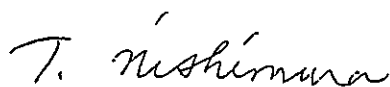


添付資料

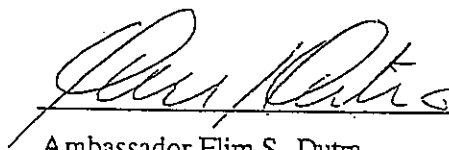
SCOPE OF WORK  
FOR  
MASTER PLAN STUDY  
ON  
DEGRADED LAND RESTORATION IN THE STATE OF PARÁ  
IN  
THE FEDERATIVE REPUBLIC OF BRAZIL

AGREED UPON BETWEEN  
GOVERNMENT OF THE STATE OF PARÁ,  
BRAZILIAN COOPERATION AGENCY  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY

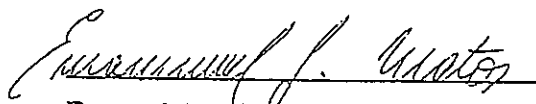
BELÉM, 9 DECEMBER 1999



Mr. Tetsuo NISHIMURA  
Leader,  
Preparatory Study Team,  
Japan International Cooperation Agency



Ambassador Elim S. Dutra  
General Director,  
Brazilian Cooperation Agency ( ABC )



Emanuel Aresti Santana Gonçalves Matos  
Executive Secretary of Science, Technology  
and Environment, SECTAM

## I. INTRODUCTION

In response to the request of the Government of Federative Republic of Brazil ( hereinafter referred to as " the Government of Brazil" ), the Government of Japan has decided to conduct the Master Plan Study on Degraded Land Restoration in the State of Para ( hereinafter referred to as " the Study " ), in accordance with the Basic Agreement on Technical Cooperation between the Government of Japan and the Government of Brazil, signed in Brasilia on September 22, 1970 ( hereinafter referred to as " the Basic Agreement" ).

Accordingly, Japan International Cooperation Agency ( hereinafter referred to as " JICA " ), the official agency responsible for the implementation of the technical cooperation programs of the Government of Japan, Brazilian Cooperation Agency ( hereinafter referred to as "ABC" ) and Executive Secretary of Science, Technology and Environment, the State of Pará ( hereinafter referred to as "SECTAM" ), the executing agency responsible for the implementation of the technical cooperation for the Study, will undertake the Study in close cooperation with the other Brazilian authorities concerned.

The present document sets forth the Scope of Work with regard to the Study.

## II. OBJECTIVES OF THE STUDY

The objectives of the Study are ;

1. To formulate a master plan on degraded land restoration, oriented to conserve natural forests, in the State of Para, which includes the following;

- (1) Indigenous forest restoration ;
- (2) Tree plantation for forest products;
- (3) Agroforestry.

2. To carry out, in the course of the Study, technology transfer to the Brazilian counterpart personnel through on-the-job training.

## III. STUDY AREA

The Study area shall cover administrative micro region of Marabá municipality with an area of 22,365 km<sup>2</sup>, which includes Brejo Grande do Araguaia, Marabá, Palestina do Pará, São Domingos do Araguaia and São João de Araguaia.

## IV. SCOPE OF THE STUDY

In order to achieve the objectives mentioned above, the Study shall cover the following items;

1. to collect and analyze the relevant existing data and information through field survey on the following; *E.M.*

(1) natural conditions including,

- topography;
- meteorology and hydrology;
- geology;
- soils;
- vegetation;
- tree species;
- others.

(2) socio-economic conditions including,

- population;
- labor;
- household income;
- industrial structure;
- education;
- health;
- others.

(3) market of forestal and agricultural products conditions including,

- marketable products;
- storage;
- processing;
- transportation;
- others.

(4) forestal and agricultural conditions including,

- policy;
- credit and extension;
- natural forest management;
- land use;
- land tenure;
- tree plantation, agroforestry, farming and pastoral practices ;
- farmer's organization;
- others.

2. to extract degraded land analyzing LANDSAT-TM and RADARSAT image. *E.M.*

3. to prepare a degraded land map at scale of 1/100,000 for the study area.
4. to identify potentials, problems and constraints against the degraded land restoration in the study area.
5. to prepare a degraded land restoration plan map at scale of 1/100,000 for the study area.
6. to formulate the master plan of;
  - (1) characterization of degraded land for restoration into some types;
  - (2) land use methodology of each type;
  - (3) degraded land restoration plan such as indigenous forest restoration, tree plantation for forest products and agroforestry;
  - (4) selection of projects according to priority;
  - (5) implementation schedule;
  - (6) recommendations about policy to promote projects, including training, environmental education and credit.
7. to assess the master plan ( technical, social, institutional, and of costs and benefits calculation ).

## V. STUDY SCHEDULE

The Study will be carried out in accordance with the attached tentative schedule (See ANNEX II ).

## VI. REPORTS

JICA shall prepare and submit the following reports to the Government of Brazil.

### 1. Inception Report

Thirty (30) copies in Portuguese at the commencement of the first field work

### 2. Progress Report

Thirty (30) copies in Portuguese at the end of the second field work.

### 3. Interim Report

Thirty (30) copies in Portuguese at the commencement of the third field work.

### 4. Draft Final Report

Thirty (30) copies in Portuguese at the forth field work. The Government of Brazil will provide its comments on the Draft Final Report to JICA within one (1) month after receipt of the Draft Final Report.

### 5. Final Report

Fifty (50) copies in Portuguese and ten (10) copies in English within two (2) months after receipt of comments on the Draft Final Report.

In addition to the above reports, the followings are to be submitted to the Government of Brazil.

6. Map ( 15 sets of original and digital data )

1) Degraded land map at scale of 1/100,000 for the study area

2) Degraded land restoration map at scale of 1/100,000 for the study area

## VII. UNDERTAKING OF BRAZILIAN SIDE

1. The Government of Federative Republic of Brazil shall accord privileges, immunities and other benefits to the Japanese study team (hereinafter referred to as "the Team" ) in accordance with the Basic Agreement;

(1) to secure the safety of the Team,

(2) to permit the members of the Team to enter, leave and stay in the Federative Republic of Brazil for the duration of their assignment therein, and exempt them from foreign registration requirements and consular fees,

(3) to exempt the members of the Team from taxes, duties and other charges on equipment, machinery and other materials brought into the Federative Republic of Brazil for the conduct of the Study,

(4) to exempt the members of the Team from income tax and other charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Team for their services in connection with the implementation of the Study,

(5) to provide necessary facilities to the Team for the remittance as well as utilization of the funds introduced into the Federative Republic of Brazil from Japan in connection with the implementation of the Study,

(6) to secure permission for entry into relevant areas for the implementation of the Study,

(7) to secure permission for the Team to take all data and documents out of the Federative Republic of Brazil to Japan, in accordance with laws and regulations in force in Brazil, for analysis during the implementation of the Study, and

(8) to provide medical services as needed. Its expense will be chargeable on the members of the Team.

2. The Brazilian side shall bear claims, if any arises, against the members of the Team resulting from, occurring in the course of, or otherwise connected with, the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the members of the Team.

3. SECTAM shall act as the counterpart agency to the Team and also act as coordinating body in relation with other governmental and non-governmental organizations concerned for smooth implementation of the Study. *E. M. 7. N*

4. SECTAM shall, at its own expenses, provide the Team with the following, in cooperation with other relevant organizations concerned;

- (1) available data and information related to the Study,
- (2) full time counterpart personnel, technical supporting staff, clerical staff, etc.
- (3) suitable office spaces with necessary equipment and furniture in Marabá,
- (4) appropriate number of vehicles with drivers, and
- (5) credentials or identification cards.

#### VIII. UNDERTAKING OF JAPANESE SIDE

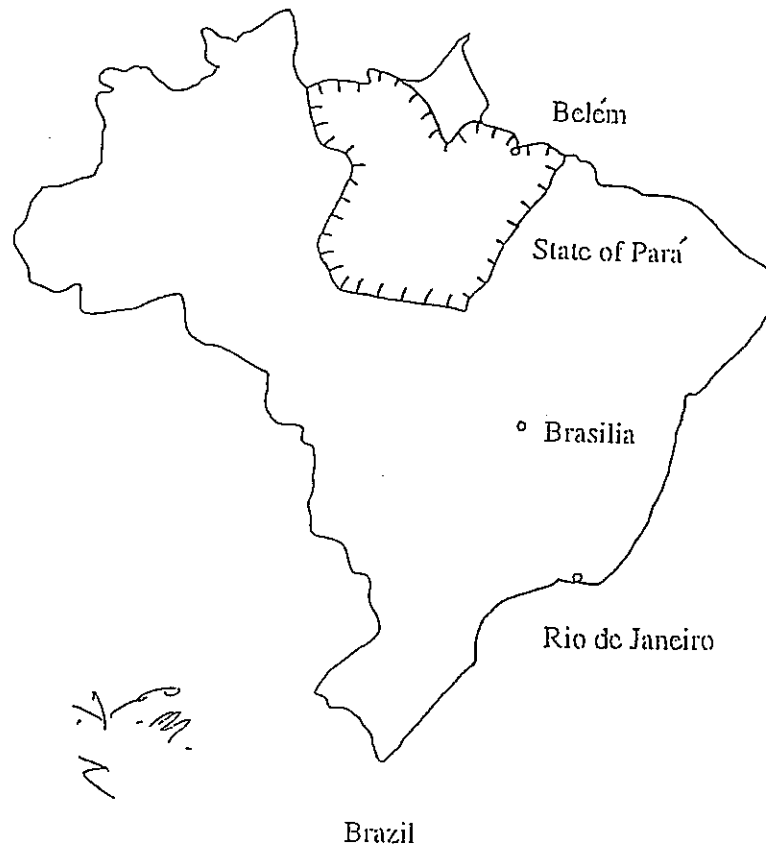
For the implementation of the Study, the Japanese side shall take the following measures;

- (1) to dispatch, at its own expense, the Team to the Federative Republic of Brazil, and
- (2) to pursue technology transfer to the Brazilian counterpart personnel in the course of the Study.

#### IX. CONSULTATION

JICA, ABC and SECTAM shall consult with each other in respect of any matter that may arise from or in connection with the Study. *E.M. 7. N*

# ANNEX I





# ANNEX II

## TENTATIVE WORK SCHEDULE

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Items																						
Works in Brazil																						
Works in Japan																						
Reports																						

(Remarks)

- Ic/R : Inception Report
  - P/R : Progress Report
  - It/R : Interim Report
  - Df/R : Draft Final Report
  - F/R : Final Report
  - ◎ : Comments of Df/R by Brazilian side
- E.M.  
T.N.

MINUTES OF MEETING  
ON  
SCOPE OF WORK  
FOR  
MASTER PLAN STUDY  
ON  
DEGRADED LAND RESTORATION IN THE STATE OF PARÁ  
IN  
THE FEDERATIVE REPUBLIC OF BRAZIL

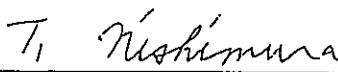
The preparatory study team ( hereinafter referred to as "the Team" ) organized by the Japan International Cooperation Agency ( hereinafter referred to as "JICA" ) headed by Mr. Tetsuo NISHIMURA visited the Federative Republic of Brazil from November 29 to December 13, 1999 for the purpose of discussing and confirming the Scope of Work for Master Plan Study on Degraded Land Restoration in the State of Pará in the Federative Republic of Brazil ( hereinafter referred to as "the Study" ).

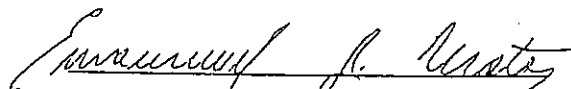
The Team had a series of discussions with officials of Executive Secretary of Science, Technology and Environment , the State of Pará ( hereinafter referred to as "SECTAM" ) and other organizations on the Scope of Work for the Study. The list of participants in the meetings is attached as Annex.

As a result of the discussions, SECTAM and the Team agreed upon the Scope of Work for the Study.

The main issues discussed by the both sides in relation to the Scope of Work for the Study are shown in the documents attached hereto.

Belém, 9 December, 1999

  
\_\_\_\_\_  
Mr. Tetsuo NISHIMURA  
Leader  
Preparatory Study Team  
Japan International Cooperation Agency

  
\_\_\_\_\_  
Emanuel Aresti Santana Gonçalves Matos  
Executive Secretary of Science, Technology  
and Environment, SECTAM

### 1. Study Area

The Study Area mentioned in the official request dated on May, 1998, from the Government of Brazil, was the whole area of the State of Pará with an area of approximately 1,250,000 km<sup>2</sup>. The project formation team dispatched by JICA in April, 1999, considered the possibility to formulate a master plan for the whole area of the State of Pará. They concluded that the Study Area was extremely extensive and it was difficult to formulate it from points of accuracy, study flow and costs. In response of the conclusion, SECTAM proposed Marabá area as Study Area with high priority, considering agricultural and pasture development history and socio-economic development potential.

The Team proposed the Scope of Work which indicated Marabá municipality as Study Area according to the result of the discussion between the project formation team and SECTAM in April, 1999. As a result of the discussions, SECTAM and the Team agreed upon the Marabá municipality as Study Area as mentioned in the Scope of Work.

### 2. Definition of degraded land in the Study

Both sides agreed that the degraded land in the Study meant unused secondary forest, grassland, over exploited forest and denuded land, which would be identified through satellite image analysis and field work.

### 3. Steering Committee

Both sides agreed to establish the Steering Committee for smooth conduct of the Study. It is expected that this Committee will authorize the reports when JICA Study Team comes to explain them. Executive Secretary of SECTAM was appointed as chairman. The members of the committee are as follows;

- Executive Secretary of SECTAM;
- Director of Environment of SECTAM;
- Coordinator of Environmental Protection of SECTAM;
- Representative of SAGRI;
- Representative of EMATER;
- Representative of ITERPA;
- Representative of ABC;
- JICA Study Team; and
- Representative of JICA in Brazil.

### 4. Consultative Committee

Both sides agreed to establish the Consultative Committee to provide necessary facilities to JICA Study Team. The members of the committee are as follows;

- SUDAN; *EM.*  
*T. N.*

- IBAMA;
- FCAP;
- UFPa;
- AIMEX;
- Embrapa;
- AMAZON;
- BASA.

#### 5. Counterpart personnel

SECTAM promised to assign the counterpart personnel in following areas and to take a necessary budget measure such as a travel allowance for conducting the Study;

- Satellite Image Processing;
- Soil Fertility;
- Meteorology;
- Forestry;
- Agriculture;
- Products Processing / Marketing; and
- Social Economy / Project Evaluation.

#### 6. Office accommodation

SECTAM promised to prepare an office for the JICA Study Team with necessary furniture in Marabá.

#### 7. Counterpart Training in Japan

SECTAM requested the counterpart training in Japan, the training subjects will be considered after assigned each counterpart personnel through discussion with JICA Study Team.

#### 8. Opening the Final Report to the Public

Both sides agreed that the Final Report would be open to the public.

#### 9. Technology Transfer Seminar

SECTAM requested that the Study should include a technology transfer seminar at intermediate and final stage of the Study to promote a better understanding and to disseminate the results of the Study. The seminar is to be jointly organized by both sides .

#### 10. Target Year

SECTAM explained that target year of the Study would be considered through the Study. *E.M.*

*T. N*

## 11. Implementation of the Project

SECTAM explained that fund resources would be considered through the Study, discussing with the financial authorities.

*E.M.*  
*T. N*

## LIST OF PARTICIPANTS

### 1. Brazilian side

#### 1) SECTAM

Mr. Emanuel Aresti Santana Gonçalves Matos, Executive Secretary

Mr. Perminio Pascoal Costa Filho

Mr. Paulo Sérgio Altieri, Coordinator of Environmental Protection

Mr. Sebastião Anísio dos Santos, Forestry Engineer

#### 2) ABC

Dra. Mariza Graça Lima, Coordinator of Bilateral Technical Cooperation

### 2. Japanese side

#### 1) Preparatory Study Team

Mr. Tetsuo NISHIMURA                      Leader

Dr. Nobuyuki TANAKA                      Member

Mr. Tetsuya KAMIJO                      Member

Ms. Michiko SUKA                      Member

#### 2) JICA in Brazil

Mr. Akihiko YAMADA                      Staff

Mr. Yasuhiro ONISHI                      Staff

Mr. Kazuyoshi SHINOYAMA              Staff

*Em.*  
*T. N*