

第4章 プロジェクトの妥当性の検証

4-1 プロジェクトの効果

本プロジェクトの実施により、次のような効果が期待できる。

表 4-1 本プロジェクトの効果

現状と問題点	協力対象事業での対応	直接効果・改善程度	間接効果・改善程度
海岸保全林が整備されていないため、飛砂、強風、砂の移動等による被害が発生し、海岸砂地周辺住民の生活に支障をきたしている。	海岸保全林の整備	<ul style="list-style-type: none"> ① 砂の移動が激しい海岸砂地において、平均樹高1 m以上の海岸保全林が、700 ha（対象地面積の約80%）以上整備される。 ② 飛砂、強風、砂の移動等による農漁村への被害が軽減する（地域住民の強風被害を受けた世帯の割合88.0% および飛砂被害を受けた世帯の割合59.6% がそれぞれ減少する）。 	<ul style="list-style-type: none"> ① 小規模二酸化炭素（CO₂）吸収源となり、地球温暖化防止に寄与する。 ② 海岸地域における自然環境の保全および生物多様性の向上に寄与する。 ③ 保全林の維持管理作業を継続的に実施することにより、地域住民の就労の場が増える。 ④ 保全林の維持管理作業を継続的に実施することにより、薪炭材や有機物が供給される。 ⑤ 海岸保全林周辺の農地や水産施設の生産性が向上する。 ⑥ 海岸保全林周辺で、新たに宅地、農地、水産施設等が整備されるようになる。 ⑦ 海岸保全林が防潮林としての効果を発揮し、高潮や津波の被害が軽減される。

これらの効果と併せ、本プロジェクトの達成度を示す各指標を以下のように整理する。

本プロジェクトの成果指標：	協力対象事業終了後、1年目（最初の雨季）の時点で、平均樹高1 m以上の海岸保全林が、700 ha（対象地面積の約80%。現状では0 ha。）以上整備される。
プロジェクト目標の指標：	<ul style="list-style-type: none"> ① 協力対象事業実施後5年目以降に実施するアンケート調査で、地域住民の強風被害件数が70%減少する（基本設計調査時88.0%（161世帯/183世帯）が毎年被害を受けていたが、25%に減少する）。 ② 協力対象事業実施後5年目以降に実施するアンケート調査で、地域住民の飛砂被害件数が70%減少する（基本設計調査時59.6%（109世帯/183世帯）が毎年被害を受けていたが、17.8%に減少する）。

(1) 成果指標について

PACSA の瑕疵検査時（協力対象事業終了後、最初の雨季の末期）で実施した森林現況調査の結果、造成された海岸保全林全体の生存率が 81 %であったことから設定した。本プロジェクトは PACSA に比して技術的難易度の高い地域で植林を行うため生育環境は悪化するが、同時に PACSA の課題等を踏まえ、土壌改良剤や元肥の見直し、保育期間の延長等を行ったことから、PACSA と同等程度の生存率を確保することが必要であると判断したためである。また、樹高については、冠水地、半固定砂地においても植栽木の平均樹高は 1 m 以上になると想定したことによる。

評価のタイミングについては、乾季は落葉状態にある植栽木の生存と枯死の判別が困難であるため、雨季の末期が最適であると思われる。

(2) プロジェクト目標の指標について

「2-2-3 環境社会配慮」のとおり、基本設計調査時にアンケートを実施した対象地周辺の住民の回答者 183 名のうち、88.0 %にあたる 161 名が強風による被害をほぼ毎年受けており、また、59.6 %にあたる 109 名が飛砂による被害をほぼ毎年受けていることが判明した。したがって、この被害割合が減少するかどうかを指標にすることで、飛砂や強風による被害が軽減したかどうかを測るものとする。なお、海岸保全林の飛砂効果は、植栽後比較的早期に発現するが、防風効果に関しては、ある程度の樹高生長が確保されないとその効果を実感できない傾向がある。

一方、本プロジェクトの全期間は都合 25 年間であるため、他の一般的なプロジェクトのように、プロジェクト終了後に評価を行うことは現実的でない。そこで、本プロジェクトでは、我が国の無償資金協力の投入が地元住民の記憶に十分留まっており、かつ、防風・防砂効果が発現し始めると想定できる時期として、本無償資金協力実施後 5 年目以降を評価のタイミングと設定する。基本設計時のアンケート調査によって、強風および飛砂による被害を地域住民が想像以上に受けていたことが判明した。

4-2 課題・提言

4-2-1 相手国側の取り組むべき課題・提言

プロジェクトの効果が発現・持続するために必要となる「ベ」国側の取り組むべき課題は以下のとおりである。

(1) 森林の維持管理

プロジェクトの効果が発現し続けるためには、「ベ」国側による森林の維持管理の実施が重要な鍵となる。PACSA の反省を踏まえ、本プロジェクトでは、工事開始前に森林の維持管理担当者（主に地域住民による）を決めることとしたため、協力対象事業実施中の維持管理体制は強化されつつある。

また、協力対象事業実施後の「ベ」国側による維持管理は、PACSA においても一定の評価があった。ただし、協力対象事業実施後 5～10 年経過すると林冠がうっ閉した状態になり、その後の林木の健全な育成のためには適切な除伐、間伐が必要となる。造成された海岸保全林は保護林に位置付けられ、間伐材、林産物、非木材産物の利用を享受できることから、長期にわたる合理的な森林管理計画を立てる必要がある。

また、対象地を含む「中南部沿岸地域」は、様々なセクターによる開発の波が押し寄せている場所でもある。本プロジェクトで整備した保全林が、可能な限り長期間、保全林としての機能を高次元で発揮していくために、適切な維持管理と利用方法に関して、今後、関係機関と協議を深める必要がある。これは、他の開発に伴う一部の土地転用手続き方法も含めて検討されるべきである。

(2) 海岸保全林造成技術の普及

本プロジェクトの上位計画は「500 万 ha 森林造成国家計画」であり、その中で海岸保全林の造成の目標は、「ベ」国全体で 10 万 ha となっている。PACSA および本プロジェクトで造成する海岸保全林の林班面積を合計しても 4,500 ha 超に過ぎず、目標の達成のためには、本プロジェクトで採用し、実施中にさらに現地に即した改良を加えた技術を用いて、「ベ」国内で同様の案件が継続的に実施されていく必要がある。

本業務においては、効果的なソフトコンポーネント計画の実施が困難であると予測されたため、その採用が見送られた経緯があり、啓蒙普及活動はすべて「ベ」国側の分担事項となっている。したがって、本プロジェクトのモデル性が高次元に発揮されるためには、「ベ」国側による普及活動および計画立案能力が問われることとなる。

4-2-2 技術協力・他ドナーとの連携

PACSA も併せ、本業務においても、長期・短期専門家や海外青年協力隊員の派遣、プロジェクト方式技術協力等の各種技術協力に関して、その必要可能性を検討してきたが、いずれの協力にも内容がそぐわないとして採用を見送ってきた経緯がある。本プロジェクトのような大規模一斉植林プロジェクトでは、植栽後の森林の維持管理や病虫害対策等が主な活動内容として挙がるが、これらの

活動だけで技術協力を実施するのはかなりの無理がある。「ベ」国側では、PACSAにおいても一定の維持管理業務を実施しており、彼らから希望が出ているのは、成長不良林の改善策や病虫害対策等に必要な資金の協力であり、技術的側面での協力要請はない。

現時点で可能性が残されているのは、対象地周辺での農村開発分野での技術協力である。本プロジェクトで造成した海岸保全林をどのように活用していくかを、森林・林業分野だけでなく、農業・水産業・灌漑・医療保健・貧困対策・産業開発・ジェンダー等を含めた総合的な地域開発の視点で整理していくというものである。

いずれにしても、今後、プロジェクトを実施していく中で、先方政府との協議を重ね、どの分野で日本が協力できるか、対象を絞り込んでいく必要がある。

一方、他ドナーとの連携に関しては、様々な提言が可能である。「1-1 当該セクターの現状と課題」で触れたとおり、現在のところ、山間部が WB、KfW、JBIC 等による森林造成で、海岸付近は日本の無償資金協力で実施するという方針がドナー間で調整されている。しかしながら、日本の無償資金協力はモデル性の提示が本来の目的のひとつであるため、今後も引き続き本事業をフェーズ 2、3 と重ねていくには無理がある。また、事業の実効性や技術的な側面での課題は、本プロジェクトの実施により、かなりの部分が解決できるものと考えられるため、たとえば、小規模 AR-CDM 事業と絡めた有償資金協力や民間植林会社独自参入による保全林造成等の実施も可能であると推測する。

「ベ」国での海岸保全林の造成が拡大・普及するために、本プロジェクトの実施に際し、こういった視点での橋渡しをどう実現していくかを検討し続ける必要がある。

4-3 プロジェクトの妥当性

「表 4-2 本プロジェクトの妥当性の検討」のとおり、様々な角度から本プロジェクト実施の妥当性を検討した結果、程度の差こそあれ、すべての項目でその妥当性が確認できた。

表 4-2 本プロジェクトの妥当性の検討

番号	検討項目	検討内容
01	プロジェクト目標と上位目標の指し示す方向性は、「ベ」国政策と合致するか。	① プロジェクト目標である海岸保全林の造成による住環境の改善は、「ベ」国の「第8次国家開発5ヵ年計画(2006～2010年)」における社会経済開発や貧困削減に対し間接的に貢献するものである。 ② 上位目標である海岸保全林造成の普及が図られることは、「ベ」国の林野行政政策の中心的存在である「500万ha森林造成国家計画」に直接的に貢献するものである。
02	同方向性は、対象地方省のニーズと合致するか。	対象3省はいずれも、海岸地域の安定化を図るため、もともと海岸保全林の造成に力を入れてきた経緯があり、本プロジェクトの方向性と省のニーズとは一致している。
03	同方向性は、対象地周辺の住民ニーズと合致するか。	① 住民アンケート結果によると、飛砂、強風、砂の移動等による被害を受けている住民は、全体の59～88%に達し、環境改善を求める声が非常に高かった。 ② 同アンケートにおいて、植林事業の必要性や参加協力に関しても高い賛同を得ている。
04	同方向性は、日本の「ベ」国援助政策の方針と合致するか。	① 日本の「対ベトナム国別援助計画」においても、「環境」、特に「森林保全・回復についての支援に重点的に取り組む」とあり、また、「生物多様性の保全に係る支援を検討する」との記載がある。 ② 同じく、「農業・農村開発」においても、「生活・生産インフラの整備・管理に係る支援に重点的に取り組む」とある。
05	プロジェクトの裨益対象が、貧困層を含む一般国民であるか。また、その数がかかなりの多数であるか。	① 本プロジェクトのターゲットグループは、対象海岸砂地周辺の住民(農漁村民)であり、住民アンケート調査においては、貧困層は明確に表れなかったが、多くの貧困層を含んでいると推測できる。 ② 本プロジェクトの裨益効果は、ターゲットグループが直接的に享受するものであり、その受益者数は計58,368人である。
06	プロジェクトの目標が人間の安全保障の観点から、BHNや教育・人造りに合致するか、若しくは、民生の安定や住民の生活改善のために緊急的に求められているプロジェクトであるか。	① 本プロジェクトの実施による住環境の改善は、地域住民にとって喫緊の要望であり、現地のBHNに合致している。また、本プロジェクトの実施による飛砂等の被害軽減ならびに貧困削減および津波被害軽減等への間接的貢献により、人間の安全保障に対しても一定の働きかけが可能である。 ② 飛砂、強風、砂の移動等による被害は深刻な状態にあり、本プロジェクトによる生活環境の改善は、緊急を要するものである。
07	被援助国が原則として独自の資金と人材・技術で運営・維持管理を行うこと	① PACSAにおいても、「ベ」国側によるプロジェクトの運営・維持管理は比較的円滑に進められた経緯がある。 ② PACSAの森林の維持管理については、問題点もいくつか指摘

番号	検討項目	検討内容
	とができ、過度に高度な技術を必要としないか。	<p>されている（事業実施中の維持管理不足、事業終了後の小規模な違法伐採等）が、全体的には良好に実施されている。</p> <p>③ 本プロジェクトにおいては、PACSA の反省を踏まえた対策をとっていることから、事業の運営・維持管理および森林の維持管理がハイレベルで実施されることが期待されている。</p> <p>④ 植林、保育、育苗方法などの、本プロジェクトの基本コンポーネントに関しては、「ベ」国側の技術水準は十分なレベルにある。</p> <p>⑤ 本プロジェクトで採用する新技術の一部は、「ベ」国でまったく新たに導入されるものも含まれているが、地元産で廉価な資材の採用、普通作業員クラスでも扱いやすい平易な構造、維持管理も容易かつ安価にできる等、特別に高度な技術は必要としないものとなっている。</p>
08	当該国の中・長期的開発計画の目標達成に資するプロジェクトであるか。	上記01 に準ずる。
09	プロジェクトの収益性は低いものであるか。	<p>① 本プロジェクトで造成する森林は、経済林ではなく保全林であり、基本的に禁伐対象地である。</p> <p>② プロジェクト対象地の自然条件は極めて劣悪であり、森林の成長や更新もあまり期待できないことから、木材や特用林産物による収益性はほとんど期待できず、薪や枝葉等の有機物の供給程度の活用に限定される。</p>
10	環境社会面で負の影響がないか、負の影響を排除するための何らかの措置がとられているか。	<p>① 「2-2-3 環境社会配慮」のとおり、本プロジェクトはJICA 環境社会配慮ガイドラインにおけるカテゴリー分類でC となっており、負の影響を与えるおそれは極めて低い。</p> <p>② 本プロジェクトの各種工事により、一時的に負の影響を及ぼす項目としては、工事車両による雨季のアクセス道路の泥濘化、作業員の一時的な大量雇用等が考えられるが、いずれも基本計画および実施の留意事項等で対策を講じている。</p> <p>③ アンケート調査の実施により、個体数は激減しているものの対象地のごく近隣においてウミガメの産卵が確認されたため、産卵場所を確保する目的で、前砂丘より汀線側での工事を実施しない計画とした（植栽付帯工や一時的な作業道利用等）。</p>
11	我が国の無償資金協力の制度により、特段の困難なくプロジェクトが実施可能であるか。	本プロジェクトの実施に特段の困難はない。

4-4 結論

「ベ」国中南部の海岸部では、長年にわたって強風や飛砂による被害が持続的に発生しており、地域住民の生活に深刻な影響を及ぼしている。

このような状況から、「ベ」国中南部地域の Quang Nam 省、Quang Ngai 省、Binh Dinh 省および Khanh Hoa 省の4省における海岸地域の植林について、我が国に無償資金協力の要請がなされたものである。

要請を受けて行われた予備調査では、(i) 実施スキームは対象地からの収入の見込みがないことから無償資金協力が該当、(ii) 中南部の海岸砂地は他のドナーの該当なし、(iii) 海岸砂丘周辺の飛砂・流砂被害防止のため緊急対応が必要、といった妥当性が報告されている。

しかし、現地調査実施期間中に Binh Dinh 省のチタン鉱山開発が本事業と大きく重なる事が判明し、同省を事業対象から除外した。現地調査では、国家プロジェクトとの整合性、我が国の無償資金協力スキームでの実現可能性、事業実施による裨益効果、植栽対象地の確定、造成森林の適正な維持管理、「ベ」国側の技術水準などの事項についての調査を行い、関係機関との協議を行った。

その結果は、「プロジェクトの効果」、「プロジェクトの課題と提言」、「プロジェクトの妥当性」として既述したとおりであり、本事業を我が国の無償資金協力で実施することは、妥当性が非常に高くかつ大変有効である。

資料

1. 調査団員・氏名
2. 調査行程
3. 関係者（面会者）リスト
4. 討議議事録（M/D）

1. 調査団員・氏名

(1) 基本設計調査団

氏名	担当分野	所属
〔官団員〕		
東城 康裕	総括	独立行政法人国際協力機構 JICA ベトナム事務所次長
尾崎 由博	計画管理	独立行政法人国際協力機構 無償資金協力部 業務第3グループ 農漁村開発チーム
〔コンサルタント団員〕		
山崎 秀人	業務主任/ 森林管理計画	国際航業株式会社
畠山 晃	植林計画I/ 施設計画	国際航業株式会社
山崎 典和	植林計画II/ 自然条件調査	国際航業株式会社
藤井 稔	施工計画・積算	国際航業株式会社
布施 好子	調査補助（通訳）	国際航業株式会社

(2) 事業化概要説明調査団

氏名	担当分野	所属
〔官団員〕		
東城 康裕	総括	独立行政法人国際協力機構 JICA ベトナム事務所次長
尾崎 由博	計画管理	独立行政法人国際協力機構 無償資金協力部 業務第3グループ 農漁村開発チーム
〔コンサルタント団員〕		
山崎 秀人	業務主任/ 森林管理計画	国際航業株式会社
畠山 晃	植林計画I/ 施設計画	国際航業株式会社
布施 好子	調査補助（通訳）	国際航業株式会社

2. 調査行程

(1) 事業課調査工程

	JICA	山崎秀人 業務主任 / 森林管理計画	畠山 晃 植林計画 / 施設計画	山崎典和 植林計画 / 自然状況調査	藤井 稔 施工計画 / 積算	布施好子 通訳
20 Feb. Wed		10:30 JICA事務所表敬				
21 Feb. Thu		11:00 日本大使館表敬				
22 Feb. Fri		13:30 農業地方開発省 (MARD) International Cooperation Board (ICD)表敬・協議				
23 Feb. Sat		14:00 農業地方開発省森林局と協議 (FD)				
24 Feb. Sun		移動 (Hanoi Da Nang Tam Ky) Quang Nam省農業地方開発部 (DARD)表敬・協議				
25 Feb. Mon		測量成果の確認 (Quang Nam省)				
26 Feb. Tue		測量成果の確認 (Quang Nam省)				
27 Feb. Wed		Quang Ngai省へ移動 (陸路) 14:00 Quang Ngai省DARD表敬・協議			測量成果の確認 (Quang Nam省)	
28 Feb. Thu		移動 (Da Nang Hanoi)		Binh Dinh省へ移動 9:00 DARD表敬・協議 (於Quy Nhon市内)	Quang Ngai省内の事業対象地区の確認	移動 (成田 Hanoi)
29 Feb. Fri		9:00 JICA事務所表敬 10:30 大使館表敬 14:00 MARD (ICD/FPMB)表敬		DARD & 省人民委員会と協議	Quang Ngai省内の事業対象地区の確認	JICA事務所表敬 大使館表敬 MARD (ICD/FPMB)表敬
1 Mar. Sat		移動 (Hanoi Da Nang Tam Ky)		移動: Quy Nhon Tam Ky	移動 (Quang Ngai省 Binh Dinh省 Quy Nhon)	移動 (Hanoi Da Nang Tam Ky)
2 Mar. Sun		現地調査 (Quang Nam省内)			測量成果の確認 (Binh Dinh省内)	現地調査 (Quang Nam省内)
3 Mar. Mon		3省 (Quang Nam, Quang Ngai, Binh Dinh)のDARDと協議、 移動 (Da Nang Hanoi)			Binh Dinh省内の事業対象地区の確認	3省 (Quang Nam, Quang Ngai, Binh Dinh)のDARDと協議
4 Mar. Tue		大使館と協議		Quang Nam省のDARDと協議	移動 (Quy Nhon Tam Ky)	大使館と協議
5 Mar. Wed		MARDと協議		Quang Nam省内の事業対象地区の確認		MARDと協議
6 Mar. Thu		MARDと協議		Quang Nam省内の事業対象地区の確認		MARDと協議
7 Mar. Fri		M/D署名立会い、大使館、JICA事務所へ報告		Quang Nam省内の事業対象地区の確認		M/D署名立会い、大使館、JICA事務所へ報告
8 Mar. Sat		帰国 (成田)	資料整理	Quang Nam省内事業対象地区の林小班調査		資料整理
9 Mar. Sun		移動 (Hanoi Da Nang Tam Ky)				Hanoi 出発
10 Mar. Mon		Quang Nam省内事業対象地区の林小班調査				帰国 (成田)
11 Mar. Tue		Quang Nam省内事業対象地区の林小班調査				
12 Mar. Wed		作業道調査 (Quang Nam省)	既存植生調査 (Quang Nam省事業対象地区内)			
13 Mar. Thu		事業紹介看板調査 (Quang Nam省)	既存植生調査 (Quang Nam省事業対象地区内)			
14 Mar. Fri		事業紹介看板調査 (Quang Nam省)	既存植生調査 (Quang Nam省事業対象地区内)	監視塔調査 (Quang Nam省)	監視塔調査 (Quang Nam省)	
15 Mar. Sat		事業紹介看板調査 (Quang Nam省)			監視塔調査 (Quang Nam省)	
16 Mar. Sun						
17 Mar. Mon		Quang Nam省Thang Binh県人民委員会への		既存植生調査 (Quang Nam省)		
18 Mar. Tue		Quang Nam省DARDへの報告		既存植生調査 (Quang Nam省)		
19 Mar. Wed		事業紹介看板調査 (Quang Ngai)				
20 Mar. Thu		事業紹介看板調査 (Quang Ngai)				
21 Mar. Fri		Quang Ngai省Duc Pho県人民委員会への説明	監視塔調査 (Quang Ngai省)	図面精査	作業道調査 (Quang Ngai省)	
22 Mar. Sat		Quang Ngai省DARDへの報告	監視塔調査 (Quang Ngai省)	図面精査	作業道調査 (Quang Ngai省)	
23 Mar. Sun		移動 (Quang Ngai Quang Nam Da Nang)				
24 Mar. Mon		移動 (Da Nang Hanoi)				
25 Mar. Tue		資料整理				
26 Mar. Wed		資料整理				
27 Mar. Thu		MARD報告				
28 Mar. Fri		大使館報告、JICA報告、MARD報告 (ICD/Forestry Projects Management Board)				
29 Mar. Sat		移動 (Hanoi発) 帰国 (成田)				

(2) 事業化概要説明調査工程

		JICA	コンサルタント
19 May	Mon	/	成田 ハノイ
20 May	Tue		MARD協議
21 May	Wed		移動、サイト調査
22 May	Thr		サイト調査
23 May	Fri		サイト調査
24 May	Sat		サイト調査
25 May	Sun	移動 成田 Hanoi	移動 サイト Hanoi
国内打合せ			
26 May	Mon	大使館表敬、JICA表敬、MARD協議	
27 May	Tue	MARD協議	
28 May	Wed	MARD協議、ミニッツサイン、大使館報告	
		移動 Hanoi 発	調達調査
29 May	Thr	成田着	調達調査、移動 Hanoi
30 May	Fri	成田着	

3 . 関係者 (面会者) リスト

(敬称略)

(1) 事業化調査時

[ハノイ]

○ 農業地方開発省 (Ministry of Agriculture and Rural Development : MARD)

• Forestry Department

Deputy Director General

PHAM MINH THOA

PHAM MANH CUONG

JICA 専門家

井上 幹博

Secretary for JICA Expert

DO THU THUY

• International Cooperation Department:ICD

Deputy Director General

HOANG THI DZUNG

Management Board for Forestry Project, MBFP

Deputy Director

PHAN THANH NGO

ICD Program Officer

NGUYEN ANH MINH

○ 在ベトナム日本国大使館

二等書記官

由谷 倫也

○ JICA ベトナム事務所

次長

東城 康裕

所員

小島 英子

[Quang Nam 省]

○ 農業地方開発部 (Department of Agriculture and Rural Development : DARD)

Vice Director

PHAN VAN HAU

• Planning and Finance Division

Vice Director

LE MINH HUNG

• Financial Section

Deputy Chief

LEMINH HUNG

• Forestry Development Division

Vice Director

TRAN THANH BINH

Specialist

NGUYEN ANH QUOC

• Preparation Board of Transmigration

Vice Director

TRAN CONG TAM

Specialist

TRINH SUAN AN

HOANG CHAU SON

Natural Resources and Environment Division

Director	LUU VAN TUYEN
Survey Engineer	HA NGOC DAI
Survey Specialist	PHAN TAN NGHIA

○ タンビン県人民委員会 (People's Committee of Thang Binh District)

・ Foreign Economic Relation Division

Chief	NGUEN VAN HUONG
Staff	NGUYEN BAO ANH
	LE VAN HUNG

○ タムキー市人民委員会 (People's Committee of Tam Ky City)

Vice Chairman	TRAN NAM HUNG
---------------	---------------

・ Economical Section

Chief	HO HUY QUYNH
Technician	PHAM PHU CAN

・ Financial Planning Section

Deputy Chief	NGUYEN DUY AN
--------------	---------------

○ ビン・ミン村 (Binh Minh Commune)

Vice Director	CAO XUAN TAN
---------------	--------------

・ Landuse Division

Staff	NGUYEN VAN HUNG
Staff	NGUEN VAN THIEP

・ Forestry Protection Division

Staff	NGUYEN THAN THANH
-------	-------------------

ビン・ダオ村 (Binh Dao Commune)

Deputy Chairman	TRAN CONG HON
In-charge of the Transportation and Water	NGUYEN THE VINH
Economy Officer	BUI TRUONG
Land Officer	VO KHAC LAM

ビン・ハイ村 (Binh Hai Commune)

Deputy Chairman	LE VAN HUNG
-----------------	-------------

・ Economy Section

Land Officer	HO VAN CHUNG
	NGUYEN HIEP

{ Quang Ngai 省 }

○ 農業地方開発部 (Department of Agriculture and Rural Development : DARD)

Director of APSA		NGO VAN HOA
Specialist		TRAN KIM NGOC
		LE GIAO LE
Staff		NGUYEN HOANG NGUYEN VU
		TRAN VAN MINH
		HO TRUONG PHU
		TRAN THANH NAM
		NGUYEN ANH TUAN

・ Agriculture and Rural Development Consulting Center

Director		LE HUU
Head of Survey Engineering Division	NGUEN TIN	
Deputy Head of Survey Engineering Div.	NGUEN THANH HAI	
Engineer		NGUYEN QUOC PHAP
		LUONG THANH TRUC

・ Accountant Division

LE HOAI LAM

○ ダックフォー県 (Duc Pho District)

・ People's Committee

Forestry Engineer		PHAM VU TAN
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・ Consultative Centre of Duc Pho Agriculture and Rural Development

NGO HOA

○ フォーチャウ村 (Pho Chau Commune)

Staff of Land and Construction		NGUYEN HONG LOAN
--------------------------------	--	------------------

Staff of the Traffic – Water System-Agriculture-Forestry-Farming and Fishery		PHAM THE DIEN
--	--	---------------

		PHAM CONG CUONG
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Technical Staff		
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○ フォーアン村 (Pho An Commune)

・ Land Use Division

Staff		NGUYEN XUAN THANG
-------	--	-------------------

○ フォービン村 (Pho Vinh Commune)

・ Land Use Division

Staff		NGUYEN VAN BAY
-------	--	----------------

○ フォーカン村 (Pho Khanh Commune)

Director		LO DONG DAN
----------	--	-------------

・ Land Use Section		PHAM KIM DANH
--------------------	--	---------------

[Binh Dinh 省]

○ 農業地方開発部 (Department of Agriculture and Rural Development : DARD)

- Vive Director PHAN TRONG HO
- Planning Division
 - Chief of Accountant Office DUONG THUONG DUNG
 - Expert HOAUNG XUAN BINH
 - Engineer LE BA THUA
 - Survey Engineer TU CONH LY
- Forestry Development Division
 - Director NGUYEN THE DUNG
 - Chief of Technical Design TRAN AN
 - Design Team Expert TRAN QUOC HY
 - Forestry Engineer NGUYEN LE HOAN VU
 - Staff NGUYEN THANH KHAM
- Water Resources and Mines, Department of Natural Resources and the Environment
 - Director HUYNH QUANG VINH
- フーミー県 (Phu My District)
 - Agricultural Office
 - Deputy Chief PHAN TAN
 - District Accountancy
 - Staff LE HOAI LAM
 - People's Committee
 - Specialist LE VAN DUNG

(2) 事業化概要説明調査時

○ 農業地方開発省（Ministry of Agriculture and Rural Development：MARD）

・ International Cooperation Department:ICD

Deputy Director General

HOANG THI DZUNG

Management Board for Forestry Project, MBFP

Deputy Director

PHAN THANH NGO

ICD Program Officer

NGUYEN ANH MINH

・ Forestry Department

JICA 専門家

井上 幹博

○ 在ベトナム日本国大使館

二等書記官

由谷 倫也

○ JICA ベトナム事務所

所長

中川 寛章

所員

小島 英子

所員

HOANG THU THUY

4. 討議議事録 (M/D)

(1) March 7th 2008

Minutes of Discussions on the Implementation Study on the Afforestation Project on Sandy Area
in the Socialist Republic of Vietnam

MINUTES OF DISCUSSIONS
ON THE IMPLEMENTATION REVIEW STUDY
ON THE AFFORESTATION PROJECT ON SANDY AREA
IN THE SOCIALIST REPUBLIC OF VIETNAM

Based on the results of the Preparatory Study, the Government of Japan entrusted a Basic Design Study on the Afforestation Project on Sandy Area (hereinafter referred to as "the Project") to the Japan International Cooperation Agency (hereinafter referred to as "JICA"). JICA sent the Basic Design Study Team to the Socialist Republic of Vietnam (hereinafter referred to as the "Vietnam") from 30 July 2006 to 12 September 2006.

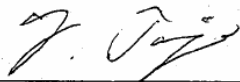
However, on the Basic Design Explanation in February 2007, destruction of a part of the forest established under the Project for Afforestation on the Coastal Sandy Area in Southern Central Vietnam (hereinafter referred to "PACSA") and possible overlap between the Master Plan on Chu Lai Open Economic Zone: Phase 2, Resettlement plan of Coastal Habitats Avoiding Natural Disaster and the Project were found out. The Japanese side requested the Vietnamese side to resolve the concerns above, and the Government of Vietnam replied to the Japanese side by the official letter of Ministry of Agriculture and Rural Development assuring reforestation for the destructed area, the measures to avoid harmful overlap and the prior consultation with the Japanese Government to secure the effect of the Project, if any overlap between PACSA and other projects can be anticipated necessarily.

On the basis of the above, the Government of Japan decided to conduct an Implementation Review Study to confirm the engagement above by the Government of Vietnam and make a necessary review on the Basic Design of the Project. JICA sent the Implementation Review Study Team (hereinafter referred to as "the Team") to Vietnam, which is headed by Mr. Yasuhiro TOJO, Senior Deputy Resident Representative, JICA Vietnam Office, and is scheduled to stay in the country from 20 February 2008 to 17th March 2008.

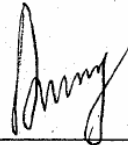
The Team held discussions with the officials concerned of the Government of Vietnam and conducted a field survey at the study area.

In the course of discussions and field survey, both parties confirmed the main items described on the attached sheets. The Team will proceed to further works and prepare the Implementation Review Report.

Hanoi, 7 March 2008



Mr. Yasuhiro TOJO
Leader
Implementation Review Study Team
Japan International Cooperation Agency



Ms. Hoang Thi DZUNG
Deputy Director General
International Co-operation Department
Ministry of Agriculture and Rural Development
Socialist Republic of Vietnam

ATTACHMENT

1. Objective of the Project

The objective of the Project is to establish coastal protection forests in the Project Site in order to protect farmland, residential zone and industrial facilities near the Project Site and also to alleviate damages to infrastructures such as the National Road, local roads, and national railway line.

2. Planting areas

The planting areas are located in coastal districts in three provinces shown below and in Annex-1.

Quang Nam Province:	Thang Binh District
Quang Ngai Province:	Binh Son and Duc Pho Districts
Binh Dinh Province:	Phu My and Phu Cat Districts

3. Responsible and Implementing Agency

3-1. The Responsible Agency is the Ministry of Agriculture and Rural Development (hereinafter referred to as "MARD"), which is responsible for management and coordination of the whole Project among three above mentioned provinces. The organization chart is shown in Annex-2.

3-2. The Implementing Agencies are the respective Departments of Agriculture and Rural Development (hereinafter referred to as "DARD") of the three Provinces. The organization charts are shown in Annex-3.

3-3. To manage and to operate the Project, the Management Boards will be set up in MARD, DARD of each province and People's Committee of each concerned district immediately after the Project commences.

4. Components requested by the Government of Vietnam

After the discussions, both sides have confirmed the following items.

4-1. Both sides confirmed that the contents, number and location of the requested items agreed on the Basic Design Study described in Annex-4 shall be reexamined through field survey and analysis in Japan considering the reviewed planting areas.

4-2. Both sides confirmed that the planting areas confirmed on the Basic Design Study shall be reviewed by excluding the left-over areas as follows.

- Land used for other purposes such as agricultural lands, fishery farms, ponds, etc.
- Land used or planned for titanium mining.
- Land used or planned for other projects and the harmful effect on the Project due to overlap can be anticipated.
- Land whose condition is inappropriate for planting.

5. Japan's Grant Aid Scheme

5-1. The Vietnamese side understands the Japan's Grant Aid Scheme explained by the Team, as described in Annex-5.

5-2. The Vietnamese side will take the necessary measures, as described in Annex-6, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

6. Schedule of the Study

6-1. The consultants will proceed to further studies in Vietnam until 17th March 2008.

6-2. Based on the report from the Team, the Government of Japan shall consider next procedure. In case the Government of Japan decides to continue positive consideration for implementation of the Project, JICA will prepare the draft report of the study in English and dispatch a mission in order to explain its contents.

6-3. In case that the contents of the report is accepted in principle by the Government of Vietnam, JICA will complete the final report and send it to the Government of Vietnam.

7. Other relevant issues

7-1. Reforest Plan for the destructed areas of PACSA

7-1-1. The Vietnamese side expressed regret for destruction of a part of the forest established under PACSA and assured reforestation. The Vietnamese side explained that necessary 19 ha of reforestation had been completed in last December and the Team confirmed that by site survey.

7-1-2. The Vietnamese side apologized on the change of the reforest site in Quang Nam Province without any notice to Japanese side. MARD understood the necessity of official discussion with Japanese side about changing reforest plan, and ordered DARD of Quang Nam Province not to occur same problems again. MARD promised to submit the letter to Japanese side on the background of the change in Quang Nam Province and the contents of order to DARD in March, 2008.

7-1-3. The Vietnamese side shall fulfill its obligations stipulated in the Exchanged Notes for PACSA signed between the Government of Vietnam and the Government of Japan on 15 November 2000 and 4 July 2001. The Vietnamese side shall protect and maintain the forests and facilities provided under the Japan's Grant Aid as well as the above reforested area.

7-1-4. The Vietnamese side shall not plan any projects which have harmful effects on PACSA.

7-1-5. In case the Government of Vietnam intends to plan other projects in the site including the forested areas of PACSA and the above reforested area, it shall consult the Japanese Government in advance.

7-2. Coordination with other projects planned in the Project area of Quang Nam Province

7-2-1. The Vietnamese side explained that detail of the plan of "Resettlement of coastal habitats

avoiding natural disaster” is not yet determined. Vietnamese side also explained that the area of “Extension of Chu Lai Open Economic Zone: Phase 2” is completely different from that of the Project.

7-2-2. The Vietnamese side promised to take sufficient consideration of the site to avoid harmful overlap between these plans and the Project.

7-2-3. If any possibility of overlap is occurred necessarily, the Vietnamese side shall consult the Japanese side about the measures to secure the effect of the Project.

7-3. Coordination with titanium mining in the Project area of Binh Dinh Province

7-3-1. The Vietnamese side (Binh Dinh Province) explained that due to the delay of the commencement of the Project based on the necessary coordination, 1457ha of the prepared site for the Project will be used for titanium mining and remaining area for the Project shall be only 132.59ha as shown in Annex-7.

7-3-2. The Vietnamese side promised to make final decision on the Project site in Binh Dinh Province as soon as possible and to submit official letter to Japanese side about Vietnamese request on the Project in March, 2008. The Team explained that based on the official letter of the MARD on request in Binh Dinh Province, the Government of Japan shall consider next procedure for the Project.

7-3-3. The Vietnamese side strongly requested additional study for the substitution site in Binh Dinh Province during the Implementation Study. The Team explained the scope and mandate of this study is to consider the contents of those agreed on the Basic Design Study.

7-4. Protection and Maintenance

7-4-1. Both side confirmed that the Vietnamese side has the responsibility for protection of the forest established under the Project except for the planting and tending period in each term. Both sides confirmed that the Vietnamese side has the responsibility for maintenance and protection after the completion of the Project. The Vietnamese side shall not plan any development projects which overlap with the Project in the Project area and have harmful effects on the Project.

7-4-2. Both sides confirmed that the contract planning with the residents for protection and maintenance of the planting areas shall be completed before planting in each term in order to maintain the forests established in good conditions.

7-4-3. The role-sharing plan for maintenance between the Japanese side and the Vietnamese side is shown in Annex-8.

7-4-4. Since the qualities of afforestation works rely largely on natural conditions, it is difficult to identify whether the damage has been caused by the contractor's defect or not. Therefore, the contractor shall not have any responsibility for the damage which might occur on the forests after handed over to the Vietnamese side.

7-5. Other undertakings to be taken by the Vietnamese side

The Vietnamese side shall implement the following arrangements in accordance with the schedule of the Project.

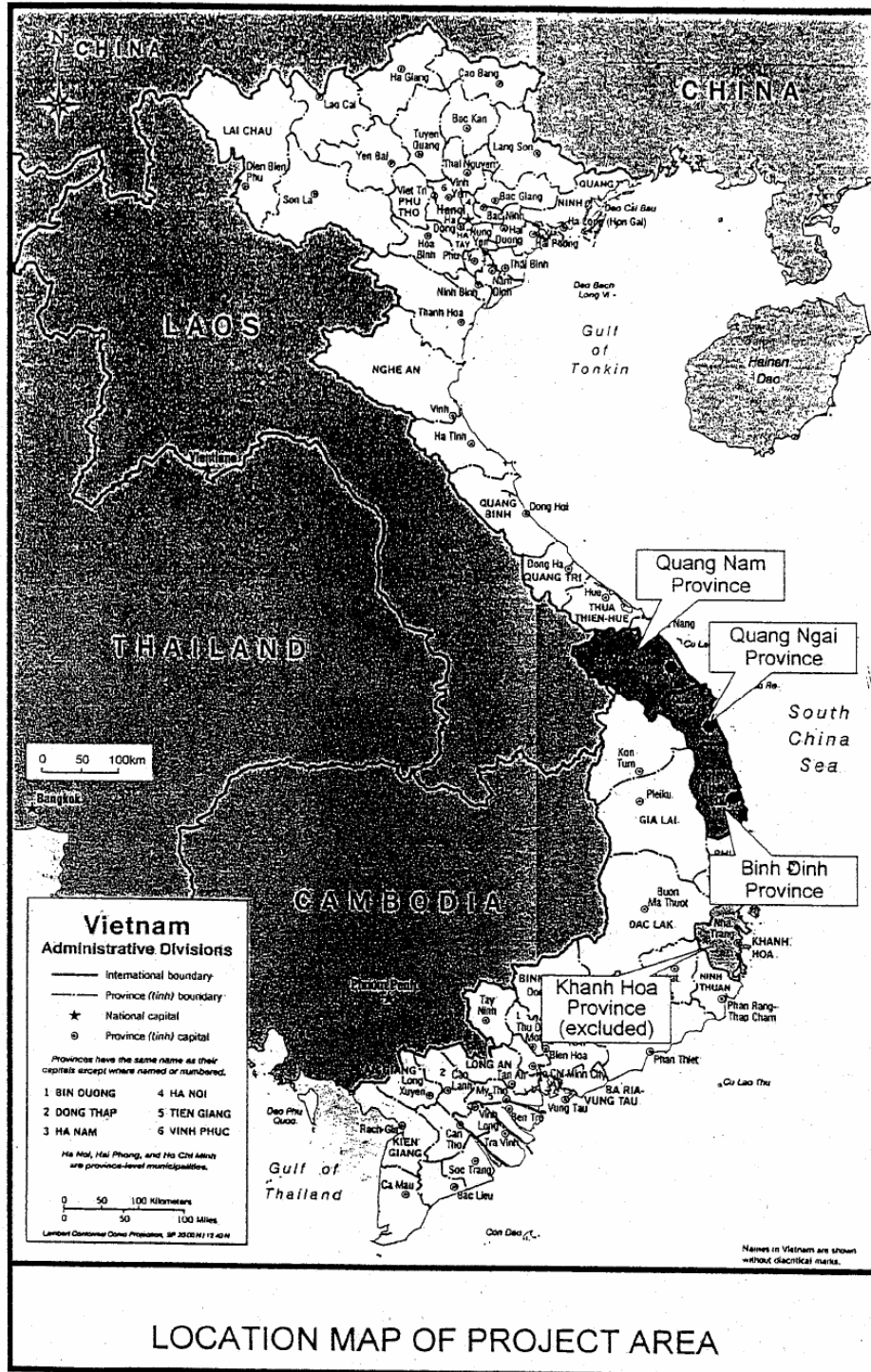
7-5-1. To elaborate awareness raising plans for inhabitants on protection and maintenance of the forests established under the Project and to carry out the plans before and during the afforestation works.

7-5-2. To remove obstacles and clear lands in the Project area.

7-5-3. To confirm the boundaries of the Project areas with the concerned DARD, People's Committees, and inhabitants in the area and explain to them that these areas are exclusively reserved for the Project and they are responsible for protecting the areas before, during and after the Project period.

- Annex-1 Planting areas
- Annex-2 Organization chart of Responsible Agency (MARD)
- Annex-3 Organization charts of Implementing Agencies (DARD) of the three Provinces
- Annex-4 List of Requested Items agreed on the Basic Design
- Annex-5 Japan's Grant Aid Scheme
- Annex-6 Major undertakings to be taken by each Government
- Annex-7 Official letter from Binh Dinh Province on titanium mining
- Annex-8 Role-sharing plan for maintenance of the forest established under the Project

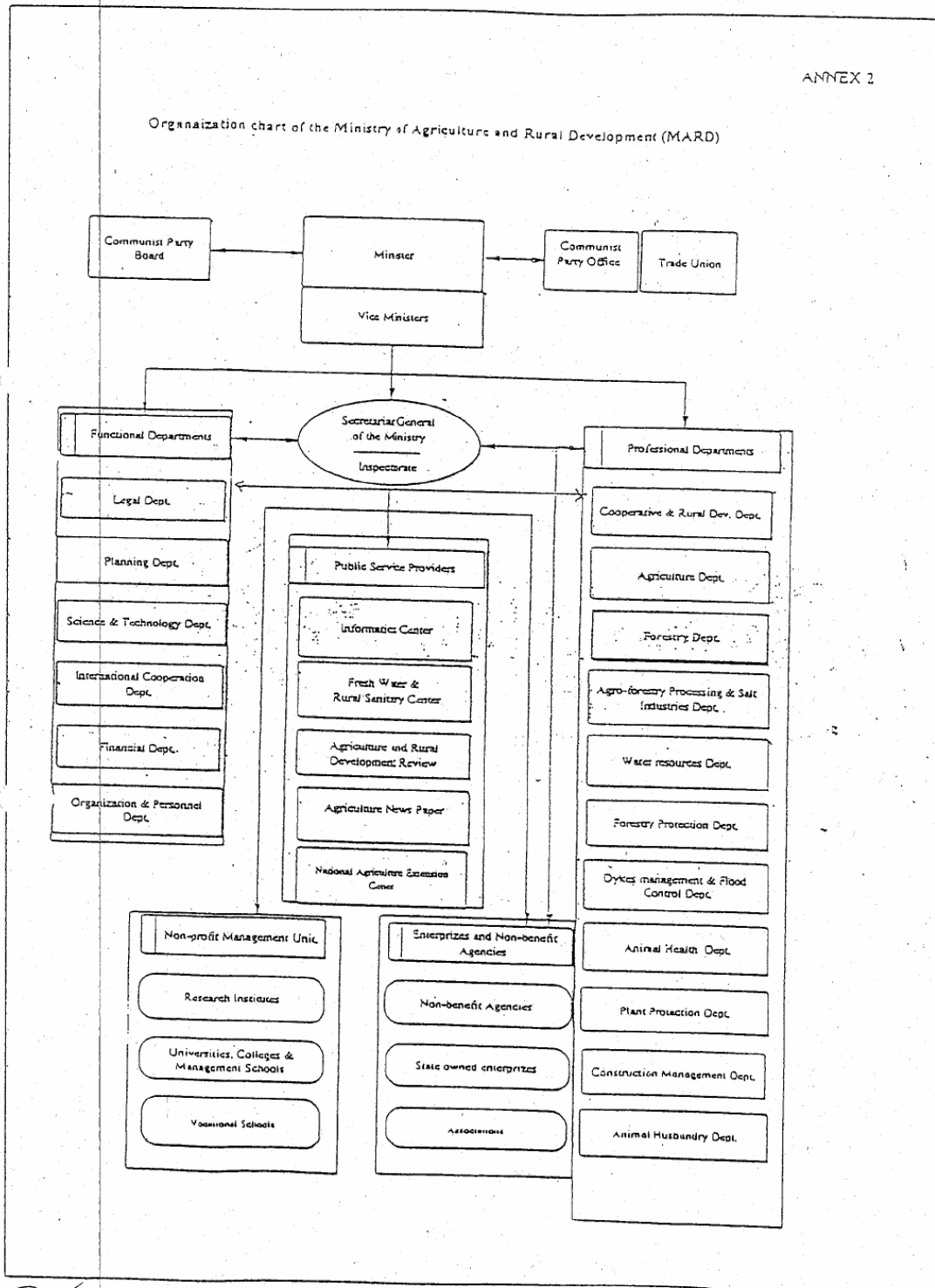




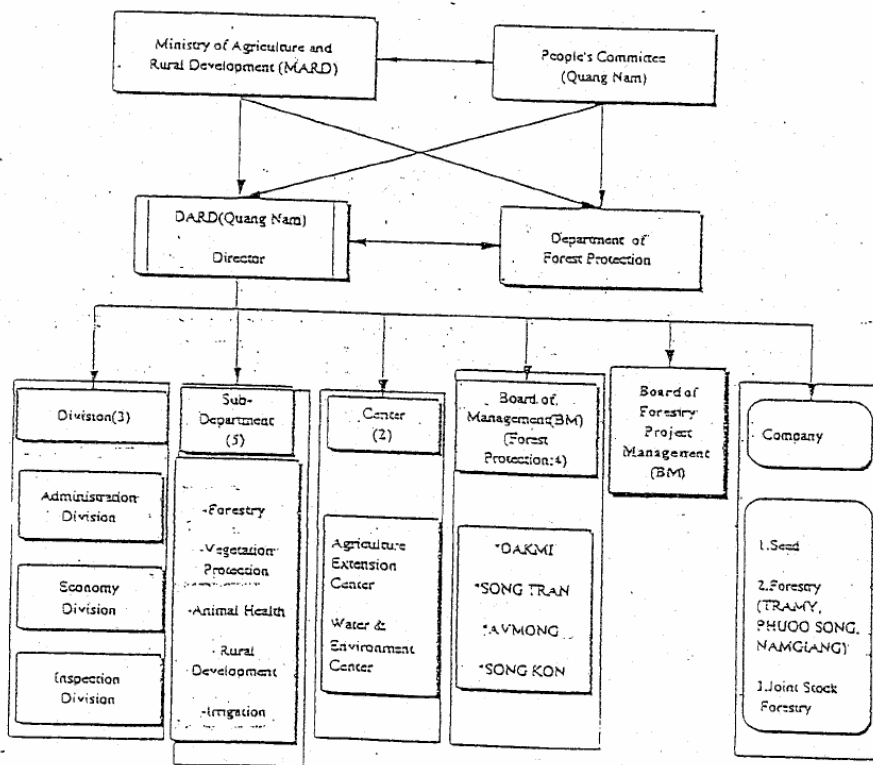
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Organization chart of the Ministry of Agriculture and Rural Development (MARD)



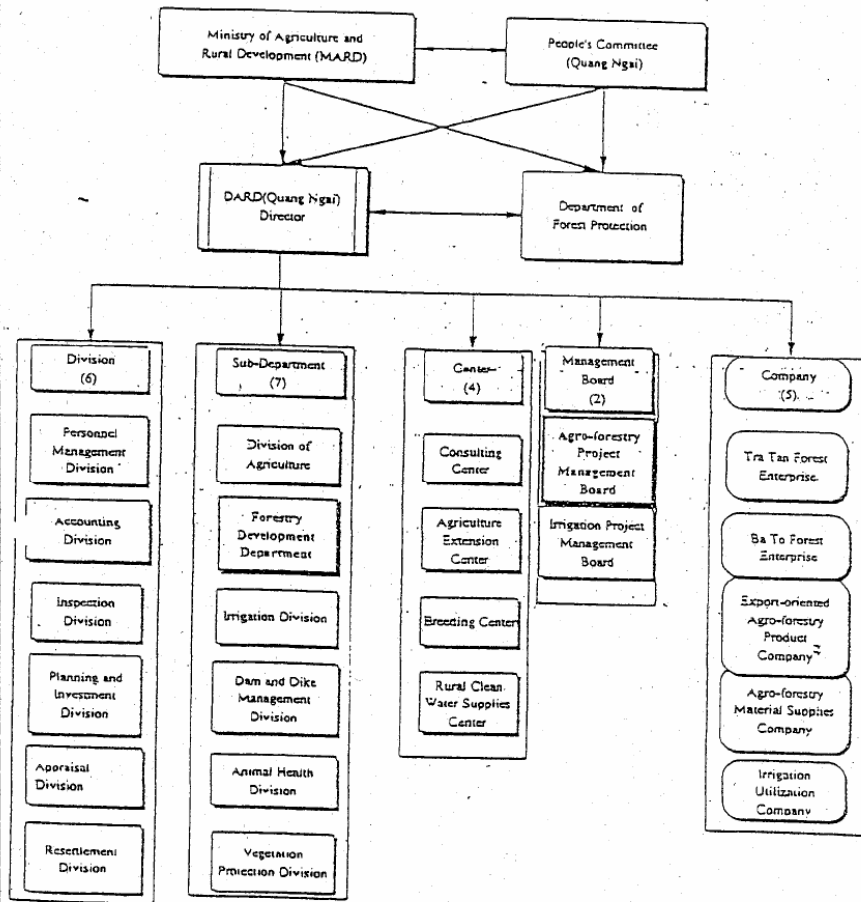
Organization Chart of the Department of Agriculture and Rural development(D.A.R.D)
(Quang Nam Province)



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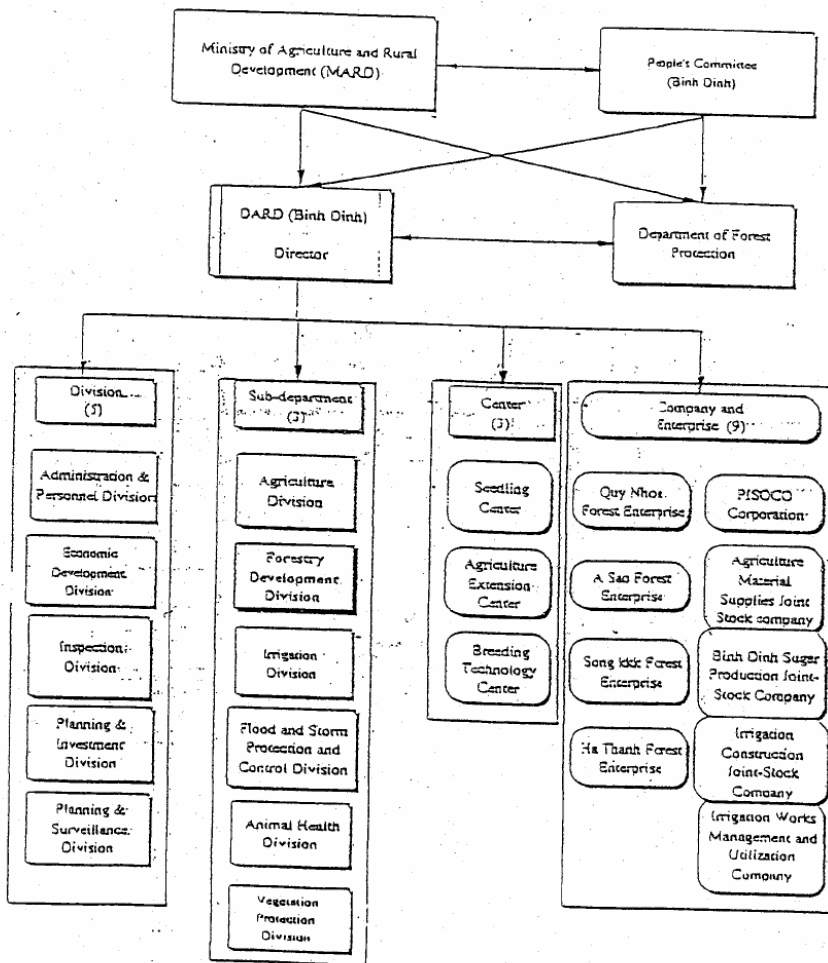
Organization Chart of the Department of Agriculture and Rural development(DARD)
(Quang Ngai Province)



M

B

Organization Chart of the Department of Agriculture and Rural Development (DARD)
(Binh Dinh Province)



W

B

Annex-4

Contents of request from Viet Nam to Japan

	Original request	Basic Design
Amount	24 hundred million Yen	10.92 hundred million Yen
Contents of the request	The Afforestation on sandy area in Quang Nam Province, Quang Ngai Province, Binh Dinh Province and Khanh Hoa Province. (Total:9,480ha) Work Road, Temporary Nursery, Equipment of the operation and maintenance (4WD, Motorcycle, PC etc.)	The Afforestation on sandy area in Quang Nam Province, Quang Ngai Province and Binh Dinh Province (Total:2,463.75ha) Work Road, Temporary Nursery, Lookout Tower, Project Sign Board




ANNEX-5 Japan's Grant Aid Scheme

The Grant Aid scheme provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

1) Japan's Grant Aid Scheme is executed through the following procedures.

Application	(Request made by a recipient country)
Study	(Basic Design Study / Implementation Review Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by the Cabinet of Japan)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the Recipient Country)

2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (Ministry of Foreign Affairs) to determine whether or not it is eligible for the Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA to conduct a study on the request.

Secondly, JICA conducts the Basic Design (or Implementation Review) Study, using a Japanese firm.

Thirdly, The Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid program, based on a report of the Implementation Review Study prepared by JICA, the results are then submitted to the Cabinet of Japan for an approval.



Fourthly, the project once approved by the Cabinet, becomes official with the Exchange of Notes (hereinafter referred to as the "E/N") signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such manner as preparing tenders, contracts and so on.

2. Study conducted by JICA

(1) Contents of the Study

The aim of the study conducted by JICA on a requested project (hereinafter referred to as the "Project") is to examine the viability of the Project necessary for the appraisal of the Project by the Government of Japan.

The contents of the Study are as follows:

- Confirmation of the background, objectives, and benefits of the requested project and also institutional capacity of agencies concerned of the recipient country necessary for implementation of the Project.
- Evaluation of the appropriateness of the project to be implemented under the Grant Aid Scheme from a technical, social and economical point of view.
- Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- Confirmation of the Project area by excluding the left-over areas
- Preparation of an undertaking design of the Project.
- Estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Study of the Project is confirmed considering the guideline of Japan's Grant Aid scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the project. Such measures must be guaranteed even though they may fall outside of jurisdiction of the organization in the recipient country actually

implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Study, JICA uses a registered consultant firm. JICA selects a firm based on proposals submitted by interested firms. The selected firm carries out an Implementation review study and writes a report, based upon the terms of reference set by JICA.

The consultant firm used for the Study is recommended by JICA to the recipient country to also work on the Project's implementation after the E/N, in order to maintain technical consistency and also to avoid any undue delay in implementation should the selection process be repeated.

3. Japan's Grant Aid

1) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two governments concerned, in which the objectives of the Project, period of execution, conditioned amount of the Grant Aid, etc., are confirmed.

2) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to them must be completed. However, in case of delay in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two governments.

3) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two governments deem it necessary, the Grant Aid may be used for the purchase of the products and services of a third country.

However the prime contractors, namely, consulting constructing and procurement firms, are limited to "Japanese nationals". (The terms "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

4) Necessary "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to the Japanese taxpayers.

5) Undertakings required to the Government of Vietnam

In the implementation of the Grant Aid project, the recipient country is requested to undertake such necessary measures as the followings:

- a) To secure land necessary for the sites of the project and to clear level and reclaim the land prior to commencement of the construction and afforestation. Especially, where there are titanium mining developments in the Project area, they shall be withdrawn and leveled clearly before the Project implementation.
- b) To provide facilities for necessary distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.
- c) To establish a responsible body such as a management board for operation and maintenance to protect planted forests by the Project.
- d) To allocate the planting areas of the Project to the local inhabitants with the determination of and persons in charges to operate and maintain the planted forests before planting in each term in order for the operation and maintenance of the planted forests in good conditions.
- e) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid.
- f) To exempt the Japanese nationals from customs duties, internal taxes and other fiscal levies, which will be imposed in the recipient country with respect to the supply of the products and services under the verified contracts.



- g) To accord the Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of the work.

6) "Proper Use"

The recipient country is required to operate and maintain the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those converted by the Grant Aid.

7) "Re-Export"

The products purchased under the Grant Aid should not be re-exported from the recipient country.

8) Baking Arrangement (B/A)

- a) The government of the recipient country or its designated authority should open an account in the name of the government of the recipient country in an authorized foreign exchange bank in Japan (hereinafter referred to as the "Bank"). The Government of Japan will execute the Grant by making payments in Japanese yen to cover the obligations incurred by the government of the recipient country or its designated authority under verified contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the government of the recipient country or its designated authority.

9) Authorization to Pay (A/P)

The government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.



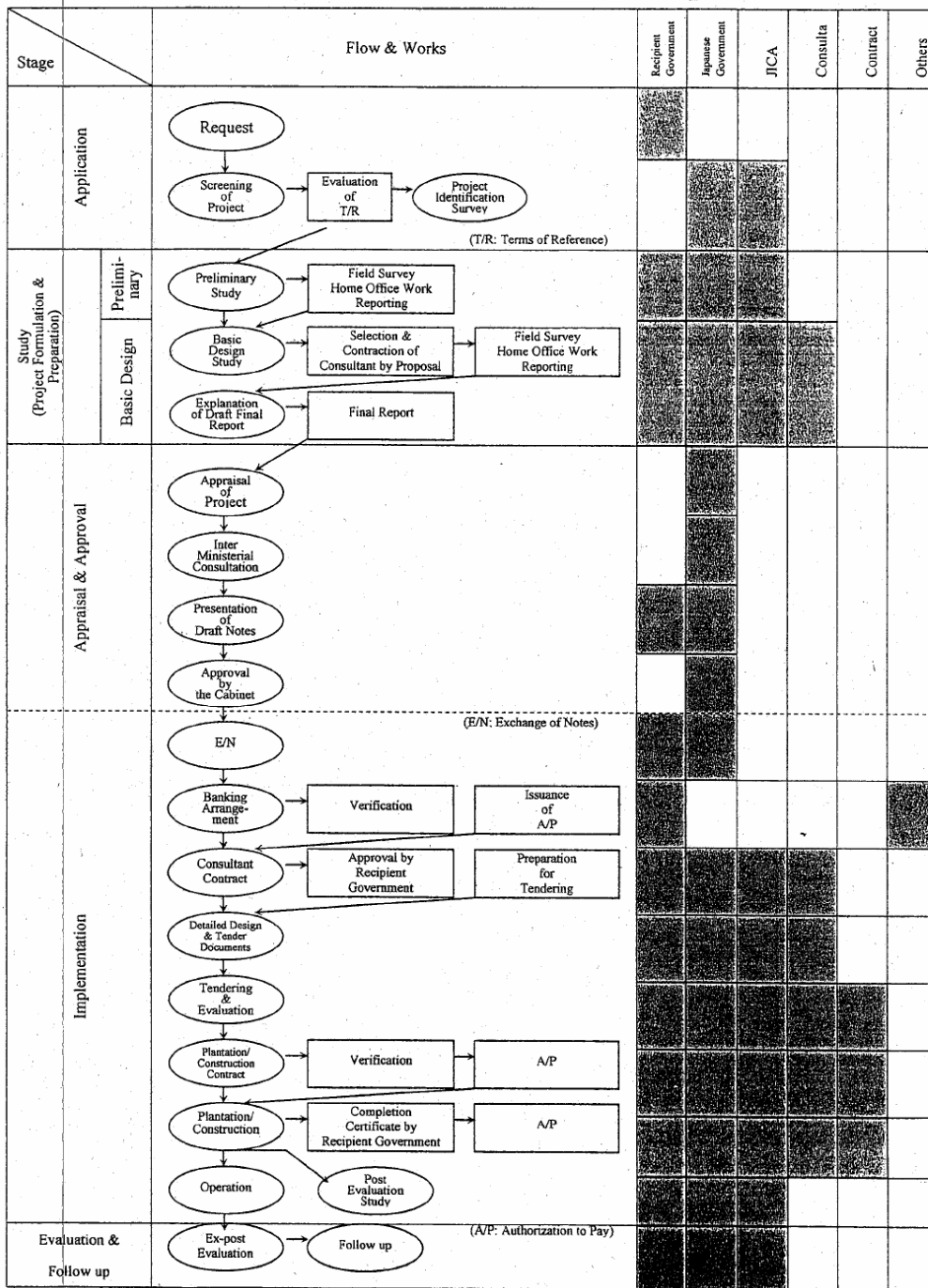


Figure: Flow Chart of Japan's Grant Aid Procedures

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ANNEX-6 Major undertakings to be taken by each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To secure land		•
2	To clear, level and reclaim the site when needed		•
3	To withdraw the existing titanium mining facilities in the Project sites and to level their areas after the withdrawal		•
4	To construct gates and fences in and around the site where necessary		•
5	To bear the following commissions to the Japanese bank for banking services based upon the B/A		
	1) Advising commission of A/P		•
	2) Payment commission		•
6	To ensure unloading and customs clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan the recipient	•	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		•
	3) Internal transportation from the port of disembarkation to the project site	(•)	(•)
7	To accord Japanese nationals, whose service may be required in connection with the supply of the products and the services under the verified contract, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		•
8	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts		•
9	To maintain and use properly and effectively the facilities contracted and equipment provided under the Grant		•
10	To bear all the expenses, other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and installation of the equipment		•

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ANNEX - 7

PEOPLE COMMITTEE OF
BINH DINH PROVINCE

SOCIALIST REPUBLIC OF VIETNAM
Independence - Freedom - Happiness

No: 609/UBND-NN

Quy Nhon, Feb. 29, 2008

Area of Project for afforestation
on sandy area - APSA

To: Ministry of Agriculture & Rural development

Before, when the P.M. have not approved the Planning on exploration, and exploitation of titanium, Binh Dinh province have co-operated with JICA and Consultant to survey the site for planting forest on sandy area. PC of Binh Dinh province have agreed with MARD that the project area was 1,589.59ha in 02 Phu My and Phu Cat districts.

According to The Decision No 104/2007/QĐ-TTg dated 13/7/2007 by The PM for approving the Planning on exploration, exploitation, processing and use of titanium ores in the 2007 -2015 period, with orientation toward 2025, PC of Binh Dinh province ordered related departments to check, compare the APSA plan area and plan area for exploration, and exploitation of titanium. The overlapping area is 1,457ha; remaining area is 132.59 ha.

According to the current regulation, the plan area for exploration, exploitation and processing of titanium belong to the decision of the PM. APSA project will start from 2009. But titanium exploiting titanium will take long time (15 - 20 years). So P.C. of Binh Dinh province would like to report to MARD and investor that the area for APSA in Binh Dinh is 133ha. If it is not achieved the requirement of project, PC of Binh Dinh would not join APSA.

Vice Chairman of PC of Binh Dinh province
Signed

CC:

- As above
- Chairman
- Central Forestry MB
- JICA
- DARD, DONRE

NGUYEN VAN THIEN

Role-sharing plan for maintenance between Japanese and Vietnamese side in APSA

Year Fiscal Year Month	1			2			3			4			5			6																							
	Term-1			Term-2			Term-3			Term-4			Term-5																										
Implementation period	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
Implementation by the Japanese side				Planting									1st Tending			2nd Tending			3rd Tending						Protection														
Implementation by the Vietnamese side							Allocation of the planting area to the residents			Protection			Protection			Protection			Protection			Protection			Protection			Protection			Protection			Protection			Protection		

(2) May 26th 2008

Minutes of Discussions on the Implementation Study on the Afforestation Project on Sandy Area in the Socialist Republic of Vietnam (Explanation on Draft Report)

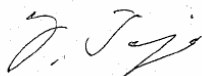
MINUTES OF DISCUSSIONS
ON IMPLEMENTATION REVIEW STUDY ON THE AFFORESTATION PROJECT
ON SANDY AREA IN THE SOCIALIST REPUBLIC OF VIETNAM
(EXPLANATION ON DRAFT REPORT)

In February 2008, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Implementation Review Study Team on the Afforestation Project on Sandy Area (hereinafter referred to as "the Project") to The Socialist Republic of Vietnam (hereinafter referred to as "Vietnam"), and through discussion, field survey, and technical examination of the results in Japan, JICA prepared a draft report of the study.

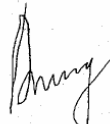
In order to explain and to consult Vietnam on the components of the draft report, JICA sent to Vietnam the Draft Report Explanation Team (hereinafter referred to as " the Team "), which is headed by Mr. Yasuhiro TOJO, Senior Deputy Resident Representative, JICA Vietnam Office, from May 19th to May 30th.

As a result of discussions, both parties confirmed the main items described on the attached sheets.

Hanoi, May 26th, 2008



Mr. Yasuhiro TOJO
Leader
Draft Report Explanation Team
Japan International Cooperation Agency



Ms. Hoang Thi DUNG
Deputy Director General
International Co-operation Department
Ministry of Agriculture and Rural
Development

ATTACHMENT

1. Components of the Draft Report

Vietnamese side agreed and accepted in principle the components of the draft report, e.g. site of the Project, afforestation plan for the Project, and cost estimation of the Project explained by the Team. Vietnamese side requested that bar chart for "Distribution of Plot to Locals" should be shortened as from June 2009 to September 2009. The Team agreed the request and promised that it will be corrected in final report of the Project.

2. Japan's Grant Aid scheme

The Vietnamese side understood the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Vietnam as explained by the Team and described in Annex-5 and Annex-6 of the Minutes of Discussions signed by both parties on 7th March, 2008.

3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed item and send it to the Government of Vietnam by the end of June.

4. Other relevant issues

The Vietnamese side agreed to implement the following arrangements in accordance with the schedule of the Project;

4-1. To confirm the boundaries of the Project areas with the concerned DARD, People's Committees, and inhabitants in the area and explain to them that these areas are exclusively reserved for the Project and they are responsible for protecting the areas before, during and after the Project period.

4-2. Confidentiality of the Project Cost Estimation

The Team explained the cost estimation of the Project as described in Annex-I. Both sides agreed that the Project Cost Estimation should never be duplicated or released to any outside parties before signing of all the Contract(s) for the Project. Vietnamese side understood that the Project Cost Estimation attached as Annex-I is not final and is subject to change.

4-3. To ensure necessary arrangement of afforestation permissions from authorizations concerned (including the security authorities) in the Project area.

4-4. To remove obstacles and clear the land in the Project area.



Project Cost Estimation

1. Initial Cost Estimation

The total cost of the Project which will be implemented with Japanese grant aid and Vietnamese contribution will be approximately ¥596 million and the breakdown of this cost based on the division of work between the two countries is described below using the estimation conditions described in (3). However, this estimated project cost is a provisional figure and does not necessarily mean the upper limit for the grant referred to in the E/N and will be further examined when the implementation of the requested Japanese assistance is examined in a concrete manner.

(1) Japanese Contribution

Estimated Total Cost: approx. 75,637 million VND

Project Cost to be borne by the Japanese Side

Project Cost Component	Japanese Yen
(1) Afforestation Cost	331 million
1) Direct Cost	(140)
2) Common Temporary Cost	(32)
3) On Site Expenses	(134)
4) Overhead	(25)
(2) Design and Supervision Cost	203 million
Total	534 million

(2) Vietnamese Contribution

Estimated Total Cost: approx. 8,741 million VND

According to the cost estimation by the Japanese side, the Vietnamese side is expected to fund the following costs amongst others.

Project Cost to be borne by the Vietnamese Side

Project Cost Component	Amount		Breakdown		
	Local Currency	Conversion to Japanese Yen			
① Witnessing	25.600 mil.	Approx. ¥ 0.18 million	① Air Travel Cost	990,000 VND/one way × 2 return trips	3,960,000 VND
② Awareness	912.000 mil.	Approx. ¥ 6.49 million	① Publication Cost of Pamphlet	48,000,000 VND/issues × 7 issues =	336,000,000 VND
③ Witnessing	91.800 mil.	Approx. ¥ 0.65 million	① Air Travel Cost	990,000 VND/one way × 10 return trips =	19,800,000 VND
④ Distribution	428.200 mil.	Approx. ¥ 2.02 million	① Quang Nam Province	480,000 VND/ha × 482.81 ha =	231,748,800 VND
⑤ Disease and	288.000 mil.	Approx. ¥ 2.03 million	① Quang Nam Province	43,200,000 VND/year × 4 years =	172,800,000 VND
⑥ Construction	653.800 mil.	Approx. ¥ 4.62 million	① Quang Nam Province :	600 m × 480,000 VND/m =	288,000,000 VND
⑦ Maintenance	134.000 mil.	Approx. ¥ 0.95 million	① Quang Nam Province	16,800,000 VND × 1 × 4 years =	67,200,000 VND
⑧ Maintenance	111.600 mil.	Approx. ¥ 0.79 million	① Quang Nam Province	13,200,000 VND × 2 + 8,400,000 VND × 2 =	43,200,000 VND
⑨ MB Operation Cost	5,958.000 mil. VND	Approx. ¥ 42.06 million	MARD	36,000,000 VND/month × 67months =	2,412,000,000 VND
			Quang Nam DARD	18,000,000 VND/month × 66months =	1,188,000,000 VND
			Quang Ngai DARD	18,000,000 VND/month × 66months =	1,188,000,000 VND
			PC of Thanh Binh Dist.	9,000,000 VND/month × 65months =	585,000,000 VND
			PC of Duc Pho Dist.	9,000,000 VND/month × 65months =	585,000,000 VND
⑩ Maintenance (Protection) of the Coastal Protection	137.500 mil. VND	Approx. ¥ 0.97 million	Term-1	120,000 VND/ha-yr × 0 ha × 0 yrs =	VND
			Term-2	120,000 VND/ha-yr × 892.06 ha × 0.083 yrs =	VND
			Term-3	120,000 VND/ha-yr × 892.06 ha × 0.417 yrs =	VND
			Term-4	120,000 VND/ha-yr × 892.06 ha × 0.417 yrs =	VND
			Term-5	120,000 VND/ha-yr × 892.06 ha × 0.417 yrs =	VND
Total	8,740.9 mil. VND	Approx. 60.76 million			

(3) Estimation Conditions

- 1) Estimation Timing : March, 2008
- 2) Foreign Exchange Rates : 1US\$=¥112.62
1VND=¥0.00706

3) Work Period

The Japanese assistance will be implemented as Type A project resulting in Treasury Obligation. The detailed work period is shown in project implementation schedule.

4) Miscellaneous

The project cost estimation will be implemented in accordance with the grant aid scheme of the Government of Japan.

2. Operation and Maintenance Cost

Operation and Maintenance Cost

Project Cost Component	Amount		Breakdown
	Local Currency	Conversion to Japanese	
① Disease and Harmful Insect Control Cost	1,440,000 mil VND	Approx. ¥ 10.17 million	Quang Nam Province 43,200,000 VND/year × 20 years = 720,000,000 VND
			Quang Ngai Province 28,800,000 VND/year × 20 years = 576,000,000 VND
② Maintenance Cost of Lookout Towers	336,000 mil VND	Approx. ¥ 2.37 million	Quang Nam Province 16,800,000 VND × 1 × 10 years = 168,000,000 VND
			Quang Ngai Province 16,800,000 VND × 1 × 10 years = 168,000,000 VND
③ Maintenance Cost of Project Information Signboards	480,000 mil VND	Approx. ¥ 3.39 million	Quang Nam Province 43,200,000 VND × 4 times = 172,800,000 VND
			Quang Ngai Province 76,800,000 VND × 4 times = 307,200,000 VND
④ Maintenance (Protection) of the Coastal Protection	2,140,900 mil VND	Approx. ¥ 15.12 million	Quang Nam Province 100,000 VND/ha-yrs × 570.52 ha × 20 yrs = 1,158,744,000 VND
			Quang Ngai Province 100,000 VND/ha-yrs × 409.61 ha × 20 yrs = 982,200,000 VND
Total	4,396,900 mil VND	Approx. ¥ 31.05 million	