

ブラジル東部アマゾン森林保全・環境教育プロジェクト 実施協議調査

報 告 書

平成15年12月

独立行政法人 国際協力機構
森林・自然環境協力部

序 文

日本国政府は、ブラジル国政府からの技術協力の要請に基づき、同国の東部アマゾン森林保全及び環境教育の実施に関わる調査を行うことを決定しました。

これを受け、国際協力機構は、平成 15 年 11 月 12 日から 11 月 23 日まで、国際協力機構森林・自然環境協力部森林環境協力課長 宍戸健一を団長とする実施協議調査団を現地に派遣し、ブラジル国政府関係者と協議を行うとともに、計画実施予定地の現地調査を実施しました。そして帰国後、国内作業を経て調査結果を本報告書にとりまとめました。

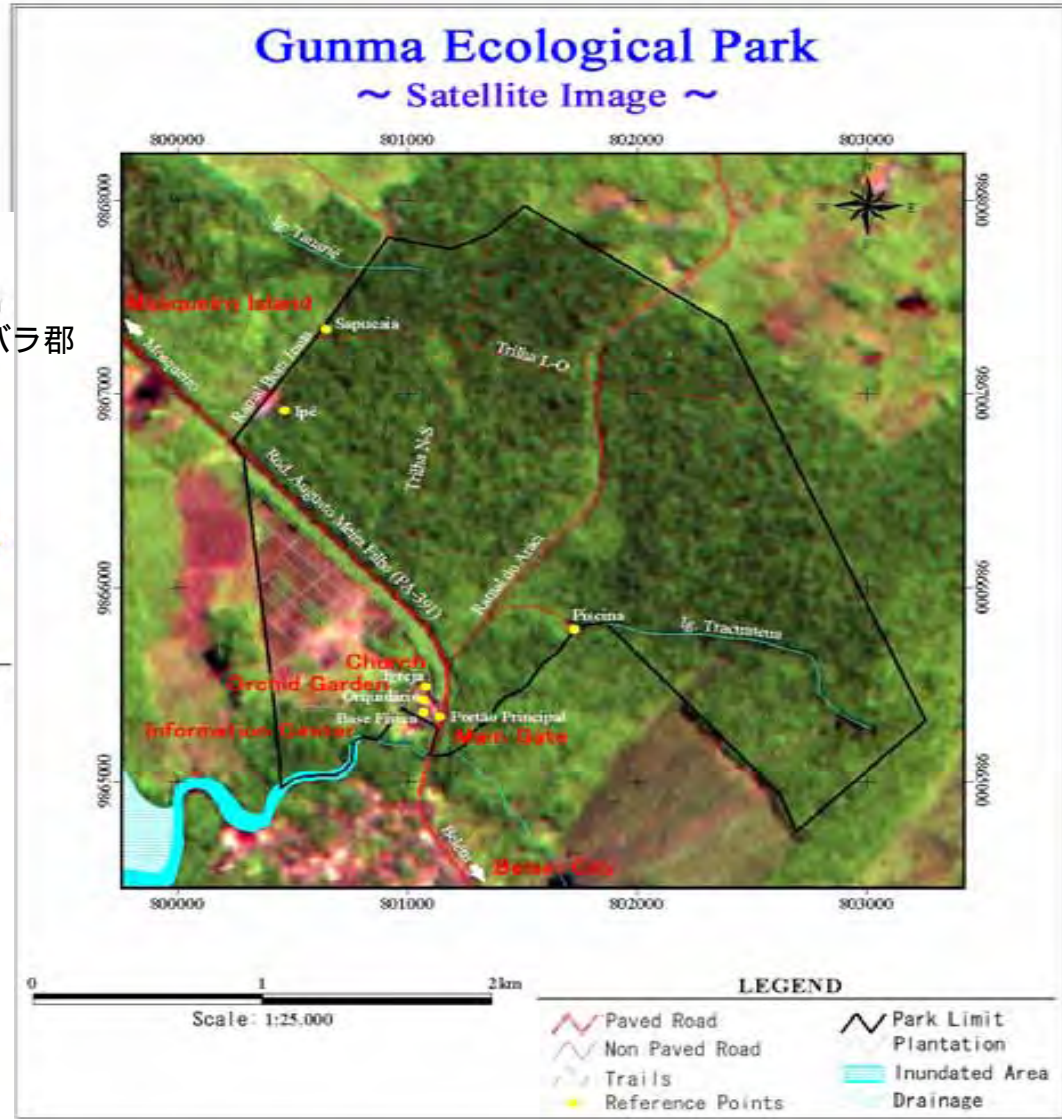
この報告書が、本計画の実施の指針となるとともに、この技術協力事業を通じ両国の友好・親善が一層発展することを期待いたします。

終わりに、この調査にご協力とご支援をいただいた関係者の皆様に対し、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

「アマゾン群馬の森」 位置図





ベレーン市街地風景



ベレーン市より「アマゾン群馬の森」への道程（約50km）



北伯群馬県人会館（アマゾン群馬の森）



アマゾン群馬の森



「アマゾン群馬の森」における林内遊歩道



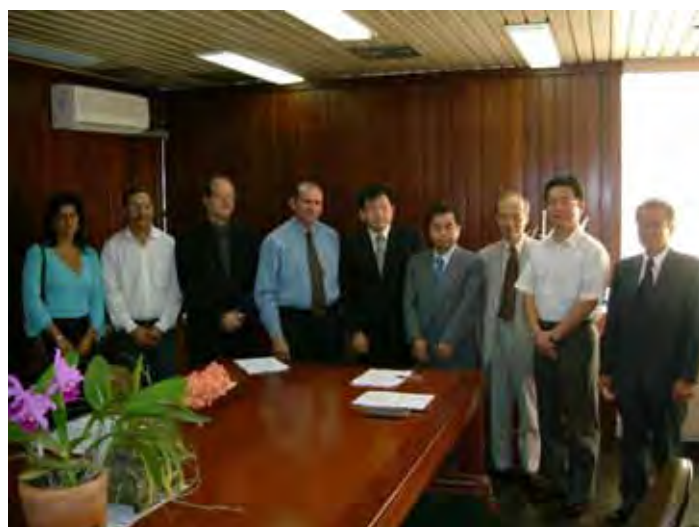
「アマゾン群馬の森」におけるコショウ栽培試験地



北伯群馬県人会館内における展示室



北伯群馬県人会館内における植林・アグロフォレストリー普及研究室（予定）



関係機関との合意文書署名風景

事業事前評価表（技術協力プロジェクト）

担当部課：森林・自然環境協力部
森林環境協力課

案件名：東部アマゾン森林保全・環境教育プロジェクト (The project for Forest Conservation and Environmental Education in the Eastern Amazon)
対象国：ブラジル連邦共和国 実施地域：パラ州サンタバーバラ郡「アマゾン群馬の森」（州都ベレーン市より約 50 km）
プロジェクト実施予定期間：2004 年 1 月 17 日～2007 年 1 月 16 日
<p>I プロジェクト要請の背景</p> <p>アマゾン熱帯雨林の保全は地球的規模の課題であり、対ブラジル援助重点分野の一つである環境分野の中でも最重要テーマとして位置付けられている。アマゾン地域の一部であり、ブラジル北部に位置するパラ州においては、木材の伐採、入植事業による農地化、牧場開発による森林の破壊が深刻となっており、森林保全の技術普及並びに一般市民を対象として森林保全の重要性を啓蒙することが急務となっている。</p> <p>パラ州サンタバルバラ郡（ベレーン市から 50km）にある「アマゾン群馬の森」は、地球的規模での森林保護活動の必要性を世界に訴えることを目的として、「アマゾンに群馬の森をつくる会」が北伯群馬県人会（本部：パラ州ベレーン）と共同で、日伯両国において募金活動を実施し、この資金により 1996 年に取得した面積 540ha を有する熱帯雨林の原生林である。また、北伯群馬県人会は群馬県等の補助を受け、1997 年に「アマゾン群馬の森」の中にビジターセンターを設立している。同ビジターセンターは、広くブラジル内外の学生や研究者の利用に供されている。</p> <p>この「アマゾン群馬の森」を活用して、日伯の研究者・技術者が森林保全や森林資源の有効活用に係る技術普及等の活動を行い、その結果を群馬県民に PR することで熱帯雨林保全の大切さを訴えていきたいとして、群馬県より JICA との連携による技術協力の実施に係る打診がなされた。これを受け、JICA は 2002 年 1 月に群馬県の参加を得てプロジェクト形成調査を実施した。この結果、「アマゾン群馬の森」は大都市ベレーンに近く、デモンストレーション効果が高いことから、森林・自然環境保全に係る活動を行うとともに、その成果を積極的に発信し、環境教育の場として機能させることが有益であることが明らかになった。この後、活動内容について検討を重ねた結果、「自然環境教育活動」「植林及びアグロフォレストリーの技術普及」および「情報発信・広報活動の強化」の 3 点にまとめられた。</p> <p>パラ州科学技術環境局（SECTAM）も大都市ベレーンの近郊では数少ない広面積の熱帯雨林である「アマゾン群馬の森」の価値を認識し、これを活用した技術協力の実施に高い関心を示し、環境教育、植林技術及びアグロフォレストリーの 3 分野にかかる専門家派遣要請がなされた。また、エミリオゲルジ博物館（MPEG）が環境教育分野の協力機関として、ブラジル農牧研究公社（EMBRAPA）東部アマゾン農牧研究センターが植林・アグロフォレストリー分野の協力機関として参加の意を示している。</p>

II 相手国実施機関

- (1) パラ州科学技術環境局(SECTAM) (プロジェクト監督機関)
- (2) エミリオゲルジ博物館(MPEG)
- (3) ブラジル農牧研究公社東部アマゾン農牧研究センター(EMBRAPA Agroforestry Research Center in Eastern Amazon)

III プロジェクトの概要及び達成目標

- (1) 上位目標
(目標) 東部アマゾンにおける森林・自然環境保全が促進される。
(指標) 東部アマゾンの森林・自然環境保全活動の実施回数。
- (2) プロジェクト目標
(目標) パラ州において、森林・自然環境保全に関する活動が促進される。
(指標) SECTAM、MPEG、EMBRAPA Agroforestry Research Center in Eastern Amazon の森林・自然環境保全活動の実施回数。

(3) 成果 (アウトプット)・活動

成果1: パラ州における自然環境教育活動が促進される。

1-1 環境教育及びエコツーリズムのための展示・教育施設及び「アマゾン群馬の森」のインフラ整備を行う。

1-2 環境教育のための生物多様性調査(インベントリー)を実施する。

1-3 地域住民、教員及び学生(小・中学生を含む)を対象に自然環境教育活動を行う。

成果2: パラ州における植林及びアグロフォレストリーの技術普及が促進される。

2-1 植林及びアグロフォレストリーの生産技術開発を行う。

2-2 植林及びアグロフォレストリーの農民への技術普及を実施する。

成果3: パラ州のアマゾンの森林に関する情報発信・広報活動が強化される。

3-1 「アマゾン群馬の森」における活動に関する情報を発信するホームページを開設する。

3-2 学校、コミュニティー及び一般市民を対象として、環境をテーマとしたセミナー及びワークショップを開催する。

(4) 投入 (インプット)

【日本側】協力金額: 200,000 千円

■ 長期専門家 (2人×3年)

チーフアドバイザー兼環境教育 24M/M

チーフアドバイザー兼育苗・造林 12M/M

業務調整兼アグロフォレストリー 36M/M

■ 短期専門家 適宜

環境教育プログラム作成

森林保全・植林活動

熱帯果樹生産

エコツーリズム、その他必要な分野等

■ 建築物及び設備

■ パソコン・事務関連資機材、車両、育苗・造林・アグロフォレストリー普及機材等

■ 研修員受入

環境教育、森林生態研究、持続的農業等

【ブラジル側】

■ C/P

プロジェクト・ディレクター 36M/M

プロジェクト・マネージャー 36M/M

環境教育

森林生態研究

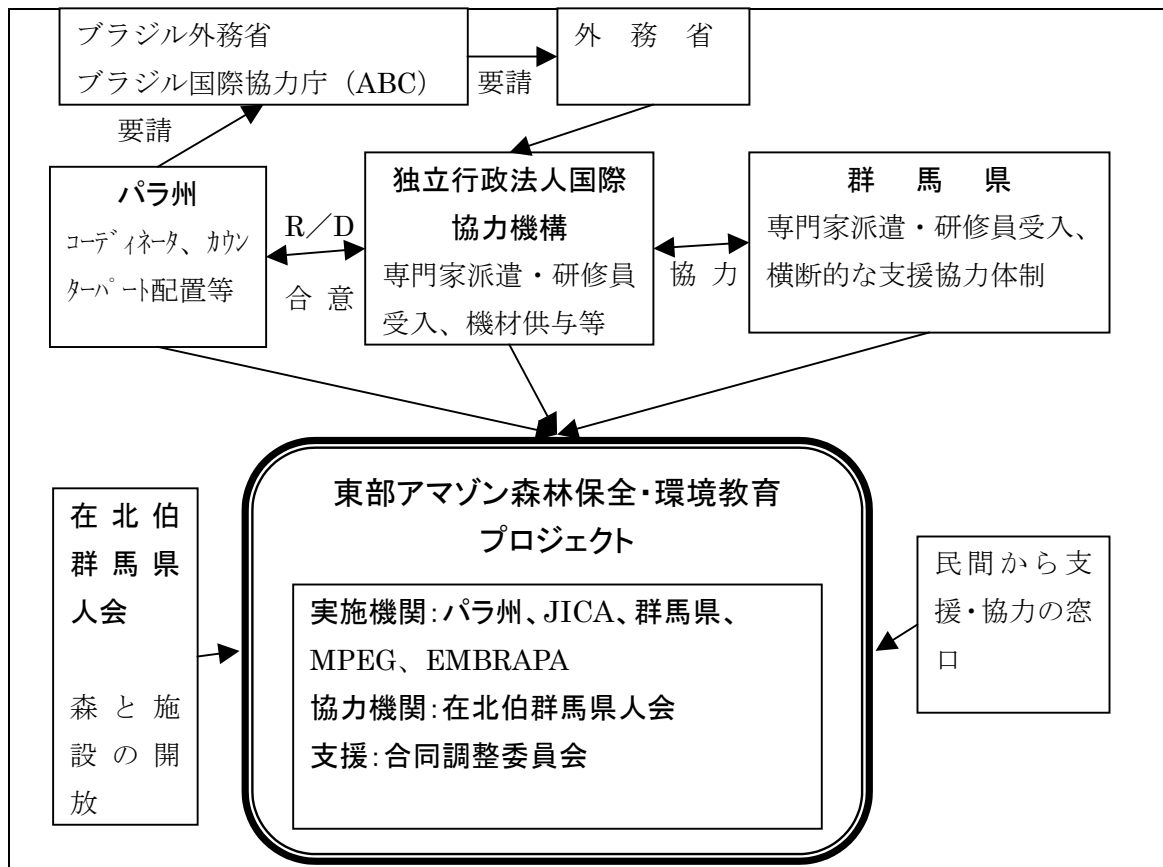
アグロフォレストリー

運転手

- 施設：プロジェクト事務所 (SECTAM)
- ローカルコスト：上記事務所管理費

(5) 実施体制

本プロジェクトは SECTAM、MPEG、EMBRAPA Agroforestry Research Center in Eastern を C/P 機関とし、「アマゾン群馬の森」をプロジェクト・サイトとする。また、日本側にあつては、群馬県庁を協力機関とする。



IV 評価結果

(1) 妥当性

本プロジェクトの協力内容は、ブラジル政府のアマゾン政策の基本である「法定アマゾン国家総合政策」(1995年)、並びにルーラ政権の「ブラジルの開発におけるアマゾンの位置」(2002年)で示された生物多様性保全や持続的生産システムの推進などの方向性に合致している。また、環境教育活動は、パラ州政府の「州環境教育計画 指針と政策」(2000年)に示された環境教育の推進に貢献するものである。本プロジェクトは JICA のブラジル国別事業実施計画の重点開発課題の「環境保全」生態系保全プログラムに位置づけられている。また、「環境教育」、「植林技術」及び「アグロフォレストリー」分野についてブラジル側各関係機関は高い関心を示している。さらに大都市ベレーンから僅か 50km の位置に、貴重な森林資源を有するプロジェクト・サイト「アマゾン群馬の森」があることから、これら活動の情報発信・広報の観点からも実施妥当性は高いと言える。

(2) 有効性

「群馬の森」を中心にした森林・自然環境保全活動の推進は、「群馬の森」のアクセスが良いこと、天然林としての価値が高いこと、活動内容に対するブラジル側関係機関のニーズが高いこと、などからプロジェクト目標は達成される見込みが高い。また、本協力で「群馬の森」の区域ごとに環境教育やエコツーリズム、またアグロフォレストリー圃場など機能別の施設を整備することから、周辺地域の学校の生徒、大学生、研究者、地域住民等に活用されることが見込まれている。

(3) 効率性

プロジェクトの長期専門家 2 名は協力活動を企画し管理する役割とし、実施は出来る限りブラジル側のリソースを活用することを前提とした投入計画としている。また、施設や機材に関する投入についても、既存の施設を生かすとともに、「群馬の森」に集中させるため、投入が分散せず効率的である。

(4) インパクト

実施機関であるエミリオゲルジ博物館や EMBRAPA 東部アマゾン研究センターはパラ州に限らず東部アマゾン全域を対象にした組織であり、プロジェクトが発信する情報やウェブサイトは広く関心をよぶ可能性がある。さらには「アマゾン森林インベントリーネットワーク」のような全国的なデータベースへ「群馬の森」のデータを発表していくこと、またベレーン市に拠点のある木材輸出協会 (A I M E X) 等の在来樹種の植林に積極的な団体などと協力をしていくことにより、広くパラ州と周辺地域に「群馬の森」を通じた森林保全活動を推進していくとする上位目標の達成は可能であると考えられる。

(5) 自立発展性

「群馬の森」は北伯群馬県人会が所有者であり、協力期間中は同会とパラ州の間の合意にもとづき活動場所として提供されるものである。協力終了後に、パラ州政府・エミリオゲルジ博物館等が環境教育・研究のフィールドとして引き続き活用していく可能性は高い。しかし、施設の維持管理費に関しては、見学者から「群馬の森」の利用料などを徴収して自立できるように経営戦略をたてていく必要がある。

V 外部要因リスク

- (1) ブラジル政府のアマゾン熱帯雨林保全政策が継続される。
- (2) パラ州政府 (例えば森林保護・保全、治安維持) や C/P 機関の協力が継続される。
- (3) 参加各機関の財政事情が急激に悪化しない。
- (4) 植林及びアグロフォレストリー分野については、異常気象などによる展示、実証圃などが壊滅的な事態に陥らない。

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

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位置図
写 真
事業事前評価表

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調 査 概 要

1. 背景

アマゾン熱帯雨林の保全は地球的規模の課題であり、対ブラジル援助重点分野の一つである「環境分野」の中でも最重要テーマとして位置付けられている。このアマゾン地域の一部であり、ブラジル北部に位置するパラ州においては、木材の伐採、入植事業による農地化及び牧場開発による森林の破壊が特に深刻となっており、森林保全の技術普及並びに一般市民を対象として森林保全の重要性を啓蒙することが急務となっている。

パラ州サンタバーバラ郡にある「アマゾン群馬の森」(ベレーン市街地から約50km)は、「アマゾンに群馬の森をつくる会」が北伯群馬県人会(本部：パラ州ベレーン市)と共同で日伯両国において募金活動を実施し、この資金により1996年に取得した面積540haを有する熱帯雨林の原生林であり、地球的規模での森林保護活動の必要性を世界に訴えることを目的として誕生した。さらに北伯群馬県人会は、群馬県等の補助を受けて1997年に「アマゾン群馬の森」の中にビジターセンターを設立している。この施設は、広くブラジル内外の学生や研究者の利用に供されている。

この「アマゾン群馬の森」を活用して、日伯の研究者・技術者が森林保全や森林資源の有効活用に係る技術普及等の活動を行い、その結果を群馬県民にPRすることで、熱帯雨林保全の大切さを訴えていきたいとして、群馬県よりJICAとの連携による技術協力の実施について打診がなされた。これを受け、JICAは2002年1月に群馬県の参加を得てプロジェクト形成調査を実施した。そして、「アマゾン群馬の森」は大都市ベレーンに近く、デモンストレーション効果が高いことから、森林・自然環境保全に係る活動を行うとともに、その成果を積極的に発信し、環境教育の場として機能させることが有益であるとの結論を得た。この後、さらに検討が重ねられた結果、「自然環境教育活動」、「植林・アグロフォレストリーの技術普及」及び「情報発信・広報活動の強化」の3分野における協力の必要性があげられた。

パラ州科学技術環境局(SECTAM)も、大都市ベレーンの近郊では数少ない広面積の熱帯雨林である「アマゾン群馬の森」の価値を認識し、これを活用した技術協力の実施に高い関心を示し、環境教育、植林技術及びアグロフォレストリーの3分野にかかる専門家の派遣を要請した。また、エミリオ・ゲルジ博物館(MPEG)が環境教育分野の協力機関として、ブラジル農牧研究公社(EMBRAPA)東部アマゾン農牧研究センターが植林・アグロフォレストリー分野の協力機関として参加の意を示した。

2. 調査目的

2003年6月に派遣した「アマゾン森林・自然環境保全基礎調査」において、ブラジル側関係機関3者(パラ州科学技術環境局(SECTAM)、エミリオ・ゲルジ博物館(MPEG)、ブラジル農牧研究公社(EMBRAPA))と協力内容について協議を行った。当調査団においては、協力開始前に活動内容について各関係機関と最終的な合意を得ることを目的とした。署名事項は、「M/M(R/D(案)及びプロジェク

ト・ドキュメント最終版(PDM、POを含む活動詳細内容記載)を含む)」及び「アマゾン群馬の森関連施設の使用に関する覚書」の2種類である。

3. 調査団員

総括	宍戸 健一	JICA 森林・自然環境協力部 森林環境協力課長
森林保全/アグロフォレストリー	田中 修	群馬県特別政策本部 第一課長
環境教育	土屋 真志	群馬県特別政策本部 第一課主幹
計画管理	柿田 雅胤	JICA 森林・自然環境協力部 森林環境協力課員

※なお、群馬県より高木政夫 県議会議長及び南雲正和 議会事務局次長が11/17まで同日程で合流。

4. 調査日程

11/12(水)	東京発
11/13(木)	7:35 サンパウロ着 JICA サンパウロ支所、在伯群馬県人会、移住資料館視察 18:10 サンパウロ発/19:39 ブラジリア着
11/14(金)	JICA ブラジル事務所打合せ、ブラジル国際協力庁(ABC)表敬、大使館表敬
11/15(土)	10:11 ブラジリア発/11:40 ベレーン着 JICA ベレーン支所事務所打合せ
11/16(日)	「群馬の森」現地調査、在北伯群馬県人会と協議
11/17(月)	9:00 パラー州科学技術環境局(SECTAM)局長表敬 11:00 ブラジル農牧研究公社・関係ラボ調査 15:00 関係機関合同会議(R/D、書説明、プロジェクトのフレームワークについて協議)
11/18(火)	9:00 関係機関合同会議(プロジェクトのフレームワークについて協議2) 15:00 SECTAM 局長他 C/Pと協議(於:「群馬の森」)
11/19(水)	9:00 関係機関合同会議(ミニッツ案説明・協議) 11:00 POEMA 15:00 エミリオ・ゲルジ博物館館長表敬 17:30 在北伯群馬県人会と協議(伯側との協議結果報告)
11/20(木)	8:30 ミニッツ署名

5. 協議内容

関係機関3者との協議は、主にPDM・POの検討・修正を行うことで進められた。この結果(付属資料1)をプロジェクト・ドキュメント全編に反映させ、M/M合意に至った。

R/Dについては、調査団派遣前に「案」を関係機関及びブラジル国際協力庁(ABC)に提示したが、ABCの確認が間に合わず署名には至らなかった。また、SECTAMがR/Dポルトガル語版をABCに提示する必要があったため、これをJICA側で作成したうえ、英・ポルトガル語版両方のR/D案を合意文書(M/M)に添付した。ABC担当職員にもM/M署名式には同席頂き、早急にR/D署名手続きを進めることを約束頂いた。現在(2003年12月)JICAブラジル事務所による持ち回り署名中であり、12月中の完了を目指している。

協議における概要報告及び主な確認内容は次のとおり。

○概要報告

- SECTAM を始めとする伯側関係機関は、環境教育及びアグロフォレストリーについて活発な活動を展開しており、どの機関も「群馬の森」について、生物多様性保全、環境教育、種子採取、アグロフォレストリーなどの見地から極めて高い評価を与えている。
- 前回の基礎調査後伯側関係機関から提出された要望をベースに、JICA 側から「『群馬の森』が地域住民に対して開かれた場となり、環境教育、森林保全活動等において関係機関に広く活用される」というプロジェクトの枠組みについて基本的に合意に達した。
- また、施設の所有者である在北伯群馬県人会も今後はより広くパラ州及びブラジル国民に利用してほしい（貢献したい）との意向を有しており、群馬県の支援も得て、今回のプロジェクトに協力し、土地・施設を無償貸与（宿泊料を除く）することに合意した。
- どの機関も積極的な参加意欲があり、将来にわたり「群馬の森」を様々な活動の場として活用することを望んでいる。今回のプロジェクトで整備された「群馬の森」が様々な活動に利用され、一般ビジターにも開かれたものとするためには、コストが必要であり、群馬県からの支援のみならず、パラ州等地域住民を含めた幅広い協力体制を構築する必要があるが、現時点ではプロジェクト終了後の継続的な利用の具体的な方法論や役割分担についてはコンセンサスがない。
- 従って、プロジェクト活動を継続していく中で、「群馬の森」が事実上「日伯友好の森」となるよう実績を積み重ね、パラ州民にも保全や継続的な利用を求める声が出るよう努力する必要がある。伯側各機関も「群馬の森」が良好な状態で保全され、一層活用されるためには地域住民との関係を深めることが重要であるとしている。
- 上述のとおり、伯側関係機関との一連の協議を通じ、プロジェクトの枠組み（Project Document）及び R/D の内容について、合意に達したため、ミニッツに取りまとめることが出来た。併せて、施設利用に関する覚書にも署名がなされた。
- しかしながら、R/D については伯側の手続きとして実施機関が合意した案文について、ABC による審査を受ける必要があることから、署名には到らず後日署名ということとなった。

○主な確認内容

1 上位目標

「東部アマゾンにおける森林・自然環境保全が促進される。」

2 プロジェクト目標

「パラ州において、森林・自然環境保全に関する活動が促進される。」

3 プロジェクト成果

- ① パラ州における自然環境教育活動が促進される。
- ② パラ州における植林及びアグロフォレストリーの技術普及が促進される。
- ③ パラ州のアマゾンの森林に関する情報発信・広報活動が強化される。

4 活動内容

- 1-1 環境教育のための生物多様性調査を実施する。
- 1-2 地域住民、教員及び学生（小・中学生を含む）を対象に自然環境教育活動を行う。
- 1-3 環境教育及びエコツーリズムのための展示・教育施設及び「アマゾン群馬の森」のインフラ整備を行う。
- 2-1 植林及びアグロフォレストリーの技術開発を行う。
- 2-2 植林及びアグロフォレストリーの農民への技術普及を実施する。
- 3-1 「アマゾン群馬の森」における活動に関する情報を発信するホームページを開設する。
- 3-2 学校、コミュニティ及び一般市民を対象として、環境をテーマとしたセミナー及びワークショップを開催する。

5 相手国実施機関

「パラ州科学技術環境局（SECTAM）」

（但し、活動分野毎で関係機関との連携・調整を行う。）

- ・ 「成果①③について」エミリオ・ゲルジ博物館（MPEG）
- ・ 「成果②③について」ブラジル農牧研究公社（EMBRAPA）東部アマゾン農牧研究センター

6 プロジェクト対象地

「アマゾン群馬の森」

（但し、トメアス等他地域と連携をとる場合は、必要に応じ活動範囲を拡大する。）

7 協力期間

「3年間」

8 投入計画

各関係機関と協議のうえ、適切な投入規模を検討する。

「日本側投入」

- ①長期専門家（以下の分野を担当する専門家を年間2名ずつ派遣する。）

- －チーフアドバイザー
- －業務調整
- 担当する専門分野
- －環境教育
- －アグロフォレストリー
- －育苗/造林

- ②短期専門家（以下の分野を含め、必要に応じて派遣する。）

- －環境教育
- －植林活動
- －熱帯果樹生産
- －エコツーリズム

- ③機材

車両、情報整理用機材（パソコン等）、環境教育用資機材、植林・アグロフォレストリー関係資機材

「ブラジル国側投入」

カウンターパート配置計画

- ・ プロジェクト・ディレクター
パラ州科学技術環境局（SECTAM） 環境保護部長
- ・ プロジェクト・マネージャー
パラ州科学技術環境局（SECTAM） 環境保護部環境課長
- ・ カウンターパート総員
(SECTAM 職員) <略>
(MPEG 職員) <略>
(EMBRAPA 職員) <略>

9 ジョイント・コーディネーティング・コミッティ（合同調整委員会）設置

プロジェクトの円滑な進行を目的とし、審議会形式で設置する。構成については以下のと

おり。

「ブラジル国側」

議長：SECTAM 環境保護部長
ABC（ブラジル国際協力庁）
SECTAM
MPEG
EMBRAPA 東部アマゾン農牧研究センター
サンタバーバラ郡政府

「日本国側」

JICA ブラジル事務所
JICA ベレーン支所
JICA 専門家
在伯日本国大使館担当書記官（オブザーバー）
在ベレーン日本国総領事館担当書記官（オブザーバー）

6. 調査総括

【本件協力の意義】

本プロジェクトは、人類共通の貴重な熱帯林を有するアマゾンにおいて、森林保全に資する以下の諸活動を促進するというものである。

- (1) アマゾンの自然及び保全活動の重要性について、地域住民に理解を得るための環境教育
- (2) アマゾン流域に住む住民が、持続的な生産活動を行うためのアグロフォレストリー
- (3) 広くアマゾンの自然に関する情報発信

本件は、伯側の実施機関も諸活動を積極的に行う意向を有しており、具体的な成果を見込め、アマゾンの森林保全に資することから協力の妥当性は高い。また、サイトとなる『群馬の森』は、在北伯群馬県人会が群馬県及び県民の善意により取得したものであり、環境保全を全面に打ち出している自治体である群馬県とJICAが協力して、アマゾンの自然環境保全に取り組むという象徴的な意味を有する。あわせて、プロジェクト活動が群馬県内はじめ日本国内にも活動が広く紹介されることにより、日本国民にも裨益する案件であると評価できる。

【プロジェクトの将来構想について】

どの機関も積極的な参加意欲があり、将来にわたり「群馬の森」を様々な活動の場として活用することを望んでいる。今回のプロジェクトで整備された「群馬の森」が様々な活動に利用され、一般ビジターにも一層開かれたものとするためには、コストが必要である。本件協力期間は、群馬県からの支援が行われる見通しがあるが、将来的には、パラ州等地域住民を含めた幅広い協力体制を構築する必要がある。残念ながら、現時点ではプロジェクト終了後の将来の継続的な利用の具体的な方法論や役割分担についての具体的なコンセンサスがない。従って、プロジェクト活動を継続していく中で、「群馬の森」が事実上「パラ州民の森」となるよう実績を積み重ね、パラ州民にも保全や継続的な利用を求める声が出るよう努力する必要がある。伯側各機関も「群馬の森」が良好な状態で保全され、一層活用されるためには地域住民との関係を深めることが重要であるとしている。

【他の案件との連携について】

JICAはアマゾン地域において、本件に関連が深い協力を実施している。

(1) 技術協力プロジェクト・東部アマゾン熱帯農業研究 (-2004.3)

(2) 草の根技術協力・アマゾン自然学校 (2003/11-2006/11)

本プロジェクトにおける森林分野の協力は、天然林を利用した種子の採取及びアグロフォレストリーの展示・普及であり、技術開発を行うことを予定していない。従って、本件においては、過去(1)の類似の協力で実施された技術協力の成果(技術開発)を生かす必要がある。また、環境教育については上記(2)の協力において、ブラジル南部の大都市から子供をトメアスに呼び自然の重要性等について教えることを予定しているが、施設や教材などを相互に利用するなどの連携により、一層効果的な環境教育プログラムが期待できる。その他にも、アマゾンの森の持続的・効率的な利用という観点では、アマパ州ヴァルゼア森林保全(2002年度短期専門家派遣、新規案件要請中)も自然資源の有効活用(循環型社会の実現)という意味では、生きた教材となるものであり、これらの協力を有機的に関連付けて協力を進め、JICAの協力全体としてより大きなインパクトが得られるように進めることが重要である。

7. プロジェクト開始までのスケジュール

・ 12月24日 実施協議調査帰国報告会

・ 2004年1月17日 長期専門家派遣、協力開始

※平成15年度中に専門家派遣1名予定 「環境教育(プログラム作成)」

以 上

別紙1 プロジェクトの将来構想について

本プロジェクト実施期間中においては、

①プロジェクトにより「群馬の森」の施設整備および伯側関係機関の活動強化が行われる

②群馬県及び関係機関の支援により、「群馬の森」の施設維持・管理が行われる

ことになるが、本プロジェクトの終了以降どのように施設を運営し、活動を継続するかについては、今後関係機関により継続検討されることとなっている。

現時点で、考えられる主なオプションは次のとおりであるが、本プロジェクトの成果を最大限活用するためには、『群馬の森』が、より公益性が高い形で運営されるオプション1に近づく方が望ましい。そのためには、本プロジェクト活動期間中に伯側及び日本側の関係機関との関係を強化する必要がある。

選択肢	利点	欠点
<p>オプション1</p> <p>伯国内にNPO法人を設立し、在北伯群馬県人会、群馬県関係機関のみならず日・伯の幅広い参画を呼びかける。</p> <p>「群馬」の看板を取る</p>	<ul style="list-style-type: none"> ・幅広い受け皿となり、本邦企業などの支援を得やすい ・現地で、成果が幅広く活用される可能性が高い ・他の案件も支援できる 	<ul style="list-style-type: none"> ・NPO法人設立までに時間と労力を要する ・群馬色が薄まる(現物出資で発言権は担保され得る)
<p>オプション2</p> <p>現行どおり、在北伯群馬県人会が主体となり、群馬県関係機関及び伯側関係機関の支援を受け運用。</p> <p>プロジェクトの枠組み継承</p>	<ul style="list-style-type: none"> ・実施体制の構築が容易(機動的) ・運営責任が明確(群馬県との関係が深い)。 	<ul style="list-style-type: none"> ・成果の活用は限定的であり、本邦企業などの幅広い支援はやや得にくい
<p>オプション3</p> <p>現行どおり、在北伯群馬県人会が主体となり、群馬県関係機関の支援を受け運用。</p> <p>現行体制に戻す</p>	<ul style="list-style-type: none"> ・実施体制の構築が容易(機動的) ・運営責任が明確(群馬県との関係が深い)。 	<ul style="list-style-type: none"> ・プロジェクトの施設機材を全てこの形で引継ぐのあれば、公益性が低く、投入は限定的とならざるを得ない。

別紙 2 関連機関等の概要・活動計画

東部アマゾン森林保全・環境教育プロジェクトのカウンターパートとなるブラジル側の関係機関は、パラ州科学技術環境局（SECTAM）、エミリオ・ゲルジ博物館（MPEG）ブラジル農牧研究公社東部アマゾン農業研究センター（EMBRAPA）の3機関で、SECTAMを窓口として、次のような活動が展開される計画である。

なお、活動の実施にあたっては、群馬の森の所有者である在北伯群馬県人会が置く予定の管理責任者を窓口として連絡、調整を密にする必要がある。

また、将来的な自立方策については、カウンターパートになる3機関、在北群馬県群馬県人会、JICA、群馬県でプロジェクト活動のひとつとして捉えて、活動開始時から協議を続けることが肝要である。具体策については、既に貧困対策を企業的に進めているNGO持続的開発活動センター（POEMAR）等と連携して検討する。

機 関 名	パラ州科学技術環境局（SECTAM）
機 関 の 概 要	<ul style="list-style-type: none"> ・ 1993年7月設立、州の科学技術の開発、環境の保護と保全を所管する。パラ州環境法（1995年制定）が法的根拠。 ・ 環境部（環境調査教育課、アグロフォレストリ-課等）が担当
活 動 計 画 の 概 要	<ul style="list-style-type: none"> ・ ブラジル側の窓口機関 ・ 自然環境教育やエコツーリズムに対応した施設整備 ・ 動植物を観察するための観察塔、歩道等の整備 ・ 広報資料の作成、ホームページの開設 ・ 学校、コミュニティー及び一般市民を対象にしたセミナーの開催
特 記 事 項	<ul style="list-style-type: none"> ・ 来年、5月にパラ州科学技術環境局長が訪日予定。

機 関 名	エミリオ・ゲルジ博物館（MPEG）
機 関 の 概 要	<ul style="list-style-type: none"> ・ アマゾンの動植物、インディオ、自然環境などの研究を行っており、アマゾン最古の自然科学系の研究施設。1866年設置。 ・ 少年研究クラブなどを対象に環境教育を実施。ベレンから西へ400kmのカシュアナに30,000ha研究保存林を所有。 ・ 園内には2000種を超える植物、鳥類、動物の動植物園、稀少魚類を集めた水族館を付帯。
活 動 計 画 の 概 要	<ul style="list-style-type: none"> ・ 日伯の両国文化、自然科学の常設展示 ・ 環境教育補助機材、標本等の作成 ・ 動植物のインベントリー調査 ・ 少年研究クラブの設置、活動支援 ・ 巡回自然環境教育活動の実施
特 記 事 項	

機 関 名	ブラジル農牧研究公社東部アマゾン農業研究センター (EMBRAPA)
機 関 の 概 要	<ul style="list-style-type: none"> ・ ブラジル農牧研究公社全体で、研究者 512 名（うち博士約 30%）アマゾン地域に 6 カ所の研究拠点。 ・ ベレン市のある東部アマゾン農業研究センターベレンは、水源地を含む 2,000ha の土地を所有。 ・ 英国国際開発省（DfID）の協力で「アマゾン地帯の天然林施業地区の遺伝資源プロジェクトを実施中 ・ 熱帯果樹、アグロフォレストリー研究に実績
活 動 計 画 の 概 要	<ul style="list-style-type: none"> ・ アマゾン原産熱帯果樹展示圃の設置 ・ 種子採種、育苗技術の開発研究 ・ 植林及びアグロフォレストリー展示圃の設置 ・ 植林及びアグロフォレストリーシステム研修会の開催
特 記 事 項	<ul style="list-style-type: none"> ・ パラ州木材工業輸出協会（AIMEX）と連携 ・ トメアス日系農業研究会等と連携

別紙3 群馬県としての JICA プロジェクト支援体制について

平成15年12月24日
群馬県特別政策本部第一課

群馬県としても、JICA「東部アマゾン森林保全・環境教育プロジェクト」実施中は、次のとおり全庁的な支援、協力を行うこととする。

また、群馬県としては、このプロジェクトを契機としてブラジル国パラ州との経済交流、研究交流などが拡大し、将来的には姉妹提携などに発展することを期待している。

第1 プロジェクトの国内協力

1 専門家派遣協力

群馬県を窓口にして長期、短期専門家の選定に協力する。なお、当面の短期専門家は次の分野を調整中。

(2) 環境教育（環境教育プログラム作成）※自然環境関係団体と調整中

2 パラ州科学技術環境局長、カウンターパートの本邦研修の受け入れ態勢

(1) 来年5月中旬を目途に、JICA プロジェクトのカウンターパートになるパラ州科学技術環境局長等をパラ州、JICA、群馬県（国際課）で調整する。

(2) JICA プロジェクトに係わるカウンターパートの本邦研修について、ブラジル側の要望を踏まえながら群馬県を窓口にして受け入れ態勢を整える。

第2 県単独事業の実施

1 本年度実施事業

(1) 第3次子ども緑の大使派遣事業：NPO 法人森の会、県緑づくり推進センター
県内の小学校6年生から選抜した6名をアマゾン群馬の森等に派遣した。

※ 第1次 1999年 5名、第2次 2000年 8名

(2) 群馬県青少年国際交流支援事業（新規）：県青少年子ども課
青年1名を2004年2月から1年間、JICA アマゾン群馬の森プロジェクトの研修生として派遣する。

(3) かぜっこ新聞（アマゾン群馬の森特集）：県広報課
県内の小学4～6年生全員に配布。発行部数67,000部

(4) アマゾン群馬の森プロジェクト推進チーム設置：県国際課
JICA プロジェクトに支援、協力すると共に県政にも活かしていくことを目的に推進チームを設置する。

2 来年度以降実施予定事業（案）

（1）県民参加型日伯友好アマゾン群馬の森総合活用事業

- ・ こども日伯友好大使派遣事業

ブラジル国パラ州と群馬県の友好を深めるため、地球環境・森林保全・国際交流に興味を持つ県内の小学6年生を派遣する。

- ・ アマゾン群馬の森活動支援事業

在北伯群馬県人会に対するNPO法人森の会（アマゾン群馬の森利活用委員会）を中心とした民間支援に補助する。

（2）アグロフォレストリー技術支援：県農業技術センター

JICAプロジェクトをバックアップするため、ブラジルで実施されるアグロフォレストリー研修会に係わる情報収集、予備試験などを行う。

（3）愛知万博（2005年）：県国際課他

愛知万博における「都道府県の日」の企画として、JICAプロジェクト、環境県群馬、日伯友好親善などを盛り込んだイベントを開催する。

（4）ブラジル移民100周年記念企画展（2008年）：県歴史博物館

2008年のブラジル移民100周年記念事業として、県歴史博物館で「ブラジル移民100周年記念企画展」を開催する。なお、企画展終了後は、宮城村に残る「海外移住研修所」跡地を活用した「移住資料室」設置を検討する。

第3 ネットワークづくり

1 環境教育

国内の自然環境教育団体とのネットワークを拡大させ、アマゾン群馬の森が「アマゾン分校」契約や「アマゾンプログラム」受入などにより、永続的に活用されるよう働きかける。

2 森林保全・植林活動

国民参加型の国際協力を進める観点からも、群馬県とNPO法人森の会を窓口として、アマゾン群馬の森を活用した全国の森林ボランティア、行政、森林組合等市民参加の森づくりのネットワークづくりを展開する。

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MINUTES OF MEETING
 BETWEEN IMPLEMENTATION STUDY TEAM
 AND AUTHORITIES OF THE GOVERNMENT OF
 THE FEDERATIVE REPUBLIC OF BRAZIL
 FOR THE PROJECT ON
 FOREST CONSERVATION AND ENVIRONMENTAL EDUCATION
 IN THE EASTERN AMAZON

Japan International cooperation agency (hereinafter referred to as "JICA") dispatched the Implementation Study Team (hereinafter referred to as "the Team") to the Federative Republic of Brazil from November 13 to November 20, 2003 for the purpose of discussing the contents of the project entitled "Forest Conservation and Environmental Education in the Eastern Amazon" (hereinafter referred to as "the Project") with the authorities concerned of the Government of Brazil.

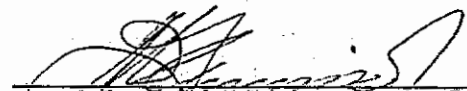
During its stay in Brazil, the Team carried out field surveys and had a series of discussions on the contents of the Project with the authorities concerned of the Government of Brazil.

As a result, the Team and the authorities concerned of the Government of Brazil agreed the matters referred to in document attached hereto.

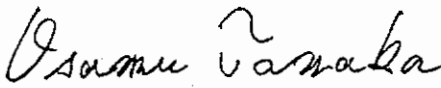
Belem, November 20, 2003



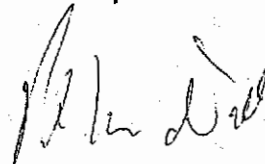
Mr. Kenichi Shishido
 Leader
 Implementation Study Team
 Japan International Cooperation Agency
 (JICA)
 Japan



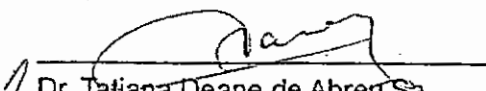
Mr. Manoel Gabriel Siqueira Guerreiro
 Executive Secretary
 Science, Technology and Environment of the
 Para State (SECTAM)
 Federative Republic of Brazil



Dr. Osamu Tanaka
 Representative
 Gunma Prefectural Government
 Japan



Dr. Peter Mann de Toledo
 Director
 Emilio Goeldi Museum of the Para State
 (MPEG)
 Federative Republic of Brazil



Dr. Tatiana Deane de Abreu Sa
 General Director
 Brazilian Agricultural Research Corporation
 Eastern Amazon (CPATU)
 Federative Republic of Brazil

THE ATTACHED DOCUMENT

1. Project Document

The both sides agreed the contents of Project Document attached in Annex I. However, "Plan of Operation" will be revised based on the progress of the Project.

2. "The Record of Discussions"

The both sides agreed the draft of "the Record of Discussions"(English) in Annex II and its Portuguese translation in Annex III from the technical point of views. SECTAM agreed to send these two documents to Brazilian Cooperation Agency (ABC) to get approval to sign promptly.

"The Record of Discussions" shall be signed in English before the start of the Project which is expected on the Middle of January, 2004.

3. Special Issue to be taken note through the discussions

- 1) The Team requested the Brazilian side (SECTAM, MPEG, EMBRAPA) that they would submit the proposal of detailed activities by the end of November, 2003.

4. Further Schedule

The both sides agreed the further schedule as follows;

Action	Schedule expected
1) SECTAM will Submit the draft of R/D to ABC	Promptly
2) SECTAM, MPEG, EMBRAPA will send the proposal of detailed activities to JICA Belem Office, which was requested by the Team	By the end of November
3)Preparation necessary budget taking into account of the proposal submitted by the Brazilian side.	By the end of December
4)Signing of the R/D between JICA, Gunma prefecture, SECTAM, MPEG, EMBRAPA, ABC	By the end of December
5)Start of the Project • Dispatch of two Japanese Experts	January 17, 2004

Annex I: Project Document (English)

Annex II: The final draft of "the Record of Discussions (R/D)" (English)

Annex III: Reference Translation of "the Record of Discussions (R/D)" (Portuguese)



**Project Document for
“the Project for Forest Conservation
and Environmental Education
in the Eastern Amazon”**

At the Gunma Ecological Park

November 20, 2003

Japan International Cooperation Agency (JICA)

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Attachment

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1. Introduction

"For Eternal Coexistence of Humans with Nature"

While there are concerns over the worsening of the global environment, "sustainable development" and "recycling society" has been part of the world's mainstream since the UN Conference on Environment and Development (commonly known as the Earth Summit)" held in Rio de Janeiro, Federative Republic of Brazil in 1992.

The Gunma Ecological Park owned by the Associacao Gunma Kenjin-Kai de Norte do Brazil was obtained to conserve the global environment and the tropical rainforest, with the Earth Summit as a turning point. The funds come from many goodwill donations including those of school children and students from inside and outside Gunma Prefecture, Japan.

Gunma Prefecture hoped to make its citizens aware of the importance of the global environment and forest conservation. Gunma Prefecture and the Executive Secretary of Science, Technology and Environment of the State of Para (SECTAM) on the Brazil side recognized the preciousness of the Gunma Ecological Park, one of the few wide-area tropical rainforests near the large city of Belem. They then decided that it was very beneficial to make it function as a place of forest conservation and environmental education. Examination was then conducted on technical cooperation with JICA.

JICA then dispatched a project-developing survey mission of representatives of the JICA and Gunma Prefecture and learned and experienced persons on January 21 through 30, 2002, thus conducting an inventory survey of the tree species. Furthermore, on January 14 through April 13, 2003, JICA dispatched short-term experts to survey the usefulness of the tropical rainforest, centering on the Gunma Ecological Park.

Based on these two preliminary surveys, JICA decided that it was highly necessary to implement a new project of technical cooperation with the core of "forest conservation, environmental education, and agro-forestry" in the Eastern Amazon region centering on the Gunma Ecological Park.

This project document was compiled based on these two surveys, followed by a series of negotiations with main project-related people through JICA's Belem Branch Office.

2. Background of the project

2-1. Development of the Amazon region and the present status of forest destruction

In January, 1998, the National Institute for Space Research (Instituto Nacional de Pesquisas Espaciais, INPE) announced the deforested area of the legal Amazon rainforest. "Legal Amazon" refers to the six Amazon states, together with part of the Mato Grosso State north of the south latitude of 16°, part of the Maranhao State west of the west longitude of 44°, and Tocantins north of the south latitude of 13°. It accounts for about 61% of the national land.

Table 1. Deforested area and latent forest area of the legal Amazon

Table 1. Deforested area and latent forest area of the legal Amazon

Unit: 100 km²

State	Deforested area*							Latent forest area**		
	1978	1988	1992	1998	1999	2000	Percentage to the latent forest area	a	b	Total
Acre	25	89	111	147	151	158	10.3%	240	1,300	1,540
Anapa	2	8	17	20	20	20	1.7%	1,110	60	1,170
Amazonas	17	197	240	289	296	303	2.0%	9,690	5,790	15,480
Maranhao	639	908	952	1,006	1,023	1,043	16.3%	950	5,460	6,410
Mato Grosso	200	715	912	1,318	1,376	1,439	25.2%	250	5,460	5,710
Para	564	1,315	1,518	1,884	1,946	2,001	16.8%	7,640	4,250	11,890
Rondonia	42	300	369	533	553	581	27.0%	1,720	430	2,150
Roraima	1	27	45	58	61	64	3.5%	1,230	620	1,850
Tocantins	32	216	238	264	266	268	46.2%	210	370	580
Legal Amazon	1,522	3,775	4,402	5,519	5,692	5,877	12.6%	23,040	23,740	46,780

Note: * Based on a 1998 INPE report. Rounded to the nearest 100 square kilometers.

** As per Fearnside (1992). (a) dense forest, (b) non-dense forest.

Table 1 combines the INPE document with the latent areas as per Fearnside (1992). Not the latent areas of the states but the deforested area of the Para State with regard to the deforested area of the legal Amazon accounts for about 34%.

The Amazon rainforest in Brazil is deforested at a rate of 50 million cubic meters each year on the average. The area deforested by 1997 was 532,000 square kilometers. The deforested area is the largest in the Para State. Belem, the capital of the Para State, is located at the mouth of the Amazon. It is the largest city in the Amazon region. It was there that the historical forest destruction originated. In the 1970s, forest destruction progressed quickly with the construction of ranches and roads. A vast area of farms and pastures spreads from in and around the current city of Belem to the eastern and southern regions, with no large forests present nearby. In highly accessible areas, there only remains sporadic secondary forests of tens of hectares.

In view of this reality, the 540-hectare Gunma Ecological Park, which is owned by the Associacao Gunma Kenjin-Kai de Norte do Brasil and which is well-conserved, has extreme scarcity value.

2-2. Status of the target sector in general

2-2-1. History of the Gunma Ecological Park

With the 21st century just around the corner, the public interest is high in the global environment. On an international level, a wide range of activities are under way, such as the protection of the natural environment and the prevention of environmental destruction. With the Earth Summit (the UN Conference on Environment and Development), held in Rio de Janeiro, Brazil, in 1992, as a turning point, the whole world's attention was attracted to the issue of protection of the tropical rainforest and virgin forests in the South American Amazon region.

In response to such world trends, the Associacao Gunma Kenjin-Kai de Norte do Brasil (chaired by Mr. Hiroshi Okajima), active mainly in the city of Belem, which is near the mouth of the Amazon, petitioned Gunma Prefecture to preserve the primeval forests almost intact and remaining in the suburbs of Belem and to embody the scheme of the Gunma Ecological Park as:

- a forest symbolizing environmental protection
- the center of social gatherings of a million Japanese Brazilians
- an open facility for academic surveys of the rainforest.

In and after 1992, Gunma Prefecture had a number of cautious deliberations. In 1994, all members of the Gunma Prefectural assembly gave signatures of agreement. In parallel, with the prefectural International Section as the contact, consideration was given to the tax-free associations, the scale and system of fund-raising, method of remittance, and rights and related matters.

With these preparations, Gunma Prefectural Governor Hiroyuki Koderu took the office of Chairman of the "Society for Establishing a Forest of Gunma in the Amazon" in December 1995. They organized an executive committee for fund-raising for "A Forest of Gunma in the Amazon with the Hands of Prefectural Citizens" (chaired by Tomiichiro Kubota, representative of the Prefectural Assembly), urging a wide range of prefectural citizens to give donations. Pupils of elementary and junior high schools also gave goodwill donations of 50 and 100 yen. Having obtained the agreement of a wide range of prefectural citizens, the project attracted about 30 million yen of donations. Based on the fund raised, a 540-hectare forest was purchased on October 27, 1996. Its register was completed under the title of the Associacao Gunma Kenjin-Kai de Norte do Brasil under the conditions: (1) non-assignment, (2) non-deforestation, and (3) non-lease.

That was followed in July 1998 by the completion of the Sede da Associacao e Centro de Vissitacao (Gunma Kenjin-Kai Hall and Visitor Center) and research building in the Gunma Ecological Park with prefectural subsidies, private donations, and a fund from the Associacao Gunma Kenjin-Kai de Norte do Brasil.

The 49th National Tree-planting Festival, held on May 10, 1998 in Gunma Prefecture in the presence of His Majesty the Emperor and Her Majesty the Empress spotlighted the Gunma Ecological Park with emphasis as the symbol of a global greening drive, thus attracting the attention of people from different sectors. The festival also invited some people from Brazil (some representatives of the Associacao Gunma Kenjin-Kai de Norte do Brasil) and deepened exchanges with them by exchanging seedlings and planting trees.

In Gunma Prefecture, the Society of Forests (an NPO) dispatched a first mission of tree planters for the Gunma Ecological Park (headed by Tomiichiro Kubota, representative of the prefectural assembly) as a project commemorating the National Tree-planting Festival from August 28 through September 7 the same year. The mission members planted trees in a commemorative manner with Vice Governor Noboru Takayama and other representatives who attended the completion ceremony of the Sede da Associacao e Centro de Vissitacao (Gunma Kenjin-Kai Hall and Visitor Center). The tree-planting mission consisted of a wide range of membership, 23 members, including representatives of various associations, mass media, housewives, and prefectural association of emigrated families. At the same time, an automobile manufacturer in the prefecture donated the leading-edge recreation vehicle for forest surveys.

Following those survey findings, they dispatched a second mission of tree planters (eight "children ambassadors for the greens, sixth-graders of elementary school) as supporters in 1999. In 2000, Gunma Prefecture Governor Kodera visited the Gunma Ecological Park in 2000, came up with a name for the forest, wrote it on a piece of paper in calligraphy, and presented it. He then accompanied the second "Children Ambassadors for the Greens" and the third "Mission of Tree Planters" and had exchange with local children. They then issued a Collection of Commemorative Photos of the Gunma Ecological Park as a record of the project.

In 2001, the Consulado Geral do Japao at Belem of the Ministry of Foreign Affairs of Japan donated a complete set of land preparation tractors and accessories as part of "grass-roots financial grant aid." A fourth "mission of tree planters" made a call.

On January 21 through 30, 2002, a survey mission of representatives of JICA and Gunma Prefecture and learned and experienced persons was dispatched to develop a project plan for "Forest Conservation and Environmental Education for the Amazon, Brazil." JICA then conducted an inventory survey of the Gunma Ecological Park.

On January 14 through April 13, 2003, Gunma Prefecture dispatched short-term experts from JICA to survey the usefulness of the tropical forest centering on the Gunma Ecological Park and to help develop a new project plan mainly for "conservation of the tropical rainforest, environmental education, and forest agriculture."

[Supplementary information]

The processes from the acquisition to the administration of the Gunma Ecological Park are assisted by the following associations and corporations:

- Help with the reception of donations and fund-raising:	Global Environmental Forum
- Mixed afforestation test "Pepper and Mahogany":	National Land Afforestation Promotion Organization
- E.R.C. Co., Ltd., Casa de Vegetacao:	Foundation of Asahi Breweries
- Jardim Japonese:	Yamaume Zouen Doboku Co., Ltd.
- Motor vehicles for surveying the conservation of the tropical forest: * Donated to the Para State (SECTAM) by the same company	Fuji Heavy Industries Ltd.
- Tractors :	Grant Aid Assistance, Ministry of Foreign Affairs of Japan

2-2-2. Present status of the Gunma Ecological Park

Overview of the Gunma Ecological Park

(1) Location:

Minicipio de Santa Barbara de Para, Estado do Para, Brasil
(high accessibility: about 50 km from Belem, the state capital, which takes about one hour by car)

(2) Area:

about 540 ha

(3) Owner:

Associacao Gunma Kenjin-Kai de Norte do Brasil

(4) History of the forest:

This forest has long been owned as an agricultural land by Portuguese immigrants. It has until today been conserved in almost a complete state under the control of the landlord.

(5) Forest overview:

The Gunma Ecological Park consists of a primeval forest of about 400 ha and a reconditioned forest of about 140 ha.

(6) Primeval forest:

It is a primeval rainforest. It comes with ipe, sucupira, and jarana (which are known as useful sources of timber as regional specialties) and other huge trees growing native to the land. Various other animals and plants are considered to live there. The forest thus attracts the interest in various research sectors.

(7) Reconditioned forests:

Reconditioned forests are used to conduct tree-planting tests effective to the Amazon region. A mixed forest of pepper and mahogany is made and a cultivation test conducted from the viewpoint of sustainable land use.

(8) Main facilities:

- 1) Sede da Associacao e Centro de Vissitacao (Gunma Kenjin-Kai Hall and Visitor Center)
The building was constructed as a center of exchange of the Kenjin-Kai members and other local inhabitants with a subsidy from Gunma Prefecture. It comes with a hall, auditorium, an accommodation room (ten-person capacity), canteen, and other visitor center functions for academic surveys and researches, symposiums, and other events.
- 2) Centro de Pesquisas Ambientais (of the Asahi Breweries Foundation)
The Centro de Pesquisas Ambientais (the Environmental Research Center) was built with the sponsorship of the Asahi Breweries Foundation. The display rooms present information about the nature, history, culture, economy, and other matters related to the Amazon.
- 3) Casa de Vegetacao (of the Asahi Breweries Foundation)
This facility was also built with the sponsorship of the Asahi Breweries Foundation. Two exhibition houses are used mainly to grow and display orchids.

2-3. Strategy of the Brazilian government

2-3-1. Strategy of the Brazilian government

The legal system for forest management in Brazil has been improved based on the Forestry Code of 1965. The Forestry Code designates the shores of rivers and lakes, reservoir areas, the peaks of mountainous regions, forests in steep slopes and regions of indigenous peoples, and other regions as permanent protection areas, and makes it obligatory to conserve 50% of the forests as legal conservation areas. Regarding environmental administration, the government announced a national environment policy designed to enhance the executive system of the administration based on the basic policy of improving and restoring the environment in 1981, and set up a Comision Nacional del Medio Ambiente (CONAMA), Ostecnicos da Secretaria Municipal de Meio Ambiente (SEMA), and other establishments constituting the national environmental system.

The Forestry Code has been revised several times against the background of the interest and pressure of people both at home and abroad who call for the stronger regulation of forest protection and management. With the foundation in 1989 of the Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renovaveis (IBAMA) as a turning point, the code was revised to make it obligatory to adopt the methods of deforestation, tree-planting, and management according to the characteristics of the ecosystem when deforesting a forest in order to promote the forest administration with emphasis on forest protection. The revised code made it necessary to obtain the prior permission of IBAMA for deforestation.

However, since the Amazon region continued to be considerably deforested, an act for provisional measures was set up in 1996 to allow only 20% of the area of private forests to be totally deforested. It was made obligatory to use at least 80% of such land as forest.

The political intention behind the limitation of the area of totally-deforestable private property to 20% is to switch the basis of industrial development in the Amazon region from traditional agriculture and stock farming to sustainable forest management. Furthermore, the fact that this act of provisional measures specifies the "multi-purpose use" of the forests implies the directions of industrial development based on the traditional forest use of the community inhabitants instead of a forestry of the industrial afforestation type with emphasis only on timber production.

The Brazilian government drafted a Multi-year Plan, or O Plano Plurianual (PPA, 2000-2003), as a national development plan according to the long-term national development vision (Axes, 2000-2007). The PPA specifies a four-year strategy of development. Axes and PPA are characterized by the viewpoint of regarding environmental conservation as a set of investment opportunities. It is not based on mere conservation but based on "using it while conserving it" through eco-tourism and other means and creating jobs and income earning opportunities there. It also presents a Programa Nacional de Florestas (National Forest Program, PNF, 2000-2003) and encourages sustainable development that enables the protection of the ecosystem.

2-3-2. Strategy of the Para State government

The optimal use and effective conservation of natural resources in the Para State are promoted as per environmental laws and ordinances. The state environmental law, which set forth the environmental policy of the Para State, entered into force in 1995. This state environmental law complements the federal environmental law and considers the characteristics of the natural resources in the state and aims to protect the forest resources and endangered species in the state. The Executive Secretary of Science, Technology and Environment of the State of Para (SECTAM) plans, coordinates, implements, supervises, and regulates the environmental policy of the state. and is a main implementer of development projects while conforming to the environmental regulations of the state. The regulations for the auditing and development of SECTAM apply to all activities that may contaminate the environment and destroy nature. Here is a description of the basic policy of the state government as per the PPA.

- 1) Develop it without destroying it.
- 2) Build social order.
- 3) Correct the regional disparities.

The state government presents three macroscopic goals for the four-year period from 2000 to 2003.

- 1) Remodel and modernize the state.
- 2) Raise the living standards.
- 3) Enlarge and diversify the basis of production.

The concepts of these strategic goals need activities to achieve the goals specified below in the economic sector.

- 1) Inhibit the process of the production frontiers in order to increase the percentage of land use.
- 2) Build the production system by promoting the processing and distribution of products.

- 3) Develop and diffuse alternative technologies designed to use natural resources efficiently in an attempt to modernize the production technologies.

On the other hand, as the result of the proposal given at the Earth Summit, the expression "sustainable tourism (development)" is being established in the tourism industry of the world. Ecotourism, which uses precious natural and cultural assets as tourism resources while protecting and conserving them, is growing throughout the world. Tourists ready to learn about the environment while enjoying sight-seeing are on the rise.

Ecotourism is positioned as one of the important policies by the Para State government as well and is expected to make a leap in the future. The government will therefore work to link with the SECTAM, tourism companies, and other corporations for active public relations.

2-4. Trends in International Cooperation

2-4-1. Trends in international cooperation assistance

- (1) Demonstration program (PDA), a subprogram of the PPG7
The PPG7 is short for The Pilot Program for the Brazilian Rainforests, which was proposed at the Houston Summit in the 1990s for the conservation of the Amazon rainforest and which was agreed in December 1991. The program was drafted by the Brazilian government, passed the consensus-building process with the donor countries with the coordination of the World Bank, and has thus been implemented. The program is thus the consensus of Brazil and the world regarding their efforts to conserve the tropical rainforest of the Amazon.
- (2) Sustainable Forest Development Project
Purpose: Optimize the use of the national forests, develop the technology for managing the private natural forests, and restore the deteriorated forests. The target includes not only the Amazon region but also the northeastern and southern states.
Donor establishment: United Nations Development Programme (UNDP)
C/P establishment: IBAMA
- (3) Program of Strategic Initiatives for the Brazilian Amazon (PRODEAM)
Purpose: Draft a regional development project as per the "Amazon Development Program" in order to promote socioeconomic exchanges with the neighbors along the Amazon.
Donor establishment: The Inter-American Development Bank (IDB)
C/P establishment: Superintendence for the Development of the Amazon Region, Ministry of National Integration (MI)

- (4) Non-timber Production and Sustainable Development in the Amazon
 Purpose: Conduct a socioeconomic assessment of the non-timber resources in the Amazon region and work to diffuse the effective use of these resources.
 Donor establishment: The International Tropical Timber Organization (ITTO)
 C/P establishment: Universidade de Brasilia
- (5) Sustainable Management of Production Forests at the Commercial Scale in the Brazilian Amazon
 Purpose: Verify the technology for processing natural forests and work to diffuse the technologies to medium- and large-scale timber deforesters.
 Donor establishment: ITTO
 C/P establishment: Eastern Amazon Agricultural Research Center of the Empresa Brasileira de Pesquisa Agropecuaria (Brazilian Corporation of Agropecuarian Research), Center for International Forestry Research (CIFOR)
- (6) Reinforcement Project for the Environmental Departments in the States of Ceara, Amazonas, Para, and Rondonia
 Purpose: Plan and implement the environmental policy of the state government as part of the Natural Resources Policy Project (SPRN), a subprogram of the PPG7.
 Donor establishment: Deutsche Gesellschaft fur Technische (GTZ)
 C/P establishment: Ministerio do Meio Ambiente, four state government organs (SECTAM in the case of the Para State)
- (7) Lake Mamiraua Ecological Reserve Project
 Purpose: Conduct ecological studies of about 200,000 hectares of flooded forests in the Mamiraua region and develop technologies for sustainable forest management for local inhabitants.
 Donor establishments: Department for International Development (DfID)
 C/P establishment: National Council for Scientific and Technological Development (CNPq), Conselho Nacional de Desenvolvimento Cientifico e Tecnologico (), IBAMA, etc.
- (8) Project for Gene Conservation in the Management Regions of Natural Forests in the Amazon Region (DENDROGENE)
 Purpose: Identify the genetic resources useful to natural forest management and develop and make a database of propagation technology.
 Donor establishment: DfID
 C/P establishment: EMBRAPA

- (9) Participatory Management of Natural Resources at Municipal Level (GESPAN)
 Purpose: Develop a technology for the sustainable use of the forests on a demand-driven basis, mainly for the inhabitants of the municipio de Moju.
 Donor establishment: DFID
 C/P establishments: EMBRAPA, Empresa de Assistencia Tecnica e Extensao Rural (EMATER), SECTAM

2-4-2. Related projects of JICA in the target areas

JICA justifies this project in the framework of cooperation in the Amazon region from the following viewpoints:

- (1) Relationship with the "Report of the Second Study Group for Country-specific Assistance for Brazil (January 2001)"
 The report the points specified below as the basic principles and important areas of future assistance to Brazil.

1) Basic approach in Japan's cooperation with Brazil

As "strategic and effective cooperation by selection and concentration," the report identifies "putting priority on the area to which Japan and Brazil contribute jointly in the areas affected on a global scale (such as the conservation of the natural resources and biodiversity)."

As "cooperation based on the concept of partnership," the report states that "Japan and Brazil should deepen their mutual partnership on an equal footing in order to increase multitiered exchanges with various non-governmental actors, in particular, actors of Japanese private companies, NGOs, universities and institutes, local governments, and other entities in Brazil."

2) Important Areas and Challenges of Japanese-Brazilian Cooperation

With emphasis on "cooperation for global challenges," the report gives a case study of "conservation of the natural environment mainly in biodiversity conservation in the Amazon region and northeastern region (assistance in basic researches and conservation management)" and "sustainable agricultural promotion in the Amazon region (agroforestry and other operations) and the cerrado region."

With emphasis on "cooperation by partnership with Japanese Brazilians," the report mentions "promoting the participation of Japanese Brazilians in cooperation under the understanding that Japanese Brazilians are important partners for both Japan and Brazil in making the bilateral relationship closer."

Such proposal made by the "assistance study groups" agree with the gist of this project to be implemented by JICA in linkage with Gunma Prefecture in the following points:

- 1) It should be a cooperation project in an area that is influential on a global scale.
- 2) With maximum consideration given to the spirit of partnership, the project should presuppose the participation of many actors including local governments of both Japan and Brazil.

- 3) The project should be about the natural environment of the Amazon, which is considered to be an important area.
- 4) The project should position Japanese Brazilians as important partners.

Based on the above, this project can be positioned as a promising one conforming to the basic principles and important challenges proposed by the "assistance study groups."

(2) Relationship with the project of technical cooperation being implemented by JICA in the Amazon

Described below is the relationship with an overview of the projects of environmental and agricultural cooperation being implemented by JICA in the tropical rainforests in the Amazon.

1) Forest Research Project Phase II of the Amazon, (October 1, 1998 through September 30, 2003)

Purpose: Clarify the biological and ecological basic knowledge necessary for enhancing the technologies for conserving the forests and restoring the wastelands in the Amazon region.

Relationship: This project is a cooperation project for basic research designed for "restoring the wastelands" with the Instituto Nacional de Pesquisas da Amazonia (INPA) of the Ministerio de Ciencia e Tecnologia as the C/P.

On the other hand, this project aims to develop and provide opportunities of research, give environmental education, and develop technologies for forest agriculture. There are no overlaps between the target areas, and there is a great difference in the natural environment including vegetation with the east Amazon region.

2) Project for Developing Sustainable Agricultural Technology for the Eastern Amazon, Brazil

(March 1, 1999 through February 28, 2004)

Purpose: Develop an appropriate and sustainable technology for agricultural products in the east Amazon region and step up the agricultural base for farm management.

Relationship: This agricultural project aims to develop a cultivation technology for the sustainable farming of fruit trees and pepper in the east Amazon region with the Brazilian Agricultural Research Corporation Agroforestry Research Center in Eastern Amazon (EMBRAPA) as the C/P.

On the other hand, this project entails no overlaps in the areas of developing and providing research opportunities and those of environmental education. However, although the area of forest agriculture is common, the synergy of both projects is likely to occur as a result of linkage by positioning the basic technology developed as the research result of existing projects as a project of displaying and diffusing it as an applied technology in the new project.

3. Problem and Issues

3-1. Framework analysis of the Problem and Issues

3-1-1. Biological studies and conservation of forests

Registered in the Para State are: 16 national zones of environmental conservation (5.85 billion hectares), eight state-run zones of environmental conservation (5.56 million hectares), eight municipio-run zones of environmental conservation (45,000 hectares), and three private zones of environmental conservation (2,400 hectares). Although many of the federal and state-run protection zones are large-scale, from hundreds of thousands to one million hectares, the infrastructure is not well-established, except for the park (35 hectares) in Belem. What is more, accessibility is low. The reality is therefore that specific activities are not enough.

Emilio Goeldi Museum of Para (MPEG), on which an inventory survey of the tree species has already been conducted by JICA, has high expectations for ecological studies of animals and plants, centering on useful tree species in the Gunma Ecological Park.

EMBRAPA is implementing Project for Gene Conservation in the Management Regions of Natural Forests in the Amazon Region (DENDROGENE) with the cooperation of the Department for International Development (DfID). It identifies genetic resources useful to the management of natural forests, cooperates in the area of developing propagation technologies, and requests the use of them on the field.

In view of the above, forest conservation mainly in biological studies of the forests and basic studies of planted trees using the Gunma Ecological Park which is near cities and highly accessible is expected to develop in the future as a forestry college for the citizens of the Para State and in Japan and Brazil and as a field for studying tropical rainforests on a short-to-medium term basis.

3-1-2. Environmental education

Environmental education in the Para State government is conducted according to the policy of the "Programa Estadual de Educacao Ambiental (PEAM)" promoted by the Comisao Internacional de Educacao Ambiental (CINEA)," which was set up according to Ordinance # 3632 of September 1999. Here is a list of the programs under way.

- 1) Canarinho Park Project (development and display of various technologies for sustainable use)
- 2) Belem City Project for Inhabitant Participation and Environmental Education
- 3) Project for Using Timber Residues in the Western Region of the Para State
- 4) Environmental Education Project in the Conservation Zones
- 5) Electronorte (Electric Utility) Project
- 6) Praia Limpa Project
- 7) Regional Project for Environmental Education (joined by 22 counties of the Para State)
- 8) School Environmental Education Project

9) Recycling Project

Of all these requirements, the Para State government has particularly high demand for the use of the Gunma Ecological Park as a hands-on field in nature in the areas related to local inhabitants and school education.

Emilio Goeldi Museum of Para (MPEG) also offers an environmental education program mainly in its own facilities (equipped with a zoo and a forest) and strongly requests the use of the Gunma Ecological Park similarly to the state government.

With an infrastructure and a learning program developed through the project, the facility is expected to be opened to receive eco-tours and trainees interested in the Amazon from both at home and abroad and to function as an open "environmental education center."

3-1-3. Agroforestry

Agroforestry is also known as "an agriculture that creates forests, or a forestry agriculture." Japanese Brazilians who immigrated in Tomeas (about 200 kilometers from Belem, the capital of the Para State), where the first immigrants came from Japan and settled in 1929, were inspired by the self-supply agroforestry conducted by the local farmers. They then initiated agroforestry on the level of merchandise crop production. The current agroforestry is a technology that is profitable on the level of merchandise crop production and with a smaller area than ranches and similar facilities. What is more, unlike traditional slash-and-burn agriculture, this technology enables people to stay on the same lot and continue the farming.

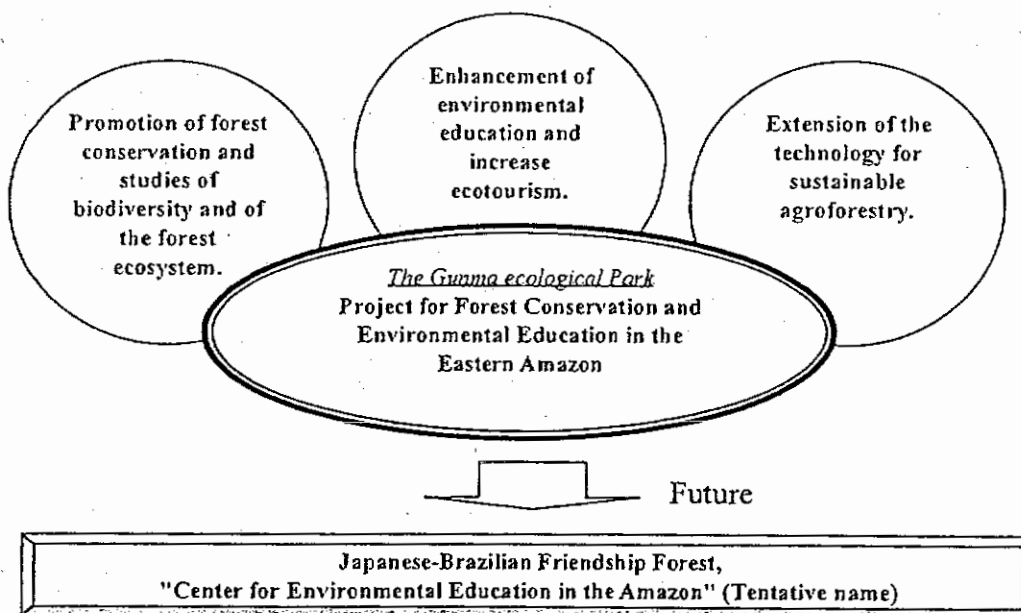
Against such a background, agroforestry is spotlighted as a technology extremely effective in sustainable development and the conservation of forests and biodiversity and is expected to increase added value with measures of processing, distribution, and sales and to develop, advance, and diffuse related technologies.

4. Project strategy

4-1. Overview of the project strategy

In view of the gist and process of acquiring the Gunma Ecological Park, the requests and present condition of the related establishments on the Brazilian side, and the importance of the Brazilian Amazon region in the world environment, the project will use the Gunma Ecological Park and develop and implement the infrastructure and program for making the park as a center facility for "environmental education, forest conservation, and agroforestry" in the east Amazon region.

The project will be named the "Project for Forest Conservation and Environmental Education in the Eastern Amazon" and will be implemented in the friendly relations between Japan and Brazil.



4-2. Organization of the project

Agreement on international technical cooperation toward the implementation of this project is established by JICA, Secretariat of Technology & Environmental, Government of the state of Para and other authorities concerned. Consensus will also be built in writing with the Associacao Gunma Kenjin-Kai de Norte do Brasil, which is the owner of the forest, for total cooperation. The project must then be implemented with a partnership based on close relationship.

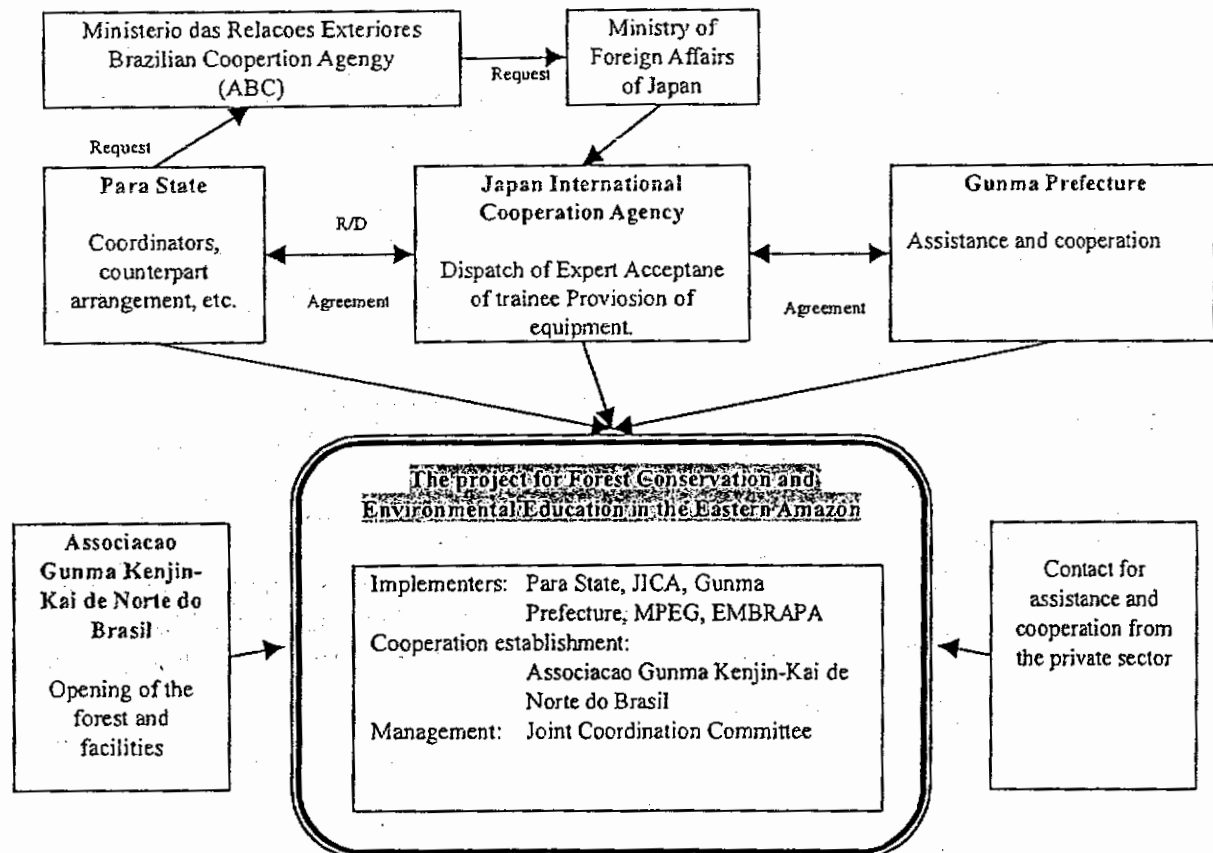
This project will involve many organizations both in Japan and Brazil. To proceed smoothly with cooperation projects, therefore, a Joint Coordinating Committee will be set up, with the following membership:

[Brazilian side]

- Brazilian International Cooperation Agency,
- Secretariat of Technology & Environmental, Government of the state of Para,
- Museum of Emilio Goeldi of the State of Para,
- Agricultural Research Institution in Eastern Amazon,
- Municipal of Santa Barbara

[Japanese side]

- Representative of JICA Brazil Office,
- Representative of JICA Belem Branch Office,
- JICA experts,
- Secretary in charge of the Embassy of Japan in Brazil(observer),
- Secretary in charge of the Consulate of Japan at Belem(observer)



5. Master plan for the project

5-1. Target area and beneficiary

The target area and beneficiary of the project should desirably be the entire Para State (which will be the implementer) and all the citizens of the state. In view of the importance of establishing the project in the region, the project will be implemented for the time being for the citizens, teachers, students, and pupils of elementary and junior high schools in the município de Santa Barbara (which contains the Gunma Ecological Park), Belem, and their surroundings. However, if there is a certain distance but an education establishment or something similar wishes to participate, it will be covered whenever possible.

Agroforestry will be flexibly addressed in such a manner that makes it an effective activity of technology extension including the Japanese-Brazilian societies of agricultural studies and Japanese-Brazilian small-scale regional farmers.

5-2. Overall goal

This project conforms to sustainable development, allowing people to "conserve and use" the project by means of ecotourism presented in the "O Programa Piloto para Protecao das Florestas Tropicais do Brasil" (PPG7) agreed in December 1991, the National Development Vision Axes of the Brazilian Government, and the "O Plano Plurianual" (PPA) as the national development plan, and allowing people to protect the ecosystem with the Programa Nacional de Florestas (PNF).

This project will promote the basic principles, proposal, and activity of the Para State Government regarding the forest and environment in response to the aforementioned policy of the Brazilian Government.

Overall goal:

" Effective forest and natural environmental conservation is Promoted in eastern Amazon areas. "

The Overall goal of the project expects that the activities for the project and the technologies to be developed and diffused will be spread to the non-beneficiary regions, citizens, related establishments, associations, NPOs, and other parts of the east Amazon region, and that the conservation of the forests and natural environment will be promoted.

The indicators to be used will be the visitors, articles in newspapers and magazines, the status of joint activities, and other factors regarding governmental establishments, colleges, NGOs, and private companies from non-beneficiary areas and outside the surroundings.

5-3. Project Purpose

Project Purpose:

" Activities of forest and natural environmental conservation are promoted in Para State. "

The project Purpose can be achieved by the degree to which the project contributes to the SECTAM, MPEG, EMBRAPA, Universidade Federal Rural da Amazonia, local citizens, and farmers. Another indicator will be the utilization status of the infrastructure and various related programs.

5-4. Outputs and activities

The project assumes that the following three goals will be achieved:

- 1) The project will promote educational activities for the natural environment in the Para State.
- 2) The project will promote the extension of the technologies for afforestation and agroforestry in the Para State.
- 3) The project will step up information and public relations regarding the Amazon forest in the Para State.

Output 1:

Promote activities for the natural environment in the Para State.
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In the early stage of the project, the implementers will lure environmental educational courses given in the Para State(SECTAM), Emilio Goeldi Museum of Para (MPEG), and other entities, while establishing infrastructural facilities required to make the project to become independent as an "environmental educational center" and setting up and enhancing teaching materials and environmental educational programs according to the requirements of related establishments. A biodiversity survey to be the basis for the program will be conducted in parallel.

After such setup and enhancement, the project will be widely opened to schools and other educational establishments, Boy Scouts, and other entities as a hands-on field for natural environmental education regarding the "conservation of the global environment and tropical rainforest."

1-1. Conduct a biodiversity survey necessary for environmental education.

- 1-1-1. Conduct inventory survey of the fauna.
- 1-1-2. Monitor and analyze the results of the inventory survey of the flora.
- 1-1-3. Prepare the guidebook

1-2. Implement environmental education activities for local citizens, teachers, students, and pupils of elementary and junior high schools.

- 1-2-1. Implement existing environmental education programs in the Gunma Ecological Park.
 - 1-2-2. Implement existing environmental education programs in the Gunma Ecological Park.
 - 1-2-3. Compile teaching materials using the social and culture states of the surrounding communities and animal/plant samples.
 - 1-2-4. Provide education tours (setting of natural science exhibitions, video theaters, drama, and park tours).
- 1-3. Improve exhibition and educational facilities and equipment of "the Gunma Ecological Park" for implementation of environmental education and ecotourism activities.**
- 1-3-1. Implement existing environmental education programs in the Gunma Ecological Park.
 - 1-3-2. Make materials for the environmental education based on environmental education activities for the surrounding local communities.
 - 1-3-3. Compile teaching materials using the social and culture states of the surrounding communities and animal/plant samples

Output 2:

Develop technologies for afforestation and agroforestry
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The project will extend as applied technologies the basic technologies developed in researches in afforestation and agroforestry such as "Project for Gene Conservation in the Management Regions of Natural Forests in the Amazon Region (DENDROGENE)" and "Project for Developing Sustainable Agricultural Technology for the Eastern Amazon, Brazil."

To expand sustainable agroforestry, the project will help grow an institute where Japanese-Brazilians and local small-scale farmers will join forces and the local farmers will think together on their own and act together by organizing comprehensive technical seminars and exhibiting demonstrations such as cultivation technology, processing, and distribution and sales.

- 2-1. Develop technologies for afforestation and agroforestry.**
- 2-1-1. Establish the zone for collecting seeds of the primeval forest in the Gunma Ecological Park, collect and select seeds.
 - 2-1-2. Install fields of seedlings of useful timber tree species.
 - 2-1-3. Install fields for displaying tropical fruit trees of Amazonian origin.
 - 2-1-4. Install demonstrative fields based on the agroforestry system
- 2-2. Extension technologies for afforestation and agroforestry among farmers.**
- 2-2-1. Provide seminars on production of seeds and seedlings and technologies for seed management.
 - 2-2-2. Provide seminars on technologies for afforestation of topical forests and forest management.

- 2-2-3. Provide technical seminars on the agroforestry system.

Output 3:

Step up information dissemination and public relations on the Amazon forests in the Para State.

The Internet will be used to set up a "virtual school on the nature of the Amazon (Tentative)" for pupils in Brazil, Japan, and the rest of the world. The project will be presented, with a complete set of a learning curriculum, teaching materials, documents, and environmental games on global warming prevention and the conservation of the tropical rainforests.

Seminars and workshops will be organized on environment-related subjects for schools, communities, and citizens to diffuse the effects of the project to a wide range of the region.

- 3-1. **Establish a homepage to disseminate information on activities in the Gunma Ecological Park.**
- 3-2. **Organize seminars and workshops on environment issues targeting schools, communities, and citizens.**

5-5. Inputs

Project inputs are summarized in Table 2. The specifications and quantities of buildings, materials, and equipment required for the project will be planned according to the progress of the Project.

Table 2. Inputs required for implementing the project

Japan	Brazil
<ul style="list-style-type: none"> ■ Long-term experts (2 persons x 3 years) <ul style="list-style-type: none"> Chief advisor / environmental instructor: 24 Chief advisor / seedling & afforestation: 12 M/M Coordinator / agroforestry: 36M/M ■ Short-term experts if necessary appropriate <ul style="list-style-type: none"> · environmental educational · Forest conservation and afforestation · Afforestation technology · Crops Cultivation · Ecotourism and other necessary sectors ■ Acceptance of Counterpart Personnel <ul style="list-style-type: none"> · Environmental education · forest ecology · sustainable agriculture, etc. ■ Buildings and equipment ■ Materials, equipment, vehicles, office equipment 	<ul style="list-style-type: none"> ■ C/P <ul style="list-style-type: none"> Project directors: 36M/M Project managers: 36M/M Environmental instructors: 31persons Forest ecology researchers: 4persons Agroforestry experts: 4persons ■ Facility: Project office (SECTAM) ■ Local cost: Administration expenses

Long-term experts to be dispatched can be nominated through Gunma Prefecture because it is linked with the local government. They will comprise two experts in charge of the three areas of environmental education, agroforestry, and seedling raising and afforestation.

The number of, and division of work among, short-term experts will be assigned according to the annual plan of the project. It is assumed that several personnel will be dispatched every year. The technical areas to be covered by such personnel will be considered, with priority given to environmental education, forest conservation and afforestation, crops cultivation, and ecotourism.

As for the project personnel on the Brazilian side, the project director (Director, Environmental Division, Department of Environment Protection, Science, Technology and Environment of the State of Para (SECTAM)) and the project manager (Manager of the Environmental Section, Environmental Division, SECTAM) are identified.

The counterparts scheduled to participate come in a wide range of personnel, including SECTAM personnel (Manager of the Environmental Education Division, personnel of the Environmental Education Division, and personnel of the Sanctuary Division), MPEG personnel (General Manager of the Public Relations and Extension Department, General Manager of the Natural History Department, researchers, technical personnel of the Natural History Department, General Manager of the Zoology, researchers of the Zoology Department, General Manager of the Botanical Department, and researchers and engineers of the Botanical Department), EMBRAPA personnel (researchers of the Seed Research Laboratory, researchers of the Tropical Fruit Tree Research Laboratory, researchers of the Crop Cultivation Department, researchers of the Forestry Department,

and researchers of the Forestry Research Laboratory), and the related personnel appointed by the Project Director.

5-6. External conditions and risk analysis

Here is a list of external conditions conceivable in implementing this project.

- 1) The Brazilian Government should continue its conservation policy for the Amazon tropical rainforest.
- 2) Cooperation should be continued by the Para State Government (such as forest protection and conservation and security maintenance) and the C/P establishments.
- 3) The financial situation of the participating establishments should not go worse quickly.
- 4) The Gunma Ecological Park will not suffer catastrophic damage due to unexpected weather.

As for afforestation and agroforestry, it can be indicated that the displays and agroforestry should not suffer catastrophic damage due to abnormal weather or other factor.

5-7. Preconditions

The preconditions for environmental education will be that there is no opposition from the local community and that cooperation is available from the local citizens and educational establishments.

6. Justification of the project

6-1. Relevance

The contents of the cooperation involved in this project conforms to the directions in such measures as promoting biodiversity conservation and the sustainable production system set forth in the "National Comprehensive Policy for the Legal Amazon" (1995), which is the basis for the Amazon policy of the Brazilian Government, and the Lula administration's "The Position of the Amazon in the Development of Brazil" (2002). The environmental education activities help promote environmental education forth in the "State Environmental Education Program: Guideline and Policy" (2002) of the Para State Government. This project is positioned as part of the ecosystem conservation program for "environmental conservation" of the important development challenges in Brazil's Country-specific Project Plan of JICA.

6-2. Effectiveness

The conservation of the forest and natural environment centering on the Gunma Ecological Park is highly likely to achieve the project goals because the Parque is highly accessible, it has high value as a natural forest, it is much in demand from relevant Brazilian establishments regarding the contents of the activities, and for other reasons. This cooperation program also provides function-specific facilities such as environmental education, ecotourism, and agroforestry fields for each zone of the Gunma Ecological Park, so that it is projected to be used by pupils in surrounding schools, college students, researchers, local citizens, and other people.

6-3. Efficiency

Two long-term experts for the project will play the roles of planning and managing the cooperation activities. The plan is such that the project will be implemented as much as possible on condition that Brazilian resources will be used. Facilities and equipment will be entered not in a dispersed manner but in an efficient manner in order to make use of existing facilities and concentrate the facilities in the Gunma Ecological Park.

6-4. Impact

Emilio Goeldi Museum of Para (MPEG) and the Eastern Amazon Agricultural Research Center are not limited to the Para State but covers the entire Eastern Amazon. The information and website provided by the project may attract the attention of a wide range of the public. And it is considered possible to achieve the overall goal of promoting forest conservation through the Gunma Ecological Park widely in the Para State and its surroundings by announcing data about the Gunma Ecological Park through such nationwide databases as the Amazon Forest Inventory Network and cooperating with associations active in planting indigenous tree species such as the Timber Exporters Association of the State of Para (AIMEX) based in Belem.

6-5. Sustainability

The Gunma Ecological Park is owned by the Associacao Gunma Kenjin-Kai de Norte do Brazil and provided as a venue of activities according to the agreement made between the association and the Para State during the cooperation period. After the end of the cooperation project, it is highly likely that the Para State Government, Emilio Goeldi Museum of Para (MPEG), and other establishments will use that facility as a field of environmental education and research. However, concerning the expenses for maintaining the facilities, a managerial strategy should be set up so that admission fees and other charges will be collected from visitors to the Gunma Ecological Park and that the Parque will be able to become independent.

Attachment 1. Pre-evaluation table of the project

Project: The project for Forest Conservation and Environmental Education in the Eastern Amazon
Recipient country: Federative Republic of Brazil Target area: Municipio de Santa Barbara, Para State (about 50 km from the state capital of Belem)
Scheduled period of the project: January 17, 2004 through January 16, 2007
<p>I. Background against project request</p> <p>The Amazon region is home to the world's largest existing tropical forest. It occupies about 4 million square kilometers in Brazil alone (about 11 times as large as the area of Japan) and as much as about 6 million kilometers if the neighboring countries are included. The diverse biological species in this forest ecosystem are a precious natural resource that has no rival in the world. However, of these precious Amazon tropical forests of Brazil, it is reported that about 50 million cubic kilometers is deforested every year on the average. The cumulative area that had disappeared until 1997 was as large as 532,000 square kilometers and it is the largest in the Para State.</p> <p>In the early days of the 1990s, the Brazilian Government began to step up its policy of conserving the Amazon tropical rainforest. As a world-level drive, the World Bank worked as a coordinator and initiated the "O Programa Piloto para Protecao das Florestas Tropicais do Brasil" (PPG7) in 1995 according to the Houston Summit of 1990. However, the restraint on deforestation was not effective enough, and a drive is now being considered on Phase II of PPG7. The conservation policies for the Amazon tropical rainforest, including PPG7, is now being promoted with emphasis on the active participation of the state government, country hall, NGO, citizens, private companies, and various other players.</p> <p>On the other hand, the Associacao Gunma Kenjin-Kai de Norte do Brasil purchased 540 hectares of forest near Belem, the state capital, with the assistance of the Gunma Prefectural Office and other authorities in 1996 in order to conserve such Amazon tropical rainforest, and established a visitor center and an accommodation facility in 1997. The forest obtained by the Kenjin-Kai is conserved in a manner that has no rival in the neighborhood. This, together with the sufficient arrangement of the infrastructure, is expected to cause people to conserve the rainforest based on this "forest."</p> <p>The Para State Government thinks that the drive for the "Gunma Ecological Park" conforms to the environmental policy and expects it to help conserve, and contribute to the sustainable development of, the tropical rainforest in the Eastern Amazon. The Government then intends to step up the capacity of operation and management of the "Gunma Ecological Park" through technical cooperation with Japan and to conduct surveys and researches, technical development, and environmental education.</p>
<p>II. Implementers of the beneficiary country</p> <ol style="list-style-type: none"> (1) Executive Secretary of Science, Technology and Environment of the State of Para (SECTAM) (2) Emilio Goeldi Museum of Para (MPEG) (3) Brazilian Agricultural Research Corporation Agroforestry Research Center in Eastern Amazon (EMBRAPA)

III. Overview and targets of the project

(1) Overall goal

Effective forest and natural environmental conservation is Promoted in eastern Amazon areas.

(2) Project purpose

Activities of forest and natural environmental conservation are promoted in Para State.

(3) Outputs and activities

Output 1: Promote activities for the natural environment in the Para State.

1-1. Conduct a biodiversity survey necessary for environmental education.

1-2. Implement environmental education activities for local citizens, teachers, students, and pupils of elementary and junior high schools.

1-3. Improve exhibition and educational facilities and equipment of "the Gunma Ecological Park" for implementation of environmental education and ecotourism activities.

Output 2: Develop technologies for afforestation and agroforestry.

2-1. Develop technologies for afforestation and agroforestry

2-2. Extension technologies for afforestation and agroforestry among farmers..

Output 3: Step up information dissemination and public relations on the Amazon forests in the Para State.

3-1. Establish a homepage to disseminate information on activities in the Gunma Ecological Park.

3-2. Organize seminars and workshops on environment issues targeting schools, communities, and citizens.

(4) Inputs

[Japan]

■ Long-term experts (2 persons x 3 years)

Chief advisor / environmental instructor: 24M/M

Chief advisor / seedling and afforestation: 12M/M

Coordinator / agroforestry: 36M/M

■ Short-term experts as appropriate

• Environmental educational

• Forest conservation and afforestation

• Afforestation technology

• Crops Cultivation

• Ecotourism and other necessary sectors

■ Buildings and equipment

■ Materials, equipment, vehicles, office equipment

■ Acceptance of Counterpart Personnel

Environmental education, forest ecology, agro-forestry, etc.

[Brazil]

■ C/P

Project directors: 36M/M
Project managers: 36M/M
Environmental instructors: 31 persons
Forest ecology researchers: 4 persons
Agroforestry experts: 4 persons

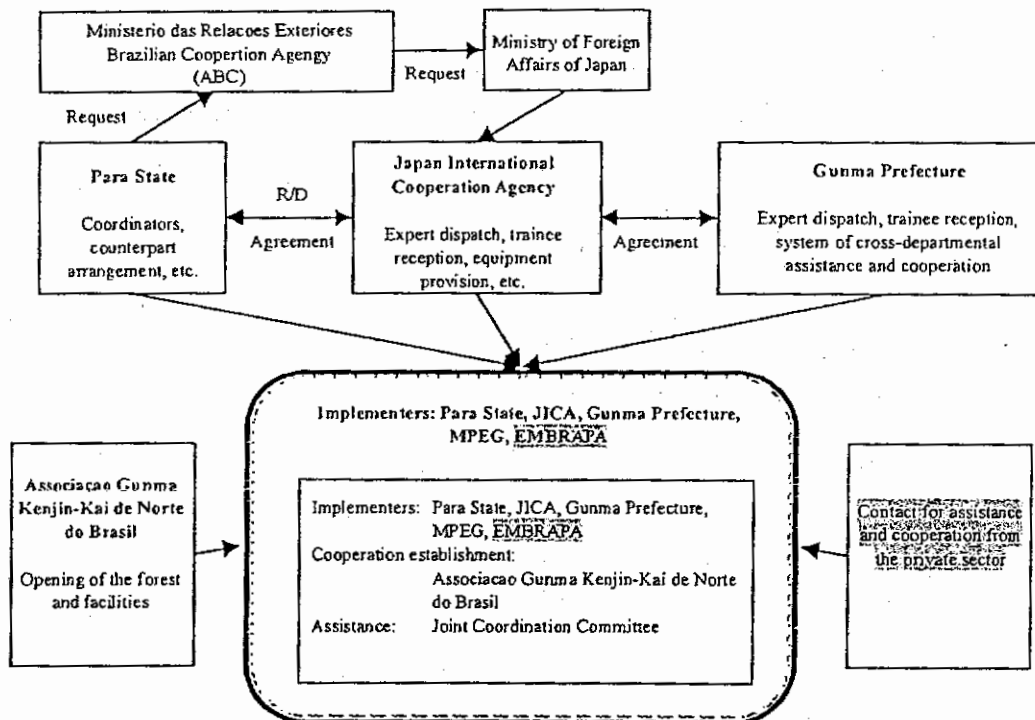
■ Facility: Project office (SECTAM)

■ Local cost: Administration expenses

(5) Implementation system

This project will use SECTAM, MPEG and EMBRAPA as C/P establishments, and will use the Gunma Ecological Park as the project site. The Japanese side will use the Gunma Prefectural Office as the "tie-up project."

Conceptual diagram of the implementation system



IV. Assessment results

(1) Relevance

The contents of the cooperation involved in this project conforms to the directions in such measures as promoting biodiversity conservation and the sustainable production system set forth in the "National Comprehensive Policy for the Legal Amazon" (1995), which is the basis for the Amazon policy of the Brazilian Government, and the Lula administration's "The Position of the Amazon in the Development of Brazil" (2002). The environmental education activities help promote environmental education forth in the "State Environmental Education Program: Guideline and Policy" (2002) of the Para State Government. This project is positioned as part of the ecosystem conservation program for "environmental conservation" of the important development challenges in Brazil's Country-specific Project Plan of JICA.

(2) Effectiveness

The conservation of the forest and natural environment centering on the Gunma Ecological Park is highly likely to achieve the project goals because the Parque is highly accessible, it has high value as a natural forest, it is much in demand from relevant Brazilian establishments regarding the contents of the activities, and for other reasons. This cooperation program also provides function-specific facilities such as environmental education, ecotourism, and agroforestry fields for each zone of the Gunma Ecological Park, so that it is projected to be used by pupils in surrounding schools, college students, researchers, local citizens, and other people.

(3) Efficiency

Two long-term experts for the project will play the roles of planning and managing the cooperation activities. The plan is such that the project will be implemented as much as possible on condition that Brazilian resources will be used. Facilities and equipment will be entered not in a dispersed manner but in an efficient manner in order to make use of existing facilities and concentrate the facilities in the Gunma Ecological Park.

(4) Impact

Emilio Goeldi Museum of Para (MPEG) and the Eastern Amazon Agricultural Research Center are not limited to the Para State but covers the entire Eastern Amazon. The information and website provided by the project may attract the attention of a wide range of the public. And it is considered possible to achieve the high-level goal of promoting forest conservation through the Gunma Ecological Park widely in the Para State and its surroundings by announcing data about the Gunma Ecological Park through such nationwide databases as the Amazon Forest Inventory Network and cooperating with associations active in planting indigenous tree species such as the Timber Exporters Association of the State of Para (AIMEX) based in Belem.

(5) Sustainability

The Gunma Ecological Park is owned by the Associacao Gunma Kenjin-Kai de Norte do Brazil and provided as a venue of activities according to the agreement made between the association and the Para State during the cooperation period. After the end of the cooperation project, it is highly likely that the Para State Government, Emilio Goeldi Museum of Para (MPEG), and other establishments will use that

facility as a field of environmental education and research. However, concerning the expenses for maintaining the facilities, a managerial strategy should be set up so that admission fees and other charges will be collected from visitors to the Gunma Ecological Park and that the Parque will be able to become independent.

V. External risk factors

- (1) The Brazilian Government will continue its policy of conserving the Amazon tropical rainforest.
- (2) Cooperation will continue to come from the Para State Government (such as forest protection, conservation, and security) and C/P establishments.
- (3) No quick changes will occur in the financial status of the participants.
- (4) The Gunma Ecological Park will not suffer catastrophic damage due to unexpected weather.

VI. Future assessment plan

- (1) Monitoring based on reports and other documents by the project team every six months
- (2) Yearly monitoring by the joint coordination committee
- (3) Assessment at the end of the project
- (4) Post-project assessment 3 years after the termination

Attachment 2: Project Design Matrix (PDM)

Project title: The project for Forest Conservation and Environmental Education in the Eastern Amazon
 Period: January 17, 2004 through January 16, 2007

Target groups: State citizens, researchers, teachers, pupils, agricultural producers of the target region
 Target region: Para State

Date: November 19, 2003

Project summary	Indicators	Means of obtaining the indicators	Constraints and external factors
[overall goal] Effective forest and natural environmental conservation is Promoted in eastern Amazon areas.	<ul style="list-style-type: none"> The increase rate in the deforested area of the Eastern Amazon stops. (Many of the cooperation projects in the conservation of the natural environment need decades to produce any effect. Their assessment indicators and methods should therefore be considered with a long-term outlook.) 	Report on the deforestation status of satellite images taken by the Instituto Nacional de Pesquisas Espaciais (National Institute for Space Research, INPE)	
[Project goal] Activities of forest and natural environmental conservation are promoted in Para State.	<ul style="list-style-type: none"> Contribution to the Para State Government, Emilio Goeldi Museum of Para (MPEG), Eastern Amazon Agricultural Research Center of the Empresa Brasileira de Pesquisa Agropecuaria (Brazilian Corporation of Agropecuarian Research), and other associations 	Annual reports of each organization	<ol style="list-style-type: none"> The policy of the environment conscious of Para State Government will not change. Governmental establishments, universities, NGOs, and private companies will participate more in the Gunma Ecological Park.
[Output] 1. Promote activities for the natural environment in the Para State. 2. Develop technologies for afforestation and agroforestry. 3. Step up information dissemination and public relations on the Amazon forests in the Para State..	<ol style="list-style-type: none"> Project that matches the results and balance of infrastructural development Numbers of seminars organized, demonstrative displays, and numbers of researchers Access frequency of web pages, frequency of seminars and workshops 	<ol style="list-style-type: none"> Project report Project report Homepage 	<ol style="list-style-type: none"> No quick decline will occur in the financial situation of the related organization.
[Activity] 1-1. Conduct a biodiversity survey necessary for environmental education. 1-2. Implement environmental education activities for local citizens, teachers, students, and pupils of elementary and junior high schools. 1-3. Improve exhibition and educational facilities and equipment of "the Gunma Ecological Park" for implementation of environmental education and ecotourism activities. 2-1. Develop technologies for afforestation and agroforestry 2-2. Extension technologies for afforestation and agroforestry among farmers.. 3-1. Establish a homepage to disseminate information on activities in the Gunma Ecological Park. 3-2. Organize seminars and workshops on environment issues targeting schools, communities, and citizens.	[Inputs] Japan: <ul style="list-style-type: none"> Long-term experts (2 persons x 3 years) Chief advisor / environmental education (24M/M) Chief advisor / seedling and afforestation (12 M/M) Coordinator / agroforestry (36M/M) Short-term experts as appropriate <ul style="list-style-type: none"> environmental educational Forest conservation and afforestation Afforestation technology Crops Cultivation Ecotourism and other necessary sectors <ul style="list-style-type: none"> Buildings and equipment Materials, equipment, vehicles, office equipment Acceptance of Counterpart Personnel Environmental education, studies of forest ecology, Agro-forestry, etc. 	Brazil <ul style="list-style-type: none"> Staff Project directors (36M/M) Project managers (36M/M) Environmental instructors: 31persons Forest ecology researchers: 4persons Agroforestry experts: 4persons Facility: Project office (SECTAM) Local cost: Administration expenses 	<ol style="list-style-type: none"> The Gunma Ecological Park will not suffer catastrophic damage due to unexpected weather. [Preconditions] <ol style="list-style-type: none"> There should be no opposition on the part of the local community. Governmental establishments, universities, NGOs, and private companies should cooperate in the activities of the Gunma Ecological Park.

Attachment 3: Plan of Operation(PO)

Project title: The project for Forest Conservation and Environmental Education in the Eastern Target groups: State citizens, researchers, teachers, pupils, agricultural producers of the target Date: November 19, 2003
 Period: January 17, 2004 through January 16, 2007 Target region: Para State

Activities	2004				2005				2006				Parties responsible	Implementers	Inputs	Expenses	Share of expenses
	I	II	III	IV	I	II	III	IV	I	II	III	IV					
I. Activities of environmental education in the Para State are promoted.																	
1-1. Conduct biodiversity surveys necessary for environmental education.																	
1-1-1 Conduct inventory survey of the fauna.													MPEG	Environmental education experts, environmental education C/P	Survey expenses (but the personnel expenses for MPEG surveyors will be borne by the		JICA/MPEG
1-1-2 Monitor and analyze the results of the inventory survey of the flora.																	
1-1-3 Prepare the guidebook.													Same as above	Same as above	Same as above		Same as above
1-2. Implement environmental education activities for local citizens, teachers, students, and pupils of elementary and junior high schools.																	
1-2-1 Implement existing environmental education programs in the Gunma Ecological Park.													SECTAM/MPEG	Same as above	Information collection, survey expenses		JICA/SECTAM/MPEG
1-2-2 Make materials for the environmental education based on environmental education activities for the surrounding local communities.													Same as above	Same as above	Information collection, survey expenses		Same as above
1-2-3 Compile teaching materials using the social and culture states of the surrounding communities and animal/plant samples													Same as above	Same as above	Information collection, survey expenses, expenses for creating teaching materials		Same as above
1-2-4 Provide education tours (setting of natural science exhibitions, video theaters, drama, and park tours).													Same as above	Same as above	Expenses for organizing workshops and seminars, expenses for educational tours		Same as above
1-3. Improve exhibition and educational facilities and equipment of "the Gunma Ecological Park" for implementation of environmental education and ecotourism activities.																	
1-3-1 Enhance and organize the "Ecotourism and Visitor Center" for the exhibition and education.													SECTAM/MPEG	Environmental education experts, environmental education C/P	Expenses for facility enhancement		JICA/SECTAM/MPEG
1-3-2 Set up an observation tower, forest footpath, front gate, parking lot, guide plates, and walkers' equipment (such as binoculars and signs).																	
1-3-3 Train interpreters for the Gunma Ecological Park.													Same as above	Same as above	Same as above		Same as above

2. Extension works of afforestation and agroforestry techniques in the Para State are promoted.

2-1. Develop technologies for afforestation and agroforestry.

2-1-1 Establish the zone for collecting seeds of the primeval forest in the Gunma Ecological Park, collect and select seeds.										EMBRAPA	Raising of seedlings, afforestation experts, EMBRAPA, C/P	Expenses for facility enhancement, expenses for technical development		JICA/EMBRAPA
2-1-2 Install fields of seedlings of useful timber tree species.										Same as above	Same as above	Same as above		Same as above
2-1-3 Install fields for displaying tropical fruit trees of Amazonian origin.										Same as above	Agroforestry experts, EMBRAPA, C/P	Expenses for facility enhancement, Information collection, survey expenses		Same as above
2-1-4 Install demonstrative fields based on the agroforestry system.										Same as above	Agroforestry experts, EMBRAPA, C/P	Expenses for organizing demonstrative fields		Same as above

2-2. Implement extension works of afforestation and agroforestry for farmers.

2-2-1 Provide seminars on production of seeds and seedlings and technologies for seed management.										EMBRAPA	Raising of seedlings, afforestation experts, EMBRAPA, C/P	Same as above		JICA/EMBRAPA
2-2-2 Provide seminars on technologies for afforestation of tropical forests and forest management.										Same as above	Same as above	Same as above		Same as above
2-2-3 Provide technical seminars on the agroforestry system.										Same as above	Agroforestry experts, EMBRAPA, C/P	Same as above		Same as above

3. Distribution of information and public relations regarding Amazon forests in the Para State are strengthened.

3-1 Establish a homepage to disseminate information on activities in the Gunma Ecological Park.										Chief advisors/SECTAM	Japanese experts, C/P	Information collection, survey expenses, expenses for creating homepages		JICA/SECTAM
3-2 Organize seminars and workshops on environmental issues targeting schools, communities and citizens.										SECTAM	Japanese experts, C/P	Expenses for organizing workshops and seminars		Same as above

RECORD OF DISCUSSIONS BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND AUTHORITIES CONCERNED OF
THE FEDERATIVE REPUBLIC OF BRAZIL
ON JAPANESE TECHNICAL COOPERATION
FOR THE PROJECT FOR FOREST CONSERVATION AND
ENVIRONMENTAL EDUCATION IN THE EASTERN AMAZON

Japan International Cooperation Agency (hereinafter referred to as 'JICA') exchanged views and had a series of discussions with the Brazilian authorities concerned on desirable measures to be taken by both Japanese and Brazilian Governments for successful implementation of the Project for Forest Conservation and Environmental Education in the Eastern Amazon in the Federative Republic of Brazil (hereinafter referred to as "the Project").

As a result of the discussions, and in accordance with the provisions of the Agreement on Technical Cooperation between the Government of Japan and the Government of the Federative Republic of Brazil signed in Brasilia on September 22, 1970 (hereinafter referred to as "the Agreement"), Coordinator for Technical Cooperation of Japan in Brazil and the Brazilian authorities concerned agreed to recommend to their respective governments the matters referred to in the document attached here to.

Brasilia, November 2003

Hiroshi Matsutani
Coordinator for Technical Cooperation
of Japan in Brazil
Japan International Cooperation Agency
Japan

Amb. Marco Cesar Meira Naslauskys
Director
Brazilian Cooperation Agency
Federative Republic of Brazil

Katsumi Otsuka
Senior Director
Problem Identification and Analyzation Task Force
Gunma Prefectural Government
Japan

Gabriel Siqueiro Gurreiro
Executive Secretary
Science, Technology and Environment of the Para State
Federative Republic of Brazil

Clayton Campanhola
Director - President
Brazilian Agricultural Research Corporation
Federative Republic of Brazil

Peter Mann de Toledo
Director
Emilio Goeldi Museum of the Para State
Federative Republic of Brazil

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of the Federative Republic of Brazil will implement the Project in cooperation with the Government of Japan.
2. The Project will be implemented in accordance with the Master Plan which is given in Annex I.

II. MEASURES TO BE TAKEN BY THE GOVERNMENT OF JAPAN

In accordance with the laws and regulations in force in Japan and the provisions of Article III of the Agreement, the Government of Japan will take, at its own expense, the following measures through JICA according to the normal procedures of its technical cooperation scheme.

1. DISPATCH OF JAPANESE EXPERTS

The Government of Japan will provide the services of the Japanese experts as listed in Annex II. The provision of Article IV- (1) of the Agreement will be applied to the above-mentioned experts and the experts will comply in accordance with Article IV-(1).

2. PROVISION OF MACHINERY AND EQUIPMENT

The Government of Japan will provide such machinery, equipment and other materials (hereinafter referred to as the Equipment) necessary for the implementation of the Project as listed in Annex III. The provision of Article IX- (1) of the Agreement will be applied to the Equipment.

3. TRAINING OF BRAZILIAN PERSONNEL IN JAPAN

The Government of Japan will receive the Brazilian personnel connected with the Project for technical training in Japan. The provision of Article III-(i) of the Agreement will be applied to the training.

III. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE FEDERATIVE REPUBLIC OF BRAZIL

1. In accordance with the laws and regulations in force in Brazil, the Government of the

Federative Republic of Brazil will take necessary measures to ensure that the self-reliant operation of the Project will be sustained during and after the period of Japanese technical cooperation, through full and active involvement in the Project by all related authorities, beneficiary groups and institutions.

2. In accordance with the provisions of Article IV of the Agreement, the Government of the Federative Republic of Brazil will ensure that the technologies and knowledge acquired by the Brazilian nationals as a result of the Japanese technical cooperation will contribute to the economic and social development of the Federative Republic of Brazil.
3. In accordance with the provisions of Article V, VI and VIII of the Agreement, the Government of the Federative Republic of Brazil will grant in the Federative Republic of Brazil privileges, exemptions and benefits to the Japanese experts referred to in II-1 above and their families.
4. In accordance with the provisions of Article IX of the Agreement, the Government of the Federative Republic of Brazil will take the measures necessary to receive and use the Equipment provided through JICA under II-2 above and equipment, machinery and materials carried in by the Japanese experts referred to in II-1 above.
5. The Government of the Federative Republic of Brazil will take necessary measures to ensure that the knowledge and experience acquired by the Brazilian personnel from technical training in Japan will be utilized effectively in the implementation of the Project.
6. In accordance with the provision of Article V-(1)-(ii) of the Agreement, the Government of the Federative Republic of Brazil will provide the services of Brazilian counterpart personnel and administrative personnel as listed in Annex IV.
7. In accordance with the provision of Article V-(1)-(i) of the Agreement, the Government of the Federative Republic of Brazil will provide the buildings and facilities as listed in Annex V.
8. In accordance with the laws and regulations in force in the Federative Republic of Brazil, the Government of the Federative Republic of Brazil will take necessary measures to supply or replace at its own expense machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the Equipment provided through JICA under II-2 above.

9. In accordance with the laws and regulations in force in the Federative Republic of Brazil, the Government of the Federative Republic of Brazil will take necessary measures to meet the running expenses necessary for the implementation of the Project.

IV. ADMINISTRATION OF THE PROJECT

1. The Director, Department of Environment Protection, Executive Secretariat of Science, Technology and Environment of the Para State (hereinafter referred to as 'SECTAM'), as the Project Director, will bear overall responsibility for the administration and implementation of the Project.
2. The Director, Environment Division, Department of Environment Protection, SECTAM, as the Project Manager, will be responsible for coordination of the managerial and technical matters of the Project.
3. The Japanese Chief Advisor will be responsible for coordination of activities of the Japanese experts and maintain close contact with the Project Director and the Project Manager on any matters pertaining to the implementation of the Project.
4. The counterpart personnel of SECTAM, Emilio Goerdi Museum of the Para State and the Brazilian Agricultural Research Corporation – Eastern Amazon listed in Annex IV will participate in the implementation of the Project under the coordination of the SECTAM.
5. The Japanese experts and the Brazilian counterpart personnel will make joint efforts to acquire successful results of the Project.
6. For the effective and successful implementation of technical cooperation for the Project, a Joint Coordinating Committee will be established whose functions and composition are described in Annex VI.

V. JOINT EVALUATION

Evaluation of the Project will be conducted jointly by the two governments through JICA and the Brazilian authorities concerned, during the last six months of the cooperation term in order to examine the level of achievement.

VI. CLAIMS AGAINST JAPANESE EXPERTS

In accordance with the provision of Article VII of the Agreement, the Government of the Federative Republic of Brazil undertakes to bear claims, if any arises, against the Japanese experts engaged in technical cooperation for the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Federative Republic of Brazil except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VII. MUTUAL CONSULTATION

There will be mutual consultation between the two governments on any major issues arising from, or in connection with this Attached Document.

VIII. MEASURES TO PROMOTE UNDERSTANDING OF AND SUPPORT FOR THE PROJECT

For the purpose of promoting support for the Project among the people of the Federative Republic of Brazil, the Government of the Federative Republic of Brazil will take appropriate measures to make the Project widely known to the people of the Federative Republic of Brazil.

IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be three(3) years from January 17th, 2004 through to January 16th, 2007.

ANNEX I	MASTER PLAN
ANNEX II	LIST OF JAPANESE EXPERTS
ANNEX III	LIST OF MACHINERY AND EQUIPMENT
ANNEX IV	LIST OF BRAZILIAN COUNTERPART AND ADMINISTRATIVE PERSONNEL
ANNEX V	LIST OF BUILDINGS AND FACILITIES
ANNEX VI	JOINT COORDINATING COMMITTEE

ANNEX I MASTER PLAN

1 Overall Goal

Effective forest and natural environmental conservation is promoted in eastern Amazon areas.

2 Project Purpose

Activities of forest and natural environmental conservation are promoted in Para State.

3 Outputs

- (1) Promote activities for the natural environment in the Para State.
- (2) Develop technologies for afforestation and agroforestry.
- (3) Step up information dissemination and public relations on the Amazon forests in the Para State.

4 Activities

- 1-1 Conduct biodiversity surveys necessary for environmental education.
- 1-2 Implement environmental education activities for local citizens, teachers students, and pupils of elementary and junior citizens high schools.
- 1-3 Improve facilities and equipment of "Gunma Ecological Park" for implementation of environmental education and ecotourism activities.
- 2-1 Develop technologies for afforestation and agroforestry.
- 2-2 Implement extension works of afforestation and agroforestry for farmers.
- 3-1 Establish a homepage to disseminate information on activities in the Gunma Ecological Park.
- 3-2 Organize seminars and workshops on environmental issues targeting schools, communities and the citizens.

In case in which the Master Plan should be changed due to the situation of the Project, both Governments will agree to and confirm the changes by exchanging Minutes of Meeting.

ANNEXII LIST OF JAPANESE EXPERTS

1. Long-Term Experts

(Two (2) full-time experts in the fields described below, will be dispatched, serving

exclusively for the Project.)

1. Chief Advisor
2. Coordinator
3. Expert in the technical field of:
 - a. Environmental Education
 - b. Agroforestry
 - c. Nursery Practice / Silviculture
 - d. Others when necessary

NOTE: Chief Advisor and Project Coordinator may serve concurrently as experts in one or two of the above-mentioned technical fields.

2. Short-Term Experts

(Short-term experts in the fields described below, may be dispatched depending on the needs as specified in the annual plan of the Project.)

- Environmental Education
- Afforestation
- Crops Cultivation
- Eco tourism

ANNEX III LIST OF MACHINERY AND EQUIPMENT

1. Machinery, equipment, tools, materials and their spare parts necessary for the implementation of the activities described in the Master Plan.
2. Vehicle(s) and their spare parts.
3. Office equipment and supplies.
4. Other machinery, equipment, tools, materials and their spare parts mutually agreed upon necessary.

ANNEX IV LIST OF BRAZILIAN COUNTERPARTS AND ADMINISTRATIVE PERSONNEL

1. Project Director

The Director, Department of Environment Protection, Executive Secretariat of Science, Technology and Environment of the State of Para (SECTAM)

2. Project Manager

The Director, Environment Division, Department of Environment Protection, Executive Secretariat of Science, Technology and Environment of the State of Para (SECTAM)

3. Counterpart Personnel

(SECTAM Staff)

- 1) The Coordinator, Environmental Education Division, Department of Environment Protection, SECTAM
- 2) Biologist, The Staff, Environmental Education Division, Department of Environment Protection, SECTAM
- 3) Art Educator, The Staff, Department of Environment Protection, SECTAM
- 4) Agronomist, The Staff, Conservation Unit Division, Department of Environment Protection, SECTAM
- 5) Geography, The Staff, Conservation Unit Division, Department of Environment Protection, SECTAM
- 6) Educator, The Staff, Conservation Unit Division, Department of Environment Protection, SECTAM

(MPEG Staff)

- 1) The Chief, Communication and Extension Division, MPEG
- 2) The Chief, Museology Division, MPEG
- 3) The Technical Staff, Museology Division, MPEG (7 educators and architect)
- 4) The Director, Zoology Division, MPEG
- 5) The Researcher, Zoology Division, MPEG (five people)
- 6) The Technical Staff, Zoology Division, MPEG (four people)

- 7) The Director, Botanical Division, MPEG
- 8) The Researcher, Botanical Division, MPEG (Two people)
- 9) The Technical Staff, Botanical Division, MPEG (Two people)

(EMBRAPA Staff)

- 1) The Researcher, Laboratory of Fruit Seed, EMBRAPA Eastern Amazon
- 2) The Researcher, Laboratory of Pomology, EMBRAPA Eastern Amazon
- 3) The Researcher, Laboratory of Plant Breeding, EMBRAPA Eastern Amazon
- 4) The Director, Department of Communication and Extension, EMBRAPA Eastern Amazon
- 5) The Researcher, Laboratory of Agrosilviculture, EMBRAPA Eastern Amazon
- 6) The Researcher, Laboratory of Forest Seed, EMBRAPA Eastern Amazon

4. Administrative Personnel

Administrative personnel, drivers and others to support the implementation of the Project.

And other personnel as mutually agreed upon.

ANNEX V LIST OF BUILDINGS AND FACILITIES

1. Office spaces for JICA experts in the buildings of SECTAM, MPEG and/or EMBRAPA Eastern Amazon.
2. Other necessary facilities, laboratory, scientific collections and study books, equipment and materials for the administration of the Project.
3. Facilities, lands and forests of Gunma Ecological Park, owned by Association of Gunma Kenjin-kai in the northern Brazil, and supported by Gunma Prefecture, Japan which are utilized for the Project according to the memorandum agreed among concerned organizations.

ANNEX VI JOINT COODINATING COMMITTEE

1. Functions

The Joint Coordinating Committee shall;

- (1) discuss and decide overall strategies in the management and coordination of the Project,
- (2) review and endorse the annual plan of the Project,
- (3) monitor and evaluate the progress of the Project, and
- (4) make decisions relevant to the overall management of the Project.

2. Compositions

The joint Coordination Committee shall be composed of;

- (1) Chairman: The Director, Department of Environment Protection, Science, Technology and Environment of the State of Para (SECTAM)
- (2) Members:
 - 1) Representative of Brazilian Cooperation Agency(ABC)
 - 2) Representative of Science, Technology and Environment of the State of Para
 - 3) Representative of Emilio Goeldi Museum of Para
 - 4) Representative of Brazilian Agricultural Research Corporation Agroforestry Research Center in Eastern Amazon
 - 5) Representative of Santa Barbara District Government
 - 6) JICA Experts
 - 7) Coordinator for Technical Cooperation of Japan in Brazil
 - 8) Others appointed by the Chairman
- (3) Observers:
 - 1) Official(s) of the Embassy of Japan
 - 2) Official(s) of the Consulate General of Japan in Belem

3. The Secretariat of the Project

The SECTAM will act as the Secretariat of the Project. The Secretariat will coordinate matters pertaining to the Project administration.

Annex III: Reference Translation of "the Record of Discussions (R/I
(Portuguese)

REGISTRO DE DISCUSSÕES ENTRE
A AGÊNCIA DE COOPERAÇÃO INTERNACIONAL DO JAPÃO
E AUTORIDADES DA REPÚBLICA FEDERATIVA DO BRASIL
SOBRE
A COOPERAÇÃO TÉCNICA JAPONESA PARA O
PROJETO DE CONSERVAÇÃO FLORESTAL E EDUCAÇÃO AMBIENTAL
NA AMAZÔNIA ORIENTAL

A Agência de Cooperação Internacional do Japão (doravante denominada "JICA") manteve contatos com autoridades brasileiras, visando troca de opiniões e discussões acerca de medidas a serem adotadas pelo governo brasileiro e japonês para a implementação harmônica do Projeto de Conservação Florestal e Educação Ambiental na Amazônia Oriental (doravante denominado "Projeto").

Como resultado das discussões e conforme previsto no Acordo Básico de Cooperação Técnica entre o Governo do Japão e o Governo da República Federativa do Brasil, assinado em Brasília, no dia 22 de setembro de 1970 (doravante denominado "Acordo Básico"), o Coordenador de Cooperação Técnica da JICA no Brasil e as autoridades brasileiras recomendam aos respectivos governos adoção das medidas contidas nos documentos anexos.

Brasília, de novembro de 2003.

Sr. Hiroshi Matsutani
Coordenador de Cooperação Técnica do Japão
no Brasil
Agência de Cooperação Internacional do Japão
(JICA)
Japão

Embaixador
Diretor,
Agência Brasileira de Cooperação (ABC)
República Federativa do Brasil

Sr. Katsumi Otsuka
Diretor
Força Tarefa para Identificação e Análise de
Problemas
Governo Provincial de Gunma
Japão

Sr. Gabriel Siqueiro Gurreiro
Secretário
Secretaria Executiva de Ciência, Tecnologia e
Meio Ambiente do Governo do Estado do Pará
(SECTAM)
República Federativa do Brasil

Dr. Clayton Campanhola
Diretor - Presidente
Empresa Brasileira de Pesquisa Agropecuária
(EMBRAPA)
República Federativa do Brasil

Dr. Peter Mann de Toledo
Diretor
Museu Paraense Emílio Goeldi
(MPEG)
República Federativa do Brasil

I. Cooperação entre Governos

1. O Governo da República Federativa do Brasil implementará o Projeto, em cooperação com o Governo do Japão.
2. O PROJETO será implantado de acordo com o Plano Diretor (Anexo I).

II. Providências de Responsabilidade do Governo Japonês

Respeitadas as normas e legislações vigentes Japão e o previsto no Artigo III do Acordo Básico, o Governo Japonês providenciará, às suas expensas, através da JICA, os itens abaixo, dentro do esquema convencional de Cooperação Técnica adotada por ela.

1. Envio de Peritos Japoneses

O Governo do Japão enviará peritos japoneses com base na lista incluso neste documento na forma de Anexo II. O envio de peritos e os procedimentos que os mesmos devem observar estão previstos no Artigo IV- (1) do Acordo Básico.

2. Doação de Máquinas e Equipamentos

O Governo do Japão fornecerá máquinas, equipamentos e outros materiais (doravante denominado "Equipamento") necessários à implementação do Projeto, conforme lista incluso neste documento em forma de Anexo III. A doação de equipamentos está prevista no Artigo IX do Acordo Básico.

3. Estágio de Técnicos Brasileiros no Japão

O Governo do Japão receberá técnicos brasileiros vinculados ao Projeto para estágio técnico no Japão. O estágio de técnico brasileiro no Japão está previsto no Artigo III - (1) do Acordo Básico.

III. Providências de Responsabilidade do Governo Brasileiro.

1. Respeitadas as normas e legislações vigentes no Brasil, o governo brasileiro providenciará medidas necessárias para a implementação e operação auto-sustentável do Projeto durante e depois do período de Cooperação Técnica japonesa, através do envolvimento efetivo e ativa participação pessoal e institucional das organizações envolvidas e beneficiárias do Projeto.
2. De acordo com o Artigo IV do Acordo Básico, o governo brasileiro tomará providências para que a tecnologia e conhecimento adquiridos pelos técnicos brasileiros em decorrência da implementação da cooperação técnica com o Japão sejam efetivamente potencializados em prol do desenvolvimento econômico e social do Brasil.
3. De acordo com o Artigo V, VI e VII do Acordo Básico, o governo brasileiro assegurará benefícios, isenções e privilégios aos peritos japoneses listados no Anexo II-1, bem como a seus familiares.

4. De acordo com o Artigo IX do Acordo Básico, o governo brasileiro adotará medidas necessárias para importar e utilizar plenamente os equipamentos que serão doados pela JICA dentro do Projeto, conforme item II – 2 acima, e materiais, equipamentos e máquinas trazidos pelos peritos mencionados no item II – 1 acima.
5. O governo brasileiro tomará medidas necessárias para assegurar a aplicação efetiva dos conhecimentos e experiências adquiridos pelos técnicos brasileiros através de estágio no Japão.
6. De acordo com o Artigo V – (1)-(II) do Acordo Básico, o governo brasileiro aloca pessoal técnico em forma de contrapartes do Projeto e funcionários administrativos de acordo com a lista do Anexo IV.
7. De acordo com o Artigo V – (1)-(I) do Acordo Básico, o governo brasileiro providenciará instalações físicas e outras facilidades para o Projeto, conforme especificado no Anexo V.
8. Respeitadas as normas e legislações vigentes no Brasil, o governo brasileiro adotará medidas necessárias para fornecer e substituir, às suas expensas, máquinas, equipamentos, instrumentos, veículos, ferramentas, peças sobressalentes e qualquer outro material necessário para o andamento do Projeto, exceto aqueles que serão deados pela JICA e previsto no item II – 2 acima.
9. Respeitadas as normas e legislações vigentes no Brasil, o governo brasileiro providenciará recursos necessários para o custeio de despesas correntes do Projeto.

IV. Gerenciamento do Projeto

1. O Diretor do Departamento de Proteção Ambiental da Secretaria Executiva de Ciência, Tecnologia e Meio Ambiente do Governo do Estado do Pará (doravante denominado “SECTAM”) será o Diretor do Projeto e terá a responsabilidade geral pela administração e implementação do Projeto.
2. O Coordenador da Divisão de Meio Ambiente do Departamento de Proteção Ambiental da SECTAM, será o Gerente do Projeto e terá a incumbência de responder por assuntos técnicos e administrativos do Projeto.
3. O Conselheiro Chefe dos Peritos Japoneses será o responsável pela coordenação das atividades dos peritos japoneses e manterá contato permanente com Diretor do Projeto e Gerente do Projeto em relação aos assuntos pertinentes à implementação do Projeto.
4. Os contrapartes brasileiros da SECTAM, Museu Paraense Emílio Goeldi, Embrapa Amazônia Oriental listados no Anexo IV, participarão da implementação do Projeto sob a coordenação da SECTAM.
5. Os peritos japoneses e os contrapartes brasileiros envidarão esforços conjuntos em prol da implementação harmônica do Projeto.

6. Para a implementação efetiva e bem sucedida da cooperação técnica, será instalado Comitê de Coordenação Conjunta, cuja composição e incumbências estão descritas no Anexo VI.

V. Avaliação Conjunta

A avaliação do projeto será realizada em conjunto pelos dois países, através da JICA e do órgão contraparte brasileiro, em dois momentos. Uma na fase intermediária da implementação do Projeto e outra seis meses antes do término da cooperação, a fim de analisar o grau de implementação.

VI. Procedimentos contra Peritos Japoneses

De acordo com o Artigo VII do Acordo Básico, o governo brasileiro deverá formalizar reclamações quanto aos procedimentos dos peritos japoneses engajados no Projeto, ou no desempenho das suas funções oficiais em território nacional, exceto por atos decorrentes de conduta imprópria proposital ou negligência grave dos peritos japoneses.

VII. Consulta Mútua

Haverá consulta mútua entre os dois Governos sobre qualquer questão importante que surja em relação aos documentos em anexo.

VIII. Medidas para promoção de entendimento e suporte ao Projeto

Visando atrair simpatia e apoio da população local ao Projeto, o governo brasileiro tomará medidas necessárias para a divulgação do Projeto junto às comunidades.

IX. Termo de Cooperação

A duração da cooperação técnica, de acordo com o Documento Anexo será de três (3) anos, iniciando-se em 15 de janeiro de 2004 e encerrando-se em 14 de janeiro de 2007.

Anexo I	Plano Diretor
Anexo II	Lista dos Peritos Japoneses
Anexo III	Lista de Máquinas e Equipamentos
Anexo IV	Lista de Contrapartes Brasileiros e Pessoal Administrativo
Anexo V	Lista de Instalações e Facilidades
Anexo VI	Comitê de Coordenação Conjunta

ANEXO I

PLANO DIRETOR

1. Objetivo Superior do Projeto

Promoção efetiva da conservação florestal e ambiental da Amazônia Oriental.

2. Objetivo do Projeto

Serão promovidas, no Estado do Pará, atividades relativas à conservação da floresta e do meio ambiente.

3. Resultados do Projeto

- (1) Serão promovidas atividades de educação ambiental no Estado do Pará;
- (2) Serão promovidas difusão de tecnologias de reflorestamento e sistema agroflorestal no Estado do Pará;
- (3) Serão fortalecidas atividades de divulgação e comunicação sobre a floresta amazônica do Estado do Pará.

4. Atividades do Projeto

- 1-1 Realizar pesquisa de biodiversidade visando a educação ambiental.
- 1-2 Implementar atividades de educação ambiental para a população local, professores e estudantes (inclusive de ensino fundamental);
- 1-3 Estruturar instalações para exposição e educação visando o ecoturismo e a educação ambiental e dotar o Parque Ecológico de Gunma de infra-estruturas;
- 2-1 Desenvolver tecnologias para reflorestamento e sistema agroflorestal;
- 2-2 Difundir a tecnologia de reflorestamento e agrofloresta para os agricultores;
- 3-1 Criar "home page" para divulgação de informações acerca das atividades desenvolvidas no "Parque Ecológico de Gunma";
- 3-2 Realizar seminários e workshops com o tema "meio ambiente" tendo como alvo escolas, comunidade local e população em geral.

No caso de necessitar alterações no Plano Diretor durante o andamento do Projeto, os Governos envolvidos deverão buscar acordo e consenso e confirmar as mudanças através da assinatura de minutas de reunião.

ANEXO II

LISTA DOS PERITOS JAPONESSES

1. Peritos Japoneses de Longa Duração
(Dois peritos para atuação em tempo integral para as áreas abaixo descritos)

1. Conselheiro Chefe
2. Coordenador Administrativo
3. Peritos para seguintes áreas:
 - a. Educação Ambiental;
 - b. Sistemas Agro-Florestais;
 - c. Produção de Viveiros /Silvicultura;
 - d. Outras, de acordo com a necessidade.

NOTA: O Conselheiro Chefe e o Coordenador Administrativo do Projeto acumulará funções como peritos em algumas das áreas acima mencionadas.

2. Peritos Japoneses de Curta Duração
(Peritos de curta duração nas áreas descritas abaixo, serão enviados de acordo com a necessidade conforme especificado no Plano Anual do Projeto)

- Educação Ambiental
- Reflorestamento;
- Cultivos de Produtos Agrícolas;
- Eco-turismo.

ANEXO III

LISTA DE MÁQUINAS E EQUIPAMENTOS

1. Equipamentos, máquinas, ferramentas, materiais e peças sobressalentes necessários para a implementação das atividades previstas no Plano Diretor.
2. Veículo(s) e peças sobressalentes;
3. Material de escritório;
4. Outros equipamentos, maquinários, ferramentas, materiais e peças sobressalentes considerados necessários por ambos lados.

ANEXO IV

LISTA DE CONTRAPARTES E PESSOAL ADMINISTRATIVO BRASILEIRO

1. Diretor do Projeto

Diretor da Diretoria de Meio Ambiente da SECTAM

2. Gerente do Projeto

Coordenador da Coordenadoria de Proteção Ambiental da Diretoria de Meio Ambiente da SECTAM

3. Contrapartes

(SECTAM)

- 1) Chefe da Divisão de Estudos e Educação Ambiental da Diretoria de Meio Ambiente, SECTAM
- 2) Biólogo da Divisão de Estudos e Educação Ambiental da Diretoria de Meio Ambiente, SECTAM
- 3) Arte – Educador da Diretoria de Meio Ambiente, SECTAM
- 4) Agrônomo da Divisão de Unidades de Preservação e Conservação, Diretoria de Meio Ambiente, SECTAM
- 5) Geógrafo da Divisão de Unidades de Preservação e Conservação, Diretoria de Meio Ambiente, SECTAM
- 6) Educador da Divisão de Unidades de Preservação e Conservação, Diretoria de Meio Ambiente, SECTAM

(Museu Paraense Emílio Goeldi Museum (MPEG))

- 1) Chefe da Coordenação de Comunicação e Extensão, Museu Paraense Emílio Goeldi (doravante denominado "MPEG")
- 2) Chefe da Coordenação de Museologia, MPEG
- 3) Técnicos da Coordenação de Museologia, MPEG (7 educadores e 1 arquiteto)
- 4) Chefe da Coordenação de Zoologia, MPEG
- 5) Pesquisadores da Coordenação de Zoologia, MPEG (5 pesquisadores)
- 6) Técnicos da Coordenação de Zoologia, MPEG (4 técnicos)
- 7) Chefe da Coordenação de Botânica, MPEG
- 8) Pesquisadores da Coordenação de Botânica, MPEG (2 pesquisadores)
- 9) Técnicos da Coordenação de Botânica, MPEG (2 técnicos)

(Empresa Brasileira de Pesquisa Agropecuária da Amazônia Oriental (CPATU))

- 1) Pesquisador do Laboratório de Sementes de Fruits, Empresa Brasileira de Pesquisa Agropecuária da Amazônia Oriental (doravante denominado de "CPATU")
- 2) Pesquisador do Laboratório de Fruticultura, CPATU
- 3) Pesquisador do Laboratório de Produção de Plantas, CPATU
- 4) Chefe do Departamento de Comunicação e Extensão, CPATU
- 5) Pesquisador do Laboratório de Agrosilvicultura, CPATU
- 6) Pesquisador do Laboratório de Sementes de Floresta, CPATU

ANEXO V

LISTA DE INSTALAÇÕES E FACILIDADES

1. Escritórios para peritos da JICA no interior do prédio da SECTAM, MPEG e/ou EMBRAPA Amazônia Oriental.
2. Outras facilidades necessárias, laboratórios, coleções científicas e didáticas, equipamentos e materiais para a administração do Projeto.
3. Instalações, terra e floresta do Parque Ecológico de Gunma, de propriedade da Associação Gunma Kenjin-kai do Norte do Brasil que conta com o apoio do Governo da Província de Gunma, Japão, que serão utilizadas pelo Projeto com base no memorando acordado entre as organizações envolvidas.

ANEXO VI

COMITÊ DE COORDENAÇÃO CONJUNTA

1. Funções

É incumbência do Comitê de Coordenação Conjunta;

- (1) Discutir e tomar decisões acerca de estratégias para o gerenciamento e coordenação do Projeto,
- (2) Revisar e homologar o planejamento anual do Projeto,
- (3) Monitorar e avaliar o andamento do Projeto, e
- (4) Decidir sobre questões relevantes em relação ao gerenciamento do Projeto.

2. Composição

O Comitê de Coordenação Conjunta será composta da seguinte forma:

(1) Presidente: Diretor do Departamento de Proteção do Meio Ambiente, SECTAM

(2) Membros:

- 1) Representante da ABC
- 2) Representante da SECTAM
- 3) Representante do MPEG
- 4) Representante da EMBRAPA
- 5) Representante do Município de Santa Bárbara
- 6) Peritos Japoneses
- 7) Coordenador de Cooperação Técnica do Japão no Brasil
- 8) Outras pessoas nomeadas a critério do Presidente

(3) Observadores:

- 1) Representante da Embaixada do Japão no Brasil
- 2) Representante do Consulado do Japão de Belém

3. Secretaria do Projeto

A SECTAM desempenhará o papel de Secretaria do Projeto. A Secretaria coordenará os trabalhos pertinentes à administração do Projeto.

MEMORANDO PARA UTILIZAÇÃO DE INSTALAÇÕES DO PARQUE ECOLÓGICO DE GUNMA

Finalidade

Cláusula Primeira - Este memorando tem por finalidade, fixar normas para correta utilização das áreas de terra, edificações, instalações e demais benfeitorias existente no PARQUE ECOLÓGICO DE GUNMA de propriedade da Associação Gunma Kenjinkai do Norte do Brasil, para execução do Projeto mencionado na Cláusula Segunda.

Termos Usados

Cláusula Segunda - São denominados neste Memorando:

- 1) Projeto: Projeto de Conservação Florestal e Educação Ambiental na Amazônia Oriental que será executado pela SECTAM e a JICA com a participação do MPEG e EMBRAPA Amazônia Oriental, a fim de desenvolver as atividades de preservação do meio ambiente da natureza e das florestas no Estado do Pará, conforme a Ata da Reunião que serão assinados pelos representantes da JICA, Governo Provincial de Gunma, Governo do Estado do Pará através da SECTAM e da ABC (Agência Brasileira de Cooperação) do Governo Federal.
- 2) Responsáveis do Projeto: O Coordenador do lado Brasileiro (SECTAM) e o Coordenador do lado Japonês (JICA) na execução do Projeto, conforme está previsto na Ata da Reunião mencionada no item 1) acima,
- 3) Áreas e Instalações: as áreas de terra de 540 ha, edificações e benfeitorias do Parque Ecológico de Gunma, de propriedade da Associação Gunma Kenjinkai do Norte do Brasil, localizado no Município de Santa Bárbara, Estado do Pará.
- 4) Associação: Associação Gunma Kenjinkai do Norte do Brasil

Uso das áreas e instalações

Cláusula Terceira: Os responsáveis do Projeto utilizarão as áreas e instalações do Parque Ecológico de Gunama exclusivamente para execução do Projeto, não podendo utilizá-las para outros fins.

2. Os responsáveis do projeto, deverão apresentar por escrito para Associação, o Plano de Utilização das Áreas e Instalações, e obter autorização prévia desta, procedendo da mesma maneira no caso de alterações do Plano.
3. Os responsáveis do projeto só poderão efetuar, quando forem necessários, reformas, instalação ou retirada de equipamentos e outros atos semelhantes no Parque Ecológico de Gunma, mediante a autorização prévia e por escrito da Associação.
4. Se ocorrer destruição total ou parcial das instalações no Parque Ecológico

de Gunma, ou danos a terceiros, decorrentes do seu uso, os responsáveis do Projeto do lado brasileiro e japonês comunicarão imediatamente à Associação, Assumindo às suas custas a inteira responsabilidade por reparação dos prejuízos, de acordo com orientações da Associação.

Construção de novas benfeitorias

Cláusula Quarta: Poderão ser construídas novas benfeitorias dentro do Parque Ecológico de Gunma, se forem necessárias para execução do Projeto, dependendo, porém, de um acordo por escrito entre os responsáveis do Projeto e a Associação.

2. Os responsáveis do Projeto apresentarão para a Associação, o projeto de construção de novas benfeitorias, inclusive, forma de administração, devendo desta obter autorização prévia.

3. Serão aplicadas as normas previstas na Cláusula Terceira para novas benfeitorias construídas.

4. O direito de propriedade das novas benfeitorias será discutido entre a JICA, Governo do Estado do Pará e a Associação até o término da execução do Projeto.

Utilização de alojamentos

Cláusula Quinta: As pessoas vinculadas ao Projeto poderão utilizar os alojamentos do Parque Ecológico de Gunma, mediante o pagamento das tarifas de hospedagem fixadas pela Associação.

Despesas de telecomunicação, energia e água

Cláusula Sexta: Os responsáveis do Projeto são responsáveis pelo pagamento das despesas de telecomunicação, energia elétrica e água utilizadas na execução do Projeto, conforme deliberações entre órgãos responsáveis pelo Projeto, e ainda, o que constar em atas de reunião para discussões do Projeto.

Segurança e vigilância

Cláusula Sétima: O responsável do Projeto do lado brasileiro será responsável pela segurança e vigilância do local do Projeto até o término de execução do Projeto.

2. O responsável do Projeto do lado brasileiro solicitará, na medida de necessidade, à Polícia Militar do Estado do Pará, o reforço de segurança ao Parque Ecológico de Gunma.

3. O responsável do Projeto do lado japonês poderá dispor às suas custas do pessoal de segurança próprio, se julgá-lo necessário para maior segurança de quem trabalham na execução do Projeto.

Administrador do Parque

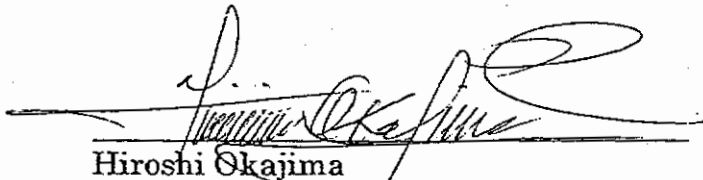
Cláusula Oitava: A Associação manterá um administrador próprio e permanente no Parque Ecológico de Gunma.

Deliberações entre as partes

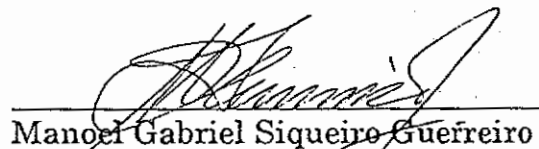
Cláusula Nona: Os assuntos não previstos neste Memorando, serão decididos, na medida de necessidade, mediante deliberações entre as partes.

Este Memorando entrará em vigor na data em que for assinados pelos representantes dos órgãos responsáveis pelo Projeto e da Associação Gunma Kenjinkai do Norte do Brasil e terá validade até a data do término definitivo da execução do Projeto.

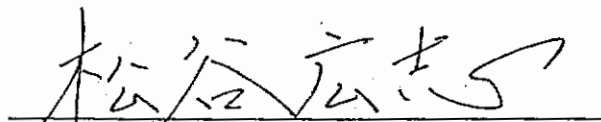
Belém, 20 de Novembro de 2003



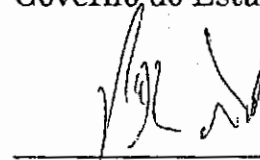
Hiroshi Okajima
Presidente da Associação Gunma
Kenjin-kai do Norte do Brasil




Manoel Gabriel Siqueiro Guefreiro
Secretário Executivo
Secretaria Executiva de Ciência,
Tecnologia e Meio Ambiente
Governo do Estado do Pará



Hiroshi Matsutani
Coordenador para Cooperação Técnica
no Brasil
Agência de Cooperação Internacional do
Japão
Governo do Japão



Peter Mann de Toledo
Diretor
Musei Paraense Emílio Goeldi
República Federativa do Brasil



Tatiana Deane de Abreu Sá
Diretor Geral
Empresa Brasileira de Pesquisa
Agropecuária
Centro de Pesquisas Agroflorestais da
Amazônia Oriental
República Federativa do Brasil

「アマゾン群馬の森」の関連施設の使用に関する覚書

（目的）

第1条 この覚え書きは、第2条に定めるプロジェクトに関連して、在北伯群馬県人会が所有する「アマゾン群馬の森（以下「群馬の森」と略す。）」の土地、建物及び付帯施設を適正に使用するために必要な事項を定めることを目的とする。

（定義）

第2条 この覚え書きにおいて、次の次号に掲げる用語の意義は、当該各号に定めるところによる。

（1） 東部アマゾン森林保全・環境教育計画（以下、プロジェクトと呼ぶ。）

2003年11月20日に JICA、群馬県、SECTAM 及びブラジル連邦政府国際協力庁（ABC）により署名された討議議事録に基づき、JICA と SECTAM が MPEG 及び EMBRAPA AMAZÔNIA ORIENTAL の参加と協力を得て、パラ州の森林・自然環境保全活動の促進を目的として実施するプロジェクトをいう。

（2） プロジェクト責任者

上記（1）の討議議事録に定めるプロジェクト・ディレクター及び日本側チーフアドバイザーとする。

（3） 在北伯群馬県人会がパラ州サンタバーバラ郡に所有する 540 ヘクタールの土地、建物及び付帯施設（以下「関連施設」と略す。）とする。

（関連既存施設の利用）

第3条 プロジェクト責任者は、「群馬の森」の関連施設をプロジェクトの実施のために使用し、その他の用途に使用しない。

2 プロジェクト責任者は、利用開始前に施設利用計画を文書で在北伯群馬県人会に提示し、予め了認を得ることとする。これを変更する場合も同様とする。

3 プロジェクト責任者は、プロジェクト実施のために「群馬の森」の関連施設において、修繕、機材の設置・撤去等その他の行為を行う場合には、在北伯群馬県人会から文書による許可を取付けるものとする。

4 関連施設内の全部又は一部を破壊した時、または使用により第3者に損害を与えた時は、日伯双方のプロジェクト責任者は、すみやかに在北伯群馬県人会に報告し、その提示を受け自己負担及び責任により一切を解決するものとする。

（新規施設の建設）

第4条 プロジェクト責任者と在北伯群馬県人会が合意した場合は、プロジェクトの実施のために、新規施設を建設することができるものとする。

2 プロジェクト責任者は、新規施設建設及び管理計画を在北伯群馬県人会に提示し、予め許可を得ることとする。

3 その他の条件については、第3条と同様とする。

4 新規施設の所有権については、プロジェクト終了時にJICA、パラ州政府及び在北伯群馬県人会との間で協議を行い、決定することとする。

（宿泊施設の利用）

第5条 プロジェクト関係者が「群馬の森」の宿泊施設を利用する場合には、在北伯群馬県人会が定める宿泊料金を同会に支払うこととする。

（通信回線使用料、電気・水道料金の分担）

第6条 プロジェクト責任者は、プロジェクト実施により発生する通信回線使用料、電気・水道料金をプロジェクトの討議議事録及び日伯の関係機関による協議結果に基づき、日伯双方で分担することとする。

（安全対策）

第7条 伯のプロジェクト責任者は、プロジェクト実施中の安全対策に関する責任を負う。

2 伯のプロジェクト責任者は、安全対策のため、必要に応じ、州政府軍警察に対し「群馬の森」に対する警備の強化を要請するものとする。

3 日本側プロジェクト責任者は、安全対策のため、必要に応じ、自己の負担により、警備員の配置を行うことができるものとする。

（管理責任者の配置）

第8条 在北伯群馬県人会は「群馬の森」の常勤の管理責任者を配置する。

（相互協議）

第9条 本書に定めない事項については、必要に応じ、当事者間による協議の上、さだめるものとする。

附則

この覚え書きは、プロジェクト関係機関及び在北伯群馬県人会の代表者による署名の日が発効し、第2条に規定する計画が終了する日に失効する。