ラオス国 森林管理・住民支援計画 事前評価調査報告書

平成15年12月

(2003年)

」類■ LIBRARY



1175895[0]

独立行政法人国際協力機構森林 · 自然環境協力部

自然森

JR

03-029

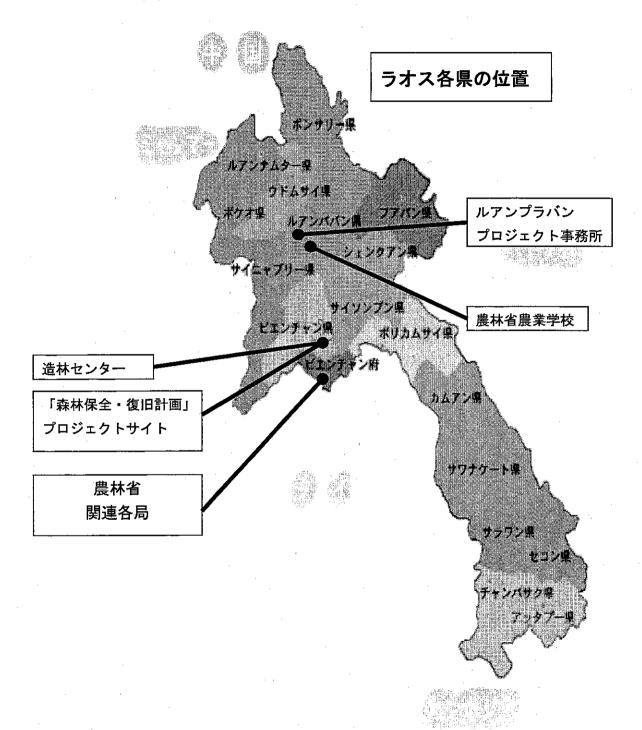
ラオス国 森林管理・住民支援計画 事前評価調査報告書

平成15年12月 (2003年)

独立行政法人国際協力機構 森林·自然環境協力部

1175895[0]

プロジェクト位置図



日本国政府はラオス国政府から技術協力の要請に基づき、同国の自然環境保全にかかる調査を実施することを決定しました。

これを受け国際協力事業団(現 独立行政法人 国際協力機構)は、平成 15 年 8 月 16 日から 9 月 14 日まで事前評価調査団を現地に派遣し、関連情報を収集すると共に協力の枠組みについてラオス国政府と共に協力の枠組みについてラオス政府関係者と協議を行い、調査結果を報告書に取りまとめました。

この報告書が本計画の今後の推進に役立つとともに、この技術協力事業が友好・親善の一層の発展に寄与することを期待いたします。

終わりに、本調査に対してご協力とご支援を賜りました両国関係者の皆様に 心から感謝の意を表します。

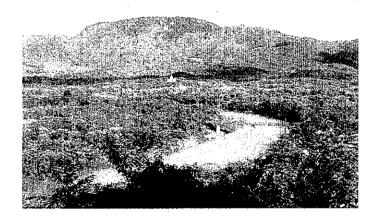
平成 15 年 12 月

独立行政法人 国際協力機構 理事 鈴木信毅

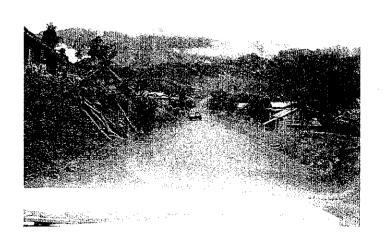
上空から見た焼畑による森林の荒廃状況



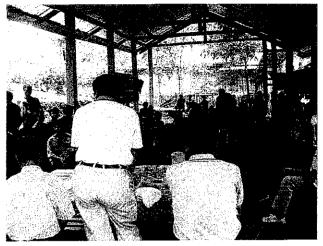
北部の中心都市ルアンプラバンの様子



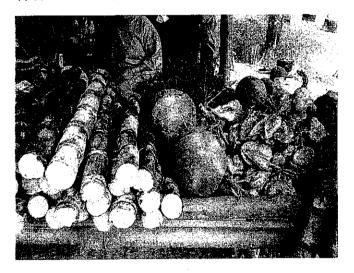
村へ視察に向かう途中



村人に対するプロジェクトの説明



森林で取れる非木材生産物



造林センターの状況



農林省での協議の様子



農林省職員を対象としたワークショップの様子



ミニッツへの署名の様子





目次

序义	
プロジェクト位置図	
目次	
第1章 要請背景	1
第2章 調査・協議の経過と概略・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	
2-1 事前評価調査・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	
2-1-1 調査の目的・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	1
2-1-2 調査団員の構成・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	2
2-1-3 調査日程・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	
2-1-4 主要面談者	4
2-1-5 調査・協議の主な内容・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	Ę
第3章 事業事前評価表(技術協力プロジェクト)・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	7
附属資料	



第一章 調査の背景及び概要

ラオス国は国土面積の 80%が山岳地帯である。TFAP(Tropical Forest Action Plan)の報告によると、1940年には 70%であった森林率が、1989年には 47%までに低下した。その要因として、焼畑移動耕作、不法伐採、貧困による土地の他用途への転用などが挙げられる。ラオス国政府は地域の環境保護の目的の他、水源涵養のための国土の保全や山岳地帯での貧困対策を目的とした森林保全を、地域住民、各国ドナーと共に努力している。また、ラオス国政府は 2020年までに森林率を 80%までに回復する計画を立てており、そのための制度を確立しつつある。1996年には森林法を制定し、2001年6月には村落森林管理に関する省令を制定した。しかしながら村落における森林管理に関しては、地方政府の森林管理に関する技術的な水準の低さや予算不足により十分な活動が行われているとは言い難い。村落森林管理を地方政府が村民とともに実施することは地域の森林保全に役立つのみならず、地域の貧困削減、地球的な環境保全に効果がある。

日本政府は、ラオス国における森林保全への協力として、無償資金協力による造林センターの建設ならびに、ビエンチャン県バンビエン郡、ヒンフープ郡にて 1996 年から 2003年に「森林保全・復旧計画」(FORCAP)を実施してきた。1996年7月から2年間の準備フェーズでは、住民参加を基本とした森林保全復旧モデル形成のための基本構想と行動計画を策定し、1998年7月から2003年7月の第二フェーズの5年間ではビエンチャン県で分収林、アグロフォレストリー、織物など生計向上活動を含む活動を実施し、村落森林管理計画モデル策定と県レベルでの人材育成を行った。

ラオス国政府はこれらの経験を踏まえ、北部地域の森林保全・復旧とあわせて貧困削減 を早急に行うため、ビエンチャン県で実施された村落森林管理計画を北部 10 県に普及する ことを目的とした技術協力を我が国に要請した。

第二章 調査・協議の経過と概略

2-1 事前評価調査

2-1-1 調査の目的

本案件の協力すべき分野、連携のあり方、活動内容、投入規模、プロジェクト対象地、カウンターパート機関について検討する。また、北部の貧困地域において森林保全を行うのであれば、森林分野に限らず地域全体の振興が必要であるとの認識に立ち、農村開発や水産分野の活動を取り入れた総合的な地域振興プログラムの策定を検討することとした。そのため、本調査では、対象地域の社会経済状況、活動に取り入れるべき農業及び水産技術を確認し、適切な投入規模、協力内容を精査することとした。

2-1-2 調査団の構成

担当		氏 名	現職
 総括	宍戸	健 一	国際協力事業団森林・自然環境協力部
			森林環境協力課 課長
参加型森林管理	岩佐	正行	農林水産省林野庁 国有林野部
			管理課 監査官
村落振興	中田	豊一	参加型開発研究所
			代表
社会配慮/人材育成	石橋	典子	国際協力事業団 森林・自然環境協力部
			森林環境協力課ジュニア専門員
協力計画	渋谷	幸弘	国際協力事業団 森林・自然環境協力部
			森林環境協力課
資源管理・普及/計画分析	北村	徳喜	コンサルタント

2-1-3 調査日程

8月17日(日)	ビエンチャン到着・団内打ち合わせ
18日 (月)	JICAラオス事務所打合せ、在ラオス日本大使館表敬、DIC表敬
	ADB、SIDA、スイスプロジェクト等訪問、農林省専門家と意見交換
19日(火)	農林省官房、農業局、畜水産局、林業局、普及局表敬・意見交換
20日(水)	農林省Ty副大臣表敬、ヴィエンチャン県農業局訪問・意見交換
	バンビエン造林センター訪問・活動状況調査
21日(木)	養殖振興計画訪問・意見交換/ルアンブラバンに移動
	ルアンプラバン県農業局(PAFO)訪問・意見交換
	ルアンプラバン県派遣JOCV 3名と意見交換
22日(金)	ルアンプランバン県PAFO意見交換、県内農業関係研修施設視察
	スイスLEAP対象郡視察
23日(土)	パクセン郡農業事務所(DAF0)意見交換、郡内モデル対象候補村落視察
24日(日)	ビエンチャンに移動
25日(月)	ワークショップ(先方は関係部局、地方機関を含む約15名参加)
26日(火)	普及局と協議
27日(水)	協議継続、橋本大使中間報告
28日(木)	協議継続
29日(金)	ミニッツ署名、JICAラオス事務所・在ラオス日本大使館報告、DIC報告
	宍戸、中田ビエンチャン発
30日(土)	岩佐ビエンチャン発(石橋、北村、渋谷は9月14日まで調査続行)
··· ·· · · · · · · · · · · · · · · ·	

	基礎資料収集、打合せ			
31日(日)	ルアンプラバン県へ移動			
	シェングン郡農林技術学校・普及研修センターでPCMワークショップについて			
	の打ち合わせ			
9月1日 (月)	ルアンプラバン県農林局訪問			
	EU Micro-Developmentプロジェクト訪問・意見交換			
	専門家居住環境調査			
9月2日 (火)	ルアンプラバン県ナン郡農林事務所			
	ポンドン村、シーブンフアン村訪問/サヤブリ県へ移動			
9月3日 (水)	サヤブリ県農林局及び普及課訪問			
	サヤブリ県サヤブリ郡農林事務所訪問			
	ナムタ村調査/ルアンプラバン県へ移動			
9月4日 (木)	ルアンナムター県へ移動			
	EU Micro-Developmentプロジェクト訪問・面談			
9月5日(金)	ルアンナムター県農林事務所及び普及課訪問			
	ナムター郡事務所訪問			
	スプトゥ村調査			
	ナムハ自然保護区周辺見学			
9月6日 (土)	ルアンプラバン県へ移動			
	ウドムサイ県にて他ドナーの活動視察			
	IUCN:NTFP採取・販売プロジェクト			
	SIDA: 高地農業調査プロジェクト			
9月7日(日)	ワークショップ打ち合わせ			
9月8日 (月)	PCM問題分析ワークショップ			
9月9日 (火)	パクセン村訪問			
	ルアンプラバン県からビエンチャンへ移動			
9月10日(水)	普及局局長向け活動概要説明			
	研修・普及の活動について意見交換			
	JICAラオス事務所において協議(協力内容、プログラム調整員、今後の予定)			
·	ローカルコンサルタント事務所で進捗確認			
9月11日 (木)	普及局で森林資源管理分野、住民支援活動についての意見交換			
	パリサク官房次長、セム官房次長にミッションレポート (ドラフト) 手交			
9月12日(金)	農林省普及局でPOと予算についての打ち合わせ			
	JICA事務所報告(今後の便宜供与内容確認:パイプライン専門家、ローカルコ			
	ンサルタントによる対象地域の調査など)			

2-1-4 主要面談者

(ラオス側)

ラオス農林省

Viravan Phannourath: Director General Xeme Samontry: Deouty Director General

Thongphout Vongsyprasom: Permanent Secretary

Phouang Parisak Pravongviengkham: Deputy Permanent Secretary

ラオス普及局

Phet Phomphiphak: Deputy Director General

Khambay Saysana: Chief of Afforestation Center

Somehanh Vongdanya

ラオス林野局

Phetsamay Vongkhammounty: Director General

ラオス農業局

Phaydy Phiaxaysarakham: Director General Khamphoui Louangrath: Deputy Director

Phouangphet Ketkeo

ラオス畜水産局

Mahanakhone Souriyad: Deputy Director General

Khamphet Roger: Senior Fisheries Office

ヴィエンチャン県農林局

Bouaphanh Konedayong: Deputy Director

ルアンプラバン県農林局

Xayaphanh Lasy: Deputy Director

Somphong Pradichit: Deputy Director General

スイス農業普及プロジェクト

Karl Gerner: Chief Technical Advisor

(日本側)

在ラオス日本大使館

駐ラオス大使 橋本逸男

- 一等書記官 KAWADA KAZUNORI
- 一等書記官 平山周作

JICA ラオス事務所

所長 西脇英隆

次長 池田修一

所員 作道俊介

水産改良普及プロジェクト(AQIP)

MORIMOTO NAOKI: Chief Advisor

ITO MASAHIRO: Project Coodinator

YAMADA OSAMU: Seed Production Expert

2-1-5 調査・協議の主な内容

本調査団における協議においては、協議日程に余裕をもたせるとともに直接の担当部局だけでなく、関係機関、地方組織等からの意見聴取も行うとともにワークレベルではワークショップの開催等により、問題認識の共有に努めた。また、協議の結果をミニッツにとりまとめた。特記すべき事項は次のとおり。

(1) 全体スケジュール

ラオス側 (パリサク副事務次官) より、プロドク、R/D案の検討においても十分な時間 (一ヶ月程度) が確保されるよう配慮願いたい旨強く申し入れがあり、 ミニッツにもスケジュール案を明記することとした。

(2) 対象地域

先方要請は北部10県としているが、当方の活動が研修だけでおわるものでなくモニタリング・住民支援活動とセットにする観点から、実施体制面・治安面の問題がある地域を除き6県を対象にする方向で説明し、最終的に了承を得た(フアパンについては要検討)。モデルエリアの設置については、ルアンナムタ県に要望があったが、OJT研修を行うためのモデルエリアであり、ラオス側の実施体制が整えば、第2年次からは着手できるとの説明を行い、当方案(モデルサイトはルアンプラバン県のみ設置、2郡4カ村程度)で合意を得た。

(3) マスタープラン

事務レベルで作成した案で合意した。研修については初期の段階は、各県のPAFO、DAFO の職員をセットで招聘し、住民参加型活動のOJTを中心に行い、当該研修で一定のレベルに

達した職員(県、郡)のプロポーザルを審査し、パイロット事業と呼ぶという方法で事業を進めることとなった。今後はラオス側C/P機関上層部の理解を得る必要がある。

注: 先方要請はFORCAPを中心とする研修であるが、ラオス側の脆弱な普及体制を考慮すると、次のような考え方で展開するのが良いと判断。

- ●PAFES, DAFOの関係スタッフに対しては、「座学+視察(バンビエン)に加え、実際に北部地域の村落で 参加型開発に関するOJTを実施」ことが効果的。
- ●農民に対しては、「同様な条件にある農民自身により行われている活動を見せることによるエンパワーメント(モデル・パイロットによる展示; farmers to farmers)」が効果的。
- (4) プロジェクトの拠点とカウンターパート

村落で参加型開発に関するOJTを行う計画のため、活動の半分以上を北部の中心地のルアンプラバンを中心に展開予定である。パリサク副次官からは、NAFESに置く事務所が大きくなることに対する懸念やPAFOに置くフィールド事務所も可能な限り既存施設を利用すべきとのコメントがあった。

(5) 関連部局との連携(プログラム)

関係プロジェクトとの一体的な実施を目的とし、プログラム化について提案した。パリサク副次官からNPEPや他のドナーとの関係なども含めて検討する必要があるとの指摘はあったが、考え方自体は以前からラオス側も言っていたことであり、引き続き内容について議論していきたいとの発言があり、ミニッツに記載することで合意を得た。

事業事前評価表

案件名:ラオス国森林管理・住民支援計画

(Forest Management and Community Support Project)

対象国:ラオス人民民主共和国

実施地域:ルアンプラバン県およびサヤブリ県を中心とした北部6県(ルアンプラバン県、サヤブリ県、ビエンチャン県、ホアパン県、ルアンナムタ県、ボケオ県)

プロジェクト実施予定期間:2004年2月1日~2009年1月31日

I プロジェクト要請の背景

ラオス国は国土面積の 80%が山岳地帯である。TFAP (Tropical Forest Action Plan) の報告によると、1940年には70%であった森林率が、1989年には47%までに低下した。その要因として、焼畑移動耕作、不法伐採、貧困による土地の他用途への転用などが挙げられる。ラオス国政府は地域の環境保護の目的の他、水源涵養のための国土の保全や山岳地帯での貧困対策を目的とした森林保全を、地域住民、外国ドナーと共に努力している。また、ラオス国政府は2020年までに森林率を80%までに回復する計画を立てており、そのための制度を確立しつつある。1996年には森林法を制定し、2001年6月には村落森林管理に関する省令を制定した。しかしながら村落における森林管理に関しては、地方政府の森林管理に関する技術的な水準の低さや予算不足により十分な活動が行われているとは言い難い。村落森林管理を地方政府が住民とともに実施することは地域の森林保全に役立つのみならず、地域の貧困削減、地球的な環境保全に効果がある。

日本政府は、ラオス国における森林保全への協力として、無償資金協力による造林センターの建設ならびに、ビエンチャン県バンビエン郡、ヒンフープ郡にて 1996 年から 2003 年に「森林保全・復旧計画」(FORCAP) を実施してきた。1996 年 7 月から 2 年間の準備フェーズでは、住民参加を基本とした森林保全復旧モデル形成のための基本構想と行動計画を策定し、1998 年 7 月から 2003 年 7 月の第二フェーズの 5 年間ではビエンチャン県で分収林、アグロフォレストリー、織物など生計向上活動を含む活動を実施し、村落森林管理計画モデル策定と県レベルでの人材育成を行った。

ラオス国政府はこれらの経験を踏まえ、北部地域の森林保全・復旧とあわせて貧困削減を早急に 行うため、ビエンチャン県で実施された村落森林管理計画を北部 10 県に普及することを目的とした 技術協力を我が国に要請した。

Ⅱ 相手国実施機関

ラオス国農林省普及局 (NAFES: National Agriculture and Forestry Extension Service)

Ⅲ プロジェクトの概要及び達成目標

上位目標

ラオス北部の対象地域の森林及び土地が保全され、地域住民の生計向上のために持続的に利用される。

「指標]

- (1) ラオス北部地域における焼畑移動耕作面積
- (2) ラオス北部地域に居住する住民の総収入

プロ<u>ジェ</u>クト<u>目標</u>

対象地域一部村落において森林、土地の保全及び、持続的な利用を考慮した森林管理活動及び生産活動が普及組織を通じて、住民により導入される。

「指標]

- (1) 研修を受けた普及員が参加型普及手法に関する試験に合格する割合
- (2) 研修を受けた農民や普及員によって取り入れられた、持続的な土地利用、森林管理、生産活動、収入向上等の技術数
- (3) 森林と土地の持続的な利用と管理に資する活動計画の立案および活動を実施した農民、農民グループの数

プロ<u>ジェクト対象地</u>

北部6県(ヴィエンチャン県、ルアンプラバン県、ホアパン県、ルアンナムタ県、ボケオ県、サ

ヤブリ県)

成果および活動

- (成果1) 対象地域に設置するモデル村落において、森林管理技術及び生産技術 が展示される。
- (活動1) 村落の現状調査等を実施し、モデル村落を選定する。
- (活動2)モデル村落の住民によって、森林資源や土地利用の状況等が把握され、村落森林管理及 び生産振興に関する活動計画が作成・実施されるよう、支援を行う。
- (活動3) モデル村落における活動状況及び成果を周辺住民等に対して、展示を行う。
- (成果2) 普及組織の職員および住民に対する研修が実施される。
- (活動1)組織体制及び対象地域の現状調査を実施し、対象グループ別に研修実施計画を策定する。
- (活動2) 研修のカリキュラムとテキストを作成する。
- (活動3) 関係部局と連携し、研修実施計画に基づき研修コースを実施する。
- (活動4)研修後のモニタリングを実施する。
- (成果3) 選定されたプロポーザルに対して『住民支援活動』(注) が実施される。
- (活動1)『住民支援活動』の基本的な考え方や諸手続きを取りまとめた実施要領を作成する。
- (活動2)研修を受講した住民組織等から提出されたプロポーザルを選定し、『住民支援活動』を実 施する。
- (活動3)住民支援活動のモニタリングを行い、必要な指導を行う。
- (成果4) 諸活動の経験を踏まえ、森林管理及び普及等について提言を行う。
- (活動1) 森林管理計画や普及制度に関する具体的なオペレーション・マニュアルを作 成する。
- (活動2) 森林管理計画及び普及制度等に関する提言を行う。
- (注)「住民支援活動」(CSP: Community Support Program) とは、本プロジェクトにおいて研修を 受けた普及員および農民が提案する生産様式の改善・生計向上活動に対して、プロジェクトが支援 を行っていく活動。

投入(インプット)

【日本側】

■ 長期専門家 (6人×5年)

チーフアドバイザー 24M/M

業務調整

24M/M

参加型資源管理

24M/M

研修/普及手法

24M/M

村落振興

24M/M

プログラム調整員 24M/M

- 短期専門家 必要に応じて派遣する
- ベースライン調査、対象地域衛星画像解析等(業務実施契約)
- 施設 プロジェクトオフィス (ルアンプラバン県)
- 資機材、車両、事務機材
- 研修員受入 村落振興、森林管理等 2~3名/年
- ■日本側投入の総額(5年間)

742,690 千円 (プロジェクト本体部分 686,360円)

【ラオス側】

C/P

プロジェクト・デレクター

プロジェクト・マネージャー

プロジェクト・スタッフ(少なくとも5名)

テクニカル・オフィサー(造林センター)

運転手

■ 施設

アドミニストレイティブ・サポート・オフィス(NAFES) ルアンプラバン事務所の敷地 造林センター(バンビエン) 前プロジェクトにより供与された車両 電気、水道、電話等

IV 評価結果

(1) 妥当性

ラオス北部においては森林資源の急速な減少・劣化とこれらの土地資源に依存する焼畑農民の生計活動とが不可分の状態にあり、北部地域において貧困削減を達成するためには、地域住民による森林利用を改善すると同時に、森林資源に依存しない代替的な生計手段の創出および生計手段の改善が不可欠となる。

本プロジェクトでは社会経済条件の厳しい北部地域において、焼畑農民を主な対象として資源の 持続的な利用を考慮したより生産性・付加価値の高い生産活動を普及し、貧困を削減するために、 モデルとなる森林管理・生産活動の実施と、住民・普及職員の育成を一体として行う。

ラオスにおいては国家貧困撲滅計画、農業戦略および森林戦略のいずれにおいても、焼畑を主体とする北部における生産様式の改善・生計向上を重要な政策課題としている。その優先課題として住民主体による資源管理、多様な耕作方法・商品作物の導入、非木材林産物の管理・加工ならびに普及体制の確立・強化等に取り組んでいる。また、国家貧困撲滅計画において優先的な対象地域として特定された最貧困 47 郡のうち、半数以上の 24 郡が北部 7 県にある。本プロジェクトの取り組む開発課題、採用する戦略、および対象地域はラオス政府の政策と優先課題に沿うものである。

また、本プロジェクトの実施に際し、「村落生計向上・住民コミュニティー開発プログラム」として、「養殖改善・普及計画フェーズII」、ならびに今後の農村開発、貧困対策分野への協力と連携を推進することとした。これは、JICAの国別事業実施計画において、援助重点分野の農林業セクターでは、農村開発の強化、水産・畜産の振興・強化及び森林保全を包括的・効果的に取り組む戦略に沿うものである。

本プロジェクトにおいては、3~4村程度のモデル村落を設置する予定であるが、モデル村落の 選定に際しては、国家貧困撲滅計画で指定されている47の貧困郡の中から、他ドナーからの支援状 況、住民の生活水準等を勘案した上で、先方政府の優先度が高い村落を選定することとなっており、 モデル村落の選択においても妥当性が確保されている。前プロジェクトである「森林保全・復旧計 画」において開発された、「村落森林管理計画」モデルは森林を中心としたものであるが、本プロジェクトでは、北部地域の農村で導入されうる多様な生産活動を中心に据えていくこと、またモデル 村落の活動における議論・調査・意思決定に住民が主体的に関わることを重視している。

これらの点から判断し、本プロジェクトはラオス政府の政策および要請内容、我が国の援助重点 分野および ODA としての適格性のすべてにおいて、妥当であると判断することができる。

(2) 有効性

本プロジェクトでは、「森林・土地の保全及び持続的な利用を考慮した森林管理活動及び生産活動が普及組織を通じて住民により導入」されることを目標としており、具体的には、住民自らが普及組織の支援を通じてこのような活動を企画・提案し、プロジェクト及び郡・村落の支援を受けながら実施することにより達成することとしている。このため、本プロジェクトでは、1)活動の見本となるモデル村落の設置、2)普及職員及び村民の教育・訓練、そして3)プロジェクトの目的に合致した活動への支援を行うこととしており、各成果の達成がプロジェクト目標の達成につながるよう論理的に構成されている。また、成果に関する外部条件については、プロジェクト開始の際のプロジェクトと県・郡との申し合わせにより満たされる可能性が高いと考えられることから、本プロジェクトの有効性は高いと考えられる。

(3) 効率性

本プロジェクトでは、対象地に設置されるモデルサイトを活動の拠点とし、北部6県に対してその効果を波及させることを目指している。そのため、モデルサイトへの集中的な投入を行うのではなく、住民にとって取り入れやすい技術や知識の普及に重点が置かれている。そのため、少ない投入で大きな波及効果を望むことができると考えられる。また、本プロジェクトにおいては、行政官

を通じた普及に限定することなく、研修を受けた地域住民を通じて技術・知識が普及されることを 目指しており、より直接的に本プロジェクトの成果を波及することが可能である。このような観点 から、本プロジェクトの効率性は高いということができる。

(4) インパクト

1)政策・制度的インパクト

本プロジェクトにおいては、活動を通じて得られる実践的な経験・分析に基づき、森林管理及び 普及に関する政策・制度について提言を行う予定である。これらの提言は、先方政府に対して大き なインパクトを与えうるものと考えられ、上位目標の達成に対し大きな役割を果たすものと考えら れる。

2) 社会的インパクト

プロジェクトの対象地域である北部6県は、森林への依存度が大きくまた貧困度も高いと考えられる高地ラオ族が居住する村落を多く含むことから、プロジェクトは貧困層である彼らに直接裨益するような活動を行うことが可能であり、彼らの生活の改善及び生活環境の改善に資するものとなる。このように、本プロジェクトにおいては焼畑の主要な担い手であると同時に、最貧困層である高地ラオ族に対して、大きなインパクトを与えることが出来ると考えられ、このことは上位目標の達成に資すると考えられる。

3)技術的インパクト

技術移転対象者数は、普及技術・政策・制度等に関して C/P が 5 名、普及技術等に関して普及職員が 18 名であるが、地域住民レベルにおいてはモデル村および CSP (Community Support Program)を通じて幅広い層の住民に森林管理技術・生産技術が普及する予定であり、技術的インパクトは中央政府レベルから地域住民レベルまで極めて大きい。このように、技術的な面においても、上位目標の達成に対するインパクトは極めて大きいと考えられる。

(5) 自立発展性

本プロジェクトにおいては、プロジェクト終了後にラオス側だけでも運営実施が可能な適正規模の活動を行っていくため、既存の組織・施設・人材・資機材を最大限活用する予定である。普及の手法は、政府の普及員に限らず、農民を介して普及していく技術・方法を重視することで、予算が少ないラオス政府にとっても継続可能な手法であると考えられる。また、研修に利用される施設は、無償資金協力により建設された造林センターおよびラオス政府が所有する学校等が利用される予定であり、新たな研修施設を建設する予定はない。知識・技術・普及事業等のソフト面においても、すでに現地に在り活用されているもの及びわずかな投入により大きな改善が望めそうなものを中心に導入することとしており、ハード面およびソフト面の双方において、プロジェクトが終了した後にラオス側だけで活動が継続されるように計画されている。そのため、本プロジェクトの自立発展性は高いということができる。

V 外部要因リスク

- (1) モデルサイトにおいて、社会環境が大幅に変化しない。
- (2) プロジェクト対象地の社会基盤および治安が維持される。
- (3) プロジェクトの協力機関が役割を果たす。
- (4) 農林省普及局の普及に係る政策と事業が形成され、全国的に実施される。
- (5) プロジェクトの研修生が普及事業を継続する。
- (6) 研修を受けた普及員が異動されない。
- (7)研修を受けた住民が移住させられない。

等が挙げられる。

VI 今後の評価計画

- (1) 半年ごとのプロジェクト・チームの報告書等によるモニタリング
- (2) 1年ごとに合同調整委員会によるモニタリング
- (3) プロジェクト中間評価(プロジェクト開始後 1.5 年)及び終了時評価(プロジェクト終了前約 0.5 年)
- (4)終了後5年後及び10年後などの事後評価

附属資料

MINUTES OF MEETING BETWEEN THE PREPARATORY STUDY TEAM OF JAPAN INTERNATIONAL COOPERATION AGENCY AND THE AUTHORITIES CONCERNED OF THE LAO PEOPLE'S DEMOCRATIC REPUBLIC ON TECHNICAL COOPERATION FOR FOREST MANAGEMENT AND COMMUNITY SUPPORT PROJECT

The Preparatory Study Team of JICA (hereinafter referred to as "the Team") on technical cooperation for the Forest Management And Community Support Project (hereinafter referred to as "the Project") was dispatched to the Lao People's Democratic Republic from 16th August to 15th September, 2003. The purpose of the dispatch was to formulate the Project requested by the authorities concerned of the Government of the Lao People's Democratic Republic (hereinafter referred to as "GOL") under the technical cooperation of the Government of Japan (hereinafter referred to as "GOJ").

During its stay, the Team exchanged views through a series of meetings and field observations on the Project with the authorities concerned of GOL.

As the result of the study, both parties reached common understandings concerning the matters referred in the documents attached hereto. This Minutes reflects discussions and initial agreements made between authorities concerned and The Team, and is subject to consideration and approval of higher authorities of the both sides.

Vientiane, 29th August 2003

Mr. Kenichi Shishido

Leader,

Preparatory Study Team,

Japan International Cooperation

Agency (JICA)

Dr. Phouang Parisak PRAVONGVIENGKHAM

Deputy Permanent Secretary,

Permanent Secretary Office,

Ministry of Agriculture and Forestry,

Government of Lao PDR

The Attached Document

1 The Background of the Cooperation between GOL and GOJ

The Government of Lao PDR (GOL) has always concerned the loss of forest resources and environmental change caused by the deforestation, which considerable affects people's livelihood. These concerns are reflected in government strategies and programmes such as, "Poverty Alleviation" and "Stabilization of Shifting Cultivation" etc. To implement the above strategies and programmes, GOL has focused its efforts firstly to the development of mountainous areas where people depend on forest resources including non-timber forest products. Thus GOL has been endeavoring to conserve forest with the participation of villagers and assistance of foreign donors.

For the above mentioned reasons, GOL has requested to GOJ a technical cooperation on "the Forest Management Capacity Building Project in the Northern part of Lao PDR" applying the result of the previous technical cooperation project, FORCAP II.

As proposed project included agriculture and forestry extension service promoting agricultural technology and conservation of forest resources, GOL assigned National Agriculture and Forestry Extension Service (hereinafter referred to as "NAFES") as an executing agency.

2 The Tentative Framework of the Project

The tentative project design stated here may be modified and finalized over the course of discussions prior to the official signing of the document titled "Record of Discussions" (hereinafter referred to as "R/D").

2.1 Project Title

The project title is "Forest Management and Community Support Project".

2.2 Implementing Agency

Core

The Project will be executed by National Agriculture and Forestry Extension Service (NAFES), Ministry of Agriculture and Forestry (MAF). Local Level

The Project will be implemented by the following agencies;

-Provincial Agricultural and Forestry Extension Service(PAFES)

-District Agricultural and Forestry Office(DAFO).

2.3 Supporting Agency(Central Level)

The Project will be supported by the related agencies in MAF;

- -National Agricultural and Forest Research Institute,
- -Department of Forestry,
- -Department of Livestock and Fisheries,
- -Department of Agriculture.
- -Other related institutions

The roles of these supporting agencies will be as follows;

(4)

- -Steering and coordination of the project
- -Technical advices to compile the training material,
- -Lecture of training,
- -Technical support to establish the Model Sites,
- -Other technical issues found in the activities.

2.4 Project Area & Project Offices

The Project will be extended to 6 provinces of Vientiane, Louang Prabang, Houaphan, Louang Namtha, Bokeo and Sayaboury.

Administrative Support Office will be set in National Agriculture and Forestry Extension Services, Vientiane.

Field Office will be set in Louang Prabang, in the compound of PAFO.

Training for the Officials of the local level will be conducted mainly in Afforestation Center, NAFES, in Vangvieng, while the training for farmers will be extended in the field (under consideration).

2.5 Project Beneficiaries

- -Staff of National Agriculture and Forestry Extension Service.
- -Staff engaged in extension works in province and district in the project area.
- -Villagers (including Village Forest Volunteers, and Village Leaders),

2.6 Project Duration

5 years from early 2004 (Proposed).

2.7 Overall Goal

Forest and land in the project area in the Northern part of Lao PDR are conserved, and sustainably used for livelihood improvement of villagers.

2.8 Project Purpose

Forest management and production activities, which take into account conservation and sustainable use of forest and land, are initiated by villagers in a part of the project area through extension system.

2.9 Outputs

- Output1: Sets of technology for forest management and production are demonstrated in the Model Sites.
- Output2: Training are conducted for extension organization staff and villagers.
- Output3: Community Support Program(CSP) are implemented for selected proposals.
- Output4: Recommendations are made on methods and institutions of forest management and extension.

2.10 Project Design Matrix (PDM)

The tentative PDM is attached in annex I.

2.11 Proposed Measures to be Taken by Both sides

(K5)

06

2.11.1 JICA side

(1) Experts

Japanese experts will be dispatched, serving exclusively for the Project in the fields such as:

- Chief Advisor
- Project Coordinator
- Participatory Resource Management
- -Training and Extension Methodology
- -Community Development
- -Others

Four or five experts may be dispatched as Long-Term Experts. Others will be dispatched as Short-Term Experts according to necessity.

(2) Counterpart Training

Training opportunities for the counterpart staff in Japan and/or in the third countries will be provided.

(3) Machinery, Equipment and Materials

Machinery, equipment and materials, as necessary for the implementation of the Project, will be provided.

- Equipment for Training
- Vehicles
- Other necessary equipment and materials

(4) Local Cost Support

- Necessary cost for the activities other than the cost born by Lao side.
- Construction cost of Field Office in Louang Prabang.

2.11.2 Lao side

GOL will make the following contributions:

- (1) Project Staff
 - 1) Project Director.
 - -Head of Counterparts, NAFES
 - 2) Project Manager:
 - Head of Counterparts in Field Office
 - 3) Other Project Staff Composed of:
 - At least 5 counterparts in Field Office (of 2-3 will be qualified staff)
 - Technical Officers of Afforestation Center, Vientiane

(2) Office Space, Facilities, Equipment and Materials

Office space and necessary facilities for the Japanese experts and counterparts for project activities will be provided.

- Administrative Support Office (in NAFES)
- Land for Field Office (in Louang Prabang)
- Afforestation Center (NAFES, Ministry of Agriculture and Forestry)
- Project Vehicles transferred from FORCAP !!
- Electricity, telephone line, water supply, etc.

(3)

W

- Space for installation and storage of equipment

(3) Administrative and Operational Costs

Administrative and operational cost, as necessary for the implementation of the Project, will be prepared. The Following costs for the activities will be born by Lao side as much as possible, and will be increased year by year.

- Training implementation cost
- Community Support Program's cost
- Other necessary administration and operational costs.

Note: The Lao side agreed, in principle, to provide counterpart budget to the project. Detailed costs to be born by the Lao side is to be worked out with Japanese side taking into consideration local budget allocation (Public Investment Plan. PIP)

3 Program Cooperation Proposed by JICA

For smooth implementation and maximizing the impact of project(s) related to Poverty Reduction through livelihood improvement and/or community development, the Team proposed the Program Cooperation, which is described in annex 2.

4 The Joint Coordinating Committee

The joint coordinating committee for the project will not be established in case that " Joint Coordinating Committee for Program " will be established.

5 Schedule

- (1) Three members of the Team will continue studies and technical discussions with NAFES and other authorities concerned until 13th September 2003.
- (2) JICA will prepare the draft Project Document which takes into account the comments as described in ANNEX 3 and draft R/D in December 2003, and will submit written comments to the draft Project Document and draft R/D to the Resident Representative of JICA Laos Office.
- (3) Project Document and R/D will be finalized incorporating the comments of NAFES by JICA.
- (4) R/D of the Project will be signed between Ministry of Agriculture and Forestry (MAF), NAFES and JICA Laos Office.
- (5) The beginning of the Project will be expected in early 2004 through both sides' cooperation.
- (6) Lao side is requested to prepare the necessary budget before the commencement of the Project.
- (7) JICA may dispatch the Pipe-Line Expert(s) for preparation of the project around November, 2003. Lao side is requested to submit A1 form(s) before October, 2003.

(13)

15

Time Table

	Aug,2003	Sep,2003	Oct,2003	Nov,2003	Dec,2003	Jan,2003	Feb,2004	Mar,2004
Preparatory Study Team		~13/9	-					
Preparation of Project Document								
Draft P/D & R/D to the Lao side					*			
Finalizing & Signing P/D & R/D						*		
Project Period			,				(expected)	
Submission of A1 Form for Pipline Expert			*					
Dispatch of Pipeline Expert(s)	3			• • •	• •	• •		



Project Design Matrix

Narrative Summary	Objectively Verificate Indian		Date: Aug 29, 2003
	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal Forest and land in the project area in the Northern Lao PDR are conserved, and sustainably used for livelihood improvement of villagers.	 Shifting cultivation area in the northern Lao PDR decreases steadily. Total production and income of villagers in the northern Lao PDR increase steadily. 	1. GOL statistics 2. GOL statistics	
Project Purpose Forest management and production activities, which take into account conservation and sustainable use of forest and land, are initiated by villagers in a part of the project area through extension system.	trained by Project	Survey by Project Survey by Project	1. Clear NAFES policy and plan on strengthening extension is formulated and implemented nationwide 2. Project trainees continue extension work
Outputs 1. Sets of technology for forest management and production are demonstrated in Model Sites.	1.1 A set of technology for forest management and production is planned and implemented by villagers in each Model Site 1.2 Forest area increases in each Model Site by 2008 1.3 Production or income of participating villagers increases 1.4 Demonstrated technology is replicated fully or partly by at least one nearby village	1.2 Survey by Project 1.3 Survey by Project	Trained extension staff are not transferred Trained villagers are not resettled

	_
	W.
17	۷)
1.	_

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
·	and/or villager for each Model Site		
organization staff and villagers.	2.1 Training courses are well understood by trainees (a: very well, b: well, c: roughly, d: little)	2.1 Questionnaire survey by Project;	
	2.2 Each trainee of intensive training conducts extension work in at least X villages	2.2 Survey by Project	
	2.3 Each trainee of general training conducts extension work in at least Y villages	2.3 Survey by Project	
	2.4 More than 50% of trained villagers apply learned technology to their forest management and/or production by themselves	2.4 Survey by Project	
·	2.5 Each trainee prepares at least one proposal which meets CSP guideline	2.5 Survey by Project	
Community Support Program (CSP) are implemented for selected proposals.	3.1 CSP guideline is well understood by trainees (a: very well, b: well, c: roughly, d: little)		
	3.2 More than 80% of implemented CSP increases production or income of participating villager(s)	3.2 Survey by Project	
Recommendations are made on methods and institutions of forest management and extension.	4.1 Recommended operation manuals are well understood by extension organization staff and villagers (a: very well, b: well, c: roughly, d: little)	survey by Project	
	4.2 Recommended operation manuals are officially approved and used	4.2 MAF or NAFES instructions	
	Recommendations on institutions are officially approved and incorporated into official documents	4.3 MAF or NAFES	

Activities	Inputs	Important Assumptions
Activities 1.1 Identify Model Sites based on studies of village situation and others. 1.2 Support villagers of Model Sites so that forest resources and land use situation are understood and activity plans of forest management and production promotion are formulated and implemented by themselves. 1.3 Demonstrate activities and outputs in Model Sites to nearby villages and others. 2.1 Formulate training plans for different target groups based on studies of extension organization and project area. 2.2 Prepare training curricula and texts. 2.3 Conduct training courses based on training plans. 2.4 Monitor activities initiated by trainees. 3.1 Formulate CSP guideline, which defines basic principles and procedures of CSP. 3.2 Select proposals submitted by villagers groups and others and carry out CSP for them. 3.3 Monitor progress of CSP and provide necessary guidance.	Government of Lao PDR Government of Japan Government of Japan	1. There is no majoresettlement in Mode Sites. 2. Infrastructure and security in Project Area is maintained. 3. Supporting Agencies play their expected roles. 4. Qualified staff are nominated for training. Pre-conditions
4.1 Prepare operation manuals for forest management and extension.4.2 Provide recommendations on method and institutions of forest management and extension.		

Outline of the Programme

1 Background

MAF, GOL and JICA have implemented various projects in the agriculture and forestry sector in the past. In view of forging a systematic coordination mechanism, it is suggested that all projects executed by MAF and supporting agencies to be seen as a package of programme addressing effective coordination for development projects. The programme gives focus on the coordination, in particular vertical —policy level to grass-root in down stream—and horizontal —between sub sectors— coordination, among projects in which JICA projects are taking part. The primary purpose of the programme which is consisted of projects is to poverty alleviation programme, the one of the priority areas that GOL has given priority.

2 Programme Title

Livelihood Improvement and Community Development Programme

3 Overall Goal

Community development taking into account agriculture, forestry, and aquaculture is promoted, and thus contributing to poverty reduction through livelihood improvement.

- 4 Projects included in the Programme
 - (1) Forest Management and Community Support Project
 - (2) Aquaculture Improvement and Extension Project Phase II
 - (3) JICA advisor(s) to MAF
 - (4) Other JICA projects that share the Overall Goal (including Volunteer programmes)

5 Joint Coordinating Committee for Programme

5-1 Functions

- (1) to take initiative in discussing the Plan of Operation and Annual Plan of activities for each project, and to give necessary advise for effective coordination.
- (2) to exchange views and experiences by presenting the output and experiences of each project,
- (3) to study necessary issues

5-2 Members

- (1) Lao side (to be nominated by GOL)
- Vice Minister, Chair
- Director General of related departments
- Others whom Chair determines necessary



(2)Japanese side

- Resident Representative, JICA Laos Office, Co-chair
- Project Chief Advisors
- JICA advisor(s) to MAF
- Representative of Embassy of Japan
- Others whom Co-chair determines necessary

5-3 Activity

- Annual meeting, and whenever Chair determines necessary
- 6 Secretariat for Joint Coordinating Committee for Programme to be announced
 - (1) Lao side
 - (2) JICA Laos Office



Discussion on the Minutes of Meeting

1 Background of the Cooperation between GOL and GOJ

The background and rational will be developed with the information from National Poverty Eradication Programme(NPEP), Strategic Vision for Agriculture Development, and Forestry Strategy 2020.

(Team) The Team suggested the Lao side provide with the alternative ideas on this part.

2 Project Title

Lao side suggested the title of the project reflects the substance of the activities e.g. 'Forest Management and Community Support Project in Selected Shifting Cultivation areas'.

3 Implementing agencies

Project Document will specify the role of each level. District level has the primary responsibility in implementing the project

4 Local Cost Support

It is suggested that the Lao side will calculate and the possible budget for local cost and make contribution to the project according to the budget described in Public Investment Programme, NPEP

5 Project Office

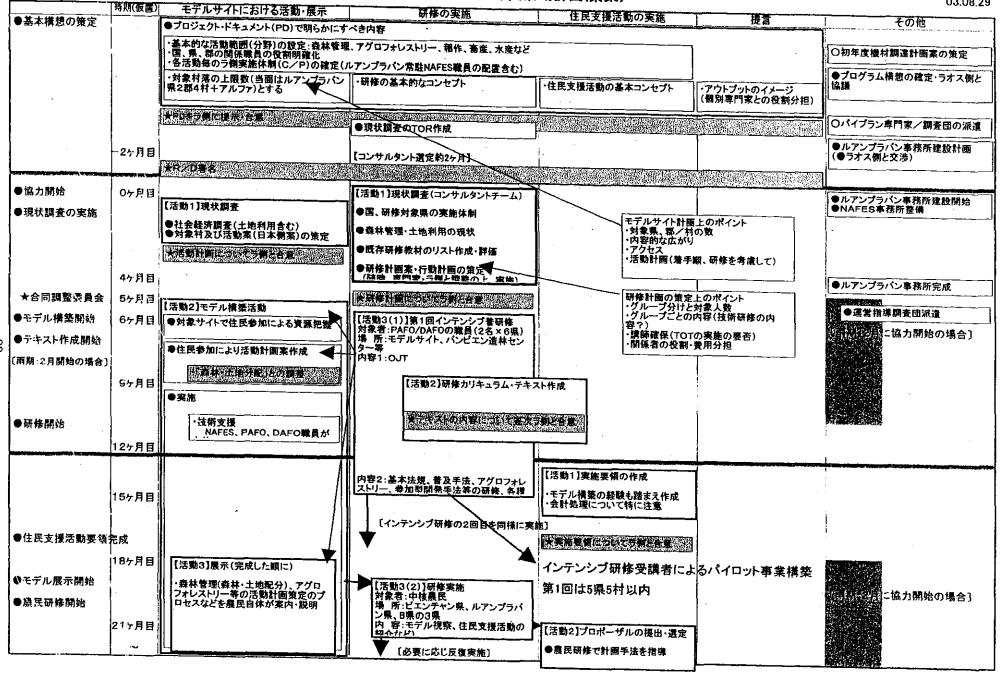
Use of Afforestation Center

- Representative of Lao side suggested that the Center may be utilized by number of projects and offices, beside the Project which implies that associated operational costs have to be born by concerned projects and offices. On this point JICA will need further discussions on the arrangement.

6 Verification of Project Document and R/D

Lao side requested one month for verification of Project Document before R/D.





经原公

Technical Cooperation Project for the Forest Management and Community Support

Project Document (draft)

December 2003

Technical Cooperation

between

The Government of the Lao People's Democratic Republic

and

Japan International Cooperation Agency (JICA)

Abbreviations

ADB Asian Development Bank

AFEC Agriculture and Forestry Extension Center

(former Afforestation Center)

AQIP Aquaculture Improvement and Extension Project

C/P Counterpart

CSP Community Support Programme

DA Department of Agriculture

DAFO District Agriculture and Forestry Office DLF Department of Livestock and Fisheries

DOE Department of Agriculture
DOF Department of Forestry
DOI Department of Irrigation

EU European Union

FORCAP Forest Conservation and Afforestation Project

FSG Farming System Generalist
GDP Gross Domestic Products
GOJ Government of Japan
GOL Government of Lao PDR

GTZ German Organization for Technical Cooperation

HH Household

JCC Joint Coordinating Committee

LEAP Lao Extension for Agriculture Project
LECS Lao Expenditure and Consumption Survey

MAF Ministry of Agriculture and Forestry

MOFA Ministry of Foreign Affairs

NAFES National Agriculture and Forestry Extension Service NAFRI National Agriculture and Forestry Research Institute

NGOs Non-Governmental Organizations NPEP National Poverty Eradication Paper

NTFP Non-timber Forest Products
ODA Official Development Assistance

OJT On the Job Training

PAFES Provincial Agriculture and Forestry Extension Service

PAFO Provincial Agriculture and Forestry Office

PCM Project Cycle Management
PDM Project Design Matrix
R/D Records of Discussion

SIDA Swedish International Development Agency

SMS Subject Matter Specialist

VARDP Vientiane Province Agriculture and Rural Development Project

WB The World Bank

Table of Contents

Abbreviations Table of Contents

Executive Summary

Introduction	29
Chapter 1 Background of the Project	30
1-1 Socio-economic Context	30
1.2 Deterioration of land/forest resources, production, and livelihood	30
1-2-1 Summary of land use and forest areas	30
1.3 Situation of production and livelihood in the North	31
1-3-1 Trend in production and livelihood in the North	
1-4 Policy and Strategy in Sector Concerned	
1-4-1 Policy/Strategy in Poverty Reduction	
1-4-2 Policy/Strategy in Extension System	
1-4-3 Policy/Strategy in Forestry Sector	
1-4-4 Policy/Strategy in Agriculture Sector	
1-4-5 Policy on Organization of villages	
1-5 Prior and On-going National and International Efforts	
1-5-1 National Efforts	
1-5-2 International efforts	
Chapter 2 Issues to be Addressed and Current Situation	40
2-1 Issues to be addressed and related organizations	
2-1-1 Extension organizations	
2-2 Current Status and Issues to be addressed	
2-2-1 Resource deterioration and improvement in production and livelihood	
2-2-2 Extension to meet farmers' needs	
2-2-3	
Land/forest policy enabling sustainable use and management and its implementation.	41
Chapter 3 Project Strategy	43
3-1 Strategy for Sustainable Use and Management of Forest Resources	43
3-1-1	
Measures to reduce local farmers' dependency onto shifting cultivation	44
3-2 Extension Strategy	45
3-2-1 'Farmer to Farmer' as an extension strategy	45
3-2-2 The steps in participatory extension	
3-2-3 Identification of Contents of Extension and Establishment in Model Villages	46
3-2-4 Farmer Training and Community Support	
3-3 Extension and Training	
3-3-1 Types of Training for Extension Staff	49
3-3-2 Training for Villagers	
3-3-3 Monitoring	
Chapter 4 Project Management and Coordination	51
4-1 Implementing Structure of the Project	51
4-2 Collaboration with technical institution and related agencies	51
4-2-1 Technical departments	51
4-2-1 Technical departments	51

4-2-3 Joint Coordinating Committee (JCC)	51
4-3 JICA Community Livelihood Programme	52
Cl FD - D	
Chapter 5 Project Design	
5-1 Overall Goal	
5-2 Project Purpose	
5-3 Outputs and Activities	
-	54
	55
	55
	56
5-4 Inputs	
	57
	57
5.5 Important Assumptions and Risk Analysis.	
5-5-1 Important assumptions	58
5-5-2 Risk analysis	59
5-6 Preconditions	59
Chapter 6 Ex-ante Assessment	60
6-1 Relevance	60
6-2 Effectiveness	
6-2-1 Project logics	
6-3 Expected Impacts	
6-3-1 Socio-economic impacts	61
6-3-2 Negative impacts	
6-4 Sustainability	
6-4-1 Institutional capacity	
6-4-2 Financial situation	
6.4.3 Social, environmental and technical acc	eptability63
6-5 Overall Assessment	-
Table 1 Trend in Land Use and Forest Cover	
Table 2 Number of Households (HH) and Plan	ted Areas for Rico
Table 3 Rice Production Trend	neu Areas Iof Mice
Table 4 Trend in Production of Cash Crops	
Table 5 Trend in Poverty Ratio	

Annex

Table 8

Annex 1	Project Design Matrix(PDM)
Annex 2	Plan of Operation (PO)
Annex 3	Legal Frameworks to do with Agriculture, Forestry, Extension and Forest Resource Management
Annex 4	Guidelines for Community Support Programme (CSP)
Annex 5	Criteria and Steps of the Model Sites Selection
Annex 6	TOR of Japanese Experts
Annex 7	TOR for Core Project Counterparts
Annex 8	PCM Problem Analysis Workshop Result
Table 6	NPEP Poor Districts in Target Provinces
Table 7	Provincial Profiles

Diagram 1 Organizational Charts (MAF and NAFES)

Diagram 2 Project Implementing Structure Diagram 3 Key Concepts of the Project

DAFO profiles

Diagram 4 Project Strategy

Diagram 5 Project Activities Flow Chart

Diagram 6 Training Flow Chart

Diagram 7 Typical Village Organization

Other Attachments

1 Minutes of Meeting

Introduction

Since 1996 the JICA has assisted the Government of Laos (GOL) in conservation and rehabilitation of degraded forest in Vientiane Province with a project type technical co-operation. Foreseeing the completion of the FORCAP phase 2 in July 2003, GOL requested to the Government of Japan (GOJ) a further cooperation to extend the success of FORCAP to Northern Laos. JICA dispatched a preparatory study team in August to September 2003, and set the project framework, through discussions, field studies, and workshops with concerned authorities, addressing the livelihood improvement through promotion of agriculture and forestry production in due consideration of sustainable use and management of land and forest.

This project document is consisted of 6 chapters and annexes. Introduction explains the brief historical background in which the proposal to this Project to come up, and the structure of this document. Chapter 1 provides the background information for the project such as the current situation of the concerned sectors, the policies and strategies, and past and on-going government and donor-funded projects. Chapter 2 describes the issues to be addressed in this project with the institutional framework and the analysis of the current situation, which is followed by Chapter 3 Project strategy for sustainable use and management of forest resources particularly at grass-root. Chapter 4 describes coordination structure of the Project. Chapter 5 presents full details of project design according to JICA's Project Design Matrix (PDM), together with pre-conditions and assumptions. Chapter 6 provides the evaluation of the project design according to DAC criteria. The attachment includes various information to do with Project.

Chapter 1 Background of the Project

1-1 Socio-economic Context

Agriculture and forestry sector, in which about 80% of the total population currently sustains their livelihood, is the most important industry occupying half of Gross Domestic Products (GDP). In particular forestry holds a unique and important place for both national economy and the livelihood of many rural population. Forest, according to the Forest Law, provides timber that is a principle Lao export product. While at the same time forest products provide a precious source of food and cash income for rural population. Furthermore, the agriculture and forestry sector recently receives an attention in the Government of Laos's effort in reducing poverty stipulated in National Poverty Eradication Paper (NPEP).

1-2 Deterioration of land/forest resources, production, and livelihood

Shifting cultivation is the major agriculture production system in the northern Laos as stated in later sections and the land type mainly consisting of fallow of the shifting cultivation has rapidly increased since 1992 and it occupies more than 60% of the total land in the north in 2002. Furthermore, in the north the area under shifting cultivation is on the rise while it decreases at national level. It is considered that the increase of shifting cultivation is the primary cause for the higher rate of forest loss in the region than the national average.

Both productivity and value-added of the prevailing production systems in the north, which are dependent on extensive use of natural resources including land and forest, are low in productivity and value addition. The living conditions of people engaged in this production system are generally poor. Due to the high rate of population increase and deterioration of natural resources there is a possibility of vicious circle that livelihood system; dependency on deteriorating resources needs to exploit more resources and in turn the livelihood gets worsened, unless smooth and quick conversion to a production system, that has higher productivity and value added with due attention to sustainable use and conservation of resources, is to take place.

1-2-1 Summary of land use and forest areas

A summary of land use and forest areas based on satellite image analysis is presented in Table 1 below.

Table-1 Trend in Land Use and Forest Cover

(Unit: Area; 1000 ha, Ratio; %)

	National				North (Datio)		
Land Use		1992		200	12	North (Ratio)	
			Ratio	Area	Ratio	1992	2002
Current Forest		11,168	47.1	9,825	25 41.5	36.3	27.9
Potential Forest	Sub-total	8,949	37.8	11,152	47.1	56.2	66.6
	Bamboo	1,532	6.5	539	2.3	6.9	2
	Unstocked	6,791	28.7	10,096	42.6	45.5	60.4
	Shifting cultivation	626	2.6	517	2.2	3.7	4.1
Other wooded area		1,444	6.1	287	1.2	2.7	0.9
			-	ĺ	-		

Agriculture land	850	3.6	1,200	5.1	0.6	1.5
Others	1,269	5.4	1,217	5.1	4.3	3.1
Total	23,680	100	23,680	100	100	100

Source: Land use and forest cover survey, MAF/Sida, 1992 and 2002 (preliminary figures)

- Note: 1) Current Forest: refer to land with crown density (tree canopy cover) of more than 20%
 - 2) Potential Forest: refer to previous forest areas where crown density is reduced below 20% for some reasons. The potential forest includes Bamboo, Unstocked and Shifting cultivation areas. Unstocked area is mainly fallow after shifting cultivation or disturbed by logging.
 - 3) Other Wooded Areas: refer to areas with tree where the site conditions are so poor that the crown cover can never be expected to exceed 20%. This includes Savannah Forest, Heath, Stunted and Scrub forests.
 - 4) Agriculture areas: refer to permanent agriculture land including rice paddy, agricultural plantations and pasture.
 - 5) Others: refer to all land uses other than above from 1) to 4).
 - 6) North includes Phongsaly, Luangnamtha, Bokeo, Udomxay, Luang Prabang, Huaphan and Sayabuly Provinces.

Most of the land is Current Forest or Potential Forest, especially Unstocked Forest, covering about 90% of the total area. Especially in the north, where mountainous landscape dominates, these two land use types occupy more than 95% and Agriculture area is only 1.5% much lower than the national figure. Moreover, Current Forest with a sharp decrease during this period is smaller than Potential Forest in 2002 at the national level and in the north this land type covers less than 30% of the land area.

1-3 Situation of production and livelihood in the North

According to the Agriculture Census for 1998/99 about 668 thousand households, 84% of all households, are classified as agriculture households that are engaged in rice production. Table-3 below shows number of households and planted areas for paddy rice and upland rice, which is the main product of shifting cultivation.

Table-2 Number of households (HH) and planted areas for rice

	Agriculture	Number o	Number of HH planting rice (1000)			Planted Area (1000 ha)			-
	HH (1000)	Total	Paddy only	Upland only	Paddy and Upland	Total	Paddy only	Upland only	Paddy and Upland
North	238	228 (100%)	54 (24%)	124 (54%)	49 (21%)	212 (100%)	71 (33%)	135 (64%)	7 (3%)
Nation	668	614 (100%)	354 (58%)	186 (30%)	74 (12%)	735 (100%)	481 (65%)	199 (27%)	56 (8%)

Source: Agriculture Census (1998/99), 2000, Agriculture Census Committee

Households engaged in shifting cultivation including those growing paddy rice and upland rice occupy 42% of the total rice growing households at the national level, but this share is much higher at 75% for the north and 67% of shifting cultivation households are in the north. Similarly, the north has much higher ratio of upland rice area as for rice planted area. It can be concluded that shifting cultivation is the main agriculture production system in the north. Other crops grown in upland area other than rice are maze and cassava for livestock feed, sweet potato, sesame, chilly peppers and so on for household consumption or sales.

Although rice is the main agriculture product, it is mainly for household consumption rather than for sales due to limited production and sales of livestock (cattle, buffalo, pig and poultry). On the other hand, non-timber forest products (NTFP) provices the major sources of income for farmers, especially those in rural areas. According to the Lao Expenditure and Consumption Survey II for 1997/98, composition of agriculture related income is as follows; livestock 30%,

commercial crops 22%, vegetables/fruits 13%, fish 11% and NTFP 11%. These figures are national averages including relatively rich and high value added production of commercial crops and vegetables in the flat areas along the Mekong River. Therefore, it is considered that in the northern mountainous areas shares of livestock and NTFP are much higher than the national average.

NTFP species collected in forest close to villages are numerous and vary from village to village. They include wood for energy and house repair, foods such as mushrooms, rattan shoot, tree leaves/herbs, wild meat, and many kinds of medicinal plants. They are not only for own consumption but also for sales to generate income. Forests also provide grazing places for livestock, single most important source of income for rural farmers. As seen above, production and livelihood of farmers in the north are heavily dependent on forests. Most of the land classified as Potential Forests or Unstocked Forests in the land use and forest cover survey is used as resources for production such as fallow for shifting cultivation, NTFP collection and grazing for livestock and they are indispensable for maintenance of their livelihood.

1-3-1 Trend in production and livelihood in the North

Production trend

Due to deterioration of land and forest resources, which are the base of the traditional production systems in the north, it is urgent to convert to sedentary and more productive systems. GOL has long recognized this issue and been promoting development of paddy field and commercial crop production through various programmes and activities including the land and forest allocation. Table-4 and 5 below present the trend in production of rice and some cash crops in the north.

Table-3 Rice production trend

			1998	1999	2000	2001	2002
Harvest area	rvest area Wet season paddy			73.0	75.3	79.7	80.8
(1000 ha)	Dry s	eason paddy	5.1	7.9	6.6	5.6	6.0
	U	pland paddy	102.0	113.4	108.4	116.8	103.4
		Total	175.4	194.3	190.2	202.1	190.3
Production	Wet season paddy		239.1	241.3	243.8	265.9	292.6
(1000 ton)	Dry se	eason paddy	18.5	26.7	23.1	20.2	22.7
	U	pland paddy	165.8	183.9	184.9	207.7	184.3
		Total	423.3	451.9	451.8	493.8	499.6
	Population (1	000 people)	1,620.6	1,661.0	1,702.7	1,754.4	1,802.9
Rice production per capita (kg) North		261	272	265	281	277	
		National	337	413	422	434	437

Source: Agriculture Statistics of Lao PDR, MAF

As shown in the table, due to the high rate of population increase, 2.7%/year (from 1998 to 2002), rice production per capita in the north shows only a fractional improvement and is still far less than a self-sufficient level with widening gap with the national average.

As for production of cash crops for sales to buy rice tends to be stagnant in general as shown in Table 5. Except vegetable production of which has grown twice during the 5 year period, all other crops and large livestock are leveling of or even decreasing. However, Job's tears, Paper Mulberry and other crops, the production of which have been recently expanding in the region, are not included in the MAF statistics. Although more data are necessary to come to a clear conclusion about production trend of cash crops, the assumption is that the conversion of shifting cultivation to cash crop production has not been going well as it should be.

Table-4 Trend in production of cash crops (Unit: crops; 1000 ha, livestock: 1000 heads)

1998 1999 2000 2001 2002

Maze	25.2	24.2	23.9	23.1	25.4
Tubers	8.1	6.3	5.0	5.2	5.9
Vegetables	8.5	14.7	25.8	25.1	17.5
Ground nut	6.9	6.0	5.4	5.9	5.9
Sugar cane	3.2	2.7	3.7	2.1	2.8
Cattle/Buffalo	543	511	545	520	543

Source: ditto

Livelihood trend

Based on the Lao Expenditure and Consumption Survey I and II (1992/93 and 1997/98), poverty rates (ratio of population below predetermined levels of food consumption and non-food essential expenditure against total population) are calculated as shown in Table-6.

Table-5 Trend in poverty ratio (%)

	92/93	97/98	Reduction
Vientiane Municipality	24.4	12.2	12.2
North	58.4	52.5	5.9
Central	39.5	34.9	4.6
South	45.9	38.4	7.5
Nation	45.0	38.6	6.4

The north is the poorest region with more than half a population under poverty line and its poverty reduction is stagnant compared to the national level. Most of upland households are considered below or far below the poverty line and improvement of their livelihood tends to be much slow.

1-4 Policy and Strategy in Sector Concerned

1-4-1 Policy/Strategy in Poverty Reduction

Outline of the National Poverty Eradication Plan

GOL formulated the National Poverty Eradication Plan (NPEP) and presented to the 8th Donor Round Table Meeting in September 2003. It is the GOL's quintessential instrument to achieve the 2020 goal to exit the status of least-developed country by 2020. NPEP is a comprehensive framework for growth and development, and has a particular focus on the improvement of the poverty situation in 47 poorest districts. Preliminary data data from LECs III in 2002/03 indicates that the poverty level may have fallen to about 30% from 39% five years ago. However, disparities among districts appear to have increased, promoting GOL to focus on the poorest districts.

Agriculture and forestry sector is one of the four main sectors together with education, health and infrastructure. From a poverty eradication perspective, the most important policy-related objective regarding agriculture/forestry development is improvement of household food security, or improved living standard more generally. NPEP gives three strategic directions to achieve this goal:

- 1) Enhancement of market based farming,
- 2) Reduction of disparities between flat land and sloping land framing, and
- 3) Enforcement of sustainable forest and watershed management. Essence of the Agriculture Vision, Agriculture Master Plan and FS 2020 forms the core of the agriculture and forestry section in NPEP.

As for the poorest districts, NPEP stresses importance of initiatives for poverty eradication by

district staff and farmers themselves and necessity of capacity building for this purpose. In order to support households and villages to engage in income generation activities GOL has earmarked 40 billion kip to the poorest districts in addition to the projects supported through other public investment programmes. This special development fund is to be channeled through village and district funds and its administrative and management details are in preparation.

1-4-2 Policy/Strategy in Extension System

Extension system development

Approach to farmers had been top-down for a long time after the Revolution until recently stressing achievement of production norms in a planned economy. The Agriculture Vision in 1999 for the first time gave a clear policy of extension and research which should serve first of all farmers needs from farmers' point of views. According to this policy in 2000 the National Agriculture and Forestry Research Institute (NAFRI) was established by bringing together research sections used to belong to technical departments within MAF and the National Agriculture and Forestry Extension Service (NAFES) was established in 2001.

NAFES

As seen in Diagram 1-2 Organization of NAFES, there are three divisions of Administration and Personnel, Planning and Cooperation, and Technical. In addition several Centers are placed responsible for each sub-sectoral technical fields. The newest center is the Agriculture and Forestry Training Center (former Afforestation Center) located in Vientiane Province. The Technical Division is responsible for 1) defining effective approaches/methods for agriculture and forestry extension, 2) preparation of technical manuals for dissemination of update knowledge and know-how to farmers and 3) evaluation of extension and technique application.

As for forestry there are two Centers e.g. Forest Plantation and Reforestation Extension Center and Shifting Cultivation and Stabilization Extension Center. These two organizations were under the Department of Forestry before NAFES establishment. There is no section or Center directly responsible for use and management of village forest or NTFP. NAFRI has a research section on NTFP.

Duties and responsibilities of NAFES are defined in MAF Provision No. 685/01 and main ones are as follows:

- To implement the agriculture and forestry extension and dissemination, according to the agriculture and forestry strategic guidelines and development plans to achieve objectives and goals set by the Party and Government.
- To study and elaborate regulations, provisions, methodology and policies regarding agriculture and forestry extension aiming to enhance more effective production.
- To transfer and disseminate the agriculture and forestry research results/outputs to farmers for more effective production and at the same time to feed back farmers' comments and suggestions concerning the application of research results to research institutions.
- To organize training for provincial, district extension staff, village extension workers, as well as farmer, in order to upgrade their knowledge and capacity in applying appropriately new technologies.

According to the MAF instruction in the same year an extension section has been established in all of the provincial agriculture and forestry offices (PAFO). As for the district level District Agriculture and Forest Offices (DAFO) still remain sub-sectoral lines (e.g. irrigation, crops, livestock and forestry) because their activities and all farmer related, thus extension activities.

Extension activities

In the Agriculture Vision villagers' needs are to be identified by Farming System Generalists

(FSG) of DAFO and transmitted to Provinces, and Subject Matter Specialists (SMS) at Province level will provide technical support to farmers. MAF/NAFES has been studying methods and institutional arrangements including staff training necessary for implementation of this extension idea. At this moment extension activities on the ground are limited to some cases of international projects.

As stated in earlier, NAFES is only two years old and MAF/NAFES is now working on ways and means for implementation of these duties. Accordingly, instruction and guidance of Provinces for achievement of production targets is still the main task of each technical center of NAFES. As for the two forest related centers, their task is mainly to guide Provinces in achieving allocated area targets of tree plantation and shifting cultivation stabilization.

Provincial Agriculture and Forestry Extension Service (PAFES)

Following the MAF Provision No. 172/02, a provincial agriculture and forestry extension service has been established in all PAFO equivalent to other technical sections. Main duties are similar to those of NAFES. However, their current task is mainly to guide and instruct DAFO for achievement of various production targets.

DAFO

There is no section in DAFO specialized in extension and all DAFO staff are considered extension workers. Their current main task is to promote agriculture production and tree planting in villages, to collect statistics and control illegal activities in resource uses.

1-4-3 Policy/Strategy in Forestry Sector

Outline of the Forestry Strategy to the Year 2020 (FS 2020; 2nd draft)

FS 2020 formulation started in September 2000 as one process of the 7th Round Table Meeting and it is expected that after revision of the current 2nd draft it will be endorsed by the government in January 2004. FS 2020 is to present objectives of the forestry sector development, basic policy directions and proposals for action based on analysis of resource situation, overall socio-economic conditions and impacts of past and on going forest policy and programmes, many of which originated in the National Forest Conference in 1991. Sections related to this project are given below.

Objectives of Forestry Sector Development

Development of the forestry sector and implementation of sustainable forest management are key elements supporting the objectives of overall national developments, the first to graduate from least developed country status, the second to eradicate poverty. The overarching objective supported by improved forest policy and management is *poverty alleviation*. The major sector objectives, which must be achieved to contribute to poverty alleviation, are:

- to maintain a healthy and extensive forest cover as an integral part of a rural livelihood support system encompassing stable water supplies and prevention of natural disasters.
- 2) to provide a sustainable flow of forest products for domestic consumption and to generate household income through sale and export, thus contributing to fiscal revenue and the country's foreign exchange earnings whilst increasing direct and indirect employment,
- 3) to preserve the many species and unique habitats, which are, for different reasons, threatened both within the country and elsewhere

Proposals for Action

Main proposals for actions concerning Village Land and Forest Management are:

- 1) Clarify the definition the status of village forest in the Forestry Law
- 2) Link harvesting plans with forest management plans developed by villages through the Village Land Use planning process
- 3) Review the land and forest allocation programme in terms of impacts on villagers' livelihoods according to agriculture production, NTFP collection and other available resources for flexible implementation according to village socio-economic conditions
- 4) Consider establishment of participatory land use planning based on the legal status of village land and forest instead of land and forest allocation
- 5) Assist villagers in formulating village land and forest management plans on the basis of overall land use plans and focusing on sustainable and equitable use of common land and forest resources, maintenance/rehabilitation of village watershed areas, income generation, etc.
- 6) Establish a demand-driven, household-based extension and information dissemination system supported by DAFO as well as model farmers and others
- 7) Assist villagers in forming groups or association for collective management of NTFPs including domestication, sales and processing
- 8) Establish micro-finance systems to support villagers investing in cropping, NTFP domestication and processing, livestock production and so on

1-4-4 Policy/Strategy in Agriculture Sector

The Government's Strategic Vision for the Agriculture Sector endorsed in Dec 1999 sets a framework of agriculture development policy/strategy level. It proposes a development strategy separately for the flat land areas along the Mekong River and for the sloping land based differences in natural and socio-economic conditions and existing stages of agriculture development. The strategic initiatives proposed for the sloping land, where this project will operate, includes the following:

- 1) land-use zoning based on bio-physical and socio-economic parameters
- 2) participatory land allocation and land-use occupancy entitlement
- 3) community management of natural resources
- 4) farming system diversification and agro-forestry development through adaptive research, trials and demonstrations on farmers' fields
- 5) sustainable land-use management with soil-erosion control, afforestation and conservation management
- 6) farmer demand driven extension
- 7) rural saving mobilization and micro credit extension with subsidized rates in some areas to promote technique adoption among the poorest strata

This Strategic Vision also proposes that MAF should enhance its capacity to respond to farmers' needs in the evolving market economy and be a partner with farmers, supporting farmers' needs and providing information and technical assistance to overcome garmer and village problems. The Strategic Vision for the first time sets the extension as one of the main tasks of agriculture administration and this led to establishment of the National Agriculture and Forestry Extension Service and Provincial extension sections.

1-4-5 Policy on Organization of villages

According to the Constitution a village is the last administrative level after Province and District and village heads are responsible for implementation of laws, decisions and instructions of the state, maintenance of order and safety, and development of their villages. The Prime Minister's Decree on Village Organization and Administration No. 102/93 has the following provisions concerning village organization.

■ Villages shall consist of at least 20 households and 100 people.

- Establishment of villages and demarcation of village boundaries shall be done by Provincial governors through District chiefs.
- Village heads are elected by villagers and approved by Provincial governors.
- Villages shall have under the leadership of village heads three committees including Economy, Order and Culture/Society.
- Agriculture and forestry matters are under the Economy committee.

1-5 Prior and On-going National and International Efforts

1-5-1 National Efforts

Shifting cultivation stabilization and Land and forest allocation

Stabilization of shifting cultivation has been an important policy for national development since 1975 because it causes forest destruction leading to resource reduction and environmental hazards such as soil erosion and it is considered a primitive cultivation method contradicting modernization. In the current long-term socio-economic development plan, shifting cultivation is to be basically stabilized by 2005 and completely stopped by 2010. Shifting cultivation stabilization is to be achieved through provision or conversion to sedentary agriculture and other alternatives and GOL has been developing infrastructure and providing support to introduction of cash crops and alternative cultivation methods.

As one of important institutional base for cash crop production and eventual stabilization of shifting cultivation, GOL has been implementing land and forest allocation programme since 1996. Main components of the land and forest allocation exercise in villages are; 1) agreeing on drawing village boundaries, 2) allocation of new plots for agriculture production with temporary land use certificates, and 3) zoning of forest area into four categories (village use, protection, conservation and rehabilitation) and agreement on use of each forest category, with full participation of villagers.

The programme achieved the following results by February 2001.

· No. of villages allocated land and forest: 6,188 villages

· No. of households allocated land: 379,290 households

· Allocated land by type (ha): Paddy; 286,303 ha, Cash Crops; 431, Tree planting; 59,429,

Grazing; 21,951, Others; 1,048,349

· Allocated forest area: 6,712,911 ha

Owing to the land allocation exercise villagers was expected to start cash crop production and eventually abandoned shifting cultivation. However, in many cases necessary technical and financial supports are not well delivered. In addition there are cases where shifting cultivation households are allocated 3 or 4 plots for shifting cultivation and prohibited shifting cultivation in other areas including village forest areas. In these cases the land allocation is used as a direct measure to encroach shifting cultivation areas.

According to MAF statistics on shifting cultivation, both shifting cultivation area and number of households engaged in shifting cultivation decreased from 249,000 ha and 210,000 households in 1990 to 110,000 ha and 99,000 households in 2001 respectively. However, in these statistics shifting cultivation on the allocated land is not counted. Regardless of the administrative classification of land, allocated or unallocated, shifting cultivation as a cultivation method is likely to be increasing in the north as shown in the land use and forest cover survey. Moreover, in some studies the land allocation is pointed as one of the causes for poverty by many villagers because it limits area for shifting cultivation leading to deceased rice production. GOL has started a review of the implementation and impacts of this programme for improvement.

Resettlement

In many districts in the north remote villages are persuaded by district authorities to move down to roadsides or close to bigger villages with purposes of better access to infrastructure and social services and eventual stabilization of shifting cultivation. It is said that there cases that pre-settlement planning for resource use and livelihood establishment in host villages for new comers is not made enough so that resources in host villages are rapidly depleted or conflicts on resource use are common and livelihood of new comers don't improve as expected. At the same time voluntary resettlement depending on kinship with varied sizes is said to be also common influencing resource use and livelihoods. Resource use planning including the land and forest allocation needs to take into account both of the two types of resettlement.

1-5-2 International efforts

Land and forest (policy and institutions)

Lao Swedish Forestry Programme (terminated in 2001)

This programme consisted of land use planning at village level, management of conservation forests, management of production forest with villagers' participation and other components. The village land use component developed methods and manuals of land and forest allocation and these manuals were distributed to Provinces and Districts for implementation. It also assisted local authority in implementing this exercise in several villages for method improvement.

Land Titling Project II (2003-2009)

With assistance of World Bank and Australia the phase I of this project established land registration systems in big cities including Vientiane and issued land titles after land measurement and dispute settlement. In the second phase this project is to expand its target areas to villages outside of big cities as well as to study and make recommendations on national land policy, land use planning and the land and forest allocation programme.

Macro-economic Policy Support Project (2003-06)

This is collaboration between JICA and the Committee of Planning and Cooperation for formulation of macro-economic policy and institution building. One of its components is agriculture and this component has three sub-components including one district one product, Micro-financing and Land and forest allocation. Many of products identified and promoted for one district one product are likely to be NTFP. The Forest Management and Community Support Projects have a close linkage with all of the three agriculture sub-components under this project.

Forest resource management

Forest Conservation and Afforestation Project I and II (FORCAP; 1996-2003)

FORCAP assisted MAF and Vientiane Province in participatory model development for conservation and rehabilitation of degraded land in lower Nam Ngum Reservoir. It developed technical management models such as Demonstration Forest and Water Protection Forest, income generation models including Profit Sharing System for small scale tree plantation management, agro-forestry systems and mulberry paper and paper mat making. The target areas are Vangvieng and Hinheup Districts in Vientiane Province.

Non-timber Forest Products Project (terminated in 2000)

This project assisted by the World Conservation Union/Denmark surveyed use and management of NTFP with a systematic approach for the first time in Lao PDR. It also assisted villagers in management, domestication, processing and sales of NTFP and

revealed economic importance of NTFP in maintenance of rural people's livelihoods.

Sustainable Forestry and Rural Development Project (2003-2007)

This project support forestry related institutions including villages in sustainable management of production forests with main focus on sustainable log production. Villagers are to form Village Forestry Organizations in an official way and go into contract with district authority concerning their participation in all aspects of production forest management including logging and sales. They will receive benefits for their participation from log sales revenue and use them for village development activities.

Micro project development through Local Communities (2002-2007)

With support of European Union this project aims to improvement of infrastructural and institutional conditions so that local authority and communities can initiate and maintain their efforts for rural development to eradicate poverty. Main components are capacity building of stakeholders at local level, improvement of road access, development of varied health systems and promotion of sustainable use of upland resources. Its target areas are Chompeth and Viengkham Districts in Luangprabang Province and Vienghouka and Lon Districts in Luangnamtha Province.

In the upland resource components main focus will be given to 1) productivity improvement in upland agriculture by introduction of new cropping techniques, 2) promotion of sustainable use of upland forest resources (NTFP, fuel wood, eco-tourism, etc.), 3) Production improvement in lowland agriculture for easement of pressure on upland resources (small scale irrigation, integrated pest management, soil fertility improvement, etc.) and others.

Research and extension in agriculture

Upland Agriculture and Forestry Research Project (2002-2005)

With support of Sweden this project has three research components i.e. 1) land management, 2) livelihood system analysis, 3) experiment for new production system in purpose of production and livelihood system improvement in mountainous areas. A field extension component would be added in the near future to apply the research result. The target areas are Phonxay District, Luang Prabang and Namo District, Oudomsay.

Lao extension for agriculture project (2001-2004)

This project aims to strengthen the MAF extension system adopted in the Agriculture Vision with assistance of Swiss. Main activities are development of extension methods and extension delivery systems, extension capacity building of staff in NAFES and concerned Provinces and Districts, production improvement through extension activities. Main production activities target by this project at this moment are rice production and chicken/pig raising.

Chapter 2 Issues to be Addressed and Current Situation

2-1 Issues to be addressed and related organizations

The development issue of the project, livelihood improvement through production and income generation with due consideration of conservation and sustainable uses of land and forest, is related to number of issues in forestry, agriculture, land, income generation etc. The institution responsible for assisting villages to conserve and promote sustainable forest resource use and management is NAFES and its provincial offices.

2-1-1 Extension organizations

As described in Chapter 1, NAFES is yet to complete establishing Provincial and District level offices with a limited number of human resources and budget available. In case the establishment of PAFES, Provincial offices of NAFES are yet to be settled, PAFO office covers the role of PAFES in many cases.

Furthermore, it is often suggested that the coordination with NAFRI which is mandated for agriculture and forestry related research including farming system. However the coordination between research and extension seems incomplete.

2-2 Current Status and Issues to be addressed

"Forests are not used sustainably" was the main problem in the problem analysis workshop organized by the Preparatory Study, to which staff from MAF Departments and PAFO of Vientiane and Luang Prabang Provinces attended. They identified causes for the problem as follows; lack of off-farm jobs/income opportunities, excessive shifting cultivation and wood harvest by villagers, lack of appropriate forest management systems, lack of extension service reaching farmers, weak law enforcement and others.

Shifting cultivation issue is closely related to livelihood maintenance and food security of farmers, and on the other hand necessity to link it with agriculture and forestry research and to introduce high value added production activities was also identified as solutions to this issue. Moreover, some problems concerning agriculture and forestry extension at village level are raised. They are lack of knowledge and capacity of District extension staff in laws and regulations, lack of appropriate forest management systems, insufficient extension system especially lack of transportation for extension activities and training system and so on.

2-2-1 Resource deterioration and improvement in production and livelihood

As explained in Chapter 1 the provision of alternative income and produce for food is much needed. Although introduction of cash crops in the north seems slow as seen in the section 1-3-1, there have been increasing cases of new production activities on slope land and some examples are given below. It should be attended that many farming households make living by combining these production activities and available labour force within a given condition of their land/forest.

- Fruit tree growing
- · Group management/sales of bamboo shoots
- Teak plantation by villagersIt is necessary to support expansion of these new initiatives as well as to strengthen extension system including both farmer to farmer extension and administrative extension that can guide and support various technical and sales aspects in detail according to farmers' needs.

2-2-2 Extension to meet farmers' needs

Issues to be Addressed

It would take some time to institutionalize the new extension system proposed in the Agriculture Vision due to various reasons including limited number of extension staff, especially at village/district level, limited budget and current workload. On the other hand it is prerequisite for use and management of forest resources by villagers' initiatives to ensure food security or income sources enough to buy foods for them. It is mentioned in the Extension Strategy that under these circumstances villagers themselves need to have measures for production improvement.

Many of local agriculture and forestry officers are still familiar with the conventional approach toward farmers, which is to promote production of targeted crops or tree planting in a top-down manner. However, due to lack of training their actual technical levels of crop or tree growing are generally insufficient to provide field instructions or demonstration needed by farmers and they tend to think their training is more urgently needed than farmers' training. It is an urgent task to make the new concept of extension understood by all extension staff, provide technical and methodological training with them and to establish an extension system that delivers support needed by farmers.

In order for this, the following issues would need urgent attention:

- 1) Formulation of extension policy concerning concept, filed duties and so on at the central level.
- 2) Formulation of policy and plans of extension staff training
- 3) Training of extension staff based on plans
- 4) Preparation and dissemination of field manuals for local extension staff
- 5) Clarification and clear distinction of roles and duties of PAFO/PAFES and DAFO concerning extension and technical support to farmers.
- 6) Implementation of extension activities by extension staff
- 7) Identification of research institutes, technical departments/sections, private companies and individuals who possess technical expertise necessary and usable for extension
- 8) Establishment of cooperation mechanism with the identified institutes and so on for ensuring timely delivery of needed technical support to farmers

As for the items 3) to 8) above, taking into account the limited existing institutional and financial capacity of NAFES, it is considered more effective and indispensable to develop core activities including extension staff training in some model areas, where extension is most needed, than to thinly spread to gain little. Demonstration of successful cases of extension activities at village level and farmer to farmer extension are also priority activities in the Model Site areas.

2-2-3 Land/forest policy enabling sustainable use and management and its implementation

<u>Issues to be addressed</u>

The land and forest allocation is an innovative policy that provides shifting cultivators with stable land tenure, which is a necessary condition for investment in land for sedentary agriculture or cash cropping. There are many villagers and villages adjacent to cities or with good access to markets, which are clearly benefited from this policy. However, it is mentioned that implementation of this policy in remote mountainous areas aims in many cases at direct confinement of shifting cultivation in order for forest protection and as a result allocated land parcels and forest are not used as planned, or reduction of rice production impoverishes farmers further.

Review of this policy/programme with focus on evaluation of its impacts and achievement in land use, production, livelihood and forest management is indispensable for improvement and this needs to be done in parallel with review of legal framework for village land and forest and

possible definition in concerned laws.

Among others legal frameworks concerning land, forest and extension, and organizations related to villages and extension system are summarized Annex 3 Legal Framework to do with Agriculture, Forestry, Extension, and Forest Resource Management.