minorities in smallholder plantation forestry and SUF management. These groups had faced poverty and food insecurity and had been the most forest dependent for wood, fuel and food. By engaging these groups in EMDPs and BSMs they became investors and partners in project activities and the benefits that accrued.

146. VBSP low interest loans provided a catalytic funding mechanism to change smallholder attitudes towards plantation forest investment. Prior smallholder reforestation had been unsustainable (limited access to LURCs, technical support, seedlings and markets) and had been dependent upon grant funding as commercial lending had not been available. The provision of low interest loans, coupled with LURCs, technical support and extension services, quality seedlings and access to markets gave the GOV, VBSP and the smallholder investors the confidence to invest in plantation forests. On harvesting, smallholders generally paid back their loans <u>and</u> replanted without having to re-borrow. Smallholders adapted quickly to the commercial culture for smallholder plantation forest investment. Extension of the revolving fund, to 2036, will allow new smallholder investors outside the project and in new provinces to benefit particularly if linked to LURCs, quality seedlings, technical and extension support, and access to markets.

147. The FSC pilot demonstrated that smallholder group certification was achievable and beneficial. The group FSC certification pilot demonstrated that the principles, criteria and indicators were achievable, 20-30 percent price premiums were realistic and new markets became available. Although 73 percent of plantation forests were assessed as meeting certifiable standards 99 percent of smallholders have not pursued group certification. Removal of the technical, institutional and cost deterrents of smallholder group certification is needed if access to global markets is to be maintained and premium prices attained.

148. *Management of Risks that threaten future smallholder plantation forest investment confidence and returns are an integral aspect of plantation forest management.* The main management risks to smallholder plantation forests include forest fires, typhoons, insects, diseases, other pests, illegal harvesting and heavy dependence on the chipwood markets. Further studies to assess threats and potential impacts and measures to mitigate risks need to be undertaken. Options for insurance cover for smallholder plantation forest investors should be pursued. Further research with alternative smallholder plantation models that diversify plantation forest land-use and product options and economize on labor that produce better a balance between chipwood and sawn timber can help mitigate the risk of higher future labor costs or lower future chipwood prices.

149. *Effective biodiversity conservation needs to be coupled with buffer zone development.* The VCF was an effective and innovative tool to provide small-scale conservation financing to SUF MBs and to encourage co-management approaches. The project led to access and use restriction for local communities offset with small-scale livelihoods activities tailored to the resources available and within the primary conservation objective. Given the level of poverty and forest dependence, demands for support often went beyond the resources and mandate of the VCF. To ensure the most effective targeting and use of conservation funds, attracting supplementary and complementary rural development funding (GOV, NGO, civil society) could be an option to strengthen the livelihood support and buffer zone development. 150. Co-management and participatory approaches can be effective tools to improve SUF management. The VCF grants financed a range of co-management and participatory approaches that led to improved communication and understanding between the MBs and communities; more sustainable resource use; better monitoring of threats; greater community ownership and awareness; and better information on socioeconomic needs of local communities. Future SUF management should continue and further develop the comanagement and participatory approaches piloted under the VCF.

151. Use experienced and trained staff from the CPCU in the MBFP, MARD in future forestry projects. The FSDP FM was managed by a well-established professional CPCU in the MBFP, MARD with outreach to PPMUs and VCF Secretariat with experienced staff, proven FM systems and procedures with extensive FM expertise and experience. Future projects should, as far as is possible, use the existing expertise and experience of the CPCU in the MBFP, MARD.

152. Decentralization of financial management and implementation arrangements to *PPMUs*. The FSDP adopted a centralized approach where all payments for contracts were made by CPCU except for advances to PPMUs and DIUs for operating costs, training and sundry activities. These centralized arrangements prolonged processing of payments to contractors; overloaded CPCU workloads; and impacted PPMU accountability of contract management. Future projects should decentralize FM and implementation arrangements to PPMUs and the CPCU co-ordinate FM procedures, monitoring and reporting.

153. Procurement packaging and planning of technical assistance and civil works need to take into account the time-bound seasonal constraints. Some activities depend upon the rainy season (nursery practices and seedling production, site preparation, planting, fertilizer application), while others, like construction of access tracks and fire towers, are dependent upon the dry season. To minimize the risk of delay in contract implementation the seasonality needs to be taken into consideration in procurement packaging and planning.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners (a) Borrower/implementing agencies

The Draft ICR was shared with the Implementing Agency. The Project Director, Mr. Pham Quoc Chien, replied with the following comments:

I have read the document. Basically, I agree with you. There are a few spelling mistakes to correct:

paragraph 2 of page ...: "Management Board For Forestry Projects" to replace " Management Board For Protection"

paragraph 4 of page..." Global Environment Fund "to replace "Global Environment Facility "

Annex 1. Project Costs and Financing

Components	Total Estimate - All Sources (US\$ millions)	Actual/Latest Estimate (US\$ millions)	Percentage of Appraisal (percent)
1. Institutional Development	4.17	4.14	99
2. Smallholder Plantation Forest	54.82	52.50	96
3. Special Use Forest	18.47	14.14	77
4. Project Management, M&E	20.62	19.42	94
Total Project Costs	98.08	90.20*	92

(a) Table A1.1: Project Cost by Component (in US\$ Million equivalent)

(b) Table A1.2: Financing by Source of Fund

Source of Funds	Appraisal Estimate (US\$ millions)	Actual/Latest Estimate (US\$ millions)	Percentage of Appraisal
IDA-39530	39.50	39.09	99
IDA-50700	30.00	27.31	91
GEF	9.00	8.00	89
Trust Fund for Forests 1	5.80	5.11	88
Trust Fund for Forests 2	6.90	5.37	78
European Commission	2.56	1.03	62
Government	4.32	4.32	100
TOTAL	98.08	90.23*	92

*Variations due to rounding

** A preparation grant of US\$130,000 was made by the Netherlands with US\$70,000 being disbursed.

Annex 2. Outputs by Component

PROJECT DEVELOPMENT OBJECTIVES, OUTCOME AND OUTPUT INDICATORS AND ACHIEVEMENTS

2(a) Table A2.1: Logical Framework from the Project Appraisal Document, 2004 for Project Achievements 2005-2011

Hierarchy of Objectives	Key Performance Indicators	Data Collection Strategy	Actual Achievements
Sector-related CAS Goal	Sector Indicators	Sector/Country Reports	2005-2011
To assist Vietnam in poverty reduction and promotion of equitable growth.	Improved welfare, i.e., reduced poverty according to national quantitative and quality standards (measuring food security, income, etc)	 Rural and forestry sector studies Periodic surveys and poverty assessments 	• The project provided positive financial returns to smallholder investors that contributed towards reduced poverty in Thua Thien Hue from 16.4% to 8.9%; Quang Nam from 22.8% to 18.2%; Quang Ngai from 22.5% to 17.6%; and Binh Dinh from 16.0% to 13.5% ³² .
Sector-Related Goal The sustainable	Increased forest cover and	Forest Sector Support	• By March 2012, the project had established 45,698 ha of
m anagement of forests and the conservation of biodiversity to achieve: (a) protection of the environment; (b) improved livelihood of people in forest dependent areas: and (c) enhanced contribution of forestry to the national economy	 Increased forest cover and area under forest cover and certification Increased contribution of forest sector to economic development and poverty reduction 	 Forest Sector Support Partnership monitoring system Forest Certification Reports Report on National Forest Inventory Annual Statistical Yearbook 	 By March 2012, the project had established 45,698 ha of plantation forests with 24,049 participating households. Increased forest cover by smallholder plantation forests in Thua Thien Hue from 48.1% to 56.7%; Quang Nam from 42.5% to 48.3%; Quang Ngai from 29.7% to 45.3%; and Binh Dinh from 39.0% to 47.2%. A 2010 Internal Assessment of Plantation Performance, applying FSC criteria and indicators for SFM confirmed profitability of smallholder plantations and estimated 70% of project plantations certifiable with minor technical improvements. Smallholders granted access to: secure land use rights, preferential VBSP credit, improved quality seedlings, extension services, forest farm groups and technical assistance that resulted in quality smallholder plantation forests that yielded households net financial benefits and improved livelihoods conditions after 4-6 years, that included: improved access to markets, new/restored homes, new businesses, family education, new animal husbandry, and increased employment opportunities.

³² Source: BCR report

• Increased capacity of production forest lands to link protection and SUFs	 Smallholders considered investment in plantation forests as money in the bank. Farm income from crops and livestock provided daily food, longer term plantation forest income provided investment opportunities. Jobs created for 24.049 households (targeted jobs and income for 19,000 households) in manual and skilled labor for planning, nurseries, establishment, silviculture, maintenance, harvesting and trucking, directly related to increased smallholder plantations. Wider economic benefits included more sustainable environmental and social conditions and new business investments in nurseries, harvesting/ silviculture/transport contracting, traders, sawmills, chipwood plants, bee keeping. Improved knowledge and skills enabled farmers to take responsibility for their household –based economic development that contributed to the wider economic development in the project area The integrated forest and farm landscapes provided a range of environmental services – provision of wood-fuel (reduced foraging of natural forests); regulated water runoff; reduced soil and water-course erosion and siltation; increased carbon sequestration and storage; and increased biological diversity that improved smallholder livelihoods, including protection of downstream agricultural productivity, homes and infrastructure. Increased sourcing of forest products (pulp, chipwood, sawlogs and fuelwood) from smallholder plantations reduced pressures to source wood products from natural and SUF forests. Community Based Forest Management pilots demonstrated payments for environmental services to nurture natural forests rather than harvest wood products FSC Certification pilots demonstrated social, environmental and economic dimensions of sustainable smallholder plantation development. Landscape (land-use) planning guidelines prepared and implemented.
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GEF Operational Program	Key Performance Indicators Sector Indicators	Data Collection Strategy Sector/Country Reports	Long-term SUF financing and outreach strategy completed including assessment of future institutional arrangements and legal and operational modalities. Actual Achievements 2005-2011
According to PAD: "To support long-term protection of globally important forest and mountain ecosystems". <u>According to GA:</u> "To assist the Recipient to enhance the contribution of forestry to: (i) rural poverty reduction and (ii) global environmental protection, through the sustainable management of plantation forests and the conservation of biodiversity in special use forests" NOTE: Same as PDO in the DCA.	 Ratio of budget spent on capital investments versus operational management Improvement of management effectiveness of SUFs Improved engagement of local communities and ethnic minorities in SUF planning and management 	 National reports to Convention on Biodiversity NEA-MONRE annual State of Environment reports to National Assembly Conservation Needs Assessment and Protected Area Management Effectiveness Assessment 	 51% of SUF budgets spent on capital investments, 49% on Operational Management Vietnam Conservation Fund established and sustainable financing mechanism for biodiversity and improved SUF planning and management, including beyond the life of the project secured. Standardized procedures and tools established for SUFs to apply for grant funding included Social Screening Report, Conservation Needs Assessment and Operational Management Plans VCF funding of 82 grants and 42 Operational Management Plans (of which 30 to international standards) implemented and managed in association with local communities. METT scores showed 19% to 39% increase in management efficiency of SUFs Communities engaged as key stakeholders in preparation and implantation of Operational Management Plans Prime Ministerial Decision on forest management revised to enable SUF Management Boards to enter into co- management arrangements with local communities and ethnic minorities living around or within SUFs

Output by Global Component	Output Indicators	Sector/Country Reports	Actual Achievements
SPECIAL USE FORESTS			2005-2011
Improved Conservation management of approximately 30 SUFs	• Initial conservation needs assessment and PA effectiveness scorecards are completed for 30 SUFs by end of year 2	 Progress reports Conservation needs assessment reports and PA effectiveness scorecards 	 Despite 2 year start-up delay, the VCF provided 82 grants to 42 SUFs by Dec 2011 that required Conservation Needs Assessments and Protected Area effectiveness scorecards completed by the end of the project. Social Screening Reports introduced to balance biodiversity conservation with protection of livelihoods and food security of local communities.
	 Standard Operational Management Plans (OMPs) prepared and implemented in at least 30 SUFs VCF funds disbursed according to approved proposals 	 Operational Management Plans 	 Standard Operational Management Plans prepared and implemented in 42 SUFs (of which 30 to international standards) with local communities using new, approved mechanisms and tools (incl. CNAs, SSRs, OMPs, METT baseline) to improve understanding of SUF conservation, socioeconomic and management needs and priorities to incorporate into proposals for grant funding.
Reduced threats to areas with ecosystems of international conservation importance	 Biodiversity in 30 SUFs maintained based on (a) changes in No. of sightings of designated species and scale of local resources uses; (b) changes in size of vegetation blocks and in land-use of priority sites within the SUFs, and between SUFs and other mature natural forest areas; and (c) changes in perceived harvest volume of non-timber forest products per effort Threats to biodiversity of 	• Threat reduction scorecards and infraction reports	 40 biodiversity inventories and surveys collected data for CNAs. 195 mammal species confirmed in Central region. A list of protected and endangered species was collected and updated by all SUF MBs. SUF management based upon CNAs, SSRs and BSMs Stronger SUFs undertook biodiversity patrols that recorded GPS referenced data on the presence of key endangered species and updated existing biodiversity inventories. Data had not yet been consolidated across SUFs.
	 Interactional importance in up to 30 SUFs reduced Effective models developed and disseminated for local communities in co- 		 METT processes helped MBs identify key issues and threats, which, when combined with CNAs, SSRs and OMPs, allowed MBs of 42 SUFs to establish BSMs to reduce threats to biodiversity VCF funds and new SUF mechanisms and tools demonstrated livelihood and BSMs.

management of forest resources	 International and local technical assistance mobilized to build the capacity of the SUF MBs and local communities to plan and implement priority conservation activities. Local communities benefited from small-scale livelihood and income generation activities.
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Hierarchy of Objectives	Key Project Indicators	Data Collection Strategy	Actual Achievement		
Project Development	Outcome/Impact Indicators	Project Reports	2005-2011		
Objective					
	plantation forest and Special Us				
Development	 Institutional and financial arrangements for promoting smallholder plantation forestry developed and available for replication (results of Component 1) Financial arrangements for funding SUFs management in place (result of Component 1) 	 Impact Evaluation Reports Implementation Review Reports Beneficiary Assessments 	 Policies & procedures formalized for issuance of land-use rights. The red book allocated to 22,781 households for an area of 40,993 ha of smallholder plantation forests. VBSP successfully demonstrated a new financial mechanism (700 billion VND of credits) that stimulated a changed culture for poor smallholder investors who borrowed funds at low interest rates to invest in plantation forests on lands for which they held a land-use right certificate, tied to the availability of extensions services, technical support and market access. VBSP has revolving fund to 2036 to allow poor smallholders to access low interest loans to invest in plantation forests to improve their livelihood conditions beyond the project. VCF demonstrated as a competitive, small-scale financing mechanism to improve management of SUFs of high biodiversity value. Based on ICR team's own field observations, VCF self-assessment and extensive stakeholder consultations. Prime Ministerial Decisions on Promulgating the Regulation on Forest Management (2006) and Pilot Study on BSMs in management, protection and development of SUFs (2012) and Government Decree on Organization and Management of the SUF System (2010). 		
Component 2: Smallholder Plantations	• Environmentally, socially, and economically viable smallholder forestry sector established and benefiting rural households in Binh Dinh, Thua Thien Hue, Quang Nam and Quang Nai provinces (result of Component 2)	 Impact Evaluation Reports Implementation Review Reports Beneficiary Assessments 	 By March 2012, the project had established 45,698 ha of plantation forests with 24,049 participating households in Thua Thien Hue (10,854 ha, 6,823 h/holds), Quang Nam (13,440 ha, 5,837 h/holds), Quang Ngai (9,597 ha, 4,569 h/holds) and Binh Dinh (11,807 ha, 6,811 h/holds). More than 850 ha of FSC Certified smallholder group certification pilot demonstrated environmental, social and economic viability of smallholder plantation forest investment. A 2010 Internal Assessments of Plantation Performance in the 4 provinces applied FSC criteria and indicators for 		

Component 3: Special Use Forests	Improved conservation management of approx. 30 SUFs (result of Component 3)	 National Reports to Convention on Biodiversity NEA-MONRE annual State of the Environment Reports to the National 	 SFM - confirmed profitability of smallholder plantations and estimated 70% of project plantations certifiable with minor technical improvements. VCF provided 82 grants to 42 SUFs in accordance with approved new mechanisms and tool (CNAs, SSRs, OMPs, METT baselines) by Dec 2011 of which 30 SUFs were considered to conform to conservation management of an international standard in balancing biodiversity conservation with protection of livelihoods and food exercise of level economic of level economic of livelihoods.
	• Reduced threats to areas with ecosystems of international conservation importance (result of Component 3)	Assembly	 security of local communities. 40 biodiversity inventories, surveys and patrols, CNAs and SSRs collected data that allowed SUF MBs to identify threats, priorities and endangered species and to incorporate these into OMP planning and management in collaboration with local communities in BSMs.
Component 4 Project Management, Monitoring and Assessment	• Procedures for functional management information and monitoring and evaluation system for plantation forest and management of SUFs developed and operational (result of Component 4)		 Procedures for field assessments and electronic monitoring of smallholder plantation forests established and implemented. 2 Internal Assessment of Plantation Performance developed and operational (2010 and 2011) to monitor silviculture and management standards, growth, yields, prices and financial returns for smallholder plantation forest investors. 2 Internal Assessment of Plantation Performance planned 2013 and 2014. Semi-annual and Annual Monitoring and Evaluation reports required for both smallholder plantation forest and SUF components. METT scores developed and operational for SUF component

Hierarchy of Objectives	Key Project Indicators	Data Collection Strategy	Actual Achievement
Output by Component	Output Indicators	Project Reports	2005-2011
1 INSTUTIONAL DEVELOP	MENT		
Institutional and financial arrangements for promoting smallholder plantation forestry developed and available for replication in other provinces	 Tax and incentive policies including product pricing relevant for plantation forestry improved and adopted, based on lessons learned and analytical studies Simplified, transparent forest land classification and allocation procedures based on lessons learned and integrated in relevant chapters of the FSSP Forest Sector Manual and Project Implementation Manual 21 District FFGs established and operational with more than 70% of all farm households benefiting from the FFG as members Forest Certification achieved by 2009 by more than 50% of registered individual households and future financing for certification services identified 	 Progress reports Case studies Workshop Proceedings Project Implementation Manual FSSP Forest Sector Manual Forest Certification Reports 	 Policies researched, improved and adopted based on lessons learned and analytical studies included: Typical experience in commercial plantation forests at household scale; Regulations on managing and providing plantation forest materials; Support and tax policy; Wood price and market; Benefits and risks on plantation forests; The best typical sample in performing the process of land classification and allocation; Evaluating potentials and restrictions on the issue in comanaging special-use forests. Initial 19 step project implementation detailed and refined for smallholder plantation forests in the PIM manual and lessons learned applied to the FSSP 559 FFGs representing 19,590 household members (80% of all farm households) established and operational Internal assessment results 2010 conducted by an international forest in the project of certifiable standard with minor improvements.

	 VCF Secretariat secured 11 additional grants through TFF beyond the project. VCF Secretariat facilitated a mind shift at policy level and SUF MBs towards more livelihood and BSMs with local communities, partly driven by the need to mitigate impacts of access and use restrictions. MBs set aside 8% of the VCF grants prior to 2009 for livelihood support and BSMs which rose to 26% by 2012. VCF Secretariat standardized procedures - each SUF had to prepare a SSR, CNA and METT baseline, an operational M&E
	system and improved FM, to secure grant finance.

2 SMALLHOLDER PLANTAT	ION	FOREST				
Environmentally, socially and economically viable smallholder forestry sector established and benefiting rural households in	•	Increased share by smallholders of total wood production in project areas	•	Records on approved provincial plantation models Copies of plantation business plans	•	45,968 ha of new smallholder plantation forests produced minimum 8 million tonnes wood production after 5 years
Binh Dinh, Thua Thien Hue, Quang Nam and Quang Nai provinces	•	Living standards of 19,000 households improved through forest income and employment	• • •	Progress reports M&E reports Beneficiary assessment and other special studies Extension reports District and province land allocation records in the registries Certification Reports	•	Living standards of 24,049 households improved through access to VBSP low interest loans, plantation forest income (positive IRRs, see Appendix 1) and job opportunities Jobs created for 24.049 households) in manual and skilled labor for planning, nurseries,
	•	Extension and training guidelines covering all aspects of plantation forest development prepared			•	establishment, silviculture, maintenance, harvesting and trucking. Extension and training guidelines
	•	95- local (block-level) FFGs formed and operational (participation recorded by gender and ethnic groups); and extension provided to at least 750 (block-level) FFGs by year 2009			•	covering all aspects of plantation forest management developed (considered fundamental by smallholder investors. 559 FFGs formed and operational in Thua Thien Hue, Quang Nam, Quang Nai and Binh Dinh and extension services and technical assistance provided to all FFGs by
	•	53,000 ha of land allocated and LURCs issues to approximately 19,000 households (by ethnic group and income) Plantation design completed by 66,000 ha in accordance with			•	year 2009 20,152 ethnic minority farmers participated in 140 Ethnic Minority Development Plans associated training courses (61% female, 39% male)
	•	approved plantation models by 2008 Smallholder production of 4 million m3 of pulpwood; 0.5 million m3 of sawlogs and 0.4 million m3 of fuelwood in 20 years				22,781 households received LURCs (red book) for 40,993 ha, targeted at poor and ethnic minorities in communities Plantation design completed for 40,993 ha of smallholder plantations

				•	Smallholder production exceeded
					pulpwood, sawlog and fuelwood targets within 5 years
4 PROJECT MANAGEMENT					
4 PROJECT MANAGEMENT Procedures for functional management of information and monitoring and evaluation system for plantation forest and management effectiveness in SUFs developed and operational	•	Procedure established for planning, accounting, fund flow and procurement Trained staff in place in CPCU/PPMU/VCF Secretariat TA recruited Procedure established for M&E M&E providing timely feedback for management action	Project management manuals and guidelines Progress reports M&E reports	•	CPCU/PPMU/VCF Secretariat prepared a comprehensive Project Implementation Manual (PIM) Work plans, budgets, funds allocation, procurement procedures, accounting, financial reporting and fund flows were undertaken in accordance with the PIM VBSP prepared a Credit Manual and the VCF an Operational Manual Staff recruited and trained in the CPCU/PPMU/VCF Secretariat and VBSP TA estimated by smallholder plantation forest investors to have been provided by the Commune Working Group (30%), District Project Management Unit (28%), Extension Staff (19%), Farm Forest Group (13%), Plantation Design Unit (10%). Semi-annual and annual reporting, International Plantation Assessment reporting, plantation forest data monitoring established for M&E World Bank Implementation and
				•	Status Results Reports prepared semi-annually. Mid-term Evaluation Reports conducted in 2007 and 2009.

	• M&E reporting provided timely
	feedback for management actions.

	Project Development Objective (PDO): The Project Development Objective is to achieve sustainable management of plantation forests and the conservation of iodiversity in special use forests													
PDO Level Results	Results	UOM ²	Baseline Original	Progress To	Cumulative Target Values ³				-	Data Source/	Responsibility	a		
Indicators 1	Core		Project Start (2005)	Date (2011)	2012	2013	2014	2015	Frequency	Methodology	for Data Collection	Comments		
50 percent of the smallholder plantation area in each project province is certifiable according to international standards for sustainable forestry.		%	0	70%	70	72	73.2	73.2	Biannually and on demand for external assessments	Internal Assessment of Plantation Performance External certification pre-assessments	CPCU, PPMUs, DIUs	76,571 ha planted, by 43,743 h/holders of which 56,050 ha of certifiable standard		
Management effectiveness in Special Use Forests will improve (in %), measured by using the Management Effectiveness Tracking Tool (METT).		%	0	19-39% increases in management effectiveness	19-39%	-	-	-	METT Conservation Threat Assessments	Annual and semi-annual reports and periodic METT updates	CPCU in coordination VCF Secretariat	Componen t closed March 2013. SUF METT scores varied 19- 38%		
Beneficiaries ⁴														
Project beneficiary households (smallholder plantation forest component)		No.	0	24,049	30,000	38,000	43,743	43,743	Annually	Annual progress reports	CPCU, PPMUs, DIUs	43,743 h/holds planted 76,571 ha		

2(b) Table A2.2: Results Framework from Project Paper for Additional Finance, 2012 (Project Achievements 2012-2015)

Of which female beneficiaries (smallholder plantation forest component)	No	0	12,024	15,000	19,000	21,872	21,872	Annually	Annual progress reports	CPCU, PPMUs, DIUs	Land-use rights & forests owned 50% male & female
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Please indicate whether the indicator is a Core Sector Indicator (for additional guidance – please see http://coreindicators).
 UOM = Unit of Measurement.
 Target values should be entered for the years data will be available, not necessarily annually. Target values should normally be cumulative. If targets refer to annual yalues, please indicate this in the indicator name and in the "Comments" column.
 All projects are encouraged to identify and measure the number of project beneficiaries. The adoption and reporting on this indicator is required for investment projects which have an approval date of July 1, 2009 or later (for additional guidance – please see http://coreindicators).

					Inter	mediate Resu	lts and Indica	ators				
Intermediate Results Indicators	Core	UOM	Baseline Original Project Start	Progress To Date (2011)	2012	Target Values201320142015		Frequency	Data Source/ Methodology	Responsible for Data Collection	Comments	
Intermediate Resu			(2005) licies availat	ole for promo	ting the develo	ppment of priva	l ate (smallholde	er) sector and r	narket devel	opment for pla	Intation forestry	/.
Plantation management, land allocation guidelines, investment procedures and institutional models for smallholder plantation management developed.		Descriptive		VBSP Credit Manual, guidelines, investment procedure, quality standards & criteria developed	Updated VBSP Credit Manual, PIM, guidelines, investment procedures, quality standards & criteria developed & applied in new provinces	Updated VBSP Credit Manual, PIM, guidelines, investment procedures, quality standards & criteria developed & applied in new provinces	Updated VBSP Credit Manual, PIM, guidelines, investment procedures, quality standards & criteria developed & applied in new provinces	Updated VBSP Credit Manual, PIM, guidelines, investment procedures, quality standards & criteria developed & applied in new provinces	Annually	Annual progress reports	CPCU, PPMUs, DIUs	Revised VBSP Credit Manual & PIM 2012-2015, new procedures, guidelines, standards & criteria for land measurement, land allocation and plantation design. Successful institutional model derived – DIU, CWGs., Plantation Design Units, Ext. Services & 806 FFGs.
Intermediate Res	ult 2	2: Provinc	ial Forestry	Departments	able to inform	, train, inspect	and monitor s	mallholder pla	ntation fores	ts according to	o prescribed pro	ject procedures
Compliance checks by provincial DARDs meet prescribed project implementation standards for approximately 70 percent of the plantation area.		Descriptive	0	70%	70	72	73.2	73.2	Biannually and on demand for external assessment s	Internal Assessment Plantation Performanc e External certification pre- assessments	CPCU, PPMUs,	4 Plantation Quality Assessments by international & national forest certification specialists with CPCU & DARDs. Local capacity for monitoring and for households have improved quality plantations

	Intermediate Results and Indicators													
	Tinit of	Baseline			Target	Values				D				
Intermediate Results Indicators	e Unit of Measur		Progress To Date (2011)	2012	2013	2014	2015	Frequency	Data Source/ Methodology	Responsibility for Data Collection	Comments			
Intermediate Result 3: Participating smallholders have skills and knowledge to manage plantations according to prescribed project guidelines.														
Rotation yields at the end of first cycle are in line with project plantation models (in % of model yield)	% of prescribe yield me		Internal assessments & financial analyses confirmed profitability of short rotation plantations on quality sites (SQ I, II).	-	-	100	100	On harvest of first rotation cycle.	Internal Assessments & Financial Analyses ICR Report	CPCU, PPMUs, DIUs	Internal assessments and ICR financial analyses confirmed profitability of short rotation plantations of <i>Acacia</i> hybrid, <i>Acacia mangium</i> and <i>Eucalyptus urophylla</i> in site qualities I, II, III, IV. Whether rotation yields (m3/ha or tonnes/ha), NPVs or IRRs, yields were generally in line with project modelling. See ICR Annex 1 for details			
Intermediate Result	4: Specia	Use Fores	ts are managed	and protected	d according to	internationa	l conservation	on standards						
30 supported Special Use Forests are implementing management plans of international standards (METT) and are managed in cooperation with local communities	descriptiv	e 0	42 SUFs received 82 grants in accordance with SSRs, CNAs, OMPs METT, BSMs <u>Note</u> : 30 to international standards	grants in accordance with SSRs,		-	-	End of Project	Management Effectiveness Tracking Tool (METT) Annual Reports		69 SUFs received 100 grants in accordance with Operational Management Plans, Social Survey Reports, Conservation Needs Assessments and METT scoring, in collaboration with local communities in BSMs. <u>Note 1</u> : 30 SUF had OMPs to international conservation standards <u>Note 2</u> : This component was not part of Additional Financing and closed in March 2013.			

Annex 2b (Continued): Intermediate Results and Indicators

Intermediate Result 1: Draft policies available for promoting the development of private (smallholder) sector and market development for plantation forestry. The PIM, the VBSP Credit Manual, the Environmental Protection Guidelines for Plantation Management, FSC Principles and Criteria, new investment and technical procedures, guidelines, guality standards and criteria for land measurement, land allocation and plantation design were introduced. Successful institutional models of project implementation through CPCU-PPMU-DIU-CWG-FFGs-households, plantation design units, extension services and technical training teams were proven as effective planning and management tools and institutional arrangements for smallholder plantation forest investment. The GOV had smallholder plantation forestry policies researched, improved and adopted based upon lessons learned and analytical studies³³ conducted within the project for application beyond the project. Through clear and consistent policies, decrees and decisions³⁴ issuance of LURCs, access to low interest VBSP loans, provision of extension and technical support through a sound institutional model, training on best practices guidelines and access to markets, provided the smallholder investors with the confidence and commitment to invest and benefit from smallholder plantation forest development.

The low interest loans from the VBSP for smallholder plantation forest investments facilitated a change from a grant dependent culture to an investment culture. VBSP disbursed loans to over 28,000 farmer households which were over 98 percent successful in terms of loan repayments. Positive financial returns provided smallholders with the confidence and commitment to pay back their loan and invest in replanting (mostly without new loans) and other investments. To ensure the sustainability of the project activities, under the Subsidiary Loan Agreement the revolving fund available to the VBSP will be at their disposal until 2036. The VBSP, MARD, MOF and MONRE are formulating the policies, plans and procedures for the availability of low interest loans within and beyond the project provinces in the future. Their challenge is to continue to provide the critical smallholder plantation package of inputs including LURCs, VBSP low interest loans, quality seedlings, access to markets and assured extension and technical support to smallholders, particularly for new households without prior plantation investment experience.

Intermediate Result 2: Provincial Forestry Departments are able to inform, train, inspect and monitor smallholder plantation forests according to prescribed project procedures. Four Internal Assessments of Plantation Performance were undertaken by independent, international and national certification specialists. They assessed that by project completion

³³ Policy studies included: (a) Typical experience in commercial plantation forests at household scale; (b) Regulations on managing plantation forest materials; (c) Support and tax policy; (d) Wood prices and markets; (e) benefits and risks on plantation forests; and (f) Land classification and LURC best practices.

³⁴ (a) Decree No. 118/2014/ND-CP dated December 17, 2014 on Arrangement, Reform and Development, and Enhancement of Operational Efficiency of Agricultural and Forestry Companies to assist the GOV to implement their Forestry Sector Restructuring Plan; (b) Prime Minister Decision No. 1759/TTg-QHQT, September 30, 2011 approved Additional Funding of US\$30 million for project expansion in Thanh Hoa and Nghe An province and extension of 3 years until 2015 in Thua Thien Hue, Quang Nam, Quang Nai and Binh Dinh provinces; (c) VBSP's Decision No. 15/QD-HĐQT dated January 27, 2011 on Regulations on dealing with at risk loans under the VBSP's system; and (d) Prime Minister Decision No. 18/2007/QD-TTg, dated February 5, 2007, on implementation of the Vietnam Forestry Development Strategy, 2006-2020.

73 percent of smallholder plantation forests were compliant with prescribed implementation standards. Furthermore, 73 percent met international certifiable standards exceeding the Intermediate Results Indicator of 50 percent. Vietnam, a major exporter of timber products and furniture, must prove legality and sustainability of forest management and chain of custody documentation to retain access to stringent global forest products markets. By improving standards in domestic plantation forests, the FSDP provided critical support to Vietnam's efforts to move towards independent certification of their domestic production forests. The FSC group certification pilot of 850 ha, owned by 354 households demonstrated that a 20-30 percent price premium could be achieved and proof of legality and sustainability provided access to global forest products markets, particularly in Europe and North America. FSC plantations in the project averaged FRRs of 31.5 percent, which is considered excellent. Without proof of legality and sustainability from forest management origin, through the chain of custody to the buyer, these international markets will not be accessible in the future.

Smallholder plantation forests not meeting project best practices were primarily due to high planting densities, often up to 2000 stems per ha, compared with more conventional planting schemes of 1100 per ha. Some smallholders were reluctant to plant lower densities and grow plantations on longer rotations for fear of wind damage (breakage or wind throw). They also tended to harvest their plantations at 4-5 years for chipwood, preferring to take less profits rather than risk losing larger trees they believe would be susceptible to wind damage. Typhoons and strong winds frequent Central Vietnam, so lower planting densities and timely thinning to prescribed densities are critically important to reduce the vulnerability to wind damage. Insurance for smallholder plantation forest investors should be an option available to mitigate risk in the future. Alternatively planting indigenous species, known to be more wind resistant is an option. Some smallholders planted the native Hopea odorata as windbreaks around their plantation forests. However, smallholders tend to resist using native species because of the longer rotations and perceived lower financial returns. Some farmers observed that planting stock from seeds, rather than tissue culture or cuttings, had higher wind resistance. An evaluation of the effects of species choice (exotic or native), planting density, thinning age/density and rotation length on vulnerability to wind damage is warranted to review plantation models for the future. Experiences and lessons learned should be documented from the project and the Smallholder Plantation Guideline reviewed for future GOV plantation programs.

Intermediate Result 3: Participating smallholders have skills and knowledge to manage plantations according to prescribed project guidelines. A highly effective 19-step approach to engaging smallholders was developed and implemented by the project³⁵. The approach covered initial village engagement, community organization, site selection, land-use planning, land-use rights certification, plantation design, loan application and issuance, and technical assistance for plantation establishment and management. A participatory monitoring system was included and helped to inform progress at the community level and provide feedback for improvements. 806 FFGs were established and trained to provide extension and communication to 26,968 household members for their plantations. Plantation

³⁵ The approach has been identified as a regional best practice suitable for replication. In August 2015, a highlevel delegation from Laos's Ministry of Agriculture and Forestry visited MARD's CPCU and the project sites to learn more about the program and its results.

designs were completed for 81,985 ha owned by 45,701 households, 41,545 households received LURCs and 76,571 ha of new plantation forests were established. Ethnic minorities participated actively in the project. Some 163 ethnic minority development plans were produced, including over 21,000 ethnic participants (63 percent female and 37 percent male).

Internal Assessments of Plantation Performance, Special Studies and the post-project financial analyses (Section 3.3) confirmed the financial profitability of the project's plantation forests of *Acacia* hybrids, *Acacia mangium* and *Eucalyptus urophylla* across site qualities I, II, III and IV. FRRs for all plantation models ranged from 16.6 percent (good) to 31.6 percent (excellent). Whether growth rates (m3/ha/year), rotation lengths (years), harvest production (m3/ha or tonnes/ha), NPVs (US\$) or IRRs (percent), yields compared favorably (exceeded) the pre-project models. Financial returns were verified as higher than some of the best plantations in Brazil, Indonesia, Uruguay and Venezuela.

In addition to the rate of financial return, jobs were created for 43,743 households in manual and skilled labor for planning, nurseries, establishment, silviculture, maintenance, harvesting and trucking, directly related to increased smallholder plantation investments. Wider economic benefits included more sustainable environmental and social conditions and new business investments in nurseries and harvesting, silviculture and transport contracting, trading, sawmills, chipwood plants and bee keeping. The improved knowledge and skills learned from the project enabled farmers to take responsibility for their household based economic development that contributed to the wider economic development in the project area. The integrated forest and farm landscapes provided a range of environmental services, including provision of wood-fuel from plantation forests (reduced foraging of indigenous forests); regulated water run-off; reduced soil and watershed erosion and siltation; protection of down-stream agricultural productivity; protection of homes and infrastructure and increased carbon sequestration and storage; and increased biological diversity that improved smallholder livelihoods and food security and reduced poverty. Fuelwood, chipwood and sawlog sourcing from smallholder plantation forests from restored landscapes substituted for harvests from indigenous forests and particularly SUFs, as previously.

Intermediate Result 4: Special Use Forests are managed and protected according to international conservation standards. SUF MBs received 100 grants for 69 SUFs (KPI 50), worth US\$7.7 million, in accordance with OMPs, SSRs, CNAs and 63 BSMs with 396 forest dependent villages within or near SUFs. The easing of the grant size in 2009 helped improve cost effectiveness and rewarded well-performing SUFs by providing them with a series of larger grants to implement their OMPs and further build capacity. Given the continued strong demand from SUF MBs, the VCF secured additional financing from the TFF in 2013 and provided 11 more grants. Additionally, the VCF and the TFF were institutionalized into the VNFF as a mechanism for longer-term funding.

The project successfully established a well-functioning organizational structure for the VCF, including a Management Committee in charge of oversight and approval of work plans and budget and a Secretariat to run the day-to-day activities.³⁶ The VCF Secretariat and RTAs, set rigorous and standardized procedures for accessing grant financing that required SUFs to

³⁶ Both later renamed to VCF Directive Committee and VCF Management Committee respectively.

prepare a SSR, CNA and METT baseline to apply for grant financing. These tools helped improve the understanding of the conservation, socioeconomic and management needs of the SUF and set priorities. To encourage behavioral changes and sustainability, the VCF set additional criteria for repeat grants, including successful implementation of the first grant, a complete OMP, an operational M&E system and reasonable and improving FM. A TRG was set up to review proposals submitted by SUF MBs and ensure quality. The VCF FM team adopted mitigation measures and targeted TA and training to cope with increased work load.

The VCF funded 39 good quality OMPs (exceeding the 30 OMPs target by 30 percent), with the other 22 OMPs requesting optimistic budgets for conservation activities. OMPs were prepared in close collaboration with local communities and were linked to the SUF investment plans. People's Provincial Committees (PPC) approved 22 OMPs that illustrated the GOV support of the development process. Additionally GOV decrees, decisions and standards³⁷ were derived by the GOV that supported the SUF component. All VCF grants involved local communities in the planning and co-management of the SUFs, strengthened by a social coordinator and formalized consultation and engagement processes. The community participation resulted in 31 boundary demarcations, 146 conservation awareness campaigns and 76 law enforcement activities. Greater participation with communities improved understanding, mutual trust and cooperation.

The project conducted 40 biodiversity monitoring activities, including inventories, surveys and information collected for the CNAs. Furthermore, the SSRs provided important insights into socioeconomic conditions of the communities living in, and around, SUFs that highlighted poverty and high levels of seasonal food insecurity, ranging from 1-4 months/year when they were forest dependent for wood, fuelwood and NWFPs.

Although the VCF mechanism was not intended for poverty alleviation, a shift towards livelihood and BSM activities occurred. This was partly driven by the need to mitigate impacts of access and use restrictions with the project supporting a total of 215 small-scale conservation-oriented livelihood activities directly benefiting 2,561 households. Moreover, the project piloted 63 BSMs in a total of 396 villages, including the two official BSM pilots in Bach Ma and Xuan Thuy National Park. It is too early to evaluate the impact of these activities due to the short implementation period. However, a mind shift has occurred at the MB and policy level. For example, MBs set aside 8 percent of their VCF grants in 2009 for livelihood support and BSMs, which has risen to 26 percent in 2012. Similarly, MARD recognized the need to balance biodiversity conservation with livelihoods and food security of communities in Decision 126 on BSM pilots.

³⁷ (a) Decision 126, Feb, 2012 on benefit sharing mechanisms in three SUFs as a pilot for co-management in protected areas; (b) MARD Circular 80, Nov 23, 2011, guidance on payment for forest environmental services; (c) MARD Circular 78, Nov 11, 2011 to implement Decree 117; (d) Decree 117, March 1, 2011 on SUF organization and management to build upon the SUF planning and management tools; (e) Decree 99/2010/ND-CP, Sept, 2010 on the policy for payment for forest environmental services; (f) Decree 65/2010/ND-CP, June, 2010, detailing articles for SUF biodiversity conservation planning, zoning and monitoring and reporting status of biodiversity Law; (g) Law on Biodiversity, effective July 2009.

Annex 3. Economic and Financial Analysis

I. Data and Assumptions

1. Financial analyses evaluate expenses and income from the perspective of one individual or entity – such as a household or Ministry – while economic analyses evaluate expenses and income to society as a whole.

2. The financial and economic analysis team consolidated data into various spreadsheet models with costs and returns by year to estimate net present value (NPV), soil expectation value (SEV) and internal rate of return (IRR), using standard formulae. Theoretically, NPV or SEV is a better indicator of total benefit (per project or per unit land area). IRR, however, is familiar to most people. When calculating a financial IRR, the acronym FRR is used; for economic IRR, ERR is used. An F or an E in front of NPV or SEV indicates financial or economic calculations.

3. **Data sources.** Required data for the financial and economic analyses (for example: input levels; yields by species, site, and age; product mixes; market prices; etc.) were primarily taken from Ministry of Agriculture and Rural Development (2013, 2014), which were developed based upon 400 observations of smallholder plantations, as well as other documents. The team validated these data with interviews of project staff, traders, forest farmer groups, local foresters, and 15 plantation households. Tables 1 and 2 give estimates of inputs and prices for *Acacia* spp. (*Eucalyptus* inputs are similar), and yields typical of participating smallholder plantations. Estimated output stumpage prices were 867,268 VND/ton for sawlogs, 709,700 VND/ton for small sawlogs, and 599,671 VND/ton for chipwood.

Table A	A3.1:	Typical	inputs/hectare	of	participating	small-scale	(1-5	ha)	Acacia
plantati	ion.								

Cost items	Unit	Price per Unit (real 2014 VND)	Year 1	Year 2	Year 3	Years 4-7
	Cuttin					
Planting material	g	853	2000	200		
Fertilizer (NPK)	Kg	14,210	400	40		
Labor	Day	159,579	106	41	31	11

	Soil	Rotation Length						
Species	Class	4 yrs	5 yrs	6 yrs	7 yrs			
Acacia hybrid	Ι	169	225	286	313			
	II	125	175	227	260			
	III	86	105	170	189			
	IV	54	89	107	123			
Acacia	Ι	161	237	283	303			
mangium	II	121	176	221	245			
	III	85	127	165	182			
	IV	53	86	102	116			
Eucalyptus.	II	90	137	186	234			
urophylla	III	69	105	142	179			

Table A3.2: Typical yields (total tons per hectare) by species, soil quality, and rotation length.

4. Data on land area directly affected by the project was obtained from the Central Project Coordination Unit (Table 3). This includes facilitating the process to obtain a 50-year Land-Use Certificate (commonly called "Red Book"), and the planting of timber species.

Table A3.3: Smallholder land area involved in project (ha/year). Area per year obtaining land-use rights certificate (Red Book) and planted with timber species under the project.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Land-Use Certificate	3,464	4,586	7,998	7,195	7,236	6,642	4,830	5,602	7,948	6,865
Planted	2,908	4,437	7,428	6,962	7,295	8,111	7,668	8,908	12,721	9,277

5. **Plantation models.** The pre-project financial and economic analysis (World Bank 2004) assumed eight potential plantation types included short- and long-rotation exotic species, native species, agroforestry systems, etc. The actual FSDP project supported principally only three main species for plantations: *Acacia* hybrid (*A. mangium* x *A. auriculiformis*), *A. mangium*, and *Eucolyptus urophylla*, with rotation lengths ranging from 4 to 7 years, on four soil Classes. Therefore, this post-project financial and economic analysis includes 48 different plantation types. A small portion of the total project area also participated in FSC certification.

6. **Opportunity cost of land.** Interviews with FSDP staff and project participants indicated that FSDP plantations usually took place on degraded land or replaced existing plantation forests with poor silviculture and genetic quality. This led to an opportunity cost of 3 million VND/ha/yr for Class I, down to 1.5 million VND/ha/yr for Class IV.

7. Value of Land-Use Certificate (Red Book). One of the major benefits to project participants was the ability to obtain a Red Book, which is a 50-year land-use certificate. Parts of the Red Book value – longer-term investment and collateral for loans – are implicit through improved management. The residual value is incorporated as a benefit to participants at the end of the time period analyzed because as long as the holder is managing plantation forests, he or she is not selling it. The team asked several participants and staff about the market value of Red Book land, and separately obtained government land price frames.

These sources led to an average value of 35 million 2014 VND/ha for soil Classes I and II, and 25 million VND/ha for soil Classes III and IV.

8. **Summary of differences between pre- and post-project analyses.** Table 4 summarizes the differences in assumptions (prices, plantation models, etc.) between the pre-project analysis and the present one.

Theme	Pre-project analysis	Post-project analysis
	(World Bank 2004)	(this document)
Scope	4 provinces, 2005-2012 (original	4 provinces from 2005-2012 and
	project).	6 provinces 2012-2015.
Plantation	8, including short and long	48, based on 3 timber species, 4
scenarios	rotation, agroforestry, fruit and	rotation lengths, 4 soil classes.
	nut trees, etc.	
Accounting for	Implicitly used real 2004 VND	Used CPI from World Bank
inflation	since future inflation unknown.	(2015) to estimate real prices over
		time in 2014 VND.
Input prices	Used estimates of 2004 prices.	Used average real prices for
		plantation-level, prices at year of
		purchase for project-level.
Labor -	Assumed 50 percent of financial	Assumed equal to market price.
economic	value.	
Opportunity	Used estimate of returns to	Used estimate based on poor
cost of land	poorly-stocked plantation forests,	plantation forest and market value
	which was negative.	of land. Cost was positive.
Taxes	Assumed 4 percent tax on timber	Assumed no taxes on timber
	farm gate value in financial	production or land.
	analysis.	
Output prices	Used estimates of 2004 prices,	Used chipwood prices for
	with sensitivity analysis.	financial analysis, used highest
		product prices for economic.
Value of Red	Value of granting Red Book not	Used estimate of market price of
Book	considered in analysis.	Red Book land from interviews
		and land price frame.
Shadow	Used SCF of 0.90 to convert	Used SCF of 0.93-0.97 to convert
exchange rate	project costs from US\$ to VND.	non-tradable from VND to US\$.

Table A3.4: Differences in assumptions between pre- and post-project analyses.

II. Results

9. Plantation-level financial analysis assuming household bears costs (no loans or subsidies). Technically, a plantation-level financial analysis would consider all the cash income and expenses that the plantation managers (project participant households) actually receive. This includes loan disbursements and payback, but does not include inputs subsidized by the project funds, such as forest management plans, etc. However, for these

purposes it is perhaps more valuable to make the same financial calculation, but without loans and including the estimated costs of obtaining Red Book (700,000 VND/ha) and a plantation design document (600,000 VND/ha). Costs of other types of technical assistance were considered to be too variable to be included. This is a more conventional indicator that can be compared around the world. It is also more directly comparable with the pre-project evaluation, which did not include the effect of loans. Table 5 gives the results for non-FSC participants, assuming no loans or subsidies.

10. Based on the percentage of land estimated to be in each plantation scenario (by species, soil class, rotation age), the weighted average FSEV of the plantations was 64.9 million 2014 VND/ha (3,090 US\$ /ha) and FRR 23.3 percent.

Table A3.5: Estimated financial returns for non-FSC smallholder project participants
without loans or subsidized costs. NPVs & SEVs in Millions of 2014 VND per hectare;
FRR in percent.

			Rotation (years)										
	Soil		4			5			6		7		
Species	Class	NPV	SEV	FRR	NPV	SEV	FRR	NPV	SEV	FRR	NPV	SEV	FRR
Acacia	Ι	34.9	110.0	44.4	48.5	127.8	40.8	60.6	139.2	37.4	59.1	121.3	31.6
hybrid	II	17.1	54.0	28.9	40.5	107.0	31.2	40.5	93.1	30.5	41.7	85.6	26.8
	III	1.0	3.2	11.3	3.8	10.0	13.3	21.4	49.1	22.4	21.1	43.3	19.9
	IV	(12.1)	(38.2)	-8.0	(2.3)	(6.0)	7.9	(0.1)	(0.2)	9.9	602	1.2	10.3
Acacia	Ι	31.6	99.7	41.8	52.8	139.3	42.8	59.5	136.7	37.1	55.9	114.9	30.8
mangium	II	15.2	48.0	27.1	30.3	80.0	31.5	38.5	88.4	29.7	38.2	78.4	25.8
	III	0.5	1.5	10.6	11.9	31.4	19.7	19.7	45.3	21.6	18.8	38.7	19.0
	IV	(12.4)	(39.2)	-8.6	(3.3)	(8.7)	6.9	(1.8)	(4.0)	8.7	(1.5)	(3.1)	9.1
Euc.	II	(0.4)	(1.3)	9.5	11.5	30.3	19.4	21.4	49.3	22.4	28.8	59.3	22.7
urophylla	III	(8.4)	(26.6)	-1.9	0.4	1.0	10.4	7.8	17.8	15.0	13.2	27.1	16.6

11. Using the same methodology, by which smallholders are assumed to bear the main costs of plantation without loans and with the estimated 1,875,000 VND/ha/yr cost of certification, the team calculated returns to FSC plantations (Table 6). FSC plantations involved somewhat more intensive management and usually longer rotations with a higher percentage of sawtimber. Because of that, and a price premium, FSC was more profitable than non-FSC, despite the somewhat higher costs and longer rotation.

	G 1	Rotation (years)						
Species	Soil class		6	7				
	eiuss	NPV	FRR (%)	NPV	FRR (%)			
		- NPVs	- NPVs in Thousands of 2014 VND per hectare -					
	Ι	105,361	45.0	110,540	38.7			
Acacia hybrid	II	77,421	38.5	82,179	33.6			
	III	39,271	27.3	38,641	23.6			
	IV	16,704	18.5	14,488	16.0			
	Ι	91,382	41.9	108,749	38.4			
A a gai g ur gu airru	II	61,267	34.2	75,044	32.2			
Acacia mangium	III	37,131	26.6	50,132	26.6			
	IV	15,495	17.9	28,369	20.6			

Table A3.6: Estimated financial returns for FSC smallholder project participants *without* loans or subsidized costs.

12. **Summary plantation-level estimates.** Weighted average return of the project per hectare was estimated using percentage of project plantation area by species, rotation length, and soil class (Table 7). Since the plantations have different rotation lengths, SEV is preferred over NPV.

Table A3.7: Summary of weighted averages of plantation scenarios with three differentsets of cost and returns assumptions; comparison to pre-project estimates.

	Pre-Project	Estimates *	Post	Post-Project Estimates			
Plantation Level	NPV (Millions VND/ha)	IRR (%)	NPV (Millions VND/ha)	SEV (Millions VND/ha)	IRR (%)		
Financial (includes loans)	-	-	30.4	76.2	44.1		
Financial (includes loans) for FSC cert.	-	-	79.8	173.2	54.2		
Financial (no loans)	12.1	18.3	23.2	64.9	23.3		
Financial (no loans) for FSC certified	-	-	63.2	137.2	31.5		
Economic	-	-	39.3	78.7	24.9		

* World Bank (2004). 2004 values adjusted to 2014 terms to account for inflation.

13. **Returns to labor.** NPVs were also calculated before costing labor, divided by the discounted number of labor days to find a value for returns to labor (Table 8). Most of the plantation scenarios returned higher value per day of labor than the assumed average market wage rate of 159,579, and higher than the 2014 value of 180,000 VND/day.

Spagiog	Soil	Rotation (years)							
Species	class	4	5	6	7				
Acacia	Ι	306,362	407,457	461,564	443,767				
hybrid	II	216,532	370,002	356,806	350,910				
	III	135,114	165,624	256,712	251,573				
	IV	68,822	132,829	144,692	148,116				
Acacia	Ι	323,417	431,102	455,989	428,040				
mangium	II	230,938	309,005	346,004	338,112				
	III	147,707	209,534	247,999	240,401				
	IV	75,008	127,315	135,854	137,502				
Eucalyptus	II	142,835	207,249	257,154	290,969				
urophylla	III	97,487	147,166	185,571	211,706				

Table A3.8: Returns to labor (VND/day) of the various plantation scenarios.

14. **Returns at the project level** were estimated by using data on actual project costs (adjusted to real 2014 VND) from the central project coordination unit and carrying forward plantation costs and returns through 2035, for consistency with the pre-project analysis. For the financial analysis, IDA repayment assumptions were based on the financing agreement. For the economic calculation, annualized opportunity cost was included, and the benefit of Red Book value at the end of 2035.

Year	Real Project Costs	Real Plantation Costs	Opportunity Cost of Land	Real Plantation Revenues	Value of Red Book
		В	Sillions of 2014 VN	D	
2005	25.4	57.7	6.7	-	-
2006	23.7	130.1	16.9	-	-
2007	64.1	212.5	34.0	-	-
2008	62.2	222.0	50.0	-	-
2009	118.7	281.3	66.8	15.1	-
2010	103.6	360.7	85.4	168.3	-
2011	94.3	464.0	103.1	350.8	-
2012	125.5	603.4	123.5	608.3	-
2013	175.0	731.3	152.8	751.2	-
2014	151.5	744.8	174.1	827.5	-
2015	51.7	561.0	174.1	1,000.4	-
2016 - 2034	-	500–700 /yr	174.1/yr	1,200-1,900/yr	-
2035	-	35.2	174.1	1,330.9	1,894.3

 Table A3.9: Aggregate project and plantation cash flow for economic analysis.

15. Table 10 summarizes the results and provides for comparison with the pre-project estimates. While the pre-project analysis included opportunity costs of land, they were actually zero or negative, so that estimate is more comparable to the estimate that does not include opportunity costs or Red Book benefit value. The project-level financial results include costs and revenues to the ministry and to the smallholders as a group. This includes repayment of the credit to IDA. Stumpage prices are for chipwood only.

	Pre-P	roject Estim	ates *	Post-Project Estimates			
Project Level	NPV (Billions VND)	NPV (Millions US\$)	IRR (%)	NPV (Billions VND)	NPV (Millions US\$)	IRR (%)	
Financial	59.5	1.9	10.6	1,266.1	60.3	15.3	
Economic (includes opportunity costs)**	457.2	14.3	17.0	816.4	50.8	13.2	
Economic (no opportunity costs)	-	-	-	1,710.2	91.2	17.4	

Table A3.10: Results of the pre- and post- project level estimates of financial and economic indicators.

* World Bank (2004). 2004 values adjusted to 2014 terms to account for inflation.

** Estimated opportunity costs in the pre-project analysis were zero or negative.

III. Discussion

16. The timber yields were very good, costs were moderate, and stumpage prices were very good, which helped lead to attractive rates of return for the private Red Book rights holders and for the Project as a whole. Many of the project participants and non-participants noted that other main benefits of the project are: (1) obtaining the land-use certificates, (2) extension and technical assistance, and (3) better seedling quality. There are other benefits at the project level that were impossible for us to fully quantify and value. Among these are the value of environmental services such as carbon storage/sequestration and water; enhanced future soil quality; and expected benefits of potential future policy reforms evaluated through studies conducted in component 1.

17. **Comparison of pre- and post-project estimates.** The project outcomes compare favorably to the pre-project estimates. Pre-project, the eight potential models were estimated to be financially viable, with NPVs from about 350,000 to 48,800,000 VND per hectare in 2014 VND after considering inflation, and FRRs ranging from 10.5 to 27 percent. Post-project plantation models had a much wider range of NPVs and FRRs, but the weighted averages were about 65,000,000 VND/ha and 23.3 percent. The differences between these results are primarily due to higher opportunity costs of land and labor, but also substantially higher yields and output prices. Returns to labor in the pre-project analysis ranged from about 40,000 to 160,000 VND/day in 2014 terms. This post-project analysis found higher returns to labor ranging from 69,000 to 460,000 VND/day.

18. At the project level, the pre-project economic estimate was ENPV of 176 billion VND in 2004 – equivalent to 457 billion VND in 2014 terms – and ERR of 17.0 percent. Post-project ENPV estimate is significantly higher at 816 billion VND, although the ERR is somewhat lower at 13.2 percent. The higher ENPV is in large part due to the additional financing of the project, which raised IDA funding from US\$ 39.5 to 69.5 million. The post-project ERR is lower in large part because the pre-project ERR estimate assumed a lower cost of labor, and used zero or negative opportunity cost of land, whereas this post-project analysis found that poorly stocked plantations could have positive NPVs at the given discount rate. If opportunity costs had been to zero and also eliminated the benefit of Red Book value, the post-project estimate of ERR would be 17.4 percent.

19. **Benchmarks.** Cubbage *et al.* (2014) reported estimated typical returns for timber plantation species in countries around the world. This provided a good basis to benchmark Vietnam's plantation returns. For comparison purposes, a few species were selected from six different countries (Table 11). Vietnam has shorter rotation lengths. SEV is the best measure of returns per hectare; by that measure, Vietnam has the third highest value among the comparison countries.

Country	Species	Rotation length (years)	NPV (US\$/ha)	SEV (US\$/ha)	FRR (%)
Vietnam	A. mangium	5	1,691	5,294	31.5
Brazil	E. grandis	16	7,712	10,891	27.9
China	Eucalyptus spp.	7	6,723	16,142	33.6
Ecuador	<i>O. pyramidale</i> (balsa)	5	303	949	10.8
New Zealand	Pinus radiata	28	-21	-23	8.0
Uruguay	E. globulus	9	1,281	2,563	17.9
Venezuela	E. urophylla	7	560	1,343	10.4

Table A3.11: Comparison of returns for *Acacia mangium* in Vietnam to select other countries around the world. NPV and SEV (8 percent discount rate).

Source: (Cubbage *et al.* 2014)

IV. Conclusions

20. The Vietnam Forest Sector Development project appears to have been highly successful in financial and economic terms. These results, as well as interviews with project staff and participants indicate that returns have been good and most are satisfied with the results. Returns are still high even when loans are not considered.

21. Some factors that could affect future investment and returns may be considered. First, the risk of future forest fires, typhoons, and diseases and pests should be managed. Some risk management, particularly for forest fires, already exists. Second, part of the reason for high returns is the low cost of labor and high price of chipwood. Exploring alternative management strategies might help mitigate the risk of higher future costs or lower future chipwood prices.

22. Loans increase the plantation forestry profitability and therefore incentivize investment, but the security that Red Book affords and technical assistance have also been important factors in stimulating investment and improving yields. As Vietnam continues post-project, the potential for continued forestry loans to smallholders is being considered. Red Book and technical support services will also be important.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) [′]	Fable	A4.1:	Task	Team	members
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Names	Title		Responsibility/ Specialty
Lending			
Susan S. Shen	Lead Ecologist	EASRD	TTL
Cao Thang Binh	Operations Officer	EASRD	Rural Development
Vinh Quoc Duong	Environment Specialist	EASEN	Environment Safeguards
Dzung The Nguyen	Operations Officer	EASRD	Rural Development
Christopher Gibbs	Rural Coordinator	EASRD	Rural Development
Igor E. Artemiev	Sr. Private Sector Specialist	CIC	Economist
Lars C. Lund	Sr. Social Development Specialist	EASSO	Social Safeguards
Xiaolan Wang	Operations Officer		Rural Development
William R. Sutton	Agriculture Economist	ECSEN	Economist
Hoa Thi Mong Pham	Social Development Specialist	EASSO	Social Safeguards
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Hiet Thi Hong Tran	Thi Hong Tran Procurement Officer		Procurement Management
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Supervision/ICR

Super vision/ Tex				
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Christopher Jackson	Lead Rural Development Specialist	GFADR	TTL	
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Douglas J. Graham Sr. Environment Specialist		GENDR	Environment	
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Ly Dieu Vu	Environment Specialist	GENDR	Environment	
Stefanie Sieber	Environment Economist	GENDR	Environment	
Dahart Cilfarda	Sr. Einensiel Menagement Specialist	CCODD	Financial	
Robert Gilfoyle	Sr. Financial Management Specialist	GGODR	Management	
Mai Phuong Tran	Sr. Financial Management Specialist	GGODP	Financial	
	SI. I maneral Wanagement Specialist	UUUDK	Management	
Ha Thuy Tran	Financial Management Specialist	GGODR	Financial	
	i manetai wianagement Specialist	GOODK	Management	

Cung Van Pham	Sr. Financial Management Specialist	GGODR	Financial Management
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Tuyet Thi Phung	Program Assistant	EASVS	ACS
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Hisham Abdo Kahin	Lead Counsel	LEGES	Legal
Hoi Chan Nguyen	Sr. Counsel	LEGES	Legal
Nina Masako Eejima	Sr. Counsel	LEGES	Legal
Huong Mai Nong Legal Associate		LEGES	Legal

*Leveraged financing for ICR b) Table A4.2: Staff Time and Cost

	Staff Time and Cost (Bank Budget Only)			
Stage of Project Cycle	No. of staff weeks	US\$ Thousands (including travel and consultant costs)		
Lending				
FY00	1.2	2,545		
FY01	10.87	57,564		
FY02	40.92	120,256		
FY03	40.46	178,686		
FY04	57.84	236,684		

Total:	151.29	595,735	
Supervision/ICR			
FY05	16.15	43,416	
FY06	21.35	92,755	
FY07	24.05	97.335	
FY08	12.33	57,217	
FY09	16.44	82,964	
FY10	25.23	84.125	
FY11	21.32	73,662	
FY12	17.92	65,703	
FY13	26.53	92.345	
FY14	20.83	54.589	
FY15	16.04	87,410	
FY16 (as of Aug 15)	0	0.757	
Total:	218.19	832,278	

Annex 5. Beneficiary Survey Results

Not Applicable

Annex 6. Stakeholder Workshop Report and Results

Not Applicable

Annex 7. Summary of Borrower's ICR

Introduction

1. Project "Forest Sector Development Project (FSDP)" sponsored by World Bank located originally in Thanh Hoa, Thua Thien Hue, Quang Nam and Quang Ngai provinces, expanded between June 2012 and March 2015 to Nghe An and Binh Dinh. The Line Agency of the project was Ministry of Agriculture and Rural Development (MARD), implementing agencies were Central Project Coordinator Department, Provincial People's Committees, Vietnam Bank for Social Policies in Thanh Hoa, Nghe An, Thua Thien Hue, Quang Nam, QuangNgai and Binh Dinh.

<u>Project Approval:</u> Approval of Pre-feasibility Report: 6th April 2004 Approval of Feasibility Study Report:27th April 2004

Financing Agreements:

Development Credit Agreement No.3953-VN dated April 4, 2005

Additional Financing signed on June 15, 2012, valid until March 31, 2015 to expand smallholder plantation forestry in the four original provinces and scale-up into two new provinces.

Design Consistency with Government Priorities

2. The project was formulated under the Forest Sector Development Strategy (2001) which focused on protection of crucial watersheds, biodiversity conservation and expansion of production forests. Additionally, the project supported the implementation of the Forest Sector Support Partnership (FSSP), a MARD partnership that established a multi-donor Trust Fund for Forests to support pro-poor and sector wide approaches to forest management, including to finance technical support for implementation of the 5 Million Hectare Reforestation Program (5MHRP) and the management and planning of the network of 121 SUFs for the protection of valuable biodiversity and culturally significant areas. The project was designed to support the nine FSSP Results Areas³⁸: Additionally, the project was consistent with, and supported, the National Biodiversity Action Plan, the National Environmental Action Plan, Vietnam's GEF Strategy (2001-2010) and the World Bank Country Assistance Strategy in Vietnam.

3. The project supported these strategies and results areas through encouraging restructuring of SFEs and creation of FFGs managed by smallholders; promoting tree growing in poor rural areas contributing to diversification of farm economies and improved rural livelihoods, including ethnic minorities; and enhancing managerial and financial management capacity for both forestry and biodiversity conservation.

³⁸ FSSP Results Areas: 1) Effective systems for collaborative planning and monitoring; 2) Policy, legal and institutional framework to harmonize national-provincial policies; 3) Macro level land-use planning; 4) Integrated micro-level (decentralized) land-use planning; 5) Reform of State Forest Enterprises; 6)Sustainable forest management planning and implementation; 7) Sustainable use and conservation of indigenous forest flora and fauna; 8) Integrated system of demand-driven research, extension, education and training; and 9) Marketing and processing of forest products at a sustainable rate.

4. The Vietnamese Government, the World Bank and the Trust Fund for Forests (TFF) provided additional funds for the Forest Sector Development Project in six central coastal provinces from June 2012 to March 2015.

The project components and main outcomes included:

5. <u>Component 1: Institutional Development:</u> Capacity and policy strengthened and institutionalization of technical and management innovations developed and tested in the field, including the establishment of FFGs and independent forest certification to help improve plantation quality, secure market access and ensure the sustainability of plantations. With additional financing, implementation was expanded to include: studies on State Forest Enterprises (SFEs) restructuring, community forestry, and timber markets; additional capacity building for FFGs; additional support to independent forest management certification; and institutional development of the Vietnam Bank for Social Policy (VBSP).

6. <u>Component 2: Smallholder Plantation Forestry:</u> Allocation of forest land, technical assistance to land use planning, plantation design, nursery development, and technical extension strengthened, and smallholder plantations financed through a line of credit with the VBSP to achieve expanded smallholder plantation forest area in 4 provinces. Under the additional financing credit, the implementation program expanded in the original 4 provinces and was scaled up to 2 additional provinces.

7. <u>Component 3: Special Use Forests:</u> Conservation and sustainable use of biological resources in SUFs achieved; and an increased reliability of SUFs funded through Vietnam Conservation Fund (VCF), an innovative national-level financing mechanism pilot to provide small grant packages, on a competitive basis, for conservation-related planning, management and monitoring on-the-ground.

8. <u>Component 4 – Project Management and M&E:</u> Capacity to plan, coordinate, and manage implementation including, monitoring and evaluation of the project at national, provincial, district, commune and SUF levels strengthened. Under the additional financing, component activities were expanded in the 4 original provinces and scaled-up to 2 new provinces.

Achievement of Objectives and Outcomes

9. The project Development Objective of the FSDP is to achieve sustainable management of plantation forests and the conservation of biodiversity in SUFs.

10. In ten years of implementation from August 2005 to March 2015, the Project has achieved important results in project components, particularly in Smallholder Plantation Forests. As of December 31, 2014, 806 FFGs were established representing 26,968 households; 75,658 hectares for 41,511 households were measured and land-use certificates for 62,225 ha were issued to 34,990 participating farmers, which accounted for 109 percent (58,749 ha) of targeted plan. Plantation design was carried out for 81,985 ha for 45,701 households. Smallholder plantings under the project achieved 76,571 ha by 43,743 plantation owners, achieving 108 percent of the 70,300 ha project target. Moreover, the Project also conducted 4 internal assessments to evaluate plantation performance as well as compliance of project plantations with internal standards in sustainable plantation management. Especially, 851.7 ha representing 354 households were group certified by FSC under the project as pilots. More than VND 746.132 billion was disbursed under the VBSP credit

program for plantations which is expected to increase to VND 1,861.9 billion by its closing date.

Institutional Development

11. The project achieved the formulation of the regulatory framework in order to serve smallholder plantation businesses; to manage and provide sustainable finance for SUFs. This project achieved or even exceeded the output indicators of the component:

12. Linking Filed Implementation with Policy development. The project re-evaluated the current regulations, policy guidance, incentives, lessons and best practices for smallholder plantation forest business at the central and provincial levels; the process of land classification and land allocation as well as the management and the ability to provide sustainable finance for SUFs and identify obstacles and potentials to provide recommendations for future actions. The project completed "The study on developing institutions for private plantation forests in 6 FSDP provinces". The on-lending plantation forest model under the Project (GoV borrowed from the World Bank, then through a sub-agreement with the VBSP, made low interest loans available to households to borrow for smallholder plantation forest development) achieved social, environmental and economic benefits in an effective and efficient manner.

13. *Establishing Forests Farmer Groups (FFGs).* The project supported the establishment and development of 806 FFGs in 6 provinces, 806 FFGs were established with participation of 26,968 households. A FFG Operational Manual was prepared to support their effective operations. FFGs shared information among members effectively in information exchange and technical advice for sourcing seeds/seedlings, site preparation, planting, maintenance, protection, harvesting and market options and prices.

14. *Promoting Plantation Forest Certification.* The project supported FFGs to: (i) attain high quality standards for plantation forest management operations in terms of technical, social, economic, and environmental criteria, (ii) obtain certification pilot areas for smallholder plantation forests, (iii) organize themselves for promoting common interests, including forest certification, improved plantation productivity and marketing of plantation timber, and (iv) improve their export market access by wood processing and downstream industries in the project provinces thus increasing the demand for industrial plantation grown timber. The intention is to encourage smallholders to seek group certification of their smallholder plantation holdings. According to international and national certification specialists, an estimated 73.2 percent of smallholder plantation forests met certifiable standards. A FSC certification pilot of 851.7 ha owned by 354 households demonstrated the processes and the benefits of certification to smallholders in gaining market access and 20-30 percent price premiums.

Smallholder Plantation Forests

15. Implementation of Smallholder Plantation Forest included 4 processes and 19 steps organized in a logical order as detailed in the Project Implementation Manual which worked effectively. Smallholder plantation forests under the FSD demonstrated that households could benefit directly and that they were socially, environmentally and economically sustainable. The project undertook participatory site selection, strengthened land allocation and issued LURCs, provided extension services, plantation design service and other plantation services and supported farmers in loan application so that they had money to invest

in plantation forest development. The project helped smallholders to be aware of benefits from project participation and they joined voluntarily. Moreover, when participating in the project, the local people not only benefited from preferential loans, technical assistance and forestry extension services but they also got assistance in receiving LURCs for the project plantation area. This is the important guarantee to the local people.

16. During implementation, the project adjusted Forestry Extension Proposals to be appropriate to prevailing conditions in the provinces. Moreover, the Project also provided support to ethnic minorities through Ethnic Minority Development Plans which helped raise their awareness, change their farming techniques and develop new livelihoods models towards sustainability.

Special Use Forests

The SUF component was implemented nationally and included two sub-components: 17. (i) Vietnam Conservation Fund (VCF) establishment and operations; (ii) SUF planning and implementation. The component successfully established and operated the VCF as an effective conservation funding mechanism. Enhanced planning and management was achieved in 69 SUFs, which received 100 grants in accordance with Operational Management Plans; Social Survey Reports; Conservation Needs Assessments; in collaboration with local communities in Benefit Sharing Mechanisms (BSMs). 30 SUFs had Operational Management Plans that met international standards. METT scores generally demonstrated improved management standards over the duration of the project. Biodiversity in SUFs were maintained, based on: (a) changes in the number of endemic species and the scope of natural resources; (b) changes in flora of SUFs and in land use in priority areas within and between SUFs and other natural forests; (c) changes in volume of harvested nontimber forest products. Effective models were introduced to local communities on the comanagement of forest resources through the enhancement of knowledge and support to the sustainable use of forest resources and biodiversity conservation.

Project Management, Monitoring and Evaluation

18. The project management sub-component supported institutional capacity building necessary to plan, coordinate and manage implementation of the overall project at a national, provincial, district and commune levels. The project enhanced planning and management skills as well as expertise to produce quality and timely annual work plans and budget; anticipate and resolve implementation problems quickly; and make adjustments based on implementation progress and feedback.

19. The M&E sub-component provided support for the detailed design, establishment and implementation of an internal M&E to track technical and financial project progress and performance at central and provincial level, district and commune level including assessment of planned work program outputs against actual performance (target numbers and location, quality, timelines). The M&E system also enabled monitoring of the effectiveness of implementation processes and incorporation of lesson learned into future planning processes and linked to the FSSP monitoring system. This sub-component financed consulting services to carry out base-line studies, short-term technical assistance for the design, establishment and testing of the M&E system; training and workshops; M&E related equipment, travel costs of project staff and incremental staff costs.

Implementation and Impacts

20. Organization (institutional, VBSP, VCF): The FSDP was seen by provinces and economic experts as the most effective project in supporting smallholder plantation forest development. One of the important factors contributing to this success was the organization, established on a system with close and scientific operating regulations from central to provincial, district, and commune levels. The project often received significant support, attention, and timely guidance from MARD, Provincial People's Committees, Management Board of Forestry Projects, DARDs, other authorized agencies, departments, and local governments in provinces, and the World Bank. From the outset, the organizational structure of the project built up a sound apparatus to control and to implement project activities. The appointment Project Steering Committee members, in the PPMUs at all levels, and Commune Working Groups at commune levels under the project proved to be a suitable arrangement of human resources. The project also created close connection with related authorities in land allocation and issuance of LURC and in disbursement of preferential credit for plantation forests.

21. Appropriateness: Activities and objectives of the project were appropriate for achieving Vietnam's targets and strategies on forestry development and agricultural restructuring, and in phase with the policy of private afforestation in Vietnam as well as the requirement of international economic integration. The institutional development component established a central to a local level management apparatus that allowed the coordination and implementation of the project. Components on smallholder plantation forests; and management and M&E enabled afforestation activities and other activities to be implemented in a systematic manner that was appropriate with socio-economic development strategies at national, provincial, and local levels, and other development strategies of the sector. The project supported institutional and policy strengthening to facilitate forestry development.

- 22. *Effectiveness*: Over the past 10 years, objectives and outcomes of the project have met or exceeded planned indicators:
 - Established 806 groups of FFGs with 26, 968 households;
 - Implemented 446 activities under ethnic minority development plans in project communes;
 - Carried out land measurement for 75,658 ha of 41,511 households; of which, completed land allocation for 64,376 ha of participating 34,990 households, reaching 109 percent above the overall project target (58,749 ha)
 - Carried out plantation design for 81,985 ha owned by 45,701 households;
 - Established 76,571 ha of plantation for 43,743 households, reaching 108 percent of the project target (70,300 ha);
 - Conducted 4 internal assessment of plantation forest
 - Completed FSC's forest certification for 851.7 ha of 354 households
 - Completed loan disbursement of more than VND 746.132 billion for plantation forests of households; the total disbursement of the project is estimated at VND 1,861.9 billion, accounting for more than 99.5 percent of the total project investment fund.

23. *Efficiency:* The project's efficiency was shown through its fund usage, timely achievement of planned targets with lowest costs and highest performance. The actual FSDP implementation in original provinces Thua Thien Hue, Quang Nam, Quang Ngai, and Binh

Dinh showed that all project's activities were designed scientifically and attracted close cooperation from farmers and involved agencies to obtain significant achievement. In the two new provinces of Nghe An and Thanh Hoa, the project was only implemented from 2012 – 2015, which was insufficient to grow a full rotation, hence, the 3 year period is insufficient to make a full assessment on the economic efficiency from the plantation forests. However, many other activities under project components implemented in these provinces have been rated as very effective and efficient, such as training for project farmers and staff, supporting plantation design, land allocation and LURC issuance, credit disbursement for plantation forests, nursery upgrading; access track upgrading, and procurement.

24. Socio-economic: Prior to the FSDP's implementation, afforestation was done with insufficient planning, management and monitoring, and particularly with outdated methods. Land availability included poor quality soil, most of which was abandoned area. Besides, support from authorized agencies were limited, thus, forestry production development remained unstable. Households planted forests spontaneously in form of extensive farming with limited investment and outdated farming techniques and poor plantation management. Moreover, state investment in plantation forestry was limited and not in phase with the role and functions of industry. The FSDP introduced the standards and best practices for sustainable forest management, supported sustainable development of the forest industry, improved income of forestry farmers, generated employment for local people, and increased forest cover to reduce the pressure of using wood and firewood from natural forests. Smallholder plantation forestry attracted interest and support from governments at different levels, particularly local people (the main beneficiary) who became actively involved in the Project. Over 10 years of implementation (from 2005 to 2014) in four provinces of Thua Thien Hue, Quang Nam, Quang Ngai, and Binh Dinh, and three years (2012 – 2015) in two provinces of Thanh Hoa and Nghe An, the project demonstrated positive financial returns to smallholders and a significant contribution to general socio-economic development in the provinces.

25. *Forest Sector:* The project adopted a participatory approach in all processes. At each implementation stage farmers and other stakeholders were consulted and engaged in planning and implementing project activities in an effective manner. The project respected participant rights, and promoted their roles and responsibilities. The project also helped allocate forestry land, and provided plantation designs for households free of charge, hence land was managed more effectively, and farmers were more responsible on the land for which they had a legal land-use right. Thereby, farmers felt more secure to invest into more intensive plantations which contributed to improvement of economic, social and environmental benefits for forestry farmers.

26. *Environment:* The project made important contributions to increase forest cover, and decrease soil erosion. Plantation forests improved quality of forest land and enriched soil fertility. Moreover, plantations created environmental values such as protection of soil and water resources, carbon sequestration, reduced GHG emissions and mitigated climate change effects. FSDP implementation helped raise local people's awareness on environmental protection through training carried out under the project.

27. Project implementation in the 6 provinces complied with best practices and technical processes, thus, brought positive impacts on the forest and land environment. Traditional cultivation of local people such as burning in vegetation clearance was changed. Debris in vegetation clearance was retained on sites as a source of nutrient and provided soil cover and helped in reducing soil erosion and reduced water runoff, thus improved soil quality and

plantation productivity. Survey findings of the evaluation team verified these findings. Training courses were held on silvicultural techniques and the prevention and control of forest fire, pests and diseases for thousands of households in the project region. Many signboards on fire prevention and control, forest protection, and forest fire watch towers were built and many access tracks were upgraded. Smallholder plantation forest development was supported by plantation design, land use right certificates, low interest loans through the VBSP and the provision of extensions services and training that allowed householders to feel secure about investing in long term plantation development. Slash-and-burn and shifting cultivation of ethnic minorities was reduced as a result.

28. *Sustainability:* FSDP was designed to provide policy, regulatory and institutional frameworks to support smallholder plantation forest development within the project and set the foundation for doing so into the future. The VBSP revolving fund will be available until 2036, which, when supported by on-going LURCs, provision of improved seedlings from certified nurseries and the provision of quality extension and technical advisory services will ensure that smallholder forestry can be replicated or scaled-up into new provinces and expanded in existing provinces. The market based approach will help in ensuring the sustainability of the Project. After 10 years of implementation in the 6 central provinces, the FSDP was viewed as highly successful and sustainable for smallholder plantation forest investors that can be continued in the long term.

Lessons Learned

29. Lessons learned from the project include:

- *Harmony in Objectives:* The FSDP was considered successful due to the harmony between the goals of the Vietnamese Government, the beneficiaries and the World Bank (WB).
- Scientific and Effective Design: The organization of the project was designed in a scientific manner and adopted an effective organizational mechanism from central to provincial to district to commune to smallholder levels. Coordination between the relavant agencies and organizations, especially investors, management agencies and bank was effective at all levels. FSDP's staff were well qualified, responsible and dedicated to the course of plantation forests and sustainable forest development.
- Appropriate Policies and Mechanisms: Policies supporting participating households with LURCs affirmed their land-use rights and access to low interest loans from VBSP provided the security for long term investment in plantation forests to achieve good financial benfits by complying with plantation techniques and market signals on species, management and rotation choices. The active participation of farmer guaranteeing the success of the FSDP
- Active Participation and Self-Reliance of Smallholders: The project promoted the initiative, creativity and self-reliance of smallholders by encouraging voluntary participation in in smallholder plantation forest development and the economic benefits. The FSDP demonstrated longer rotation pilots that resulted in more smallholders adopting this approach to achieve higher benefits from longer rotation plantations.
- *Role of Monitoring and Evaluation*: Formulation of M&E is an integral part of project management, feed-back and decision-making process to help project management and funding agency to measure the technical, operational and financial delivery performance (quantity and quality) to guide the project to

achieve the desired impacts, outcomes and target indicators in an effective and efficient manner. The preparation of a M&E Handbook provided the basis for project staff at all levels to perform M&E tasks from the field staff to help the CPCU, PPMUs and DPMUs in project supervision and management to improve project performance and compliance.

Shortcomings

- 30. Limitations revealed during the Project implementation include:
 - The levels for achievement of forest certification, planting indigenous trees, and adopting longer-rotation sawlog plantations were overly optimistic in light of the poverty faced by the poor, marginalized and ethnic minority participants selected in the project. Some households planted at higher densities than prescribed, without understanding the implication for health, growth and quantity and quality of harvest yields.
 - In some instances land allocation and issuance of land use rights certificates (LURC) were delayed due to overlapping boundaries; variations between actual cultivated and allocated areas; delayed district and commune administrative procedures; availability of cadastral officials at commune and LURC Registry Office; and insufficient leadership and priority in issuing LURC for participating farmers. In other instances LURCs issued before the project were subject of some form of sale, transfer, gift, without the official owner certificate which required time to complete legal documents. In other instances households had used issued LURCs as collateral to banks and could not afford to pay to release them; some households after planting forests lived far from their homes seeking work in other provinces; some ID cards were incorrect or lost; and some participants in smallholder plantation forestry were not register residents in the commune.
 - In new provinces of Nghe An and Thanh Hoa difficulties in the credit disbursements by VBSP to households were experienced due to a lack of knowledge on the procedures for applications.
 - Some FFGs lacked leadership and did not operate as effectively as planned.

Recommendations

31. Designing new forestry development projects: There have been a number of outstanding results achieved during 10 years of FSDP implementation through effective support from the Government in issuance of LURCs, availability of suitable production forestry models, access to low interest loans from VBSP, provision of extension and technical support services and access to markets that made it possible for farmers in rural areas to reduce poverty by forestry plantation investment. However, it is essential to formulate this new approach into a new project on forestry development in order to achieve sustainable forest management and to provide better benefits to plantation forest investors and production forest business.

32. The new project in forestry development must be consistent with the new development objective and the specific characteristics of the forest sector. China, the world's largest importer and exporter of wood products is both a major buyer and a major competitor for Vietnam timber market. The goal of the new forestry development project will be to contribute towards building a more competitive and efficient forest sector in Vietnam. Thus, the new project should focus on support to:

- Equitization of approximately 50 potential State Forest Companies;
- Land use planning, land allocation and issuance of LURC for households, household groups and communities for forest management;
- Small and medium sized forestry companies and enterprises to strengthen their capacities in wood processing and development of forest product markets;
- Establish a forestry production method that encourages cooperation and linkages among forest investors (establishing forestry cooperatives or forest farmer groups); cooperation between farmers and small and medium forestry companies and enterprises, to improve plantation quality and increase value-added forestry products.
- Preferential credit for households, and small and medium sized forestry companies and enterprises to cultivate, improve and enhance the quality of plantations and to plant about 100,000 ha and convert 20,000 has of chipwood to sawlog plantations;
- Develop accredited nurseries capacity for high quality seedling production;
- Manage 15,000 has of production natural forest community co-management, contribute to stabilizing living of communities depending on the forest and ensure sustainable development of natural forest resources towards forest certification;
- Pilot sustainable forest management certification for approximately 7,000 hectares of plantation forest and community forest;
- Strengthen the capacity in developing policy and mechanisms: support forestry companies after equalization; support preferential credit; create linkage among cultivators in the project area; joint venture between cultivating households with forestry companies in the project area;
- Build small-scale infrastructure work to improve the livelihoods of people in the project area: upgrade access tracks, build fire watch towers, sign boards on forest fire prevention, and forest protection and management stations; and
- Promote and scale-up outcomes achieved by the FSDP as well as other forestry development projects implemented in recent years both in material facilities and human resources. It is suggested that MARD play the role of the project line agency and other Province's People Committee be sub-line agencies; project owners and sub-project owners be MBFP and DARD, respectively.

33. *The World Bank (WB):* To draw experiences and lessons learned from the FSDP project in scaling-up within and beyond Vietnam and to incorporate into new project designs.

- Support the FSDP in prolonging and carrying out procedures for project completion; enhancing the project results achieved in recent years; successfully completing the community forest management model and replicating this model through launching a workshop to disseminate experiences nationwide; and sharing experiences and lessons learned in the FSDP's implementation to other provinces in Vietnam and to other countries with the similar conditions to those in Vietnam;
- Assist in designing new projects by providing experienced specialists who have thorough understanding of Vietnam forestry development; the core of the proposed project is to provide solutions to reform state forestry companies and restructure and develop the forestry sector sustainably; and

• Provide funding for the new forestry projects in which the qualified staff of FSDP and other forestry development projects could be utilized in the most effective way.

34. *Government of Vietnam:* In order to enhance and replicate the positive results achieved from the FSDP, in future, the Government of Vietnam is encouraged to focus on the following activities:

- Assign an appropriate organization or agency to take responsibility to design a new forestry development project with the basic goal of restructuring and sustainably developing forests through radical reform of State Forest Companies, establishing efficient and sustainable forestry development models;
- Arrange supplementary funds and allow MARD to continue Project implementation for about 2 more years in at least Thanh Hoa and Nghe An provinces which have been implementing the project for only 2 years. This activity will help in addressing the remaining issues of the project, providing solutions for the efficient use of revolving funds from WB and the project staffing which have been formed in the last 10 years;
- Carry out research and issue relevant policies on forest development such as intercropping the indigenous trees into production forest; issue specific policies on plantation forests in mountainous and remote areas; promote market diversification and services supporting smallholder plantation business to facilitate households' participation in the forest sector connection network.

35. *Ministry of Agriculture and Rural Development:* To lead the FSDP project settlement; finalize on-going provision of low interest loans through the VBSP with associated technical support; and guide preparation of the forestry development project. Recommended actions:

- Assist project management agencies at province and district levels in the FSDP settlement; provide instructions on maintaining and efficiently utilizing officials of FSDP and other forestry development projects;
- Finalize the supportive mechanism for credit disbursement via VBSP beyond the Project; and
- Lead the preparation of the new forestry development project to reform management of SFEs, forest sector restructure and sustainable development.
- 36. *Provincial People's Committees:* Recommended actions:
 - Direct and accelerate issuance of LURCs for households in districts that were previously granted with group LURCs; allocate sufficient counterpart funds to PMUs at provincial and district level to complete remaining work in the Project;
 - Support MARD in developing new projects on forest sector restructuring and sustainable development;
 - Raise awareness of smallholder plantation forest investors to diversify investments, intercrop with other tree species in timber plantations; practice animal husbandry to improve livelihoods and minimize risks in the context of climate and market changes;
 - Support FFGs in building internal cooperation capacities and forest management institution in the group; formulating the community internal regulations regarding

the receiving, use and repayment of loans; building regulations on forest resources development and environmental protection.

- 37. *Vietnam Bank for Social Policies:* Recommended actions:
 - Coordinate with the CPCU to issue a long-term policy and mechanism for revolving loans to increase number of households who could join in the plantation forest business.
 - Develop and implement disbursement plans, carry out payment for related activities.
 - Carry out verification/inspection of established plantation area and finish disbursements for the 2014 planting season.

Annex 8. Comments of Co-financiers and Other Partners/Stakeholders

Not applicable

Annex 9. List of Supporting Documents

9a: Reference Documents

ACIAR. 2014. *Sustainable Plantation Forestry in South-East Asia*. ACIAR Technical Reports 84 by C.E. Harwood and E.K.S. Nambiar, CSIRO.

Cubbage, F., Koesbandana, S., Mac Donagh, P., Rubilar, R., Balmelli, G., Olmos, V. M., Kotze, H. (2010). *Global timber investments, wood costs, regulation, and risk.* Biomass and Bioenergy, 34(12), 1667-1678.

Dalmacio, M. (2012). *Impact of Higher Interest Rate on Profitability of Smallholder Forest Plantation*. Hanoi, Vietnam: Ministry of Agriculture and Rural Development, FSDP Central Project Management Board.

Forest Stewardship Council. 1996. FSC International Standard: FSC Principles and Criteria for Forest Stewardship, FSC-STD-01-001.

Frey, G.E.; Ha, T.T.T.; Davis, R.R.; Dzung, N.V. and Chien, P.Q. 2015. Financial and Economic Analysis of a Smallholder Forest Plantation Project in Vietnam. A Report for the World Bank.

Gittinger, J. P. 1982. *Economic Analysis of Agricultural Projects (Second Edition)*. Baltimore: John Hopkins University Press.

Harwood, C. E. et al. 2015. *Genetic Improvement of Tropical Acacias: Achievements and Challenges*. Paper published in Southern Forests: Journal of Forest Science, DOI: 10.2989/20702620.2014.999302

Kim Hoang Ltd. September, 2011. *Report on Growth and Yield Tables for Smallholder Forest Plantations*, FSDP.

Lagman-Martin, A. 2004. *Shadow Exchange Rates for Project Economic Analysis: Toward improving practice at the Asian Development Bank.* ERD Technical Note No 11, 44pp, Asian Development Bank, Manila, the Philippines.

Ministry of Agriculture and Rural Development. August, 2003a. Environmental Impact Assessment and Impact Management and Monitoring Plan, FSDP.

Ministry of Agriculture and Rural Development. August, 2003b. *Environmental Protection Guidelines for Plantation Management*, FSDP.

Ministry of Agriculture and Rural Development. August, 2003c. *Resettlement Policy Framework*, FSDP.

Ministry of Agriculture and Rural Development. August, 2003d. *Ethnic Minority Development Strategy*, FSDP.

Ministry of Agriculture and Rural Development. June, 2004a. *Operational Manual, Vietnam Conservation Fund*. FSDP.

Ministry of Agriculture and Rural Development. December, 2004b. *Project Implementation Manual*, FSDP.

Ministry of Agriculture and Rural Development. January 2007a. *Mid-Term Review Report No. 1.* Submitted to the World Bank by the Central Project Coordination Unit. Reporting Period: 1 August 2005 to 31 December, 2006.

Ministry of Agriculture and Rural Development. May, 2007b. *Mission Report, Senior Forest Certification Specialist, Smallholder Plantation Forestry*, FSDP.

Ministry of Agriculture and Rural Development. December, 2007c. *Forest Farmer Groups, Business Plan*, Smallholder Plantation Forestry, FSDP.

Ministry of Agriculture and Rural Development. February, 2008a. Smallholder Plantation Design. Silvicultural Plantation Models. Technical Assistance Package, FSDP.

Ministry of Agriculture and Rural Development. February, 2008b. *Operational Guidelines* for FSC Group Certification. Volume 1, Setting up and Managing Farmer Forestry Groups, FSDP.

Ministry of Agriculture and Rural Development. March, 2008a. Specific Measures to Improve Planting Material of Commercial Tree Species in Central Vietnam, FSDP.

Ministry of Agriculture and Rural Development. March, 2008b. *Nursery Accreditations Baseline Study*, FSDP.

Ministry of Agriculture and Rural Development. March, 2008c. FSC Group Certification. 12 Concise Steps to Obtain Certification, FSDP.

Ministry of Agriculture and Rural Development. March, 2008d. Operational Guidelines and Toolkit for FSC Group Certification. Handbook for Group Managers, FSDP.

Ministry of Agriculture and Rural Development. March, 2008e. *Silvicultural Demonstration Plots, Design Proposal*, FSDP.

Ministry of Agriculture and Rural Development. March, 2008f. *Plantation Progress Monitoring, Growth and Yield*, FSDP.

Ministry of Agriculture and Rural Development. April, 2008g. *Assessment of Ethnic Minority Development Plans*, FSDP, Formulated in Thua Thien Hue, Guang Nam, Quang Nai and Binh Dinh, *Main Findings and Recommendations*, FSDP.

Ministry of Agriculture and Rural Development. May, 2008h. Updated Costs of Establishing Plantation Models in the FSDP Area, Main Findings and Recommendations, FSDP.

Ministry of Agriculture and Rural Development. May, 2008i. *Silvicultural Techniques Field Skills Guidelines*, FSDP.

Ministry of Agriculture and Rural Development. June, 2008j. Forest Products Market Outlook. Main Findings and Recommendations, FSDP.

Ministry of Agriculture and Rural Development. June, 2008k. *Benefits and Risks of Smallholder Forest Plantations. Main Findings and Recommendations*, FSDP.

Ministry of Agriculture and Rural Development. July, 2008l. Updated Costs of Establishing Plantation Models in the FSDP Area, FSDP.

Ministry of Agriculture and Rural Development. August, 2008m. *Converting Silvicultural Regimes, Models 1/2 to Model 4. Main Findings and Recommendations*, FSDP.

Ministry of Agriculture and Rural Development. September, 2008n. *Status and Application of Surveying in FSDP. Issues, Conclusions and Recommendations*, FSDP.

Ministry of Agriculture and Rural Development. September, 2008o. Formation of Farmer Forestry Groups, Smallholder Plantation Forestry, FSDP Report No. 42.

Ministry of Agriculture and Rural Development. December, 2008p. Surveying and Mapping Contracts for FSDP. Standards, Procedures and Guidelines, FSDP.

Ministry of Agriculture and Rural Development. January 2009a. *Mid-Term Review Report No. 2.* Submitted to the World Bank by the Central Project Coordination Unit. Reporting Period: 1 January 2007 to 31 December, 2008.

Ministry of Agriculture and Rural Development. March, 2009b. *Planting Material Statistics*, 2005-2008, FSDP. Development, Status and Trends, FSDP.

Ministry of Agriculture and Rural Development. May, 2009c. Seed Source Strategy, FSDP. Context, Strategy and Challenges, FSDP.

Ministry of Agriculture and Rural Development. May, 2009d. *Financial Analysis of Short Rotation Plantations*, FSDP.

Ministry of Agriculture and Rural Development. May, 2009e. *Strengthening Extension Services to Forest Plantation Farmers*, FSDP.

Ministry of Agriculture and Rural Development. August, 2009f. *Observation on Mixed Species Plantation on FSDP Areas*, FSDP.

Ministry of Agriculture and Rural Development. September, 2009g. Design of Mixed Species Forest Plantations for Smallholders, FSDP.

Ministry of Agriculture and Rural Development. October, 2009h. Evaluation of 2008 Nursery Upgrading Effect. Main Findings and Recommendations, FSDP

Ministry of Agriculture and Rural Development. January 2010a. Development of a Standard Format for the Ethnic Minority Development Plans, FSDP.

Ministry of Agriculture and Rural Development. March, 2010b. Integration of Landscape Planning and Project Implementation Manual. Project Implementation Manual Revision – Commune Planning, FSDP.

Ministry of Agriculture and Rural Development. April, 2010c. National Ethnic Minority and Social Impact Specialists Final Report, FSDP.

Ministry of Agriculture and Rural Development. April, 2010d. *Institutional Development Component, Status Summary*, FSDP.

Ministry of Agriculture and Rural Development. May, 2010e. *Handbook for FSC Group Certification, Smallholder Plantation Forestry*, FSDP.

Ministry of Agriculture and Rural Development. May, 2010f. First Internal Assessment Report on Smallholder Plantation Forestry, FSDP.

Ministry of Agriculture and Rural Development. January 2011a. *Revised Project Implementation Manual for Additional Financing and Extension*, FSDP.

Ministry of Agriculture and Rural Development. September, 2011b. *Resettlement Policy Framework, for Additional Financing and Extension*, FSDP.

Ministry of Agriculture and Rural Development. October, 2011c. *Environmental Impact Assessment and Updated Environmental Management and Monitoring Plan for Additional Financing and Extension*, FSDP.

Ministry of Agriculture and Rural Development. October, 2011d. Social Impact Assessment of Smallholder Forest Plantations in Nghe An and Thanh Hoa Provinces for Additional Financing and Extension, FSDP.

Ministry of Agriculture and Rural Development. October, 2011e. *Revised Ethnic Minority Development Strategy for Additional Financing and Extension*, FSDP.

Ministry of Agriculture and Rural Development. October, 2011f. *Technical Guidelines for the Management of FSC Certified Forest Plantations*, compiled by Pasi Miettinen, Senior Forest Certification Specialist an Le Thuy Anh, National Forest Certification Specialist.

Ministry of Agriculture and Rural Development. October, 2011g. Updated Environmental Protection Guidelines for Plantation Management, Additional Financing and Extension, FSDP.

Ministry of Agriculture and Rural Development. November, 2011h. Second Internal Assessment on Forest Certification and Plantation Performance, FSDP.

Ministry of Agriculture and Rural Development. March 2012a. *Review of Smallholder Plantation Models*, FSDP, by Marcelino V. Dalmacio, Senior Tree Plantation Specialist/Team Leader, FSDP.

Ministry of Agriculture and Rural Development. March 2012b. *Best Practices and Lessons Learned in Farm Forest Management*, FSDP, by Marcelino V. Dalmacio, Senior Tree Plantation Specialist/Team Leader, FSDP.

Ministry of Agriculture and Rural Development. March 2012c. *Site Quality, Yield and Profitability of Smallholder Forest Plantations in Central Coastal Regions*, by Marcelino V. Dalmacio, Senior Tree Plantation Specialist/Team Leader, FSDP.

Ministry of Agriculture and Rural Development. May 2012d. *Forest Plantation Work Norms*, by Marcelino V. Dalmacio, Senior Tree Plantation Specialist/Team Leader, FSDP.

Ministry of Agriculture and Rural Development. April, 2013a. *Draft Borrower Completion Results Report, Special Use Forest Component*, Vietnam Conservation Fund, FSDP.

Ministry of Agriculture and Rural Development. May, 2013b. Evaluation of Nurseries Selected for FSDP Plantations in 2013, FSDP

Ministry of Agriculture and Rural Development. September, 2013c. *Third Internal* Assessment on Expansion of FSC Groups and Plantation Performance, FSDP.

Ministry of Agriculture and Rural Development. December 2014. *Fourth Internal Assessment on Expansion of FSC Groups and Plantation Performance*, FSDP.

Ministry of Agriculture and Rural Development. March, 2015a. Draft Borrowers Completion Report, Submitted to the Central Project Coordination Unit, FSDP.

Ministry of Agriculture and Rural Development. March, 2015b. *Cultivating Forest Plantations: A Sustainable Way to Reduce Poverty in Vietnam*, FSDP.

Ministry of Finance. 2012. Subsidiary Loan Agreement, Additional Financing for the FSDP, between the Ministry of Finance on Behalf of the Socialist Republic of Vietnam and the Vietnam Bank for Social Policies, Credit Number 5070-VN.

Sadanandan Nambiar, E. K., et al. January, 2015. *Acacia Plantations in Vietnam: Research and Knowledge Application to Secure a Sustainable Future*. Paper published in Southern Forests: Journal of Forest Science, DOI: 10.2989/20702620.2014.999301

The Government, Socialist Republic of Vietnam. August, 2006. Prime Ministerial Decision No. 186/2006/QD-TTg. Promulgating the Regulation on Forest Management.

The Government, Socialist Republic of Vietnam, February, 2007a. Decision No. 18/2007/QD-TTg, promulgated by the Prime Minister on the *Vietnam Forestry Development Strategy*, 2006-2020.

The Government, Socialist Republic of Vietnam, 2007b. Vietnam Forestry Development Strategy, 2006-2020.

The Government, Socialist Republic of Vietnam. December, 2010. Decree No. 117/2010/ND-CP on the Organization and Management of the Special Use Forest System.

The Government, Socialist Republic of Vietnam. February, 2012. Prime Ministerial Decision No. 126/QD-TTg. Decision on Pilot Study on Benefit Sharing Mechanism in management, protection and development of Special Use Forests.

Tordoff, A. W., Tran Quoc Bao, Nguyen Duc Tu and Le Manh Hung, eds. (2004) Sourcebook of existing and proposed protected areas in Vietnam. Second edition. Hanoi: BirdLife International in Indochina and the Ministry of Agriculture and Rural Development

VAPECO. February 2013. Report on Project Impact Assessment, FSDP.

Vietnam Bank for Social Policies. 2005. Credit Manual for Lending to Plantation Forest Households, FSDP.

Vietnam Bank for Social Policies. January, 2013. Credit Manual for Lending to Plantation Forest Households, FSDP.

World Bank. February, 2002a. Project Concept Note, FSDP

World Bank. 2002b. Country Assistance Strategy for the Socialist Republic of Vietnam.

World Bank. May, 2004. Project Appraisal Document, FSDP, Report No: 26767-VN.

World Bank. April, 2005. *Development Credit Agreement for the FSDP between the Socialist Republic of Vietnam and the International Development Association*, Credit Number 3953-VN.

World Bank. 2006. Country Assistance Strategy (2006-2010) for the Socialist Republic of Vietnam

World Bank. March 2011 and March 2012. Restructuring Documentation, FSDP

World Bank. February, 2012a. *Project Paper on a Proposed Additional Credit in the Amount SDR 19.00 million to the Socialist Republic of Vietnam for the FSDP*, Report No: 67196-VN.

World Bank. June 2012b. *Financing Agreement, Additional Financing Agreement for the FSDP between the Socialist Republic of Vietnam and the International Development Association*, Credit Number 5070-VN.

World Bank. Various. Aide Memoires, Management Letters, and Supervision Mission Reports, FSDP.

World Bank. Various. Implementation Status and Results Reports, (2005-2015), FSDP.

The World Bank. July 2014a. *Implementation Completion and Results Report Guidelines*, compiled by OPCS.

World Bank. August, 2014b. *Guidelines for Reviewing World Bank Implementation Completion and Results Reports. A Manual for Evaluators.*

World Bank. 2015a. *World Development Indicators. International Monetary Fund, International Financial Statistics and Data Files.* Consumer price index (2010 = 100) FP.CPI.TOTL. Retrieved 23 July 2015, from

http://data.worldbank.org/indicator/FP.CPI.TOTL

World Bank. 2015b. Tarrif Rate, Applied, Weighted Mean, All Products TM.TAX.MRCH.WM.AR.ZS. *World Bank staff estimates using the World Integrated Trade Solution System*. Retrieved August 4, 2015 from http://data.worldbank.org/indicator/TM.TAX.MRCH.WM.AR.ZS

WWF-World Bank, 2007. Management Effectiveness Tool: Measuring Progress at Protected Area Sites. Second Edition, ISBN 978-2-88085-281-8, WWF, International, Gland Switzerland

Examples of ICR Reports

World Bank. June, 2007. ICR Report for the Second Rural Transport Project, Socialist Republic of Vietnam.

World Bank. June, 2009. ICR Report for the Second Community Forestry Project, Mexico.

World Bank. September, 2010. ICR Report for the Andhra Pradesh Community Forest Management Project, India.

World Bank, June, 2012. ICR Report for the Coral Reef Rehabilitation and Management Project (Phase II), Republic of Indonesia.

9b: GOV Legal and Regulatory Framework Related to FSDP

GOV Instrument	Date	Comment
Smallholder Plantation Forests		
Prime Minister Decision No. 120/QD-TTg Forest		To mitigate climate change in
Protection and Development in Coastal Areas in	2015	coastal and mangrove forests
Response to Climate Change, 2015-2020		
Decree No. 118/2014/ND-CP on Arrangement,	Dec 17	To assist the GOV to implement
Reform and Development, and Enhancement of	2014	their Forestry Sector
Operational Efficiency of Agricultural and Forestry		Restructuring Plan
Companies		_
Prime Minister Decision No. 1759/TTg-QHQT on	Sep 30	To scale-up FSDP in 2 new
Additional Funding of US\$30 million	2011	provinces and extend in original
		4 provinces
VBSP's Decision No. 15/QĐ-HĐQT on at Risk	Jan 27	To clarify VBSP procedures for
Loans	2011	at risk loans
Prime Minister Decision No. 18/2007/QD-TTg	Feb 5	To implement Vietnam Forestry
Procedures to implement Forestry Development	2007	Development Strategy, 2006-
Strategy, 2006-2020		2020.
Special Use Forests		
Decision 126, on Benefit Sharing Mechanisms in	Feb,	To pilot BSMs for participatory
three SUFs	2012	co-management in 3 SUFs
MONRE Circular 22. Criteria to Identify Invasive	2012	To identify and list invasive
Exotic Species		exotic species
MARD Circular 80, November 23, 2011, Guidance	Nov	To provide a guide on payment
on Payment for Forest Environmental Services;	23	for forest environmental
	2011	services

MARD Circular 78 on Implementation of Decree 117	Nov 11 2011	To implement Decree 117, SUF planning and management tools
Decree 117 on SUF Management and Planning	Mar 1 2011	To implement SUF/VCF organization, planning and management tools, particularly OMPs
Decree 99/2010/ND-CP. Policy for Payment for Forest Environmental Services;	Sep 2010	To clarify policy for Payment for Forest Environmental Services
Decree 65/2010/ND-CP. Articles for SUF biodiversity conservation planning, zoning and monitoring and reporting in compliance with biodiversity Law	June 2010	To clarify biodiversity conservation planning, zoning, monitoring and reporting in accordance with the Biodiversity Law
Law on Biodiversity	July 2009	Law detailing biodiversity conservation

Annex 10: Management Effectiveness Tracking Tool (METT) for SUF Component

The METT³⁹ is a monitoring tool used by managers to provide a quick overview and report progress in their achievement of protected area management effectiveness. It is obligatory for GEF protected area projects to use the METT tool three times during the project's lifespan. The METT is most useful for tracking progress over time in individual sites or closely related group of sites rather than tracking progress between sites with very different geographic, institutional, social, environmental and economic settings.

The METT is a simple and rapid site assessment tool to provide useful datasets on protected areas and to identify and track local threats and rank their impacts. On repeat assessments, retaining some of the team from prior assessments is important for consistency. The METT has standardized datasets for i) Reporting Progress at Individual Protected Area Sites; and ii) Detailing Protected Area Threats. Additionally an Assessment Form allows SUF MBs to assess critical issues and assess scores in accordance with agreed criteria. The comparison of the datasets and assessment scores over time for individual sites allows a measure of management effectiveness.

The checklist of SUF related issues assessed in the METT included:

- Legislation
- Regulations
- Law enforcement
- Objectives of management
- Scope and design
- Boundary demarcation
- Management plan, implementation and review
- Resource inventory
- Access and resource use
- Survey and research
- Active resource management
- Staff employed and adequacy
- Staff training to meet objectives
- Budget sufficiency and security
- Budget to meet critical management needs
- Equipment sufficiency
- Equipment maintenance
- Education and awareness program
- Planning for land and water use
- Cooperation with adjacent land and water users
- Local community participation in planning and management
- Indigenous people participation in planning and management
- Economic benefits to local communities

³⁹ Refer to: WWF-World Bank, 2007. Management Effectiveness Tool: Measuring Progress at Protected Area Sites. Second Edition, ISBN 978-2-88085-281-8, WWF, International, Gland Switzerland

- Monitoring and evaluation procedures
- Adequacy of visitor facilities
- Role of commercial tour operators
- User fee charges and their contribution to management
- Condition of SUF special PA values

Under each SUF related issue, predetermined criteria indicated different levels of management effectiveness. SUF MBs self-assessed their effectiveness criteria in accordance with each issue to give a METT score for individual SUFs for each assessment. Any change in management effectiveness was determined by change in METT score.

The checklist of SUF related threats assessed in the METT included:

- Residential and commercial development
- Agriculture and aquaculture
- Energy production and mining
- Transportation and service corridors
- Biological resource use
- Human encroachment
- Natural system modifications
- Invasive and other problematic species and genes
- Pollution entering or generated within
- Geological events
- Climate change and severe weather events
- Specific cultural and social threats

SUF MBs self-assessed each threat and ranked their impacts on each SUF according to ratings of high, medium, low or not applicable. Any change in threats and impacts were monitored by comparing subsequent threat data.

The METTs scores showed an overall improvement in the management effectiveness of the SUF MBs from 19-33% across the three regions from 2008 to 2010. Caveats need to be applied, for example, the northern region score was initially quite high in 2010 and was subject to some reviews and is now more in keeping with the other two regions. In general the METTs scores have improved, but at the same time the rating of threats have also increased (as reported in the 2011 Annual Report).

Table A10.1 summarizes METT scores of selected SUFs over the period 2005-2012.

	METT scores by year							
Selected SUF by region	2005/06	2008/09	2010	2011	2012			
Northern Region								
Bai Tu Long		49	59		65 Feb			
Ben En	47	50	50 Dec	59 Aug				
Cuc Phuong		65			64 Feb			
Dong Son Ky Thuong		43	45 Dec		51 Feb			
HL Van Ban		50	62 Sep	51 Sep				
Na Hau		49	52 Dec	46 Sep				
Nam Xuan Lac			58 Dec		39 Jan			
Pu Hu		32	64	69 Nov	65 Dec			
Pu Luong	52	60	62 Dec	62 Aug				
Sop Cop		35	59		57 Jan			
Xuan Lien	36	68	73 Dec	62 Aug,				
Xuan Thuy	36	n/a	n/a	46 Sep				
Central Region								
Bach Ma (BSM)		69	68 Nov	65 Oct				
Kon Ka Kinh	37	41	57 Oct	62 Nov				
Kong Trai		37	47		54 Feb			
Southern Region								
BDNB	37	42	48 Apr	49 Nov				
Con Dao		n/a	n/a	64 Sep				
Lo Go Xe Mat	40	51	51 Jun	46 Sep				
Phuoc Binh		47			53 Feb			
Ta Kou		42	58 Nov	49 Sep				

Table A10.1 Summary METT scores, Selected SUF MBs 2005-2012

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