



# Report and Recommendation of the President to the Board of Directors

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Project Number: 34341  
October 2006

Proposed Loan and Technical Assistance Grant  
Socialist Republic of Viet Nam: Forests for  
Livelihood Improvement in the Central Highlands  
Sector Project

Asian Development Bank

## CURRENCY EQUIVALENTS

(as of 27 September 2006)

Currency Unit	–	dong (D)
D1.00	=	\$0.00006234
\$1.00	=	D16,040

## ABBREVIATIONS

5MHRP	–	5 million hectare reforestation program
ADB	–	Asian Development Bank
BCI	–	Biodiversity Conservation Corridor Initiative
CDF	–	commune development fund
CDM	–	clean development mechanism
CFM	–	community forest management
CIP	–	commune investment plan
CPC	–	commune people's committee
CPMU	–	central project management unit
CPRGS	–	comprehensive poverty reduction and growth strategy
DARD	–	Department of Agriculture and Rural Development
EA	–	executing agency
EMDP	–	Ethnic Minorities Development Plan
FDS	–	Forestry Development Strategy
FIRR	–	financial internal rate of return
FLITCH	–	Forests for Livelihood Improvement in the Central Highlands Sector Project
FSP	–	Forestry Sector Project
FSSP	–	Forest Sector Support Program and Partnership
GAD	–	gender and development
GDP	–	gross domestic product
GIS	–	geographic information system
GMS	–	Greater Mekong Subregion
GPS	–	global positioning system
GTZ	–	Deutsche Gesellschaft für Technische Zusammenarbeit (German Agency for Technical Cooperation)
LIEMDP	–	livelihoods development and ethnic minorities development plan
MARD	–	Ministry of Agriculture and Rural Development
MOLISA	–	Ministry of Labor, Invalids, and Social Affairs
NTFP	–	non-timber forest product
PFMB	–	protected forest management board
PLUPLA	–	participatory land-use planning and forestland allocation
PPMU	–	provincial project management unit
SDR	–	special drawing rights
SFE	–	state forest enterprise
SFM	–	sustainable forest management
SGIA	–	second generation imprest account
SME	–	small or medium enterprise
SOE	–	state-owned enterprise
SUF	–	special-use forest

TA	–	technical assistance
TFF	–	Trust Fund for Forests
UIEMG	–	upland indigenous ethnic minority group
VDG	–	Viet Nam development goals
VWU	–	Vietnamese Women's Union

### NOTES

- (i) The fiscal year (FY) of the Government ends on 31 December.
- (ii) In this report, "\$" refers to US dollars

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## LOAN AND PROJECT SUMMARY

<b>Borrower</b>	Socialist Republic of Viet Nam
<b>Classification</b>	Targeting classification: Targeted intervention Sector: Agriculture and natural resources Subsector: Forest Themes: Environmental sustainability, sustainable economic growth, governance Subthemes: Human development, indigenous peoples
<b>Environment Assessment</b>	Category B An initial environmental examination was undertaken. The Project will enhance environmental quality by protecting nationally and globally significant biodiversity and improving the performance of forest-based environmental services.
<b>Project Description</b>	<p>The Project addresses the problems of forest loss and degradation and rural poverty in Viet Nam's Central Highlands by instituting sustainable forest management (SFM) over one third of the country's natural forest estate, whose timber stocks are currently valued at about \$4.4 billion. It will do so by (i) building capacity and upgrading forest sector governance, management, and incentive regimes in the provinces of Dak Lak, Dak Nong, Gia Lai, Kon Tum, Lam Dong, and Phu Yen, covering over 3 million hectares (ha) of forestland; (ii) increasing forestry-based livelihood opportunities and reducing poverty in 60 communes by involving over 80,000 of the country's poorest households in sustainable forestry covering 144,000 ha of commune and village forestlands, which will include over 30,000 ha of livelihood plantations established on bare lands; (iii) creating an enabling business environment; (iv) strengthening supply and market chains, and (v) satisfying participation requirements for the use of credit enhancements that may be requested by investors and lenders that wish to invest in the forestry sector in Viet Nam.</p> <p>The Project objectives and activities include (i) formulating technically sound and socially relevant SFM plans for over 3 million ha of natural forests and plantations on bare land, with SFM plan preparation including (a) delineating forest conservation and use zones, (b) rationalizing the Government's and stakeholders' roles and responsibilities and enabling effective participation of the local communities and the private sector in SFM, and (c) providing investments for improving the condition and productivity of household, community, and state-managed forests; (ii) providing wage-generating and livelihood-improvement investments, especially for forest-dependent ethnic minorities; (iii) supporting stakeholder technical and operational capacity building for SFM; and (iv) providing project implementation support.</p> <p>Advisory technical assistance (TA) is required to (i) provide the Government with technical and advisory support for extending</p>

proposed sustainable forest resource development and management to small-scale farmers and households; (ii) ensure effective livelihood improvement and community support in 60 communes in the project area; (iii) facilitate decentralized administrative and financial management; and (iv) support compliance with the ethnic minority, gender, environment, and involuntary resettlement policies of the Government and Asian Development Bank (ADB).

The Ministry of Agriculture and Rural Development (MARD) will execute the Project, and provinces will be responsible for project implementation. Using a participatory diagnosis and design approach involving multiple stakeholders, a detailed needs assessment was undertaken in the core subproject area of Lam Dong and seven core communes spread over the project area. Based on the needs assessment, forest resource development and livelihood improvement investments were developed, and project implementation strategies identified. The remaining five subprojects and communes have been selected in accordance with criteria agreed among MARD, relevant provincial authorities, primary stakeholders, and ADB. Consistent with the sector approach, detailed feasibility studies for the non-core provinces and communes will be undertaken in accordance with a predetermined schedule and guidelines.

## **Rationale**

Viet Nam's development success, especially in expanding food production and moving from rice deficits to the world's second largest rice export volume, is attributed to key reforms that (i) allocated land to individual farmers and households, (ii) rationalized and reduced the role of the state in the sector, (iii) strengthened the technical and operational capacity of state and other stakeholders, and (iv) increased investments and access to markets. Viet Nam's forestry sector has the necessary policies, laws, and sector strategies in place to replicate the successful experience of the agriculture sector. But weak institutional, technical, and human resource capacity block moves toward pro-poor and market-oriented governance and incentives for the sector. Consequently, even in the Central Highlands, which has the highest potential in the country for forest-based economic development and poverty reduction, the sector is in serious decline largely due to unsustainable resource use and exploitation. A key factor for the poor performance is the uncertainty over forest ownership, management, and use rights and roles.

The Government's Forest Development Strategy (2001–2010) and sector plans call for making forestry an important economic sector by (i) protecting and developing forest resources and increasing forest cover from 32% to 43% by 2010, (ii) achieving an annual growth rate of over 3.5% during 2006–2010, (iii) accelerating and completing forestland allocation under the Land Law and the revised Forest Protection and Development Law, (iv) using forestry to improve livelihoods and reduce poverty in mountainous areas dominated by ethnic minorities, and (v) increasing the efficiency and value of the

country's wood-processing industry. The Government's policy is to restrict the state's role to forest and biodiversity protection, and to let the private sector dominate the production of forestry products.

The comprehensive poverty reduction and growth strategy (CPRGS) emphasizes the need to focus on the disadvantaged rural areas with high proportions of ethnic minorities, such as the Central Highlands, where minorities dominate. These areas are where most of the remaining forest survives, and the CPRGS recognizes this.

The Central Highlands is Viet Nam's most important forestry region, contributing more than 60% of the country's annual hardwood consumption. Ecological conditions and terrain are suitable for sustainable forestry, as population densities are still low compared with the country's other regions. An improving road network is increasing access to national and regional markets, and incremental wood production from the Project will mitigate the shortages of raw material supplies faced by local processing enterprises. Project interventions have the potential to secure over 70% of Viet Nam's 2010–2015 domestic timber needs. Accordingly, the draft 2006–2010 socioeconomic development plan identifies the Central Highlands as a priority forestry region.

The Central Highlands is home to over 5 million people and the second poorest region in the country, with poverty rates as high as 57% among ethnic minorities. Over 2.5 million people are in the work force, but unemployment is high, with only about 11% in wage-earning occupations. As these communities have forestry-relevant skills and knowledge, engaging them in forestry will lead to improved forests, forestry, and livelihoods.

### **Impact and Outcome**

The Project will contribute to Viet Nam Development Goals by (i) improving the condition and value of country's forests and timber supply, (ii) ending hunger among 80,000 of the country's poorest households living near these forests, and (iii) improving the protection of critical watersheds and globally significant biodiversity. The specific outcome of the Project is enabling the Government to institute SFM over one-third of country's remaining natural forest resource base.

### **Cost Estimates**

The total project cost, including taxes and duties, is estimated at \$90.66 million equivalent.

**Financing Plan**

It is proposed that ADB provide a loan of \$45 million equivalent from its Special Fund resources.

<b>Source</b>	<b>Total Cost</b>	<b>Percent</b>
Asian Development Bank (ADB)	45.00	49.60
Government	18.29	20.20
Governments of Finland, The Netherlands, Sweden, and Switzerland	15.57	17.20
Cofinancing <sup>a</sup>		
Beneficiaries	11.80	13.00
<b>Total</b>	<b>90.66</b>	<b>100.00</b>

<sup>a</sup> Trust Funds for Forests  
Source: ADB estimates.

**Loan Amount and Terms**

The Asian Development Bank will provide a loan of various currencies equivalent to \$45 million from the Special Fund resources of ADB, with a maturity term of 32 years and a grace period of 8 years, will be provided. The loan will bear an interest rate of 1.0% per annum during the grace period and 1.5% per annum thereafter.

**Period of Utilization**

30 June 2015

**Estimated Project Completion Date**

31 December 2014

**Executing Agency**

MARD will serve as the Executing Agency. Implementing agencies include the six provinces.

**Implementation Arrangements**

The central project management unit, headed by a project director, will be responsible for project coordination, procuring all major equipment, and distributing it to the provinces. Provincial project management units will be responsible for project implementation in the provinces.

**Procurement**

Goods and services financed from the ADB loan and TA and cofinancing partners will be procured in accordance with ADB's *Procurement Guidelines*. Goods, civil works, and materials will be procured through international competitive bidding when valued at more than \$1 million equivalent, or by national competitive bidding procedures acceptable to ADB when valued below \$1 million equivalent. Goods and materials valued at less than \$100,000 may be procured through shopping, and those valued at less than \$10,000 equivalent through direct contract. To commence the Project on time, ADB has approved, at the Government's request, advance action for procurement. The Government has been advised that approval of advance action does not commit ADB to finance any part of the Project.

**Consulting Services**

The Project will contract 5,101 person-months of consultant services. This level of input is necessary to allow for the efficient and effective shift away from a state-dominated forest sector and will include 153 person-months of international consultants and 4,948 person-months of national consultants. Consultants will be recruited in a single package from a firm, using quality- and cost-based selection.

**Project Benefits and Beneficiaries**

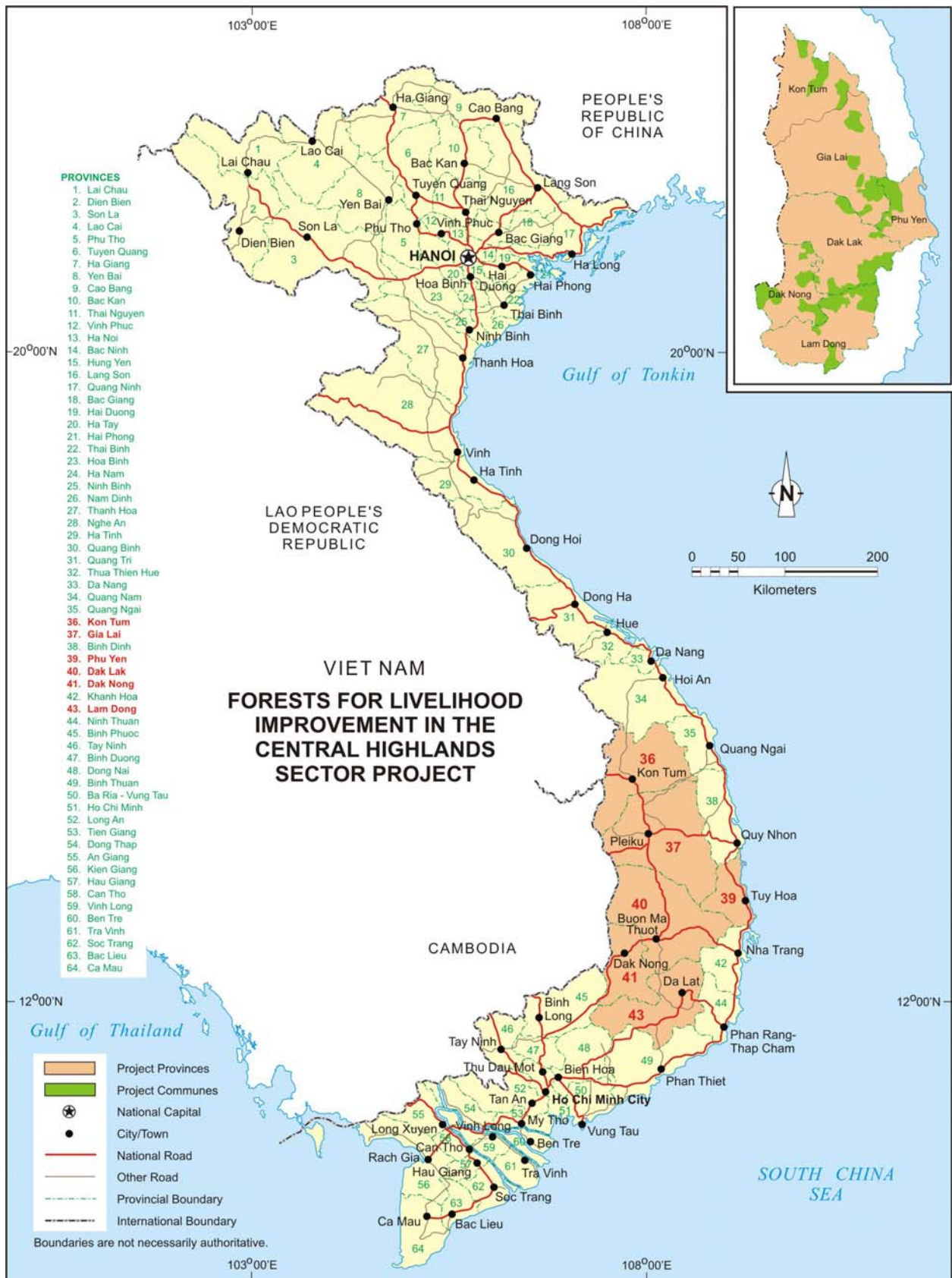
The Project will address (i) the absence of technically sound and socioeconomically responsive forest governance and sustainable management plans and (ii) institutional, management, and market failures that constrain the full and effective participation of communities and private sector. At full development, the project plantations will increase production incrementally by more than 300,000 cubic meters annually, and total natural forest asset value will likely increase from \$4.4 billion to \$6.4 billion. The Project will provide clear forest use and management rights to households and communities by allocating forestland, and the resulting security will encourage them to invest in and manage forest production sustainably and profitably. Over 8 years, the Project will generate an estimated minimum of 23 million person-days of wage-generating opportunities for households, communities, and enterprises. Capacity-building activities will create a critical cadre of over 500 well-trained forestry professionals and 1,000 technicians.

**Risks and Assumptions**

The Project will support interventions and technologies that are well established in Viet Nam's forestry sector and so poses minimal technical risks.

Implementing the Government's state forest enterprise (SFE) reform is central to rationalizing forestland use roles, responsibilities, and investments. Failure in respect to SFE restructuring will put at risk the potential for attracting private investments as well as community support and participation. The following measures incorporated under the Project will mitigate this risk: (i) a specific assurance from the Government to implement the state-owned enterprise reform decrees; (ii) provision by the Project of incentives to restructured SFE employees, including training; and (iii) leverage support through state-owned enterprise reform of the poverty reduction support credits.

A demand-driven, market-oriented approach to forest sector management is new to Viet Nam and risks undue government interference. To address this risk, demand-driven and stakeholder-based investment planning will be emphasized under the Project. This will also be the focus of training and building stakeholder capacity and awareness.



## I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on (i) a proposed loan, (ii) a proposed administration by the Asian Development Bank (ADB) of a grant to be provided by the Trust Fund for Forests, and (iii) a proposed administration of technical assistance (TA), to the Socialist Republic of Viet Nam for the Forests for Livelihood Improvement in the Central Highlands Sector Project.

## II. RATIONALE: SECTOR PERFORMANCE, PROBLEMS, AND OPPORTUNITIES

### A. Sector Background and Performance

#### 1. Forest Sector and Sustainable Economic Development

2. Sixty percent of natural land in Viet Nam is classified as forestland, most of which is found in mountainous areas, with the Central Highlands accounting for over 30% of the remaining natural forests and 60% of nation's domestic timber supply. From 1943 to 1993, Viet Nam's forest area suffered a 35% loss, from 14.3 million ha in 1943 to 9.3 million ha in 1993. However, recent years have witnessed a reversal of this trend, which is attributed to national reforestation programs such as 5 Million Hectare Reforestation Program (5MHRP).<sup>1</sup> Mountainous regions such as the Central Highlands and forest areas are home to ethnic minority communities served by poor roads and limited access to social services and markets.

**Table 1: Forest and Land Area (Viet Nam and Central Highlands) (million ha)**

Item	Viet Nam	Forest as % of Total	Central Highlands	Central Highlands as % of Total
Total Area	32.90	–	5.95	18.09
Forestland Area	19.20	58.36	4.10	21.35
Forested Land	10.90	33.13	3.20	29.36
Natural Forest	9.40	28.57	3.00	31.91
Plantation	1.50	4.56	0.14	9.33

– = data not available.

Source: National Forest Development Strategy, 2001–2010.

3. The forestry sector in Viet Nam is mainly concerned with forest resource protection and management and associated harvesting activities. The value of forestry sector output was about 1.3% of national gross domestic product (GDP) in 2004, but this does not take into account domestic processing, consumption of fuel wood and other timber products, and exports of wood-derived products. The current value of sector output is estimated to be around \$1.8 billion, which is 5–6% of national GDP. Consistent with the Government's priority to maximize export earnings, exports of wood products increased from \$530 million in 2002 to \$1.5 billion in 2005. The forestry sector also contributes about 7% of the nation's energy balance, mainly in the form of fuel wood. The role of forests in watershed protection and biodiversity conservation is strongly emphasized in the 5MHRP.

4. Meeting the Government's projected GDP growth rate of over 7% in 2005 would have required about 12 million cubic meters (m<sup>3</sup>) round wood equivalent of wood raw material, but current official estimates put the annual supply at about 5 million–6 million m<sup>3</sup>. The deficit is being made up from over-harvesting of remaining forests and imports, both legal and illegal.

<sup>1</sup> 5MHRP, one of the five national programs, was started in 1998 under the Prime Minister's Decision No. 661/QĐ-TTg. The program includes 2 million ha of protected and special-use forest (1 million ha of new plantations and 1 million ha of natural regeneration), and 3 million ha of production forests.

The magnitude of the supply deficit suggests that the remaining forests are under considerable threat despite logging bans and official sanctioning of reduced harvesting. Poor forest management and over-harvesting have resulted in forest stocks being 25–45% below the norm, causing production and productivity losses. Productivity in natural forests and plantations is at half to quarter of their potential. Wood-processing efficiencies are at 30–35%, or far below the 80–90% that is the international industry norm.

5. Current domestic timber prices are below import prices and are generally lower than international prices. This suggests that supply is not constrained, despite greatly reduced felling quotas, and reinforces the conclusion that a substantial proportion of the supply is coming from unofficial sources.

## **B. Key Challenges, Lessons Learned, and Opportunities**

### **1. Key Challenges**

6. Viet Nam's recent success in development, especially in expanding food production and moving from rice deficits to the world's second largest rice export volume, is attributed to key reforms that (i) allocated land to individual farmers and households, (ii) rationalized and reduced the role of the state in the sector, (iii) strengthened the technical and operational capacity of state and other stakeholders, and (iv) increased access to investments and markets. Viet Nam's forestry sector has the necessary policies, laws, and sector strategies in place to replicate the agriculture sector experience, but institutional, regulatory, human, and technical capacity for moving toward a framework of pro-poor and market-friendly governance and incentives is weak and, in some cases, missing. Consequently, even in the Central Highlands, which has the highest potential in the country for forest-based economic development and poverty reduction, the sector is in serious decline, largely due to unsustainable resource use and exploitation. A key contributing factor for the poor forest management and performance is the uncertainty over forest ownership, management responsibilities, and use rights.

7. **Rationalizing Forestland Ownership, Use, and Management.** Rationalizing forestland ownership, use, and management roles and responsibilities remains a challenge to sustainable forest management. Slow progress has occurred in classifying forestland, planning land use, and allocating land to households, communities, organizations, and non-state enterprises, both nationally and in the Central Highlands. Management regimes are based on administrative considerations, not on sound technical criteria. Several national inventories have estimated over 8 million ha of bare land nationally and at least 700,000 ha of bare forestlands in the Central Highlands. But these lands remain underutilized because of uncertainty over use rights. Considering the poverty and underemployment in rural areas such as the Central Highlands, the underutilization of bare forestlands represents a missed livelihood development opportunity.

8. Despite the introduction of new land allocation policies since 1993, economically disadvantaged ethnic minorities have limited influence on forestland allocation and management decisions. High administrative fees for land certificates that document forest ownership and use rights further disadvantage the poor. Insufficient funds have been allocated and made available for timely, equitable, and effective forestland classification and allocation. Tenure and access insecurity discourage local communities' taking a long-term stake in sustainable forest management, resulting in commune and village forestlands being poorly managed and underutilized. The consequences include (i) continuous forest encroachment and unsustainable harvesting, (ii) declining food and livelihood security for poor communities, and (iii) increased forestland conversion.

9. More than 400 state forest enterprises (SFEs) control large areas (on average 20,000 to 25,000 ha each) of primary forestland, which were allocated during the 1970s for logging to meet growing post-war timber demand for reconstruction. Since the late 1990s, the harvesting quotas of SFEs have been sharply reduced because of concerns about forest degradation and worsening flood risks. As a result, many SFEs are no longer commercially viable but still control extensive forest areas. Over 100 SFEs with about 3,000 employees control over 1.4 million ha of natural forest.

10. Because of failures in forest classification and allocation, necessary financial and human resources are not appropriately allocated and/or utilized, causing lost output potential and export earnings, reduced domestic supplies of wood products, and the sector's insignificant contribution to poverty reduction.

11. **Fragmented Institutions and Insufficient Human Resources.** Responsibility for forest resource management, control, and monitoring has been delegated to provinces, districts, and communes. But insufficient funds have been allocated to the lower-level institutions to recruit, train, and retain the necessary staff. Institutional arrangements for provincial forest management are fragmented, despite specific regulations on who can and should do what. Provincial Department of Agriculture and Rural Development (DARD) and forestry staff responsible for policy and technical matters have no administrative jurisdiction over forest managers (i.e., the SFEs), causing regulatory and technical oversight to break down.

12. Internal coordination is weak between the Ministry of Trade and Industry, which is responsible for planning and promoting wood-processing industries, and the Ministry of Agriculture and Rural Development (MARD), which is concerned with producing and supplying raw material. Similarly, insufficient coordination exists among departments that manage forestry, agriculture, and water resources, so that each sector agency strives to maximize its own benefits without considering the physical and ecological limits to total resource use.

13. No well-trained, professional forestry cadre exists in provinces, allowing new entrants to enter at the district or commune level and climb to the provincial level. Recruitment of forestry staff in provinces, districts, and communes does not tap into a national and provincial pool of educated and trained forestry graduates and technicians. Consequently, the skills for carrying out the required forest planning and management tasks are insufficient in provinces, districts, and communes. Staffing of the various technical entities in provinces and districts is insufficient to meet the extension needs and demands of the community. Staff of provincial, district, and commune institutions are not adequately trained to ensure equity for women and ethnic minorities.

14. **Insufficient Investments.** The investment in maintaining economically important forest resources is only about 3% of the current value of sector output. The Government's investment in the sector is driven mainly by 5MHRP, which focuses on protected and special-use forests. Production forests to supply raw materials for domestic and industrial use are expected to be financed by commercial funds.

15. Although Government policy includes promoting private sector investment in forestry, a conducive investment environment has not yet been created. Loans are available for forest plantations and wood processing at concessionary rates (currently 6.24%) from the Development Support Fund, but few enterprises can access it due to uncertainties over land holdings. The slow progress of land-use planning and allocation creates further uncertainty that drives away potential investors, both domestic and foreign.

16. **Low Technical Knowledge, Information, and Skills Base.** The two fundamental pre-conditions for sustainable forest management are that (i) the managed forest area be defined with clear, long-term ownership and management regimes of 50–100 years and (ii) harvesting decisions and levels are based on sound growth and yield information. Since 1990, the Forest Inventory and Planning Institute has established a network of around 4,000 sample plots, but budgetary and technical constraints have prevented this data from being analyzed and published, making it unavailable to planners, managers, and investors. In addition, inadequate data collection and analysis covers the processing industry, making it difficult to link forest management regimes and production with specific market segments and end users.

17. Ethnic minorities, who reside mainly in upland areas, have traditionally practiced shifting cultivation, which became unsustainable as the population grew and land-use conditions changed. But no sustenance or livelihood alternatives have been developed. Demonstrations of agroforestry systems suitable for replacing shifting cultivation have been lacking. Rural communities' lack of access to new, improved, and appropriate technologies, combined with undefined local resource governance regimes, have further contributed to their impoverishment, as well as to forest loss. These communities' skills and capacity need to be developed for sustainable forest management, community-participatory development, and integrated village development planning.

## 2. Lessons Learned

18. The Forestry Sector Project<sup>2</sup> (FSP) of the Asian Development Bank (ADB) has faced delays in implementation and low disbursements. This was expected to a certain extent, as it was the first forestry loan project in the country and MARD had limited experience with the sector modality and its requirements. Other key lessons include the following:

- (i) The assumption was misplaced that the Government had the budget and human resources available to undertake forestland-use mapping and allocation nationwide and in the project area within the specified 2 years.
- (ii) Participatory forestland-use and resource planning approaches and technologies were not part of MARD's operational tool kit, so there were no cost norms or budgetary provisions in the state budget for these activities. Correcting this problem caused a 3-year delay in implementation.
- (iii) Fund-flow and implementation decision-making has to be decentralized, and DARD's project accounting, financial management, and administrative capacity need to be strengthened.
- (iv) Efficient and effective input delivery and management considerations require that project investments and activities not be sprinkled over a lot of noncontiguous provinces.
- (v) Small-scale forestry is not capital intensive but is labor intensive, which is why a loan of about \$10 million under the Project could deliver the outputs and benefits that were originally estimated to cost \$33 million in loans.
- (vi) Efficient and sustainable forestry depends on scale, requiring investments at the commune, province, and watershed level to achieve the desired results.
- (vii) Six years is too short for implementing forestry projects.

19. Other funding agencies' and stakeholders' experience indicates the following:

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<sup>2</sup> ADB. 1997. *Report and Recommendation of the President to the Board of Directors on Proposed Loan to the Socialist Republic of Viet Nam for the Forestry Sector Project*. Manila. (Loan 1515-VIE, approved in February 1997)

- (i) Implementing national forest sector reform to restrict the state's role in forest management and allow others to dominate production forest development will require sustained technical and financial inputs over the next 10 years.
- (ii) Under given institutional, technological, social, and market conditions, decentralized and collaborative forest resource management is the optimal option for instituting sustainable forest management in Viet Nam.
- (iii) Timely and effective implementation of large-scale investment projects requires that governance, capacity, and market failures be dealt with in a comprehensive and integrated manner.
- (iv) To improve fund delivery and disbursements, decentralized financial instruments such as block grant funding mechanisms should be used.
- (v) Instituting sustainable forest management will require the full and effective participation of local communities and the formal private sector.
- (vi) Sustainable plantation forestry is an economically viable and environmentally sound option for combining sustainable forestry with livelihood improvement.

### 3. Opportunities

20. **Clear Sector Development Priorities and Policy Directions.** The Government's Forest Development Strategy (2001–2010) and sector plans call for making forestry an important economic sector by (i) protecting and developing forest resources and increasing forest cover from the current 32% to 43% by 2010, (ii) achieving an annual growth rate of over 3.5% during 2006–2010, (iii) accelerating and completing forestland allocation under the Land Law and the revised Forest Protection and Development Law, (iv) using forestry to improve livelihoods and reduce poverty in chronically poor mountainous areas dominated by ethnic minorities; and (v) increasing the efficiency and value of country's wood-processing industry.

21. 5MHRP explicitly calls for (i) allocating forestland to organizations, households, and individuals with emphasis on hunger elimination and poverty reduction; (ii) increasing people's involvement in forestry; (iii) expanding protected forests in important watersheds; (iv) promoting the use of bare land for generating employment and reducing poverty; and (v) increasing the productivity of natural forests and plantations to meet anticipated future demand for forest products.

22. The Government has a benefit-sharing policy in place that requires increasing benefits to households and individuals involved in forest protection, management, and reforestation. These policies cover both allocated forestland and areas managed under contract by households or individuals, including protected, special-use, and production forests. This creates an opportunity for the expanded participation of communities and the non-state sector.

23. SFE restructuring requires SFEs that manage mainly production forests to operate as productive business entities.<sup>3</sup> This allows rationalizing and redefining the state's role in the forestry sector. It also removes a major barrier to private sector and community participation.

24. Forest lease laws allow forestland leasing of both protected forests for ecotourism and production forests to Vietnamese residing abroad, foreign organizations, and individuals. This provides the right conditions for the participation of national private sector as well as foreign investors.

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<sup>3</sup> Decision No. 187/1999/QĐ-TTg and Politburo Resolution No. 28QĐ/TW of June 2003 provide for renovation of SFEs.

25. **High Potential for Forestry and Poverty Reduction.** The Central Highlands region is currently the most important in Viet Nam for forestry, with timber stock valued at about \$4.4 billion at current prices. It encloses about 30% of the country's forest area and supplies over 60% of the country's annual hardwood consumption. Ecological conditions in the Central Highlands are ideal for forestry. The terrain is generally easy, making commercial forestry feasible and potentially efficient. Population densities are still low compared with other regions in Viet Nam. Currently, infrastructure is a constraint as major domestic and regional wood product markets are more than 200 kilometers (km) away. But roads are improving, and this should improve market access.<sup>4</sup> Moreover, existing processing capacity faces worsening raw material shortages, which will raise market demand.

26. The Central Highlands have over 3 million ha of forest, but about half of it is seriously degraded, requiring investments to restore its condition and productivity. Sound management of forests, including planting bare land with high-yielding native and exotic species, can meet over 70% of Viet Nam's 2010–2015 domestic timber demand. Accordingly, the draft 2006–2010 socioeconomic development plan identifies the Central Highlands as Government priority region, and forestry as a priority sector. It seeks to increase wood product exports from \$1.5 billion in 2005 to \$3.5 billion in 2010. Central Highlands forests will have to make a major contribution if these targets are to be achieved sustainably.

27. More than half of the 5 million people living in the Central Highlands are in the workforce, but only about 11% are in wage-earning occupations, indicating high unemployment, particularly in the chronically poor ethnic minority communities. Most of the rural poor and unemployed live near forests and have basic skills and knowledge relevant to forestry. Systematically and fully engaging these communities and the unemployed in the forest resource planning, management, production, and processing provides a win-win opportunity for sustainable forestry and livelihoods.

28. The Government aims to reduce poverty from 52% in 2005 to about 38% by 2010. Forestry is to play a major role in meeting this target by contributing to the regional GDP growth rate of 8–8.5%. Currently, SFEs and provincial management boards employ over 12,000 people including contract laborers. Lower forest harvests and the resulting reduction in wood processing put their livelihood at risk. But, as they are skilled and semiskilled in some forestry practices, the Project can provide alternative job opportunities.

29. **Increasing Funding Agency Commitment and Emerging Opportunities.** Government and the Forest Sector Support Program and Partnership (FSSP) provide resources for developing a sector-wide, programmatic approach to forest sector investments.<sup>5</sup> The Trust Fund for Forests (TFF), supported by FSSP, helps mobilize substantial grant financing for capacity-building activities necessary to improve the management capacity and performance of the sector. Carbon sequestration and trading under the clean development mechanism create additional cash-transfer opportunities to communities living in or near forests. Furthermore, accessing the Global Environmental Facility-funded Viet Nam Conservation Fund will reduce the Government's start-up costs for protecting regionally and globally significant biodiversity hotspots found in the Central Highlands.

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<sup>4</sup> ADB. 2002. *Technical Assistance to the Socialist Republic of Viet Nam for Central Region Transport Network*. Manila.

<sup>5</sup> On 12 November 2001, the Government of Viet Nam and 20 representatives from various aid agencies, including ADB and the World Bank and social and environmental nongovernment organizations, signed the FSSP memorandum of agreement.

30. **Regional Synergies and Cooperation.** The Central Highlands forest ecosystem straddles the Cambodian and Lao People's Democratic Republic border, providing watershed protection to rivers draining into the Mekong and feeding into the Tonle Sap in Cambodia. Moreover, the conservation of these forests will be central to successfully implementing the Greater Mekong Subregion (GMS) Biodiversity Conservation Corridors Initiative (BCI).<sup>6</sup> Correspondingly, GMS economic corridor development will increase the market catchment and access for project products and services.

### III. THE PROPOSED PROJECT

#### A. Approach, Impact, and Outcome

31. A participatory approach to diagnosis and design involving multiple stakeholders has been adopted for developing the project proposal.<sup>7</sup> Project preparation identified the need for an integrated approach to making the forestry sector market oriented. This is necessary if the country's goal of becoming a fully market-oriented and modern economy is to be achieved and the sector is to (i) meet the country's growing demand for wood products for domestic consumption and export, (ii) help reduce poverty in remote areas, and (iii) enhance and maintain forestry-related environmental services. To achieve these sector objectives in an environmentally sound and socially equitable manner, adopting a sector modality is both desirable and feasible. Because forestry investments have to be responsive simultaneously to the needs of many stakeholders and to the socio-ecological conditions of specific locations, the traditional blueprint approach to development and investment planning is inadequate to meet the sector's many goals.

32. Furthermore, as summarized in paragraphs 20–24 and 28, Viet Nam has (i) a well-defined forest sector strategy, development, and investment plan; (ii) the necessary policy and regulations in place; and (iii) the necessary institutional capacity to implement a sector loan. Accordingly, based on the analysis of the key challenges affecting sector performance, lessons learned, and opportunities identified, the Project takes a program and geographic slice of the country's forest sector development plan as encapsulated in the Forest Development Strategy (2001–2010) and FSSP.

33. Investment packages and project interventions and implementation arrangements have been developed using a participatory planning approach. The sample core subproject of Lam Dong and the seven sample communes were developed using this approach. A similar approach will be used in designing and implementing the remaining five subprojects and 53 commune investment plans (CIPs). Over 8 years, project implementation will cover six provinces (subprojects) in the Central Highlands involving over 60 communes. Province and commune selection criteria require that they (i) have rich forests with significant but

<sup>6</sup> ADB. 2004. *Technical Assistance to the Greater Mekong Subregion Biodiversity Corridor Conservation Corridor Initiative*. Manila (TA 6213–REG). The initiative aims to prevent and mitigate forest fragmentation within nine high-value ecosystems in GMS economic corridors.

<sup>7</sup> ADB. 2001. *Technical Assistance to the Socialist Republic of Viet Nam for Forests for Livelihood Improvement in the Central Highlands*. Manila (TA 3818–VIE). Total TA amount is \$1.56 million, of which \$800,000 is from TA funds and \$760,000 is funded by the Government of the Netherlands. TA reviewed and analyzed sector strategies, policies, regulations, institutions, and technical issues in the FSSP framework. The outputs of these analyses have informed the Government's revision of the 2001–2010 Forest Sector Strategy, 2006–2010 forest sector development plan, and formulation of this project proposal. This analysis has been complemented by the findings of ADB. 1999. *Technical Assistance to the Socialist Republic of Viet Nam for the Study on the Policy and Institutional Framework for Forest Management*. Manila (TA 3255–VIE); and policy and institutional analyses undertaken by FSSP partners such as the World Bank and Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ, German Agency for Technical Cooperation).

underutilized forestry potential; (ii) are home to some of the poorest people and communities in the country, particularly disadvantaged ethnic minorities, and (iii) have an underutilized workforce with knowledge and skills relevant to forestry. The type and scale of forestry interventions in each of the subprojects are similar and so are expected to replicate the financial and economic viability of the sample Lam Dong subproject. The Project will be implemented by provinces in collaboration with project area households, communities, and forestry teaching and training institutions.

34. The Project proposes an investment package with the primary purpose of increasing the forest capital of the county and improving its developmental and poverty-reduction performance. It includes investments in areas that are critical for transforming the sector, i.e., business capital, human capital, forestry-related rural infrastructure, knowledge capital, and stakeholder institutional capacity.<sup>8</sup> The Project will contribute to the Viet Nam Development Goals (VDGs, are national level equivalent of the Millennium Development Goals) of poverty reduction and environmental protection by accelerating the market-orientation of the country's forestry sector.<sup>9</sup> It will do so by (i) improving the condition and value of Central Highlands forests, (ii) eliminating hunger and halving poverty among 80,000 of the country's poorest households living in or near these forests, (iii) improving the protection of globally significant biodiversity, (iv) enhancing the protection and performance of critical watersheds, and (v) attracting investors to invest in the sector. The specific outcome of the Project is to enable the Government to bring over one-third of country's poorly and mismanaged natural forest estates under sustainable forest management and secure over 70% of national timber needs in 2010–2015.

## **B. Components and Outputs**

35. The Project consists of four components: (i) sustainable forest resource management and development, (ii) livelihood improvement, (iii) capacity development, and (iv) project management and implementation. Sustainable forest resource development and management investments focus on provinces and communes; livelihood improvement forestry investments on over 60 selected communes; business and capacity development investments on relevant stakeholders such as state agencies, communities and communes, and small and medium enterprises (SMEs) and entrepreneurs; and project management and capacity-building investments on provinces, districts and communes to ensure timely delivery of funds, inputs and outputs.

### **1. Sustainable Forest Resource Management and Development**

36. **Forest Land Management Planning.** The main purpose of this investment is to secure over \$4.4 billion worth of forest and timber assets and future benefits by clarifying, establishing, and protecting forestland property and the use rights of the state, households, communities, and other stakeholders. Building on completed land-use maps prepared by the Ministry of Natural Resources and Environment, and using a participatory approach involving multiple stakeholders, the Project will support upgrading strategies for provincial land and forestland use in accordance with the new Land and Forest Protection laws. This will include rationalizing forest management objectives and regimes in provinces, districts, and communes. It will provide the enabling governance and incentive framework for accelerated and equitable forestland allocation, restructuring of SFEs, and multi-stakeholder and multiple-use sustainable natural

<sup>8</sup> This is consistent with the six capital bundles of a well-functioning economy or sector and, thereby, for sound economic and sector development investments (Jeffrey Sachs. 2005. *The End of Poverty*. Penguin Books.)

<sup>9</sup> Consistent with the Government's socioeconomic development plan 2001–2005 and ADB. 2002. *Country Strategy and Program (2002–2004): Viet Nam*). Manila; it is included in ADB. 2004. *Country Strategy and Program Update (2005–2006): Viet Nam*. Manila.

forest and plantation development and management. Six provincial sustainable forest management plans will be prepared and, once approved by the provincial people's committees, will become the business plans for the forestry sectors in project provinces.

37. Involving over 3 million ha of production forests, the Project will support the following activities under this component:

- (i) forest zoning and identifying production clusters, for which the Project will support forest resource management planning and zoning based on geographic information systems (GIS) in provinces, districts, and communes;
- (ii) forest delineation, surveying, and demarcation for clearly and permanently defining forest boundaries, irrespective of land ownership and/or management regimes; and
- (iii) forest inventory and management planning, for which the Project will support the preparation of detailed forest management plans for over 3 million ha in consultation with participating stakeholders. This will minimize conflicts over forestland use and management and achieve economies of scale in terms of project management, production, and marketing.

38. **Forest Resource Development.** The purpose of these investments is to improve the management of existing commune and village forests, and bring underutilized bare land under high-yielding productive plantations of native and/or exotic species. The Project will support forest management improvements such as enrichment planting and improved protection for forest resources under village and/or community ownership in 60 selected communes. Investments will aim to increase the extent of plantation forests and improve their condition and productivity. Involving over 80,000 households, this will bring over 144,000 ha of commune and village forests under sustainable forestry, including over 30,000 ha of livelihood plantations established on bare lands. Given the low creditworthiness and lack of access to affordable financing in the project area, the costs and benefits of the investments will be shared in accordance with the equity models identified and developed during project preparation.

39. In addition to defining and delineating protected and special-use forests, the Project will facilitate the conservation of three high-priority global biodiversity areas covering over 87,000 ha under the Viet Nam Conservation Fund and the GMS BCI. Project activities will include participatory biodiversity assessments and monitoring. This will provide increased wage-earning opportunities for the local communities and, at the same time, improve their development skills in numeracy and community organization.

40. **Business Development.** The Project will support business development opportunities for such entities as SMEs and reformed and restructured SFEs. This will improve forest resource use and processing efficiencies, strengthen supply and markets chains, and add value to forest-based goods and services. The Project will provide support to at least three SFEs undergoing restructuring within the overall framework of public sector and state enterprise reform. The Project will support market diversification by helping to establish at least 20 new SMEs and providing marketing support to about 75 community groups and over 40 existing SMEs. It will support piloting of modern, efficient woody biomass-conversion technologies to increase the efficiency of using wood as fuel in project communes. To capture emerging resource mobilization and marketing opportunities, the Project will support pilot measures promoting clean development mechanisms and technologies that contribute to innovative financing for forest ecosystem conservation and services.

## **2. Livelihood Improvement**

41. The Project will support livelihood improvement and income generation in 60 of the country's poorest communes by establishing commune development funds (CDFs). Using an equity model, 70% of the income from household and commune forestry activities will go to the participating households and 30% to the revolving fund established under each CDF. CDFs will give priority, but will not be restricted, to forestry-related income-generating and livelihood-improvement investments in communes and villages. Support for small-scale infrastructure improvement will include constructing and upgrading health posts, class rooms, drinking wells, small irrigation systems, inter-village and commune access roads, and commune cultural houses. These investments will be made in accordance with the CIPs.<sup>10</sup> Over 80,000 households, and over 144,000 ha of village and commune forests, will benefit from these interventions. CDFs will use a bottom-up participatory planning approach to allow communes and communities to determine project investment priorities and activities. Reinvesting 30% of revenues in the CDF will contribute to making Project investments financially self-sustaining and reduce dependence on external sources. CDF management will also empower local communities, including ethnic minorities and women, by increasing their capacity and opportunity to participate in decision making. In addition to these commune-based activities, the Project will actively involve local communities in forest demarcation, inventorying, and monitoring. These activities will provide additional opportunities for income generation in local communities in the early stages of project implementation.

## **3. Capacity Development**

42. The objective is to build the relevant stakeholders' technical, management, and monitoring capacity at central, provincial, district, and commune levels. This will catalyze the transition of the state-dominated forest management regime toward a non-state and market-friendly one. The Project will support strengthening (i) forest planning and management decision-support systems, (ii) collaborative and community-based forest resource development and management, (iii) decentralized financial and administrative decision making and project implementation, (iv) effective extension delivery, and (v) institutional capacity in communes and districts. Key interventions include training staff, providing equipment to provide extension, and enterprise support services to communities, households, and SMEs. Particular emphasis will be placed on strengthening capacity in communes, especially of ethnic minority groups, to administer and manage a CDF. The Project will support and facilitate upgrading teaching staff at two forestry institutions responsible for educating and training foresters and forestry technicians. It will also support training and upgrading the skills of over 550 professional staff and about 1,000 technicians.

## **4. Project Management and Implementation**

43. The Project will strengthen MARD's project management and implementation capacity centrally and provincially, financing the necessary office equipment and supplies for project implementation. To overcome Government staff constraints without increasing the long-term budgetary burden on the Government, the Project will contract administrative and support personnel for efficient and effective implementation and monitoring of project activities. Under TA, a consulting firm will be contracted to help MARD implement the Project, in particular preparing a forest resource management plan, decentralizing commune investment planning

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<sup>10</sup> CIPs were prepared for seven sample communes spread over the six provinces, and these provide the template for scaling up and replication in the remaining 53 communes. The indicative investment size and decision criteria are identified and agreed with the Government. These will be detailed in the project implementation manual prepared by the project preparatory TA consultants and will be finalized within 3 months of loan effectiveness.

and implementation, supporting social and ethnic minority development, and ensuring compliance with Government and ADB guidelines.

### C. Special Features

44. **Clustering.** Project activities and commune clustering will (i) maximize synergies between sustainable forestry and livelihood improvement for poverty reduction, especially among ethnic minority communities; (ii) facilitate the efficient delivery of material and extension inputs and project supervision; and (iii) achieve critical production thresholds to catalyze the development of market chains and enterprises.

45. **Collaborative Resource Management and Decentralized Implementation.** The involvement of primary stakeholders and other non-state actors in forest management and Project implementation will help overcome the Government's human resource capacity constraints, improve transparency, and empower rural communities. In accordance with the Government's decentralization policies, the 5-year commune investment plans will be approved by provincial people's committees, but yearly investment plans and budgets will be approved by district people's committees. Commune people's councils will approve investments of up to D1 billion.<sup>11</sup>

46. **Performance-Based Allocation.** Project fund allocation will be based on the timely and efficient utilization of funds and disbursements by project provinces. Consistent with the sector modality, the provincial and physical targets are indicative. Provincial fund allocation will be adjusted in project years 2, 4, and 6 to take into account fund utilization and disbursements by project provinces. Funds from underperforming components and/or provinces will be reallocated to better-performing components and/or provinces.

47. **GIS-Based Landscape Approach.** Consistent with state-of-the-art conservation and forestry practices, the Project uses the landscape approach and GIS technology for planning, implementation, and monitoring impact.

48. **Regional Cooperation and Emerging Resource Mobilization Opportunities:** The Project will strengthen Viet Nam's contribution to regional cooperation in environmental management by improving the protection of critical watersheds and biodiversity of importance to neighboring countries such as Cambodia and the Lao People's Democratic Republic and to the larger global community. It will maximize synergies with the GMS economic cooperation program and BCI. It will help Viet Nam's forestry sector attract substantial foreign direct investment and capture the new funding opportunities from carbon trading and ecotourism.

### D. Cost Estimates

49. The estimated project cost is \$90.66 million equivalent, including physical and price contingencies, taxes and duties, and interest during implementation. Component-specific cost estimates are in Table 2, and the detailed project cost estimate is presented in Appendix 4.

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<sup>11</sup> Existing Department of Finance guidelines for decentralizing budget management will be adopted for project implementation. Administrative and financial management arrangements are to ensure that disbursement is done within 30 days of completing work under the Project. The Project will undertake capacity building and provide technical assistance to provinces, districts, and communes to support this objective.

**Table 2: Project Investment Plan**  
(\$ million)

Item	Amounts <sup>a</sup>
<b>A. Base Cost<sup>b</sup></b>	
1. Sustainable Forest Resource Management and Development <sup>c</sup>	44.35
2. Livelihood Improvement <sup>d</sup>	12.59
3. Capacity Development <sup>e</sup>	4.98
4. Project Management and Implementation <sup>f</sup>	21.31
<b>Subtotal (A)</b>	<b>83.23</b>
<b>B. Contingencies<sup>g</sup></b>	<b>5.12</b>
<b>C. Financing Charges During Implementation<sup>h</sup></b>	<b>2.31</b>
<b>Total (A+B+C)</b>	<b>90.66</b>

<sup>a</sup> Includes taxes and duties of \$6.27 million.

<sup>b</sup> In mid 2006 prices.

<sup>c</sup> Includes cofinancing (grant) amounting to \$2.4 million for business development from the Trust Fund for Forests (TFF).

<sup>d</sup> Includes cofinancing (grant) from TFF amounting to \$1.2 million equivalent. Physical contingencies computed at 3–5%. Price contingencies have been applied at 2.8% for 2006 and 1.9% for the rest of the period for foreign currency costs and 6% per year for local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>e</sup> Includes cofinancing (grant) from TFF amounting to \$3.5 million equivalent.

<sup>f</sup> Includes \$7.57 million in TA cofinancing for TA.

<sup>g</sup> Physical contingencies computed at 3–5%. Price contingencies have been applied at 2.8% for 2006 and 1.9% for the rest of the period for foreign currency costs and 6% per year for local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>h</sup> Includes only interest charges. Interest during construction has been computed at 1%.

Source: Asian Development Bank estimates.

## E. Financing Plan

50. The Government has requested a loan of \$45 million equivalent from ADB's Special Funds resources to help finance the Project. The loan will have a 32-year term, including a grace period of 8 years and an interest rate of 1.0% per annum during the grace period and 1.5% per annum thereafter. The Government will provide counterpart funds of \$18.29 million equivalent for taxes, recurrent costs, and part of the capital cost. Trust Fund for Forests (TFF) partners—the governments' of Finland, The Netherlands, Sweden, and Switzerland—will cofinance \$15.57 million. The indicative financing plan is in Table 3.

**Table 3: Financing Plan, (\$ million)**

Source	Total Cost	Percent
ADB	45.00	49.60
Trust Fund for Forests <sup>a</sup>	15.57	17.20
Government	18.29	20.20
Beneficiaries <sup>b</sup>	11.80	13.00
<b>Total</b>	<b>90.66</b>	<b>100.00</b>

<sup>a</sup> Because the project is seen as a major investment for implementing the forestry sector development plan of the Government and the development partners, about \$15.57 million in grant technical assistance and cofinancing is being mobilized. About \$8 million of this amount will cofinance the business-development, livelihood improvement, capacity development and project management components of the Project, and about \$7.57 million cofinances the TA. Additional ADB support may come from credit enhancements given to investors and lenders that wish to invest in the forestry sector in Viet Nam.

<sup>b</sup> Contributions are in kind only and cover the costs of establishing and maintaining plantations

Source: Asian Development Bank estimates.

## **F. Implementation Arrangements**

### **1. Project Management**

51. MARD will be the Executing Agency. The central project management unit (CPMU), headed by a project director, will be responsible for coordinating, monitoring, and providing quality control and advisory services to provinces during implementation. The CPMU will be responsible for procuring all major equipment and distributing it to implementing agencies. Provincial project management units (PPMU) under the provincial DARD will be responsible for project implementation in the provinces. Facilitated and supported by the CPMU and PPMUs, MARD and provincial authorities will meet at least twice in a year to jointly review and endorse the project annual plan of operations. The central Project Steering Committee (CPSC) will be established by MARD. The CPSC will be headed by a Vice-Minister of MARD and will have representatives from concerned agencies from concerned agencies and provinces. The CPSC will be responsible for providing guidance and Project oversight to ensure objectives of the Project as outlined in this Loan Agreement are achieved. Provincial steering committee (PPSC) headed by the leader of the relevant people's provincial committee leader will be established to oversee Project implementation at the provincial level.

### **2. Implementation Schedule**

52. The Project will be implemented over 8 years from October 2006 to 31 December 2014. Project activities are sequenced across provinces and in communes in accordance with project planning and the implementation capacity of Government staff and local communities. Starting in project year 1, CIPs will be prepared on a rolling basis with funds flowing within 3 months of planning phase completion and as approved by appropriate provincial authorities. Procuring major equipment will take place in the first year. The implementation schedule, outlining the preparation and implementation of six provincial forest management plans and CIPs, is in Appendix 5.

### **3. Procurement**

53. ADB has approved advance action for procurement of goods and recruitment of consultants. MARD will take advance procurement action to expedite Project implementation particularly office equipment and supplies for the CPMU. All supplies, equipment and services financed from the ADB loan, technical assistance and ADB-administered grants will be procured in accordance with ADB's *Procurement Guidelines*. Goods, works, and materials will be procured through international competitive bidding where the cost is valued at more than \$1 million equivalent, or by national competitive bidding procedures acceptable to ADB, where the cost is valued below \$1,000,000 equivalent. Goods and materials valued at less than \$1 million and \$10,000 equivalent will be procured through shopping and direct contracting respectively. The Government has been advised that approval of such advance action does not commit ADB to finance any part of the Project. The procurement plan is outlined in Appendix 6.

### **4. Consulting Services**

54. The Project will require 153 person-months of international consulting services and 4,948 person-months of national consulting services. In addition, staff will be contracted as needed to develop commune capacity for sustainable forest management and livelihood diversification. This level of input is necessary to efficiently and effectively shift the state-dominated forest sector (over a third of the country's natural forest estate) toward non-state management. Under TA, international and national consultants will be recruited in a single

package from a consulting firm, using ADB quality- and cost-based selection through a full technical proposal in accordance with ADB *Guidelines on the Use of Consultants*. Contracted staff and/or NGOs with relevant experience will be recruited by MARD in consultation with ADB and in a manner consistent with ADB's policy on national staff recruitment. Appendix 7 summarizes consulting services.

## **5. Disbursement Arrangements**

55. The CPMU will use ADB imprest account procedures for eligible project expenditures. An imprest account for the loan will be established by the CPMU at a commercial bank acceptable to ADB within 1 month of loan effectiveness. The account will have a ceiling of \$2.5 million; the initial deposit will be based on estimated expenditures for the first 6 months of project implementation or \$2.5 million, whichever is lower. The imprest accounts will be established, managed, replenished, and liquidated in accordance with ADB's *Loan Disbursement Handbook*, as amended from time to time, and detailed arrangements agreed by the Government and ADB. Statement-of-expenditure procedures will be used for reimbursing eligible expenditures and liquidating advances to the imprest accounts to ensure speedy project implementation. The maximum payment for any individual item using statement of expenditure is \$100,000.

56. To expedite fund flows to the provinces and national institutes, each province will establish a second-generation imprest account (SGIA) if necessary for the grant proceeds or local equivalent for the loan proceeds, at commercial banks acceptable to ADB. The CPMU will transfer funds from the imprest accounts to the SGIAs in accordance with ADB's *Loan Disbursement Handbook* and detailed arrangements agreed by the Government and ADB. The initial amount to be deposited into each of the SGIAs will not exceed the equivalent of 6 months' estimated expenditures or \$250,000, whichever is lower. The ceiling for SGIAs will not exceed \$250,000. Project financial management and supporting documents will be in accordance with arrangements acceptable to ADB.

## **6. Financial Management, Accounting, Auditing, and Reporting**

57. **Financial Management.** MARD is currently implementing five ADB loan projects, including the FSP. It has implemented forestry loan and grant projects funded by the World Bank and other development partners amounting to over \$380 million and demonstrated the financial-management capacity necessary to manage a large, externally financed project. It has maintained a number of first and second generation imprest accounts and has submitted required audits in a timely fashion. Based on the experience of ADB and others with MARD, the financial management arrangements are appropriate.

58. **Accounts and Auditing.** The Government will, through MARD, maintain adequate records and accounts to identify goods and services financed by the Project. The CPMU will (i) keep project accounts separate from regular accounts; (ii) maintain separate accounts for the loan and grant portions of the Project; (iii) ensure accounts and financial statements are audited annually in a timely fashion, in accordance with sound accounting principles, by external auditors acceptable to ADB; and (iv) submit to ADB, not later than 6 months after the close of each fiscal year, certified copies of audited project accounts (including the imprest accounts, statements of expenditure, and financial statements), the auditor's reports and opinions, and the

management letter, together with a report of actions taken by MARD to improve the financial management system. The Project will finance the cost of auditing.<sup>12</sup>

59. **Anticorruption.** ADB's *Anticorruption Policy* was explained to and discussed with MARD. Consistent with its commitment to good governance, accountability, and transparency, ADB reserves the right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive, or coercive practices relating to the Project. To support these efforts, relevant provisions of ADB's *Anticorruption Policy* are included in the loan regulations and the bidding documents for the Project. In particular, all contracts financed by ADB in connection with the Project will include provisions specifying the right of ADB to audit and examine the records and accounts of the Executing Agency and all contractors, suppliers, consultants, and other service providers as they relate to the Project.

## 7. Reporting

60. After the Project becomes effective, MARD will prepare quarterly progress reports summarizing (i) progress made against established targets, (ii) delays and problems encountered and actions taken to resolve issues, (iii) compliance with loan assurances and covenants, (iv) a proposed program of activities to be undertaken during the next 6 months, (v) expected progress during the succeeding period, and (vi) the status of participating provinces and institutions. Within 3 months of physical completion of the Project, the Government will prepare and submit a project completion report to ADB.

## 8. Project Review

61. The Government and ADB will conduct reviews of the Project at least twice a year to ensure smooth implementation. The Government and ADB will jointly undertake a midterm review after 3 years of physical implementation. The midterm review will (i) review the Project's scope, design, implementation arrangements, and other relevant issues; (ii) examine progress toward the Project's objectives and output; (iii) assess implementation performance against projections and identify changing needs for resource allocation; (iv) review compliance with loan covenants; (v) identify problems and constraints; and (vi) formulate appropriate recommendations for corrective action.

## 9. Project Performance Monitoring, Evaluation, and Sustainability

62. One of the major objectives of the Project is to improve the productivity of forest sector in the Central Highlands and its contribution to poverty reduction. MARD and ADB have identified a shortlist of verifiable indicators for monitoring and evaluation that are incorporated in the design and monitoring framework (Appendix 3). In addition, the Project will promote beneficiary-based impact-monitoring regimes developed under the ongoing FSP. Putting in place and strengthening a decentralized forest-resource and financial-management regime is necessary to ensure the post-project sustainability of assets created by the Project. CDFs will play an important role in ensuring that sufficient operational budgets are available for this purpose.

## IV. TECHNICAL ASSISTANCE

63. Advisory TA is required to provide the Government with technical and advisory support for extending the proposed sustainable resource development and management in the forest

<sup>12</sup> ADB. January 2002. *Guidelines for the Financial Governance and Management of Investment Projects Financed by Asian Development Bank*. Manila.

ADB. 2002. *Guidelines on Asian Development Bank-Funded Project Processing and Implementation*. Hanoi.

sector to small-scale farmers and households and so ensure effective livelihood improvement and community support in 60 communes in the project area.

64. TA will cover five main areas by providing (i) international and national expertise, and fixed-term contracted staff, to strengthen the Government's capacity for forest inventory, assessment, valuation, and sound financial management; (ii) advisory support on sustainable forest resource development in the 60 communes in the Project area, including strengthening their capacity to handle development funds and stage community and social development activities; (iii) support for strengthening the management and maintenance of small-scale infrastructure development for income-generating activities, as well as two forestry education and training institutions; (iv) support for coordinating capacity development in communes, districts, provinces, and the national Government; and (v) support for compliance with the Government's and ADB's ethnic minority, gender, and environmental policies. The total cost of TA is estimated at \$7.82 million equivalent, with cofinancing of \$7.57 million from TFF and the remaining \$0.25 million from ADB.<sup>13</sup> TA objectives, scope, cost, financing, and outline terms of reference are in Appendix 7.

## V. PROJECT BENEFITS, IMPACTS, ASSUMPTIONS, AND RISKS

### A. Project Benefits

65. **Pro-Poor and Market-Friendly Sector Governance.** The Project will address (i) the absence of technically sound and socioeconomically responsive forest management plans and (ii) institutional, management, and market failures that constrain the full and effective participation of the private sector, both formal and informal, in forestry. Removing these barriers will facilitate mobilizing much-needed human and financial resources from non-state sectors. It will also increase the efficiency of public sector forestry investments, which so far have underperformed because of insufficient forest planning and management capacity. The Project will help secure over 3 million ha of natural forests with a current value of \$4.4 billion and bring management of over 1.5 million ha of natural production forests in line with international market requirements and certification standards. Timber asset value is expected to increase to \$6.4 billion over the project life of 40 years, instead of reducing to \$2.8 billion, as it would without the Project. Stakeholder-specific cost- and benefit-sharing options and arrangements have been identified to ensure the efficient use of project funds and equitable sharing of project benefits. This will improve governance and the transparency of financial transactions.

66. **Improved Sector Performance and Competitiveness.** By allocating long-term, secure ownership or usufruct rights, providing forest-management and agroforestry-extension advice and financial support, and developing appropriate infrastructure, the Project will encourage private sector investment in a range of new or restructured and diversified enterprises for production and the effective utilization of forest resources. It will also strengthen forest sector institutions to enable them to provide long-term forest management capacity building to both state and private enterprises. The focus on strengthening private sector production and marketing mechanisms will increasingly meet domestic and international market demand for sustainably harvested domestic forest resources, thereby curtailing illegal logging and expensive imports.

67. **Improved Livelihoods and Reduced Poverty.** Allocating land to individual farmers and households has significantly contributed to Viet Nam's transition from rice deficits to the second

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<sup>13</sup> TFF was established in December 2003. The governments of Finland, Netherlands, Sweden, and Switzerland are the main contributors to the fund.

largest volume of rice exports in the world. The Project will facilitate a similar transformation of country's forest sector, especially in the Central Highlands. Less than 1% of forestland has been allocated so far to households and communities. The principal social benefit from the Project will be the provision of clear forestland-use rights to households and communities through the allocation of forestland, and the resulting security will encourage them to invest in and manage forest production and protection sustainably and profitably. More direct, quantifiable benefits will derive from employment generation by households, communities, and enterprises. The Project will have a significant impact by providing opportunities for long-term employment either through owner-operated forest production or employment in forest-based enterprises. Project forest planning and management activities will directly create at least 23 million person-days of wage-generating opportunities for semiskilled and underemployed rural residents. Under the equity-sharing models for household forestry, in the first year of implementation, the Project will ensure at least \$110 in additional income to households. This additional cash income will allow households to overcome 3–5 month food deficits and eliminate hunger. In addition to cash income from labor wages during the first 6 years, households will realize a revenue share of about \$1,100/ha in year 8.

**68. Enhanced Social and Gender Equity.** The equitable allocation of land and clear rights over its use will help ethnic minorities in the project area participate effectively in forest-based economic activities and reduce income disparities. Poor households will acquire economic opportunities other than shifting cultivation, thereby reducing forest loss. The Project will promote the participation of women in forest production and management through focused capacity building and training. For this purpose, the Project will seek to recruit one female staff member in each provincial project implementation office in one of three key areas of specialization: forestry, farming systems, and community development.

**69. Increased Revenue Generation, Natural Forest Assets and Value, and Wood Production.** In the scenario without the Project, the total growing stock in the natural production forests of the Central Highlands is expected to decline from the present 100 million m<sup>3</sup> to about 75 million m<sup>3</sup> by 2045. With the Project, the estimate is about 135 million m<sup>3</sup>. Thus the total growing stock is expected to be 60 million m<sup>3</sup> higher 40 years from now as a result of the Project. With a project investment of about \$12 million for improving natural forest management and \$60 million in maintenance costs over 40 years, the asset value is expected to increase to \$6.4 billion. Under the proposed management, over 40 years the natural forest area has the potential to generate incremental wood yield valued at \$44 million (net present value at 10% discount rate). At full development, the Project's livelihood plantations will have an annual production value of over \$3.6 million. Annual Government revenues from natural resource taxes on livelihood plantations and natural forest management alone are expected to average \$1.86 million in 2006–2010 and about \$2 million in 2011–2015. This revenue will increase substantially if the envisaged private sector investments are realized. The revenue-generating components described above do not include the value of biodiversity conservation or watershed services the forests provide. A financial evaluation of candidate revenue-generating investments for the sample subproject was undertaken in real terms, using constant 2005 prices. The financial analyses of selected plantation models indicate a financial internal rate of return (FIRR) of 12–17%, whereas longer rotations of 15–40 years have FIRRs of 9–15%. Sensitivity analysis was carried out for a combination of yield classes (12, 16, and 20 m<sup>3</sup>/ha/year), daily wage rates (D35,000, D30,000, and D25,000), and distance to market (50, 100, 150 km). The financial rates of return for 50 and 100 km vary from 13% to 27%. For more than 150 km and a daily wage rate of D35,000, it varies from 1% for yield class 12 to 8.2% for yield class 20, indicating that returns are most sensitive to distance to market. These rates of return compare favorably with the weighted average cost of project capital.

70. **Combining Environmental Protection and Poverty Reduction.** The sector's ability to achieve the national goal of placing 43% of its land area under forest cover, and of protecting the environment and maintaining habitats, is clearly under serious threat despite the recorded increase in forest area through reforestation. Delineating and demarcating the remaining natural forest areas into special-use, protected, and production management blocks or zones, with clearly defined management roles and responsibilities, will strongly help stem habitat degradation. The Project will specifically address biodiversity conservation by supporting the protection of over 99,000 ha of natural forest and facilitating improved management of over 87,000 ha of globally significant biodiversity area. In addition to providing sustainable supplies of non-wood forest products, these activities will increase opportunities for the local poor to earn wages and develop social capital.

## **B. Risks**

### **1. Institutional, Economic, and Environmental Risks**

71. The Project will support interventions and technologies well established in Viet Nam's forestry sector, with minimal technical risks. Project interventions will secure and enhance indigenous people's access to forest resources without causing any involuntary restrictions on land use or access to resources.

72. SFE reform is central to rationalizing roles, responsibilities, and investments in using forestlands. Failed SFE restructuring would put at risk the potential for attracting private sector investments and community support and participation. The following measures will mitigate this risk: (i) a specific assurance from the Government to implement SOE reform decrees; (ii) provision by the Project of incentives to restructured SFE employees, including training; and (iii) the coordination with FSSP partners and through SOE and/or SFE reform performance trigger in the poverty reduction support credits to leverage support.

73. A demand-driven, market-oriented approach to forest sector management is new to Viet Nam and risks undue government interference. The demand-driven aspect will, however, be facilitated by the Project's emphasis on participatory management, which will be the focus of capacity building, training, and awareness-building consultations and workshops. These activities will contribute to the growth of forest and agroforestry SMEs and the long-term sustainability of project outcomes.

74. Business or technical risks exist if householders and enterprises do not attain the required skills to achieve the returns expected from improved forest utilization and management. The Project's investment in long-term capacity building in the forest sector will help to mitigate this risk.

75. Failure to provide adequate income-earning opportunities to absorb labor affected by the restructuring of SFEs may increase poverty and illegal felling in the project area. To mitigate this risk, SFE restructuring will include retraining for job opportunities created by increased forestry and processing activities in the non-state sector.

76. A risk exists that worsening supply deficits and poverty will increase illegal logging, making sustainable forest management less attractive and profitable in the short run. This risk will be managed by increasing the access and stake of households, communities, and the state sector in the forests, so that they see the long-term benefits of sustainable forestry. The Project will also involve the Ministry of Industry in sector discussions so that developing forest processing enterprises stays in line with supplies of raw materials.

77. Potential environmental risks include (i) soil erosion during forest harvesting and planting, (ii) water contamination from fertilizer and pesticide use, (iii) the use of lands suitable for natural forests for plantations, and (iv) minor impacts from constructing village infrastructure. The Project recommends the necessary mitigation measures together with specific staff and budgetary resources for implementing internationally recognized, sustainable forestry and risk management regimes to avoid or minimize these impacts. Environmental assessment and review procedures have been prepared to ensure environmental compliance in subproject selection. A sector environmental analysis was carried out, and the findings suggest that long-term and cumulative impacts are largely beneficial.

## **VI. ASSURANCES**

78. In addition to the standard assurances, the Government and MARD will give the following assurances, which will be incorporated in the legal documents:

### **A. Specific Assurances**

- (i) Within 3 months of loan effectiveness, MARD will approve a detailed project implementation manual with clear definitions of roles and responsibilities of different line agencies and stakeholders and guidelines on technical, operational, and financial administration and management of the Project.
- (ii) The central and provincial authorities will ensure to make timely requests for counterpart funds to be appropriated in the central and provincial budget for activities for the first and subsequent project years.
- (iii) By 30 June 2008, harvesting and transit rules governing wood and wood products as stipulated in Decision No. 40/2005/QD-BNN dated 7 July 2005 will be reviewed and if necessary revised to ensure unhindered access to markets for wood and wood products harvested by villages and communes under the approved management plans set up under the Project.
- (iv) By 31 December 2008, provincial timber harvesting quotas and harvesting plans will be based on the results of the forestry inventory and growth and yield assessments carried out under the Project.
- (v) By 31 December 2008, SFE's role and functions in the project provinces will be brought in line with the sustainable forest management administrative and management regimes developed by the Project.
- (vi) By 30 June 2009, MARD and project provincial authorities will approve SFE's plans and submit respective proposals to the Government requesting permission to implement these plans.
- (vii) The Government will ensure that adequate budget will be made available on an annual basis to the project provinces for the operation and maintenance of the project facilities and government-employed staff at the provincial, district, and commune level.
- (viii) The Government, through MARD, will ensure that project activities comply with applicable laws and regulations of Viet Nam; ADB environment policies and regulations, specifically ADB's *Environment Policy* (2002); environment assessment and review procedures, the summary initial environmental examination; and environmental monitoring plan as set out in the summary initial environmental examination for preparing initial environmental examination for the remaining project provinces.
- (ix) The Government will ensure the implementation of the livelihood improvement and ethnic minority development plan prepared for the Project in accordance with applicable government policies and procedures and ADB policies, specifically

ADB's *Policy on Indigenous Peoples* (1998). This includes ensuring equal opportunities for ethnic minority communities and staff in training, and integrating cultural sensitivities in project implementation.

- (x) In the unforeseen event of involuntary resettlement as defined by ADB's policy on involuntary resettlement, MARD will inform ADB and, prior to proceeding with the particular activity, prepare resettlement planning documents for review and approval by ADB.
- (xi) The Government will ensure that the Project's gender action plan is implemented and that equal access to project and training opportunities are provided for men and women. Women will make up at least a quarter of commune-level project staff. Forestland allocation certificates will be for women and men with joint titles as per the Land Law of 2003.
- (xii) The Government will ensure that forestland tenure rights are consistent with forest and plantation harvesting cycles to ensure project primary stakeholders rights to harvest wood and non-wood forest products at maturity.

## **B. Conditions for Loan Effectiveness**

79. The following are specified as additional conditions to the effectiveness of this Loan Agreement for the purposes of Section 9.01(f) of the Loan Regulations: (i) MARD and relevant Government authorities will have issued decisions providing clear guidelines for Project implementation and financial allocations; (ii) the Borrower will have established the CPMU and PPMUs in a manner satisfactory to ADB, with necessary staffing including full time qualified accountants; and (iii) the Borrower will have received the confirmation of the Trust Fund for Forests that the TFF Grant will be made available for the purpose of the Project.

## **VII. RECOMMENDATION**

80. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve

- (i) the loan in various currencies equivalent to Special Drawing Rights 30,486,000 to the Socialist Republic of Viet Nam for the Forests for Livelihood Improvement in the Central Highlands Sector Project from ADB's Special Funds resources, with an interest charge of 1.0% per annum during the grace period and 1.5% per annum thereafter; a term of 32 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft Loan Agreement presented to the Board;
- (ii) the administration by ADB of grant not exceeding the equivalent of \$8,000,000 to the Socialist Republic of Viet Nam to be provided by the Trust Fund for Forests;
- (iii) the administration by ADB of technical assistance not exceeding the equivalent of \$7,570,000 to the Socialist Republic of Viet Nam for the Forests for Livelihood Improvement in the Central Highlands Sector Project to be provided by the Trust Fund for Forests on a grant basis; and
- (iv) If the Board approves the proposals, I, acting under the authority delegated by the Board, will approve ADB providing the balance of the technical assistance not exceeding the equivalent of \$250,000 for the Project.

Haruhiko Kuroda  
President

## EXTERNAL ASSISTANCE TO THE FORESTRY SECTOR

1. Current external assistance to the forestry sector is estimated at over \$400 million equivalent, and there are at least 21 development partners contributing over \$1 million. Among these, the most prominent are Asian Development Bank, Australia, Canada, Denmark, European Union, Finland, Global Environment Facility, Germany, International Development Association of the World Bank, Japan, The Netherlands, Sweden, and Switzerland.

### A. Forest Sector Support Program and Partnership

2. The Forest Sector Support Program and Partnership (FSSP) is a broad framework for collaboration between the Government of Viet Nam and over 24 international development partners now working in the forestry sector. The FSSP memorandum of agreement includes 15 basic principles of collaboration agreed among the partners and a program framework that specifies indicative performance standards for the broad goal, focused objective, and purpose, as well as specific activities under nine result areas.

**Table A1.1: Forest Sector Support Program Result Areas**

Result Area	Specific Activities
1	Collaborative planning and monitoring of strategic developments
2	Policy, legal, and institutional frameworks
3 and 4	Macro and micro land-use planning
5	State forest enterprise reform
6	Sustainable forest management planning and implementation
7	Sustainable use and conservation of indigenous flora and fauna
8	Research, training, and extension
9	Marketing and processing

Source: Asian Development Bank estimates.

3. The FSSP program framework, with its nine result areas, will likely be replaced by the forthcoming national forest strategy (NFS, 2006–2020), as the key document for collaborative support and implementation by both national and international partners.

### B. Trust Fund for Forests

4. Viet Nam's Trust Fund for Forests (TFF) is a grant facility established in June 2004 to support pro-poor and sustainable approaches to forest management, and a transition towards a comprehensive sector-wide approach for development and cooperation in the forest sector. By pooling resources from several funding agencies into one fund, TFF will provide a more effective means of supporting key sectoral priorities, which are agreed and updated annually by the FSSP partnership.

5. Finland, The Netherlands, Sweden, and Switzerland have pledged to contribute around \$28 million to the fund in 2004–2007. Moreover, the German Government has provided MARD with technical assistance to help manage the fund through the project Reform of the Forestry Administration System.

**Table A1.2: Trust Fund for Forests Funding**  
(\$)

Funding Source	Earmarked	General	Total
The Netherlands	6,019,047	4,815,238	10,834,285
Switzerland		1,203,809	1,203,809
Finland	5,000,000	7,307,020	12,307,020
Sweden		3,800,000	3,800,000
Germany (GTZ)	In kind		

GTZ = Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) (German Agency for Technical Cooperation).  
Source: Asian Development Bank estimates.

6. Two technical advisors have worked with the FSSP coordination office and relevant ministries since November 2004 to develop TFF regulations and operational procedures, launch operations, and build capacity to manage the fund. In 2004, the FSSP Technical Executive Committee approved five small TFF grants totalling €200,000. Currently, the committee is appraising two proposals for full projects. Work will commence in 2005 on developing benchmarks for sectoral budget support.

### C. Past Investment Levels in the Sector

7. Total investment in the sector, according to the Forestry Development Strategy (FDS) in 1999, was around D1.185 trillion, equivalent to around \$76.5 million, of which 85%, or around \$65 million, was for silviculture. However, an ADB-funded study (TA 3255–VIE) on Forest Policy and Institutional Framework suggests that expenditure in 1999 was only D314 billion, or \$22 million. Table A1.3 below summarizes the current relationship between planned targets, actual areas planted, and expenditure.

**Table A1.3: Targets, Actual Areas Planted, and Expenditure on Plantations**

Year	Target Area to be Planted Annually (ha)	Reported Area Planted Annually (ha)	Reported/Required Annual Expenditure (\$'000)	Average Cost per Ha (\$)
Planned 1999–2005 (FDS)	500,000		300,000	600 <sup>a</sup>
Actual 1999 (FDS)		311,000	65,000	209
Actual 1999 (TA 3255–VIE)		311,000	22,000	70

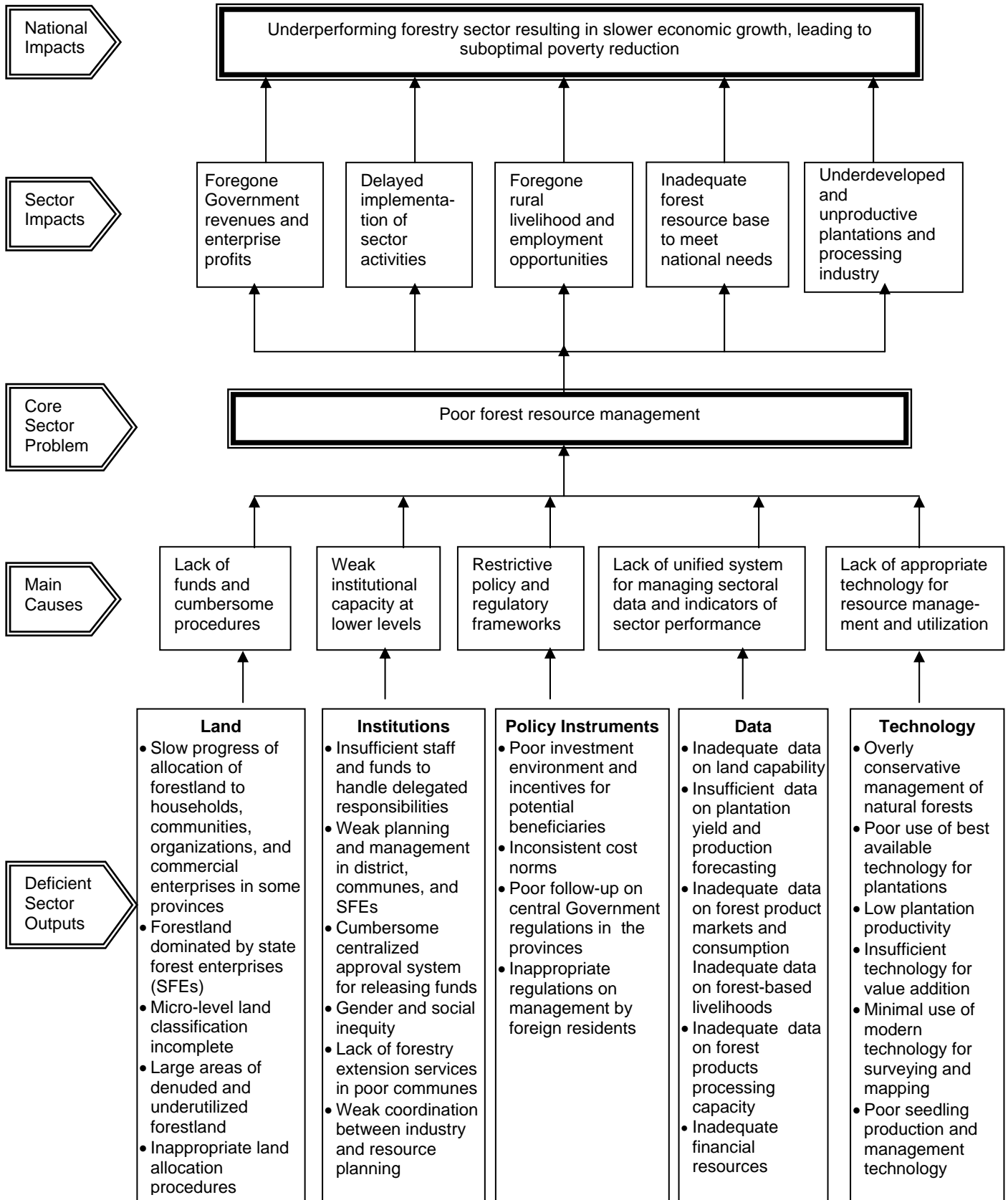
FDS = Forestry Development Strategy, ha = hectare, TA = technical assistance.

<sup>a</sup> Based on current cost norms for plantations establishment.

Source: Asian Development Bank estimates.

8. The funds provided for investment are insufficient to achieve the planted area targets set in the 661 Program and the FDS. The apparent actual investment for planting 1 hectare (ha) is 12–30% of the current cost norm for plantation establishment. Part of this difference may be that some of the labor is provided unpaid in return for a share of future benefits and is not being valued. However, low investment is almost certainly a major contributory factor to the poor performance of the plantations established. Only about 3% of the value of current output from the forestry sector is being invested in maintaining this important economic resource.

### PROBLEM TREE ANALYSIS



## DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p><b>Impact</b> Improved forest productivity and livelihoods and reduced poverty in the Central Highlands</p>	<p>Change in Indicators over 10 years:</p> <ul style="list-style-type: none"> <li>• Forest loss reversed, and cover increased by at least 3% from pre-project base</li> <li>• Natural forest productivity increased by 30%</li> <li>• Plantation productivity increased from 5–6 cubic meters per ha per year to 15–18</li> <li>• Per capita income of at least 5,000 project households doubled</li> <li>• At least 23 million person-days of wage-earning opportunities generated</li> </ul>	<ul style="list-style-type: none"> <li>• Provincial and district statistics</li> <li>• Project baseline data and monitoring reports</li> <li>• Evidence from provincial cadastral offices</li> <li>• National forest and poverty surveys</li> </ul>	<p><b>Assumptions</b></p> <ul style="list-style-type: none"> <li>• Stable socioeconomic environment</li> <li>• Prices for agricultural and forest produce remain favorable</li> <li>• Timely fund-flow and budget allocations</li> </ul>
<p><b>Outcome</b> State-owned and other forests sustainably managed in the Central Highlands.</p>	<p>Change in indicators over ± 8 years:</p> <ul style="list-style-type: none"> <li>• At least 50% increase in cash benefits for poorest households from commune and village forestry.</li> <li>• Natural forest stocking increased by at least 10%.</li> <li>• Investment plans for protecting all land on slopes &gt;21°, and watersheds protected.</li> <li>• 20% increase in raw material supply for local processing industry</li> <li>• Over 250,000 tons of carbon stored.</li> <li>• Illegal logging incidents reduced by 30%</li> <li>• At least 50% increase in provincial forest revenues</li> </ul>	<ul style="list-style-type: none"> <li>• DARD/Department of Forestry forestland allocation and forestry statistics</li> <li>• Reports of Forest Protection Department on illegal activities</li> <li>• Provincial revenue statistics</li> <li>• Area planted and maintained in watershed areas</li> <li>• Forest enterprise utilization and output data</li> <li>• Provincial economic survey data</li> </ul>	<p><b>Assumptions</b></p> <ul style="list-style-type: none"> <li>• Government support for Land Law and Enterprise Law maintained</li> <li>• Fiscal incentives by Government for planting and benefit sharing maintained</li> <li>• Sufficient budget for project monitoring and information system operations</li> <li>• No major natural disasters</li> <li>• Funds allocated on time</li> </ul> <p><b>Risks</b></p> <ul style="list-style-type: none"> <li>• Forest management zones with permanent management units allowed sufficient time to become productive</li> <li>• Cash crop commodity prices and forestry remain competitive</li> </ul>
<p><b>Outputs</b> 1. Six performance-enhancing, sustainable forest management plans covering over 3 million ha and timber stocks worth \$4.4 billion</p>	<ul style="list-style-type: none"> <li>• Approved provincial forest management plans</li> <li>• Approved commune forest management</li> </ul>	<ul style="list-style-type: none"> <li>• Provincial and district forest inventories</li> <li>• Land-use certificates</li> <li>• Project monitoring reports</li> </ul>	<p><b>Assumptions</b></p> <ul style="list-style-type: none"> <li>• Responsive and interested stakeholders</li> <li>• Central and provincial governments remain committed to SFE</li> </ul>

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>operational</p> <p>2. 30,000 ha of high-yielding plantations established, and 99,000 ha of natural forests protected, under non-state sector forestry, improving livelihoods of over 80,000 households</p> <p>3. Forest planning and management decision-support systems, and capacity of project stakeholders and forestry education and training institutions, enhanced at provincial, district and commune level in six provinces and 60 communes</p> <p>4. Enhanced business models and capacity of six provincial forestry departments, at least 3 SFEs, 60 SMEs, and 75 community groups</p>	<p>plans</p> <ul style="list-style-type: none"> <li>• Provincial forestry statistics and sale data</li> <li>• Important forested watershed areas under protection regime with support of surrounding villages</li> <li>• Increased cash incomes in project communes</li> <li>• Provincial forestry enterprise statistics</li> <li>• Employment success rate of Central Highlands forestry training institutions graduates</li> <li>• DARD forest administration and revenue statistics</li> <li>• SFE, SME, and community forestry business success and failure rates</li> </ul>	<ul style="list-style-type: none"> <li>• Mid term review mission report</li> <li>• Provincial business and enterprise statistics</li> <li>• National and provincial poverty assessment reports</li> <li>• Project monitoring reports</li> </ul>	<p>restructuring and reduced role of state in production forestry</p> <ul style="list-style-type: none"> <li>• Central Highlands and forestry sector remain a priority for the Government</li> <li>• Budget and material inputs are delivered on time</li> </ul> <p><b>Risks</b></p> <ul style="list-style-type: none"> <li>• Central and provincial authorities succumb to temptation to allocate forestland to non-forestry sectors for short-term revenue and/or export target considerations</li> <li>• Communities resort to cost-cutting measures and do not make timely or sufficient labor and material inputs in plantations</li> </ul>
<p><b>Activities with Milestones</b></p> <p><b>Component 1: Sustainable Forest Resource Management and Development</b></p> <ul style="list-style-type: none"> <li>• Forestland use planning</li> <li>• Forestland delineation and zoning</li> <li>• Forestland allocation</li> <li>• Protection and production forest inventory and assessments, and valuation</li> <li>• Provincial forest management and business plan prepared and approved</li> </ul> <p><b>Component 2: Livelihood Improvement</b></p> <ul style="list-style-type: none"> <li>• Establish commune development funds in 60 communes to support income-generating activities</li> </ul> <p><b>Component 3: Capacity Development</b></p> <ul style="list-style-type: none"> <li>• Capacity building in GIS/GPS use</li> <li>• Forest inventory and assessment training</li> <li>• Agroforestry technology identification and extension</li> <li>• Business model development for community forestry, SFEs and SMEs</li> <li>• CDF accounting and administration support</li> <li>• Clean development mechanism piloting</li> </ul> <p><b>Component 4: Project Management and Implementation</b></p>			<p><b>Inputs (\$ million)</b></p> <p><b>Component 1:</b> Loan: \$23.59 Government: \$1.16 Beneficiaries: \$8.86</p> <p><b>Component 2:</b> Loan: \$9.64 Government: \$0.97 Cofinancing: \$1.20 Beneficiaries: \$1.46</p> <p><b>Component 3:</b> Loan: \$0.66 Government: \$1.06 Cofinancing: \$3.52</p> <p><b>Component 4:</b></p>

<p><b>Activities with Milestones</b></p> <ul style="list-style-type: none"> <li>• Project implementation plan preparation</li> <li>• Staff and consultant mobilization</li> <li>• Commune-level project implementation</li> <li>• CDFs made operational</li> </ul>	<p>Loan: \$5.02</p> <p><b>Inputs (\$ million)</b></p> <p>Government: \$8.59 Cofinancing: \$8.48</p>
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CDF = commune development fund, DARD = Department of Agriculture and Rural Development, GIS = geographic information system, GPS = geographic positioning system, SFE = state forest enterprise, SME = small-or medium-sized enterprise.

## COST ESTIMATES AND FINANCING PLAN

### Table A4.1: Cost Estimates by Component Category

Item	Local Million			\$ Million		
	Local	Foreign	Total	Local	Foreign	Total
<b>A. Sustainable Forest Resource Management and Development</b>						
<b>1. Forest Land Management Planning</b>						
a. Forest Land Zoning	50,030	–	50,030	3.19	–	3.19
b. Forest Delineation and Demarcation	30,889	–	30,889	1.97	–	1.97
c. Forest Inventory and Planning	24,612	–	24,612	1.57	–	1.57
<b>Subtotal (A1)</b>	<b>105,531</b>	<b>–</b>	<b>105,531</b>	<b>6.72</b>	<b>–</b>	<b>6.72</b>
<b>2. Forest Resource Development</b>						
a. Community Forest Development	304,952	–	304,952	19.42	–	19.42
b. PFMB/SUF Planting	72,584	–	72,584	4.62	–	4.62
c. SME Planting	69,923	–	69,923	4.45	–	4.45
d. Participatory Community Protection	32,127	–	32,127	2.05	–	2.05
e. Forest Infrastructure	4,459	1,604	6,062	0.28	0.10	0.39
<b>Subtotal (A2)</b>	<b>484,045</b>	<b>1,604</b>	<b>485,649</b>	<b>30.83</b>	<b>0.10</b>	<b>30.93</b>
<b>3. Business Development for Sustainable Forest Management</b>						
a. State Forest Enterprises	60,410	0	60,411	3.85	0.22	4.06
b. SMEs	–	1	1	–	1.26	1.26
c. CDM/Ecotourism/NTFP	20,548	1,042	21,591	1.31	0.07	1.38
<b>Subtotal (A3)</b>	<b>80,959</b>	<b>1,044</b>	<b>82,003</b>	<b>5.16</b>	<b>1.54</b>	<b>6.70</b>
<b>Subtotal (A)</b>	<b>670,535</b>	<b>2,647</b>	<b>673,183</b>	<b>42.71</b>	<b>1.64</b>	<b>44.35</b>
<b>B. Livelihood Improvement</b>						
1. Commune Development Fund	1	–	1	1.20	–	1.20
2. Small-scale Commune Infrastructure	178,808	–	178,808	11.39	–	11.39
<b>Subtotal (B)</b>	<b>178,809</b>	<b>–</b>	<b>178,809</b>	<b>12.59</b>	<b>–</b>	<b>12.59</b>
<b>C. Capacity Development</b>						
1. Community Beneficiaries	9,426	2,269	11,695	0.60	0.14	0.74
2. Agency Staff	3,195	770	3,965	0.20	0.05	0.25
3. Forest Enterprises	3,814	919	4,733	0.24	0.06	0.30
4. Provincial Forest Management Staff	3,195	770	3,965	0.20	0.05	0.25
5. National Government Staff	2,996	724	3,720	0.19	0.05	0.24
6. Forest Management, Extension and GIS Training	26,859	6,479	33,338	1.71	0.41	2.12
7. Training Institution Infrastructure	11,443	5,268	16,711	0.73	0.34	1.06
<b>Subtotal (C)</b>	<b>60,929</b>	<b>17,198</b>	<b>78,126</b>	<b>3.88</b>	<b>1.10</b>	<b>4.98</b>
<b>D. Project Management and Implementation</b>						
1. Project Management, Consulting Services and Studies	12,489	3,744	16,233	5.53	2.13	7.66
2. Project Workshops and Study Tours	4,388	1,057	5,446	0.28	0.07	0.35
3. Government Counterpart Staff	69,529	–	69,529	4.43	–	4.43
4. Vehicles and Equipment	60,694	39,510	100,203	3.87	2.52	6.38
5. Vehicles and Equipment Operation and Maintenance	22,564	16,510	39,074	1.44	1.05	2.49
<b>Subtotal (D)</b>	<b>169,662</b>	<b>60,821</b>	<b>230,484</b>	<b>15.54</b>	<b>5.76</b>	<b>21.31</b>
<b>Total Baseline Costs</b>	<b>1,079,935</b>	<b>80,666</b>	<b>1,160,602</b>	<b>74.72</b>	<b>8.50</b>	<b>83.23</b>
Physical Contingencies	12,215	0	12,215	0.82	0.09	0.91
Price Contingencies	63,805	2,259	66,064	4.06	0.14	4.21
<b>Total Project Costs</b>	<b>1,155,956</b>	<b>82,925</b>	<b>1,238,881</b>	<b>79.61</b>	<b>8.74</b>	<b>88.35</b>
Interest During Implementation	–	36,294	36,294	–	2.31	2.31
<b>Total Costs to be Financed</b>	<b>1,155,956</b>	<b>119,219</b>	<b>1,275,175</b>	<b>79.61</b>	<b>11.05</b>	<b>90.66</b>

– = data not available, CDM = Clean Development Mechanism, CFM = community forest management, CIP = commune investment plan, GIS = geographical information system, MTR = midterm review, PFMB = protected forest management board, NTFP = non-timber forest product, SFM = sustainable forest management, SME = small- or medium-sized enterprise, SUF = special-use forest.

Source: Asian Development Bank estimates.

**Table A4.2: Components by Financiers**  
(\$ million)

Item	ADB	Government	Cofinanciers	Beneficiaries	Duties and
	Amount	Amount	Amount	Amount	Taxes
<b>A. Sustainable Forest Resource Management and Development</b>					
<b>1. Forest Land Management Planning</b>					
a. Forest Land Zoning	0.78	2.60	–	–	–
b. Forest Delineation and Demarcation	1.67	0.42	–	–	–
c. Forest Inventory and Planning	1.33	0.33	–	–	–
<b>Subtotal (A1)</b>	<b>3.78</b>	<b>3.35</b>	–	–	–
<b>2. Forest Resource Development</b>					
a. Community Forest Development	14.57	0.11	–	6.74	0.29
b. PFMB/SUF Planting	4.41	0.49	–	–	0.49
c. SME Planting	2.12	0.47	–	2.12	0.47
d. Participatory Community Protection	2.17	–	–	–	–
e. Forest Infrastructure	0.32	0.08	–	–	–
<b>Subtotal (A2)</b>	<b>23.59</b>	<b>1.16</b>	–	<b>8.86</b>	<b>1.25</b>
<b>3. Business Development for Sustainable Forest Management</b>					
a. State Forest Enterprises	–	1.57	1.24	1.48	0.30
b. SMEs	–	0.54	0.72	–	–
c. CDM/Ecotourism/NTFP	–	1.05	0.41	–	0.15
<b>Subtotal (A3)</b>	–	<b>3.16</b>	<b>2.37</b>	<b>1.48</b>	<b>0.44</b>
<b>Subtotal (A)</b>	<b>27.37</b>	<b>7.67</b>	<b>2.37</b>	<b>10.34</b>	<b>1.70</b>
<b>B. Livelihood Improvement</b>					
1. Commune Development Fund	–	–	1.20	–	–
2. Small-scale Commune Infrastructure	9.64	0.97	–	1.46	0.68
<b>Subtotal (B)</b>	<b>9.64</b>	<b>0.97</b>	<b>1.20</b>	<b>1.46</b>	<b>0.68</b>
<b>C. Capacity Development</b>					
1. Community Beneficiaries	–	–	0.78	–	–
2. Agency Staff	–	–	0.27	–	–
3. Forest Enterprises	–	–	0.32	–	–
4. Provincial Forest Management Staff	–	–	0.27	–	–
5. National Government Staff	–	0.06	0.19	–	–
6. Forest Management, Extension and GIS Training	–	0.56	1.68	–	–
7. Training Institution Infrastructure	0.66	0.44	0.02	–	–
<b>Subtotal (C)</b>	<b>0.66</b>	<b>1.06</b>	<b>3.52</b>	–	–
<b>D. Project Management and Implementation</b>					
1. Project Management, Consulting Services and Studies	0.30	0.11	7.44	–	0.11
2. Project Workshops and Study Tours	–	0.04	0.33	–	0.04
3. Government Counterpart Staff	–	4.69	–	–	–
4. Vehicles and Equipment	2.82	3.50	0.27	–	3.50
5. Vehicles and Equipment Operation and Maintenance	1.90	0.26	0.44	–	0.26
<b>Subtotal (D)</b>	<b>5.02</b>	<b>8.59</b>	<b>8.48</b>	–	<b>3.90</b>
<b>Total Project Costs</b>	<b>42.69</b>	<b>18.29</b>	<b>15.57</b>	<b>11.80</b>	<b>6.27</b>
Interest During Implementation	2.31	–	–	–	–
<b>Total Disbursement</b>	<b>45.00</b>	<b>18.29</b>	<b>15.57</b>	<b>11.80</b>	<b>6.27</b>

ADB = Asian Development Bank, CDM = Clean Development Mechanism, CFM = community forest management, CIP = commune investment plan, GIS = geographical information system, MTR = midterm review, PFMB = protected forest management board, NTFP = non-timber forest product, SME = small and medium enterprise, SUF = special-use forest.

<sup>a</sup> Finland, The Netherlands, Sweden, and Switzerland.

Source: Asian Development Bank estimates.



## PROCUREMENT PLAN

The first English-language draft of the procurement documents should be submitted for Asian Development Bank (ADB) review and approval regardless of the estimated contract amount. ADB-approved procurement documents should be used as models for all procurement financed by ADB and will not be subjected to further review unless required under special arrangements. For international competitive bidding, ADB will conduct prior review of the bid evaluation report. For national competitive bidding, ADB will review the bid evaluation report and award of contract post facto.

Description	Number of Contracts	Total Base Cost Estimates (\$'000)	Mode of Procurement	Responsible Agency
Vehicles	3	1,454	NCB	CPMU
Communications equipment	2	63	ICB/NCB/DC	CPMU
GPS equipment	1	228	ICB/NCB/DC	CPMU
Office equipment	2	602	NCB	CPMU
Satellite and other data	1	66	ICB/S/DC	CPMU
Computer software	2	140	ICB/NCB	CPMU
Office furniture and equipment	2	188	NCB/S	CPMU
Technical equipment	2	62	ICB/NCB/DC	CPMU
Civil works <sup>a</sup>	6	9,300	NCB/S/DC	CPMU/PPMU
<b>Total</b>	21	12,103		

CPMU = central project management unit, DC = direct contract, DP = direct purchase, GPS = global positioning system ICB = international competitive bidding, NCB = national competitive bidding, PPMU = provincial project management unit, S = shopping.

<sup>a</sup> Civil works will include construction and/or upgrading of intra-commune and village roads and tracks, water wells, health posts, schools, and small irrigations channels.

Source: Asian Development Bank estimates.

## TECHNICAL ASSISTANCE

1. In conjunction with the Forests for Livelihood Improvement in the Central Highlands Sector Project (the Project), advisory technical assistance (TA) is required to provide the Government with technical and advisory support for the proposed sustainable resource development and management of the forest sector, extension to small-scale farmers and households, and livelihood improvement and community support in 60 communes in the project area. TA will cover five main areas by providing (i) international and national expertise and fixed-term contracted staff to strengthen the Government's capacity in forest management planning, inventorying, assessment, valuation, and financial and budgetary planning; (ii) advisory support relating to sustainable forest resource development in the 60 communes in the project area, including strengthening the capacity of communes to handle commune development funds as well community and social development objectives; (iii) support for small-scale infrastructure development and income-generating activities; (iv) verification visits and coordinated capacity-development interventions in communes, districts, provincials, and the national Government, including the oversight of twinning arrangements between Vietnamese and external training institutions; and (v) verification of compliance with ethnic minority, gender, and environmental policies of the Government and Asian Development Bank (ADB). The total cost of TA is estimated at \$7.82 million equivalent with cofinancing \$7.57 million from Trust Fund for Forests (TFF) and from ADB \$0.25 million.<sup>1</sup>

2. The Implementing Agency for TA will be Ministry of Agriculture and Rural Development (MARD). The selection and engagement of the consultants for TA will be done by ADB in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for engaging domestic consultants. During implementation, as services are required, ADB's standard quality- and cost-based selection method will be used, and full technical proposals will be invited from the shortlisted consulting firms. Procurement under TA will be carried out in accordance with ADB's *Procurement Guidelines*. TA will be carried out over 8 years and will require the services of an international consulting firm, consisting of 153 person-months of international consultant services and 4,948 person-months of national consultants, in financial management, accounting and project administration, forest management planning, biometrics and forest valuation, plantation development, forest seed and stand improvement, environment and biodiversity conservation, community and social development including gender analysis, and GIS and database management.

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<sup>1</sup> The governments of Finland, The Netherlands, Sweden, and Switzerland are the main contributors to TFF.

**Table A7: Outline Terms of Reference for Consultants**

Component and/or Subcomponent	Description	Person month	Total Cost (\$)	Outline TOR
<b>A. International Consulting Services</b>				
A, B, C, D	Financial management and project implementation support (team leader)	48	1,070,200	<ul style="list-style-type: none"> <li>• Take overall responsibility for implementing technical assistance.</li> <li>• Take the lead in assisting provincial teams in planning, preparing, and completing the subprojects (commune investment plans, or CIPs) and follow-up on forest resource management plans in all provinces.</li> <li>• Verify core commune investment plan implementation.</li> <li>• Provide team leadership, coordination, financial management, and administrative input.</li> <li>• Develop and supervise implementation of a comprehensive capacity-development plan.</li> <li>• Coordinate and oversee training institution twinning arrangements and capacity development inputs.</li> <li>• Provide guidance on following Asian Development Bank (ADB) requirements on statement of expenditure guidelines.</li> <li>• Monitor and report.</li> </ul>
A1, A2	Forest management planning specialist	20	238,000	<ul style="list-style-type: none"> <li>• Support forest development management plan preparation for six provinces based on principles of sustainable forest resource and development management.</li> <li>• Assist detailed forest survey and inventory.</li> <li>• Provide guidance on demarcating and delineating the provincial forest estate.</li> <li>• Advise on participatory planning procedures to establish commune forest management in households and villages in the 60 target communes.</li> <li>• Identify sustainable forest management and environmental monitoring indicators related to forest product harvesting and planting.</li> </ul>
A1, A2	Forest biometric	20	308,400	<ul style="list-style-type: none"> <li>• Manage the forest inventory.</li> <li>• Model growth and yield.</li> <li>• Sample designs and intensity; establish procedures for enumeration, data-logging procedures, and inventory control.</li> <li>• Establish computer-based inventory data storage and retrieval system, and manage inventory, yields, and forecasts.</li> <li>• Establish growing stock and yield</li> </ul>

Component and/or Subcomponent	Description	Person month	Total Cost (\$)	Outline TOR
				<p>estimation guidelines for the 60 project communes.</p> <ul style="list-style-type: none"> <li>Assess growing stock and yield for the provincial forest estates.</li> </ul>
A1, A2, A3, A4	Plantation development specialist	12	190,200	<ul style="list-style-type: none"> <li>Provide technical advice on tree improvement to achieve higher growth and yield.</li> <li>Recommend species and provenance trials necessary to establish complete datasets in the agro-ecological zones targeted.</li> <li>Recommend species and provenances to be planted in uniquely identifiable ecological zones.</li> <li>Recommend the purchase of genetically superior seed (in terms of quantity, species, and provenance) from identified, reliable, and reputable suppliers of quality seeds.</li> <li>Help the Department of Agriculture and Rural Development, districts, state forest enterprises (SFEs), and small and medium enterprises (SMEs) in the private sector set up a reliable system for managing improved seed stands for supplying part of the demand for seeds (both for plantations as well as of indigenous species for protected forests).</li> <li>Include tree improvement data from research programs in the commercial forest intervention prescriptions and integrate findings and guidelines in the curricula of training institutions.</li> </ul>
A1, A2, A3	Forest seed and stand improvement specialist (nursery development)	12	204,600	<ul style="list-style-type: none"> <li>Review current nursery practices in SFEs and non-state nurseries.</li> <li>Identify nursery sites.</li> <li>Assist province and districts in establishing suitable nurseries for covering demand for quality seedlings.</li> <li>Review site preparation, establishment, and silvicultural practices and recommend operational prescriptions.</li> <li>Undertake random sampling of seedling quality from various nurseries and assist in quality improvement.</li> <li>Prepare guidelines for nursery operations and prescriptions for commune, village level, and district nurseries.</li> </ul>
A1	Forest business and economic specialist	12	190,200	<ul style="list-style-type: none"> <li>Review the adequacy and efficacy of existing forest valuation instruments, decrees, and regulations affecting valuation.</li> <li>Compare valuation practice in Viet Nam with regional and international</li> </ul>

Component and/or Subcomponent	Description	Person month	Total Cost (\$)	Outline TOR
				<p>practice.</p> <ul style="list-style-type: none"> <li>• Identify key criteria such as the commercial value of forest products, both timber and other, and of commercialized services.</li> <li>• Assess value as public or user assets.</li> <li>• Determine commercial and other values and compare with market prices.</li> <li>• Determine indicative values and prices for major species groups.</li> </ul>
A4	Environment and biodiversity specialist	6	86,800	<ul style="list-style-type: none"> <li>• Advise provincial staff and special-use forest (SUF) management on conservation, reforestation, and ecosystem restoration, and review current management plans and proposed ecotourism plans.</li> <li>• Review operational management plans of SUFs.</li> <li>• Assist in implementing an environmental assessment and review procedure and prepare and review subproject initial environmental assessments.</li> </ul>
A2, B	Community and social development specialist	6	92,800	<ul style="list-style-type: none"> <li>• Lead the development and implementation of social and gender analyses.</li> <li>• Establish a participatory approach for community forest management and livelihood improvement interventions in the communes.</li> <li>• Design data collection for household, village, and commune analyses of income, poverty, social amenities, access to services, and pre- and post-project socioeconomic situations.</li> </ul>
A1, B, C, D	Geographic information system (GIS) and database specialist	14	269,500	<ul style="list-style-type: none"> <li>• Design and set up a forward-looking interfacing and modular spatial forestland-use planning and monitoring system and develop capability provincially and centrally for the next decade.</li> <li>• Establish a GIS data collection, storage, retrieval, and mapping system consistent with national cadastral data sets.</li> <li>• Include in the database non-sectoral information on organization, finance and administration, socioeconomic factors, poverty, and assessment of the impact of forest activities on poverty reduction.</li> <li>• Generate quarterly and biannual electronic reports with visualized information and maps.</li> </ul>
B	Financial accounting and management specialist	3	51,150	<ul style="list-style-type: none"> <li>• Assist provincial staff in maintaining project account ledgers, making entries, balancing books, preparing statements of expenditure, and</li> </ul>

Component and/or Subcomponent	Description	Person month	Total Cost (\$)	Outline TOR
				<p>preparing statements of accounts for ADB-funded loan projects.</p> <ul style="list-style-type: none"> <li>Review guidelines to set up and operate commune development funds (CDFs) and monitor their establishment.</li> <li>Evaluate the performance of CDFs.</li> <li>Assist in generating financial reports and handling audit queries.</li> <li>Evaluate provincial accountants' handling of project accounts and submission of timely statements of expenditure.</li> </ul>
	<b>Subtotal A</b>	<b>153</b>	<b>2,701,850</b>	
<b>B. Domestic Consulting Services</b>				
A, B, C, D	National deputy team leader – development specialist	72	223,200	<p>Assist the team leader in</p> <ul style="list-style-type: none"> <li>implementing TA;</li> <li>helping provincial teams plan, prepare, and complete the subproject CIPs and follow up on forest resources;</li> <li>verifying investment plan implementation; and</li> <li>following-up on support services to communes regarding upland farming and agroforestry.</li> </ul>
A1, A2, A3, A4	Forester	12	276,600	<p>Assist with</p> <ul style="list-style-type: none"> <li>forest development plans in six provinces,</li> <li>detailed survey and inventory,</li> <li>participatory planning and commune forest development,</li> <li>plantation development and performance monitoring, and</li> <li>forestry extension.</li> </ul>
A2, B, C	Agroforestry, upland farming systems, and community livelihood improvement specialists (2)	180	309,600	<ul style="list-style-type: none"> <li>Provide extension to communes on agroforestry, upland farming, micro income-generating projects, participatory project planning, securing funds from CDFs, and monitoring performance.</li> <li>Conduct data collection and socioeconomic surveys.</li> <li>Conduct poverty reduction impact surveys.</li> </ul>
A1, A2, A3, A4	Provincial and district implementation support (forestry, finance, infrastructure, and coordination)	1,440	792,000	<ul style="list-style-type: none"> <li>Assistant to the forester in supporting the implementation of forestry interventions in each province.</li> <li>Learn-assist in the beginning and advance to take over duties provincially.</li> </ul>

Component and/or Subcomponent	Description	Person month	Total Cost (\$)	Outline TOR
D	Financial accounting support (6)	72	182,160	<ul style="list-style-type: none"> <li>Assistant to the team leader and financial management consultants in implementing accounting and CDF elements provincially and in the 60 communes.</li> <li>Learn-assist in the beginning and advance to take over duties provincially.</li> </ul>
A2, B	Commune implementation support (contracted staff)	2,880	576,000	<ul style="list-style-type: none"> <li>Serve as key motivators and animators providing orientation, explaining project policies, providing input to groups and participatory processes, collecting basic data (and entering it into handheld personal digital assistants to upload into the database), and building communication bridges between the Project and communes.</li> <li>Follow up on nurseries; commune forest plantations; participatory protection; coordinating training and study tours for communes; field visit support; and assisting in planning, budgeting, and project annual general meetings in communes.</li> </ul>
A, B, C, D	GIS national consultants (2)	72	165,960	<ul style="list-style-type: none"> <li>Assist in designing and setting up a modular, spatial forestland-use planning and monitoring system and build capability provincially and centrally in using the GIS data collection, data storage and retrieval, and the mapping system.</li> </ul>
A2, B, D	National financial management consultant	36	106,380	<ul style="list-style-type: none"> <li>Assist in maintaining account ledgers, making entries, balancing books, preparing statements of expenditure, and preparing financial reports.</li> <li>Provide support for establishing CDFs in communes, evaluating performance, and improving CDF implementation.</li> </ul>
	Unallocated short term <sup>a</sup>	40	118,580	
	Interpreters and translators (2 people)	144	426,333	
	<b>Subtotal B</b>	<b>4,948</b>	<b>3,176,813</b>	

Note: The balance of person-months is time spent by contracted staff rather than consultants, but they will be recruited under the consultant package.

<sup>a</sup> This will include on demand services of a national environmental specialist.

Source: Asian Development Bank.

## SUMMARY LIVELIHOODS IMPROVEMENT AND ETHNIC MINORITIES DEVELOPMENT PLAN

### A. Introduction

1. The overarching goal of the Forests for Livelihood Improvement in the Central Highlands Sector Project (the Project) is to improve the livelihoods of isolated upland rural communities living in and adjacent to forestland in a sustainable manner that will also facilitate forest improvement and natural resource management. Villages of the Central Highlands are largely populated by indigenous or other minority groups. The livelihoods development and ethnic minorities development plan (LIEMDP) is formulated as a time-bound program to ensure that ethnic minority groups living in 60 communes in the six provinces of the Central Highlands will benefit from project interventions, which aim to improve forestland allocation and management to reduce poverty and improve livelihoods in the area. The LIEMDP is based on detailed analyses of poverty, ethnicity, and livelihoods in the project area in general and in sample communes in particular. It is expected to have beneficial impacts upon approximately 65,000 members of ethnic minorities and other poor households in approximately 6,000 villages in the 60 communes selected.

#### 1. Poverty, Ethnicity, and Forests in the Central Highlands

2. Taken as a whole, the northwest and the Central Highlands are the poorest regions in the country. According to the Vietnam Development Report 2004,<sup>1</sup> the Central Highlands stand out because of their limited progress in poverty reduction over the past 4 years and because food poverty in this central region has remained unchanged for the past decade. The report goes on to predict that the overall poverty rate for Viet Nam in 2010 will be 21%, and that 37% of that figure will be ethnic minority people. Indeed, more recent times have seen an increase in the Central Highlands poverty rate due to the collapse of coffee prices, a sharp drop in pepper prices, and the lack of a diversified local production base. The LIEMDP is a central document for project design, presenting the strategy that will drive poverty reduction in targeted communities throughout the Central Highlands. The LIEMDP is based upon extensive participatory beneficiary consultations in the target provinces. In terms of its replicability, the LIEMDP is generic and the main strategies will remain the same. Only the specific income-generating activities adopted by different communities are expected to vary, as will some internal implementation arrangements.

3. The objective of the LIEMDP is to provide an enabling environment in which a suitable strategy and appropriate mechanisms—replicable in most if not all of the 137 poor forest communes in the Central Highlands—to ensure sustainable livelihood improvement and access to benefits for the target communities. The LIEMDP has been formulated such that most beneficiaries belong to indigenous and other minority groups.

4. Poverty in Viet Nam is measured in a variety of ways, depending upon the agency concerned. The Ministry of Labor, Invalids, and Social Affairs (MOLISA) uses a measure of household income per capita as follows for 2001–2005:

- (i) in highland and mountainous areas, per capita income of less than D80,000 per month or D960,000 per year;
- (ii) in flat rural areas, per capita income of less than D100,000 per month or D1,200,000 per year; and,

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<sup>1</sup> 2003. *Joint Donor Report to the Vietnam Consultative Group Meeting*. Ha Noi.

- (iii) in urban and peri-urban areas, per capita income of less than D150,000 per month or D1,800,000 per year.

5. The Government Statistics Office published a comparative view of the spatial incidence of poverty in 1993, 1998, and 2002. All regions of Viet Nam are compared against three poverty measures: overall poverty rate, food poverty rate, and poverty gap. According to this report, the Central Highlands region has the second worst incidence of overall and food poverty and the second highest poverty gap of all regions. In fact, the figures suggest that poverty reduction in the Central Highlands has lagged behind that of other regions, as it declined from third to second worst ranking for overall poverty between 1993 and 2002. A recent study—funded by New Zealand’s International Aid and Development Agency (NZAID) in collaboration with the Inter-Ministerial Poverty Mapping Task Force, International Food Policy Research Institute, Information Center for Agriculture and Rural Development, and Institute of Development Studies—used combined data from the 1998 Vietnam Living Standards Survey and the 1999 Population and Housing Census to map national poverty by commune. Although the analysis differs significantly from MOLISA estimates of poverty, the study confirms that the poorest regions are the remote areas of the northwest, upland areas of the north-central coast and the northern part of the Central Highlands.<sup>2</sup>

6. According to this analysis, Dak Lak, Lam Dong, and Phu Yen are among the better-off provinces in the country, while Gia Lai and Kon Tum are among the poorest. Phu Yen and Lam Dong are not generally regarded as Central Highlands provinces, but both are contiguous to the project area and have some districts in the upland and highland areas. Again, these upland and highland areas are inhabited mainly by minority communities, and their socioeconomic well-being is significantly worse than conditions in lowland areas. Although there are undoubtedly many poor Kinh (mainstream Vietnamese) households in the Central Highlands, ethnic minority households are more likely than Kinh to be poor. Poverty in the selected areas of the Central Highlands is marked by landlessness, periods of food and cash deficit, illiteracy, and lack of access to forestland and forest resource exploitation. The poor suffer high illiteracy among people above school age, particularly in indigenous communities. People lack savings or capital for investing in better production technology and also lack awareness and knowledge of the options available. Population growth in the Central Highlands has been dramatic, mainly due to the migration of Kinh into the area. In 1998 only 4% of Viet Nam’s population lived in the Central Highlands, but by 2002 this figure had risen to 6% and, over the same period, the percentage of ethnic minorities in this population decreased from 45% to 39%. This in-migration can also help explain the rise in poverty in the Central Highlands over recent years, as poor and perhaps landless Kinh migrate into the area hoping to obtain cheap or government-allocated land.

## 2. Poverty and Forest Resource Decline

7. Although the Central Highlands are the richest region in terms of forest resources, only 3% of the income of Central Highlands dwellers comes from forestry. Local households’ forestry activities have been limited mainly to forest planting and care under contract. Also interesting is that the Central Highlands contain almost 50% of the national area of destroyed forest, presumably due to slash-and-burn, shifting cultivation. Although now illegal, it is still practiced by those with no other land resources. Field studies confirmed that most of the forestland, especially areas with good forest reserves in the Central Highlands, is owned by state forest enterprises (SFEs). All the forest area that has been allocated to the villagers is poor. The

<sup>2</sup> Minot, N., Baulch, B., and Epprecht, M. (in collaboration with the Inter-Ministerial Poverty Mapping Task Force). 2003. *Poverty and Inequality in Vietnam: Spatial Patterns and Geographic Determinants*. Washington, DC: International Food Policy Research Institute.

survey clearly shows that the forest's potential to benefit those living nearby has not been properly exploited. The issuance of land-use certificates is still very limited, and this slow progress has affected households' capital mobilization for production.

8. The Government has promulgated many different policies and regulations to facilitate rural development and poverty reduction, but they have been implemented with varying degrees of success. The Government has also made serious attempts to create an appropriate legal environment to facilitate implementation of its policies and programs. The Land Law of 2003 provides for allocating long-term land-use rights to individuals, households, and communities of Vietnamese living in the same villages and hamlets, or with similar customs and practices, or with the same descents.<sup>3</sup> This would allow assigning long-term land-use rights to ethnic minority and indigenous tribal communities.

9. **The 2001–2005 Five-Year Plan and Fundamental Solutions for the Socioeconomic Development of the Central Highlands.** This plan was approved through Decision 168/2001/QD on 30 October 2001 and is particularly relevant to the Project. It applies to the Central Highlands provinces Dak Lak, Gia Lai, Kon Tum, and Lam Dong, seeking to facilitate dynamic development with a high but sustainable growth rate while protecting ecological and environmental resources. It aims to raise living standards and the quality of life in remote areas inhabited by ethnic minorities and other areas that encounter significant difficulties. It also hopes to build a strong and transparent political system and an equitable society.

### 3. Comprehensive Poverty Reduction and Growth Strategy

10. Specific mention is made of the need to improve and stabilize the living standards of ethnic minorities in a manner that is compatible with their customs. The Comprehensive Poverty Reduction and Growth Strategy aims to reduce poverty by creating new and improved opportunities for poor people to take part more fully in, and gain more benefit from, ongoing socioeconomic reform and development.

### 4. Government of Viet Nam Agencies Responsible for Poverty Reduction and Ethnic Minority Development

11. The most immediately relevant agencies involved in rural community and ethnic minority development are the Ministry of Agriculture and Rural Development, Committee for Ethnic and Minority Affairs, MOLISA, Vietnamese Women's Union, education, and health.

## B. Community Forestry and Forest Land Allocation, Experiences, and Issues

12. In recent years, some community-based forestry initiatives have been piloted through funding agency assistance programs such as the German Agency for Technical Cooperation (GTZ) Dak Lak project. These experiences indicate that conditions required for successful community-based management include the following:

- (i) Land allocation processes should be decided by the community. These need to take into account community traditions, traditional boundaries, village social composition, earlier experiences with social forestry, and access to markets.
- (ii) Benefit realization is fundamental to providing incentives for protecting forests. Benefits should be available to those receiving forestland and to others in the community. Benefit-sharing policies that result in uniform sharing of benefits need to be developed within the community.

<sup>3</sup> Official Gazette Nos. 228–229 (28/12/2003).

- (iii) Community forest rules need to be developed and agreed by all members of the community (and adjacent communities) and include penalties for noncompliance.
- (iv) Access to capital and technical and marketing advice is needed to ensure maximum benefits are realized from the allocated forestland and that incentives to protect it are also maximized.

## 1. Results of Participatory Appraisals Carried out in Sample Communes

13. Based on the lessons above, the LIEMDP has been developed on the basis of participatory enquiries held with the indigenous and other ethnic minorities in the course of project preparation.

14. **Overall Conclusions from Field Studies.** Poverty in the areas studied is patterned thematically across communities such that effectively tackling poverty reduction and livelihood improvement requires addressing these thematic issues in a strategic manner. To prescribe a list of investments without building a mechanism within the target communities to build empowerment and the capacity to address poverty reduction needs locally would be a design oversight.

15. **Access to Forests, Forest Land, and Agricultural Lowland.** Ethnic minority groups traditionally live in or on the borders of forested areas and survive by hunting, collecting non-timber forest products, and cultivating various crops. They were denied access to these livelihood resources when forested land was passed to SFEs. In reality, they have received very little land. The allocation of agricultural land to households and forested land to communities must take place.

16. **Cultures, Traditions, and Religious and Behavioral Differences.** These must be taken into consideration when designing interventions and their implementation to ensure that they are appropriate.

17. **Access to Services, Technology, and Capital.** These communities' access to technology or services is constrained by their geographic isolation, poor roads and communications, illiteracy, and lack of cash and savings for investment. Heads of household, particularly in middle and lower socioeconomic groups, are generally illiterate in the Kinh language. The community suffers from poor delivery of education and health services.

18. Minority communities hold very few assets or farming tools and are inexperienced in intensive agriculture, which is necessary on small flatland plots and home gardens. Agricultural extension services are ineffective.

19. Farming systems are very basic and extensive, with low inputs. Yields are low, and no processing is done to add value. Most ethnic minority members are basically subsistence farmers, and some still engage in slash-and-burn, shifting cultivation, although this is illegal. Livelihood insecurity is a big problem.

20. **Ethnic Minority Participation.** The goal of the LIEMDP is to reduce the incidence of poverty and improve food security among ethnic minority communities who form the poorest sections of the population in the project area.

21. The immediate objective is to increase the benefits of forest management and use by grassroots communities, in partnership with state and other agencies, to improve the livelihoods

of forest-dependent communes in the 60 target communes in the selected provinces. These communes are taken from the MOLISA list of the 137 poorest communes in the six provinces. Ethnic minorities occupy shares of the population of these communes ranging from approximately 50% to 100% and suffer poverty rates of 40–60% and higher. These communes also have productive forestlands available for allocation under the Project.

22. The intended beneficiaries are ethnic minority and other poor households, communities, and village and commune forest protection boards.

## **2. Components and Outputs**

### **a. Sustainable Forest Resource Development and Management**

23. **Forestland Management Planning.** Using a participatory approach involving multiple stakeholders, the Project will support upgrading provincial land and forestland use strategies in accordance with the new Land and Forest Protection laws. This will include rationalizing forestland use objectives and management regimes in provinces, districts, and communes. The Project will provide the enabling governance and incentive framework for sustainable natural forest and plantation development and management, the restructuring of SFEs, and accelerated and equitable forestland allocation.

24. Covering over 3 million ha of production forests, the Project will support the following activities under this component:

- (i) Regarding forest zoning and identifying production clusters, the Project will support provincial, district, and commune forest resource management planning and zoning based on geographic information systems (GIS).
- (ii) It will lead the delineation, surveying, and demarcation of forests to clearly and permanently define forest boundaries, irrespective of land ownership and/or management regimes.
- (iii) Regarding forest inventory and management planning, the Project will support the preparation of detailed forest management plans for over 3 million ha, in consultation with participating stakeholders. This will minimize forestland use and management conflicts and achieve economies of scale in terms of project management, as well as of production and marketing. Sustainable forest management plans will be approved by provincial people's committees and become the business plan for provincial forestry.

25. The Project will address one of the fundamental issues of both forest management and poverty reduction in the Central Highlands: forest boundary demarcation and land allocation. Local communities and all stakeholders will be involved in this process. The Project will support special measures to enable the participation of hitherto excluded sections of local communities, especially ethnic minorities and women, by building their literacy in the Vietnamese language and increasing their access to information, training, and extension programs. Empowerment via functionality in different languages will develop in tandem with local communities' rediscovering their indigenous knowledge, especially regarding forest-related activities.

26. The Project will also build the capacity of state agencies to implement ethnic minority-sensitive participatory planning and implementation in forestry. These measures are expected to bring under the management of the 60 selected communes approximately 180,000–480,000 ha, increasing the forest resources available for livelihood improvement. Local communities and all stakeholders will be involved in surveying to ensure consensus on forest boundaries. In areas

where demarcation cannot be done by natural features, permanent markers such as concrete posts will ideally be used. However, permanent colored markings on trees and rocks can be used, with their positions recorded on the map record using global positioning systems. Traditional leaders of ethnic minority communities will participate in the process, along with commune people's committees, to include consideration of traditional boundaries of village forestlands in boundary demarcation.

27. **Small and Fragmented Forest Tracts.** Small forest tracts will generally be allocated to communities to manage. A similar set of activities will be undertaken for these blocks as part of preparing commune investment plans (CIPs), but procedures will be simplified as much as possible to keep paperwork to a minimum.

28. The management of forest areas will be achieved by implementing participatory rehabilitation and management of protected forests by protected forest management boards, and of special-use forests by (i) participatory protection of protected forest areas with usufruct sharing, (ii) planting indigenous tree species, and (iii) enrichment planting in degraded areas.

29. The Project will see community forest planting by communes and village communities, improved forest management, and increased valuation of forest resources under village community ownership or tenure in at least 60 selected communes covering a total area between 180,000 and 480,000 ha. Participatory protection of forests shall also be done over the area planted by communes and areas for which they enter into contractual obligations with state agencies. The proposed community forestry activities for the selected 60 communes will include

- (i) planting indigenous species;
- (ii) forest restoration and enrichment planting in degraded natural forests;
- (iii) creating village woodlots with fast-growing tree species to meet local fuel wood and small timber needs, as well as for commercial purposes;
- (iv) agroforestry practices;
- (v) farm forestry and homestead planting, especially for fruit trees;
- (vi) participatory protection of natural forest; and
- (vii) developing basic infrastructure for the overall development of the commune.

30. **Business Development.** The Project will support (i) the promotion of small and medium enterprises and household economic development opportunities to support the productive sector's adding value to forest-derived goods and services in the Central Highlands, (ii) SFE restructuring to set up efficient forest-related enterprises and to release land for community use, and (iii) pilot measures to promote the clean development mechanism, ecotourism, and renewable energy in the Central Highlands.

#### **b. Livelihood Improvement (Community Support)**

31. The Project will support livelihood improvement and income generation in the 60 communes by establishing a commune development fund (CDF) in each of the 60 communes with seed capital of \$20,000 per CDF. These will be revolving funds, each CDF handling its own income generation and project investment funds on a sustainable basis.

32. Commune investment plans for small-scale infrastructure and forestry activities in the 60 target communes, covering about 400,000 people in over 80,000 households, will be prepared and implemented by the beneficiaries and supported with functioning and sustainable CDFs. The main objective of the livelihood-improvement, or community support, component of the Project is to have functioning CDFs in place in the 60 selected communes of the project area to

support income-generating activities and develop and maintain small-scale commune infrastructure.

33. Commune investment plans (CIPs) will be drawn up in the communes, and their implementation by beneficiaries will be supported by functioning and sustainable CDFs. Livelihood improvement under the Project will focus on two sub-components, namely (i) establishing CDFs for undertaking income-generating activities and (ii) rural infrastructure support.

34. The CDF scheme is a self-funding mechanism to distribute the benefits of forestland and forest resource allocation throughout the beneficiary community and will actively drive local poverty reduction. It will not be just a project account for channeling project funds to communes, but should be an active fund through which beneficiaries receive project funds under Government programs and other income or revenue that the community beneficiaries may generate through various economic activities, including selling products gathered from the community forest. CDFs should not be drawn down by expenditures on project activities, but continue as revolving funds for the commune with two accounts as described below.

35. Technical assistance (TA) grant support will help communes build capacity to manage their CDF, provide farming systems advice, and carry out planning and monitoring. CDFs will have

- (i) a project account, in which project loan funds will be disbursed for project activities, and.
- (ii) a commune revenue account, which can receive seed money to establish livelihood improvement activities identified by the producer groups in the commune, as well as funds from the Trust Fund for Forests (TFF).

All interest accrued from the project account will be transferred to the commune revenue account for the commune to use for livelihood improvement.

36. **Small-Scale Community Infrastructure Support.** The Project will support the funding of small-scale rural infrastructure to help communes improve (i) such social amenities as drinking water supply, school rooms, and health clinics; (ii) access to roads and markets by repairing and improving village access roads; and (iii) small-scale irrigation by constructing small dams and irrigation channels.

37. Each commune selected under the Project for community support will receive investment funds of up to \$275,000 from the loan, of which up to 30% can be invested in small infrastructure. The remaining 70% must be invested in forest-related activities. Adjustments can be made freely between activities within each category, as the beneficiaries see fit, by using annual work plans to adjust proposals and targets already laid down in a CIP approved by district and provincial authorities.

### c. Capacity Development

38. Capacity development includes strengthening institutional capacity in communes and districts through staff training and providing equipment for extension and enterprise support services to communities, households, and small and medium enterprises.

39. Capacity building for ethnic minority groups in village communities is essential, as is capacity building for commune and village officials for establishing CDFs, handling finances, and producing simple financial statements and physical target monitoring reports. Other training

needs include improved functional literacy and language proficiency; poverty reduction through extension with a focus on ethnic minorities; information and communications technology for selected communes; enterprise development; training for project implementation staff in districts, provinces, and the central Government; and training for GIS and database utilization and for monitoring and evaluation (M&E).

### **3. Monitoring and Evaluation**

40. The LIEMDP will be monitored as part of overall monitoring of project implementation. Impact assessment of the LIEMDP will form part of the overall M&E process. It will be necessary to create an enabling environment in which sub-commune residents can develop indicators to evaluate. All progress reports prepared by the executing agency (EA) will address the LIEMDP goal, objectives, and components and report on achievements, problems, and future strategies. At midterm review and project completion, external monitoring will be carried out by an external institution engaged by the EA with ADB approval. External monitoring will be both quantitative and qualitative. Participatory research will be carried out to fully involve ethnic minority communities and women in assessing how well the strategies visualized under the LIEMDP and the Project have delivered benefits.

41. Some indicators for measuring the achievement of this goal relate to income improvement, others to better health outcomes, and others to a greater degree of informed participation in community decision making by marginalized residents. Still others relate to intangibles such as self esteem, sense of vulnerability, sense of control, and social inclusion. Many indicators will be locally determined according to the outlook of ethnic groups. Broadly speaking, however, a list of indicators including both quantitative and qualitative ones may include increased

- (i) numbers of beneficiary households;
- (ii) average forest-based incomes;
- (iii) employment;
- (iv) wages and incomes of forest enterprise workers;
- (v) forest areas legally owned or managed by households;
- (vi) food security in terms of food availability in households year-round, food allocation within households, and nutritional adequacy;
- (vii) value of social infrastructure in rural communities;
- (viii) household forestry enterprises,
- (ix) savings in households and communities;
- (x) percentage of communities and households with access to safe water and sanitation;
- (xi) capacity of workers in forest-related industries;
- (xii) participation of ethnic minority women and men in community-based decision making on forestland demarcation, allocation, and utilization; and
- (xiii) use of non-timber forest products by communities.

### **C. Conclusion**

42. It must be noted that the LIEMDP is a generic document, which can be adapted to a variety of commune situations. Although it represents a sum of community choices for project implementation, community validation of the LIEMDP during implementation will heighten local ownership, thereby improving its effectiveness. Careful calibration of the LIEMDP with other project components will likely bring to communities significantly improved livelihood, both material and not, even for the poorest and most vulnerable groups in the Central Highlands.

## SUMMARY POVERTY REDUCTION AND SOCIAL STRATEGY

### A. Linkages to the Country Poverty Analysis

<b>Is the sector identified as a national priority in country poverty analysis?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Is the sector identified as a national priority in country poverty partnership agreement?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p><b>Contribution of the sector or subsector to reduce poverty in Viet Nam:</b></p> <p>The forestry sector plays a critical role in meeting the subsistence needs of poor ethnic minority communities and other poor groups in Viet Nam, particularly in the Central Highlands. The Central Highlands have biodiversity of high national and international importance. All indigenous ethnic minority groups have traditionally derived a significant portion of their livelihood by harvesting timber and non-timber forest products (NTFPs) for household use. Upland rice and other crops were grown in forest clearings with long fallows. However, ethnic minorities' traditional use of the forests has gradually waned on account of Government policies restricting access to forest areas. The Government has, until recently, allocated large forest areas to state forest enterprises (SFEs), leading to a net reduction in productive forest areas available to people. In addition, the role of communities in forests has been reduced to protection and maintenance functions contracted by SFEs and highly restricted access to NTFPs. All these factors have contributed to worsening poverty among ethnic minority communities over the years. The Forestry Sector Project assisted by the Asian Development Bank (ADB) and other projects have facilitated the development of new thinking with regard to the likely contribution of the forestry sector to poverty reduction. The denuded condition of many forestlands has also brought about the realization that joint management of forests with communities in partnership with government can provide greater protection and sustainable use of the resources for reducing poverty among rural communities in the Central Highlands, as well as facilitate reforestation and environmental improvements. The Government's new approach is to provide communities with rights to use forests to improve their livelihood and to protect forests with conservation and sustainable management. The proposed Forests for Livelihood Improvement in the Central Highlands Sector Project (the Project) will aim to develop this further by providing capacity building, technical assistance (TA), and financial resources to government agencies and communities so that they can better work together for the common good.</p>	

### B. Poverty Analysis

**Poverty Classification:** Targeted intervention

<p><b>What type of poverty analysis is needed?</b></p> <p>Project preparatory TA has produced an in-depth participatory assessment of poverty in the project provinces. It includes detailed analyses of all stakeholders, in particular of the indigenous and other ethnic minority communities living in the project area, which are among the poorest and most vulnerable groups in the country. Strong analysis links poverty to the decline in the communities' access to forest and croplands, as well as their poor access to health and education services. Authoritative analyses detail the situation of women, gender relations, the priorities and needs of women, and the gender-based constraints to reducing poverty and improving well-being.</p>	<p>TI H/G</p>
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### C. Participation Process

<b>Is there a stakeholder analysis?</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Is there a participation strategy?</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

### D. Gender Development

<p><b>Strategy to maximize impacts on women:</b> The Project includes a gender action plan to maximize women's opportunities to participate in land allocation, land-use planning, and livelihoods development. The Project also provides capacity building, particularly for ethnic minority women, to strengthen project benefits. It provides proactively for ethnic minorities' participation in and benefit from commune development funds, which will enable local communities to invest in social infrastructure to reduce women's domestic drudgery. It will also support community</p>
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livelihoods activities expected to enable women in particular to improve incomes and food security. All land allocations will be made equally to women and men. This will be indicated by including the names of both spouses on land documents and, for households headed by women, the women's names.

Has an output been prepared?  Yes  No

#### E. Social Safeguards and other Social Risks

Item	Significant/ Not Significant/ None	Strategy to Address Issues	Plan Required
<b>Resettlement</b>	<input type="checkbox"/> Significant <input type="checkbox"/> Not significant <input checked="" type="checkbox"/> None		<input type="checkbox"/> Full <input type="checkbox"/> Short <input checked="" type="checkbox"/> None
<b>Affordability</b>	<input type="checkbox"/> Significant <input type="checkbox"/> Not significant <input checked="" type="checkbox"/> None		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Labor</b>	<input checked="" type="checkbox"/> Significant <input type="checkbox"/> Not significant <input type="checkbox"/> None	Significant positive impacts are expected. The project will provide skills upgrading for local labor, mainly ethnic minority groups, so that they may find employment and higher wages in forestry management operations and forest-product processing. The Project will support improving the technology and skills of state forest enterprises and local labor, thereby improving employment opportunities and wages, reducing wastage of wood, and improving the utilization of wood resources in the Central Highlands. The strategy forms part of the livelihood improvement and ethnic minority development plan (LIEMDP).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Indigenous Peoples</b>	<input checked="" type="checkbox"/> Significant <input type="checkbox"/> Not significant <input type="checkbox"/> None	Significant positive impacts are expected. The LIEMDP is summarized in Appendix 8. In a sense, the Project is devoted almost entirely to improving conditions for ethnic minorities. It will improve their legal access to productive forestland and provide opportunities for their participation in land-use planning, demarcating boundaries, and allocating land. It will facilitate access to improved extension and technology support from government agencies. It will provide value-adding opportunities locally, so that ethnic minority households and communities may benefit from better incomes and prices for their produce. It will help build critically needed social development skills such as numeracy, particularly among children and women. Adult learning programs will improve people's ability to assimilate information and participate effectively in public consultations and decision making.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Other Risks/ Vulnerabilities</b>	<input type="checkbox"/> Significant <input type="checkbox"/> Not significant <input checked="" type="checkbox"/> None		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## GENDER ACTION PLAN

### A. Introduction

1. This gender action plan (GAP) ensures that poor rural women benefit equitably with men (with emphasis on the indigenous communities of the Central Highlands) from investments made under the Forests for Livelihood Improvement in the Central Highlands Sector Project (the Project). The GAP is based upon participatory research and consultations carried out in the six provinces covered by the Project as part of project preparation. The GAP is based on two premises, one of which involves the return of forestland use to women and men living in communities and households located in and around forested areas, for their livelihood development and sustainable management. However, returning forestlands without technical support and other opportunities for livelihood diversification will not lead to many improved conditions. Therefore, the GAP includes setting up commune funds that can be accessed by communities for improving their income-earning opportunities. These funds can also generate revenues to support forest-based activities and improvements to social and physical infrastructure and services. All of these interventions are based on gender analyses of the livelihoods, priorities, and needs of poor rural communities, particularly ethnic minorities, inhabiting these areas. Gender-sensitive strategies to augment access to resources and livelihoods are expected to improve the lives in particular of ethnic minority women and men in the project areas.

2. The people who are the subjects of this GAP lack access to commune resources. Most of the women and many of the men are illiterate and lack mainstream Kinh language skills and so cannot make their needs felt by commune authorities. While the commune is the administrative unit, it is important to include planning and implementation of livelihoods activities in villages or hamlets to include the most vulnerable and poorest members of local communities in the Project. Traditional leaders of ethnic minority villages, including elders' groups and groups of women, will be among those who need to be mobilized to bring their voices into the planning process.

#### 1. Gender Issues

3. The analysis of gender issues is based on a review of the situation of ethnic minority communities in particular, as well as the gender concerns of Kinh women in the project area. The Project potentially affects approximately 400,000 people in 80,000 households in the 60 communes of the six project provinces, of which five are in the Central Highlands. The other province, Phu Yen, adjoins the Central Highlands. Poverty is high in these provinces<sup>1</sup> and in particular in the communes inhabited by ethnic minorities (where poverty rates are 50–60% and higher) on account of their loss of traditional forest-based livelihoods without compensation. Ethnic minorities indigenous to the Central Highlands are of the Mon Khmer ethno-linguistic group. They have suffered of the most from the loss of access to productive forests because their livelihoods were the most dependent upon forests. The 10 Mon Khmer ethno-linguistic groups in the Central Highlands include the relatively large Ro Mam and Ba Na, each with approximately 215,000 people. The other ethno-linguistic group partly indigenous to the Central Highlands is the Malayo Polynesian group, which includes the Ede, numbering approximately 350,000, and the Chu Ru, who are few in number. Non-indigenous ethnic minority groups include the Hmong, Tay, Thai, Nung, Lu, and Dao. Ethnic minorities constitute approximately 50% of the population in Kon Tum, 43% in Gia Lai, 29% in Dak Lak, 22% in Lam Dong, and 5%

<sup>1</sup> As per the report New Zealand Aid. 2003. *Poverty and Inequality in Vietnam*. The percentage of rural population in poverty in Gia Lai is approximately 63%, Kon Tum 65%, Dak Lak 50%, Lam Dong 46%, and Phu Yen 46%.

in Phu Yen. The kinship system of most of the upland indigenous ethnic minority groups (UIEMGs) has a clear matrilineal bias, particularly regarding the ownership and inheritance of land, including forestland. Traditional ownership systems define the kinds of reciprocal relations that exist within lineage groups and the extent of mutual exchange permitted with others. The new Land Law, approved in 2003, accords equal rights to women and men for having property registered in their name. As the allocation of land titles has not proceeded apace in the Central Highlands, its impact on women's customary land rights is unclear. However, vestiges of traditional matrilineal land-holding systems will be relevant when forestlands are about to be allocated, particularly if customary rights are to be included, as is essential for empowering ethnic minority communities to improve their livelihoods.

4. The social position of women in UIEMGs is supposed to be superior to that of Kinh women and other lowland ethnic groups. Most of the latter groups are characterized by patriarchal norms underpinning family and community relations and functions. These include substantial deference toward men in most matters, both domestic and public. Among the UIEMGs, women did not in theory have to deal with such patriarchal systems of deference and control, as the matriarchal systems tilted in their favor. Men came to live in the homes of their wives after marriage, preserving women's support from their own families and kin groups. Access to land for men was mediated by their relations with women. However, given the significant responsibilities of women in food production and domestic roles, men were supposed to deal with external forces, giving them substantial roles in public decision making and mediation with the state. Women of UIEMGs have lost out through the gradual loss of forestlands to the state.<sup>2</sup>

5. Today, the situation of UIEMG women is characterized by pressure on account of a number of factors. As the communities lost access to forestlands, both women and men came under pressure to grow sufficient food to meet household requirements. Among the UIEMG, women collected forest foods to supplement upland agriculture, in which women played an equal role. As there was no plowing involved in upland farming, women were quite self-sufficient in producing crops in temporary fields, after they were first cleared by men. In addition to clearing land, men hunted and harvested timber. However, the loss of forestlands drastically reduced the scope for such activities. As forest foods provided sustenance in periods of rice shortage, as well as supplementing families' diets at all times, women tried to sell forest produce and handicrafts to procure food in times of shortage. Women bear full responsibility for domestic work, which lengthens their workday by several hours beyond that of men. The lack of culturally appropriate reproductive health options and inadequate water supply and sanitation systems cause reproductive health problems. The lack of safe water increases women's workload, as does family ill health. The improved availability of basic amenities in these communes will go a long way toward reducing women's vulnerabilities and improving the health and well-being of the entire community.

6. While women are clearly more hard pressed than men under the shrinkage of livelihoods resources, traditional patterns of decision making also appears to be changing in response to changing circumstances. While decision making on a range of domestic issues is shared, increased contact with mainstream lowland communities has increased men's personal expenditures on alcohol and tobacco and claim, over which women have no control (as is true in mainstream society).

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<sup>2</sup> From the 1970s, state enterprises for developing plantations of coffee, tea, and rubber, as well as agro-industries, controlled approximately 70–80% of the natural forest area of the Central Highlands provinces. In 1993, the Land Code severely restricted communities' access to NTFPs from forestlands under state control.

7. Then again, women's traditional knowledge of non-timber forest products (NTFPs) and upland agriculture without chemical inputs is increasingly regarded as useless, such that men, who know somewhat more about intensive lowland rice and other crops, appear to be gaining the upper hand. This is particularly so regarding new crops and farming techniques. When ethnic minority communities relocate and receive land for cash cropping, men tend to take over critical decisions on crop production. They are the ones to negotiate with officials and others regarding cash cropping and appear to make decisions regarding land-use changes and investment in chemical fertilizers, which increases investments in agriculture. While women's traditional knowledge increasingly comes to be regarded as irrelevant, women are also losing their decision-making position with regard to land and resource allocation. This, along with reduced access to land, does not augur well for women's position. The new Land Law does deal with the issue of land titles for both spouses, but its implementation goes back only to 2001. A lot remains to be done in granting equal land rights to men and women. The Project is expected to do much by providing equal land rights to productive forestlands to women and men. Granting legal, secure access to productive forestlands will benefit not only women but entire UIEMGs.

8. Women's traditional knowledge of livestock rearing commands respect in communities. Women are responsible for rearing and maintaining small and large livestock but prefer smaller livestock because of disease problems with larger ones. Men are generally responsible for selling and buying larger livestock. During participatory consultations, women revealed their preference for increased livestock resources for livelihoods improvement. The Project will help women to acquire additional livestock resources through the commune-based funds to be set up for livelihoods and building social infrastructure.

9. Women of UIEMGs lack literacy and numerical skills. They usually do not speak or understand the Kinh language and thereby are excluded from officially disseminated information and training and extension services, among other aspects of mainstream economic and political life. This gap needs to be addressed to improve women's capability to participate in activities under the Project in particular and in the development process in general. The Project will aim to provide an enabling environment for local women to participate effectively in all levels of governance.

## **2. Gender Interventions Required**

10. The following are some of the gender-related interventions that the Government must put in place, working with the Vietnamese Women's Union (VWU), nongovernment organizations (NGOs) working on gender issues, and Asian Development Bank (ADB), to maximize the positive outcomes of development on ethnic minority women in the Central Highlands. These include

- (i) training in adding value to existing and potential NTFPs and ensuring marketing arrangements;
- (ii) using women's indigenous knowledge, especially of forests, to add more value to forest-based activities;
- (iii) diversifying women's access to higher value commodities (the Japan Fund for Poverty Reduction—assisted project for developing eri silk production among ethnic minority women will provide valuable experience for replication);
- (iv) increasing the availability of affordable credit for women, with improved targeting of UIEMG women;
- (v) gender-sensitization training including UIEMG perspectives for upland women and men as well as others;

- (vi) literacy empowerment programs for UIEMG women and men;
- (vii) designing culturally appropriate health programs; and
- (viii) incorporating key components of Gender Strategy in Agriculture and Rural Development to the Year 2010 (Decision No. 4776QD-BNN/TCCB, 28 January 2003) of the Ministry of Agriculture and Rural Development (MARD) in programs to monitor and evaluate the changing status of ethnic minority women in forest-based livelihoods improvement.

## **B. Draft Gender Strategy**

11. MARD's gender strategy is designed to improve gender equity, promote women's status in agriculture and rural development, and strengthen the institutionalization of gender-responsive planning in the sector. One of the key objectives is to increase women's access to resources, in particular land, including forestlands. Another is to increase gender awareness, include gender-disaggregated indicators in monitoring, and increase gender-sensitive planning and implementation of programs and projects, particularly with regard to training and extension services. All in all, the gender strategy aims to empower women and increase their participation in decision making at all levels.

12. This GAP is designed specifically to meet the needs of project communes in the Central Highlands. It stands together with the ethnic minorities development plan (EMDP) prepared for the Project and needs to be understood and implemented in conjunction with the EMDP so that gender issues are properly addressed.

13. The principles upon which the GAP is based include

- (i) equal project opportunity and benefit-sharing between women and men,
- (ii) systematic measures to reduce gender inequality in project areas regarding forest-related interventions,
- (iii) a targeted approach for poor women lacking livelihoods,
- (iv) collecting gender-disaggregated data including stakeholder-designed monitoring and evaluation (M&E),
- (v) facilitating an enabling environment to support women's capacity building and participation in all phases of project activities and mainstream gender beyond the EMDP, and
- (vi) increased representation of women in decision-making bodies at all levels.

14. The GAP has the overall goal of reducing poverty in approximately 600 villages in the 60 communes in the project area. More specifically, the aim is to reduce the incidence of food-poor households and increase the incomes of poor households, with a particular focus on UIEMG women. The Project will contribute to this goal by introducing sustainable forest management and biodiversity conservation by communities, the state and other entities.

15. Women are likely to benefit from investments in forestry-related activities and improved access to social infrastructure, as well as from measures to build their capacity and reduce drudgery, according to consultations with women in the project areas and the priorities they identified.

16. Benefits for women will arise primarily from the return of forestlands to communities and households. While this is a step in the right direction, returning forestlands will not itself reduce poverty in the short run. Immediate sources of income will be required, so it will be important to include non-forest activities such as livestock rearing, which has been prioritized by women and

commune people's committee (CPC) officials. Particular livelihoods chosen will relate to the resource base of individual communes. However, the fundamental need is to ensure women's equal access to resources and provide special capacity-building efforts to facilitate their informed participation.

17. Capacity building for gender-responsive planning, implementation, and M&E will need to be provided by the executing agency (EA) nationally, provincially, and in districts. There are no women employed in provincial DARD planning and management. While competent women work in VWU at the provincial level, female staff are needed with technical training in forest management. In most areas, VWU has acquired sufficient experience in working with ethnic minority communities, but it often has difficulty targeting UIEMG women. The Project will need to work with VWU to develop training programs for them for NTFP processing and value addition, which can become important income-earning activities. VWU may need external help in designing culturally appropriate literacy programs or supporting culturally acceptable health programs. GAP recommends using external facilitators from Tay Ngyuen University in Pleiku or NGOs with demonstrated experience in Viet Nam.

18. Low literacy among older women is recognized as weakening their capacity to participate and absorb learning and information disseminated by government agencies. Among younger women, literacy rates are close to national averages. Wherever possible, project information will need to be translated into different ethnic minority languages. However, younger women who are bilingual can play valuable roles in project implementation. The GAP rests on the premise that, unless UIEMG women are enabled to participate fully, the project outcomes will not be sustainable from a gender perspective. Younger, bilingual ethnic minority women can be employed as facilitators and trained to work with other women's groups.

19. As decision making in villages will focus on the role of traditional councils of elders, where women are not represented, gender sensitizing these councils will be undertaken so that women's interests are considered in deliberations and decisions. Women will make up 40% of the membership of community development funds (CDFs) set up under the Project. Through their participation in CDFs, as well as during participatory land-use planning and land allocation (PLUPLA), women will be provided with the enabling environment they require to participate and forward their interests. Besides, all forest and other land will be allocated to women and men with joint title under the Land Law of 2003.

20. As project activities in forestry and infrastructure development are community based, safeguards are required to ensure that women do not provide free labor. Women's existing workloads need to be considered, and their labor must be compensated at the same rate as for men for similar activities. As far as agroforestry with individual households is concerned, the initial payment from loan should be made to household members who actually provide the labor and not to the putative household head. Women's preferences for activities should be assessed through household surveys assisted by CDFs.

21. An important aspect of the Project will be joint ventures between restructured state forest enterprises (SFEs) and the newly constituted CDFs. The gender profile of most SFEs is not very good, particularly at senior levels. To receive project support, each SFE must provide a human resource strategy that will include measures to improve the recruitment of women for senior and technical positions. They will also need to demonstrate measures by which rural women will benefit from joint ventures.



**Table A10.2: GAP Time-Bound Actions and Investments**

Planned Output	Required Action	Responsible Agency	Responsible Community Group	Timing Project Month
Provide gender-disaggregated data for planning and project monitoring and evaluation	Commune investment plans for 60 communes to include specific socioeconomic data for each village in communes	PPMU, CPC, VWU, GAD consultants	Village leadership	01–24
Involve women in project design	Use participatory rural appraisals in villages for initial project design and during the PLUPLA for other communes	PPMU, CPC, VWU, GAD consultants	Women participating in rural appraisals and PLUPLA	01–18
Involve women in project management	Women with forestry or related project management experience to work with other women to provide training	PPMU, CPC, VWU, GAD consultants	CDF	01–96
Equal participation of women in village PLUPLA	Ensure that all village women can participate equally with men	Councils of elders, CPC, PLUPLA consultant	All households in village	01–18, 60–72
Local capacity development for village women to participate in CDF activities	Training for all women in activities for sustainable CDF functioning	Councils of elders, SFE, consultants	All households in each village	01–60
Training for women in adding value to NTFPs found suitable for marketing	Identification of NTFPs with marketable surpluses, markets, and inventory	SFE, NTFP training specialists	Women who want to participate	01-60

CDF = commune development fund, CPC = commune people's committee, GAD = gender and development, GAP = gender action plan, NTFP = non-timber forest product, PLUPLA = participatory land-use planning and forestland allocation, PPMU = provincial project management unit, VWU = Vietnamese Women's Union.

Source: Asian Development Bank Staff estimates.

## ECONOMIC ANALYSIS

### A. Economic Rationale for Investment in Forestry in Central Highlands

1. The Comprehensive Poverty Reduction and Growth Strategy (CPRGS) of the Government of Viet Nam aims to reduce poverty rapidly and ensure that all Vietnamese benefit from economic growth. Specific mention is made in the CPRGS about the need to improve and stabilize the living standards of ethnic minorities in a manner that is compatible with their customs. The Government's Forest Development Strategy (2001–2010) and sector plans call for making forestry an important economic sector by (i) protecting and developing forest resources and increasing forest cover from 32% to 43% by 2010, (ii) achieving an annual growth rate in the forestry sector of over 3.5% during 2006–2010, (iii) accelerating and completing forestland allocation under the Land Law and the revised forest protection and development law; (iv) using forestry to improve livelihoods and reduce poverty in chronically poor mountainous and ethnic minority–dominated areas, and (iv) increasing the efficiency and value of the country's wood-processing industry.

2. Recent poverty assessments highlighted that progress in poverty reduction has been slow in the Central Highlands, where significant numbers of ethnic minorities live. This finding points out the requirement for continued targeted investment for poverty reduction in this area. Forestry remains the major potential economic activity in the Central Highlands. In the overall policy framework of poverty reduction, a sub-objective exists to increase the share of benefits to households involved in forest protection, forest management, and reforestation. Implementation of this benefit-sharing policy lags behind expectations due to a number of constraints. The emphasis on socially inclusive development and a geographic focus on the central region in the country strategy and program of the Asian Development Bank (ADB) further justify the proposed investments under this Project.

3. The forestry sector in Viet Nam is mainly concerned with forest-resource protection and management and the associated harvesting of timber, mainly from natural forests. Available information indicates an annual wood deficit of around 5–6 million cubic meters (m<sup>3</sup>) roundwood equivalent. The Government's drive to expand the economy includes promoting exports of wood products, particularly wooden furniture. The value of wood exports was \$530 million in 2002 and increased to about \$1.5 billion in 2005. Most of the wood inputs for the processing industry come from imports and illegal sources. The Central Highlands region is the most important in Viet Nam for forestry, as it has almost 30% of the country's total forest area and contributes more than 60% of the total hardwood supplies from natural forests. The region also assumes unique significance in view of its including biodiversity hotspots and important watersheds. There are currently about 3.17 million hectares (ha) of forestland in the Central Highland, including about 3.03 million ha of natural forest and 0.14 million ha of forest plantations. The Project proposes to establish scientifically sound management regimes for these forestlands in the central region. It will undertake forest resource development and management activities supported by capacity development and project management support. It will also undertake rural infrastructure improvement to ensure that all the necessary types of capital are in place to make investment in the sector effective.

4. The proposed Project will address a number of market and other failures. First and foremost, it will remedy the issue of forestland tenure rights. The existing land tenure of forestlands in the Central Highlands does not provide adequate incentive for investment, nor does it guarantee benefits accruing to the local communities. Despite the availability of vast forest resources in the region, the current contribution of forestry to household income remains

very low at less than 5%. Forestland definition, delineation, demarcation, and allocation will provide well-defined property right to forestlands. These activities will generate substantial rural employment opportunities. The proposed Project will augment tree cover, rehabilitating and restoring natural forests in sensitive ecosystems and reversing forest degradation. These activities will internalize the environmental externalities associated with forestland degradation. That project area is a nationally important watershed signifies the correction of this market failure. The enhanced management of natural forest will augment the supply of environmentally related public goods. The project will also address the information coordination failures, which prevent private sector investment in the forestry sector, by identifying suitable forestlands and making this information available to the private sector. It will also address the capacity and technological failures of the Government that result in unproductive and economically unattractive forestry activities in the vast forestlands of the Central Highlands.

## **B. Project Benefits**

5. **Poverty Reduction.** The project directly and indirectly helps reduce poverty in the Central Highlands. It will directly address poverty through its assistance regarding fast-growing tree species using an equity model. In the first round of livelihood plantations, 5,200 households will be permanently lifted out of poverty by project investments. A financing mechanism will be institutionalized by establishing commune development funds to scale up the livelihood plantation model. After the first harvest, a similar number of households will be supported to establish livelihood plantations. The project will provide a lot of employment (23 million person-days) covering 80,000 households in the targeted local communities through its forestland management planning activities. In addition, the vibrant forestry sector envisaged by the Project is expected to generate a variety of secondary economic opportunities for local communities.

6. **Natural Forest Management.** The Project will arrest forest degradation and develop and implement sustainable forest management plans for about 1.5 million ha of natural production forestlands in the Central Highlands. Employing certain plausible assumptions, with- and without-project revenue streams from sustainable timber harvesting were calculated. The total forest stock under the project management regimes is expected to increase significantly as (i) the forest area stabilizes at the baseline area and (ii) the stock is allowed to grow under initially low rates of harvesting. The predicted yield difference with and without the project was valued at \$40/m<sup>3</sup>. The stumpage value of hardwood timber was taken at \$76/m<sup>3</sup>, and \$36 was deducted from this stumpage to account for the cost of state forest enterprise (SFE) forest management over and above the direct project investment. Incremental wood yield due to proposed better management will generate \$44 million worth of net present value for the Government at a 10% discount rate.

7. **Plantation Forestry.** The Project will support establishing 44,000 ha of forest plantations, 30,000 ha by small holders, 9,550 ha by SFEs, and 5,200 ha by small- and medium-sized enterprises (SMEs). The livelihood plantation is supported through an equity model.<sup>1</sup> The bulk of project investments, \$21 million (over 26%), are allocated for this activity. A number of fast-growing plantation models were developed and subjected to financial analysis. The results indicate that returns are attractive for fast-growing species on short rotations, with financial internal rates of return (FIRRs) of 12–17%. Models based on longer rotations have FIRRs of 9–15%. All plantation models are moderately sensitive to the cost of labor, which constitutes a significant proportion of the cost of plantation establishment. Short rotation models are also sensitive to the output price of wood. All models show significantly better returns than

<sup>1</sup> See Supplementary Appendix H for details.

those earned from comparable models based upon existing activities and cost and price parameters, for which FIRRs are 2–11%. The analyses thus show that the proposed Project will generate adequate financial incentive for smallholders, SFEs, and SMEs to engage in forest plantation. Moreover, the analyses show that the Project has potential for significantly improvements over the baseline situation. The weighted average cost of capital for the Project was estimated to be 4.6, and the indicative FIRR values of revenue-generating components are much above that figure. This clearly demonstrates the financial viability of the revenue-generating components of the Project.

8. The plantation component of the proposed Project is expected to generate over 2 million m<sup>3</sup> of pulpwood and 72,500 m<sup>3</sup> of saw logs during the first 8 year rotation. In addition, if the projected area of 6,850 ha of indigenous hardwoods and 2,700 ha of enrichment planting goes to a full rotation of 40 years, around 1.5 million m<sup>3</sup> of hardwood timber will become available in the future. The smallholder labor contribution to the project is expected to amount to 6.5 million person-days over 8 years, and SFEs and SMEs are expected to require 1.6 million person-days of input from workers in their areas. At current wage rates, this is valued at almost D32 billion (\$2 million). Much of this demand for labor is likely to be met by poor households.

9. If the anticipate private sector investment materializes, forest plantations are expected to expand by about 50,000 ha per year over a decade, beginning from 2010. This expectation is consistent with the target in the National Forestry Development Strategy and demand for wood as an industrial raw material. The plantations will take about 10 years to come into production and start to generating revenue, allowing a few years to begin investment, complete land allocation, and attract private investment. With a conservatively estimated yield of about 15m<sup>3</sup>/ha/year, annual government revenue would be around \$6 million. This is based on a 4% natural resources tax and a log value of \$20 per m<sup>3</sup>. The present value of future annual income of \$6 million, starting in 10 years time at 10% discount, is around \$20 million, which is substantially more than the proposed investment in sector strengthening.

10. **Economic Feasibility of Core Subproject.** One of the core subprojects, the Lam Dong core subproject, was subjected to economic analysis. Timber benefits from natural forest management and forest plantations and non-timber forest product (NTFP) benefits were quantified. Among the environmental benefits, watershed protection benefits were assessed using benefit-transfer methods. Only conservative environmental values were used in calculations. Appropriate conversion factors were used to convert financial costs and benefits to economic costs and benefits. The analysis shows an economic internal rate of return of 14%, indicating that the overall project generates benefits in excess of costs. As the Lam Dong subproject is representative, this analysis is indicative of the economic feasibility of the entire Project.

11. **Environmental Benefits.** The Project will define, allocate, and enhance management of 1 million ha of special-use and protected forests, mostly in important watershed areas. Watersheds provide many environmental services such as smoothing flows for flood protection and the provision of dry season water flows, as well as water filtration and protection. Watersheds also support downstream economic activities such as fisheries by protecting habitats and nursery grounds, as well as water-supply schemes. Very conservative assumptions on benefits from NTFPs and such environmental services as preventing soil erosion generate benefits worth \$5 million per annum. The present value of this benefit stream, at 10% discount rate for 40 years, is about \$49 million, far exceeding expenditure. The ecological importance of the natural forests for conserving biodiversity, the extent to which the water resources are used

for hydro-power generation and irrigation, and the negative impact of flood damage would suggest a much higher economic value.

### **C. Financial Sustainability**

12. Sustainability of financing for livelihood plantation has been guaranteed by the proposed equity model. While contributing to poverty reduction significantly, commune development funds, created to finance this component, recover adequate funds (30% of revenue) to allow repeating support for other farmers. Revenue from sustainable natural production forest management and natural resource taxes from plantation activities will generate adequate revenues for the Government to repay the loan and continue to support the forest management regimes put in place by the Project. Tax revenues (the 4% natural resources tax) from natural and plantation forestry components will be \$1.86 million in 2006–2010 and \$2 million in 2011–2015. Fiscal affordability analysis shows that the revenue stream from the natural resource tax alone is adequate to repay the loan. If private sector development takes place as envisaged, it will generate an additional \$6 million in annual Government revenues. The expected expansion of the forestry sector will lead to parallel expansion of processing activities. The Government charges 22% percent sales tax on processed wood products. The incremental increase in sales tax due to project intervention will be substantial. These extra revenues, which come at the later part of project implementation, and surplus from the natural resource tax after paying the debt services, is more than adequate to sustain financial support for forestry sector activities after the project implementation period.