

19 タイ・カセサート大学研究協力計画討議議事録
及び計画書

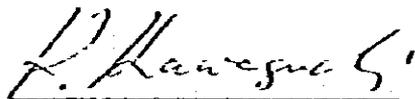
THE RECORD OF DISCUSSIONS BETWEEN
THE JAPANESE IMPLEMENTATION SURVEY TEAM AND
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THAILAND
ON THE JAPANESE TECHNICAL COOPERATION
FOR THE RESEARCH AND DEVELOPMENT PROJECT
IN KASETSART UNIVERSITY

The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as JICA) and headed by Dr. Keizaburo Kawaguchi, Professor Emeritus, Kyoto University, visited Thailand from March 31 to April 11, 1980 for the purpose of working out the details of the technical cooperation program concerning the Research and Development Project in Kasetsart University, Thailand.

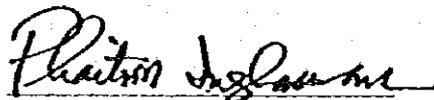
During its stay in Thailand, the Team exchanged views and had a series of discussions with the Thai authorities concerned in respect of the desirable measures to be taken by both Governments for the successful implementation of the above-mentioned Project.

As a result of the discussions, the Team and the Thai authorities concerned agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Bangkok, April 10, 1980.

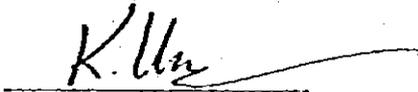


Dr. Keizaburo Kawaguchi
Leader, Japanese Implementation
Survey Team,
Japan International Cooperation
Agency



Prof. Dr. Phaltoon Ingkasuvan
Rector, Kasetsart University

In the presence of



Mr. Kasea Unahasuan
Deputy Director-General,
Department of Technical and
Economic Cooperation

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN THE TWO GOVERNMENTS

1. The Government of Japan and the Government of Thailand will cooperate with each other in implementing the Research and Development Project in Kasetsart University (hereinafter referred to as "the Project") for the purpose of promoting self-sufficient production of vegetable seeds and effective utilization of carbohydrates. The Project will be carried out in the facilities, of Kasetsart University, which have been established with the cooperation referred to in the Exchange of Notes dated October 4, 1978 between the two Governments.

2. The Project will be implemented in accordance with the Master Plan which is given in Annex I.

3. The Project will be carried out in close contact with the Agricultural Extension and Training Center and the Agricultural Machinery Center which will be established with the cooperation referred to in the Exchange of Notes dated July 23, 1979 between the two Governments.

II. DISPATCH OF JAPANESE EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in Annex II through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

2. The Japanese experts referred to in 1. above and their families will be granted in Thailand the privileges, exemptions and benefits no less favourable than those accorded to experts of third countries working in Thailand under the Colombo Plan Technical Cooperation Scheme.

III. PROVISION OF MACHINERY AND EQUIPMENT

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials necessary for the implementation of the Project as listed in Annex III, through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

2.

2. The articles referred to in 1. above will become the property of the Government of Thailand upon being delivered c.i.f. to the Thai authorities concerned at the ports and/or airports of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.

IV. TRAINING OF THAI PERSONNEL IN JAPAN

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Thai personnel connected with the Project for technical training in Japan through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

2. The Government of Thailand will take necessary measures to ensure that the knowledge and experience acquired by the Thai personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THAILAND

1. In accordance with the laws and regulations in force in Thailand, the Government of Thailand will take necessary measures to provide at its own expense:

(1) Services of the Thai counterpart personnel and administrative personnel as listed in Annex IV;

(2) Land, buildings and facilities as listed in Annex V;

(3) Supply of replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided through JICA under III above;

(4) Transportation facilities and travel allowance for the Japanese experts for the official travel within Thailand;

(5) Suitably furnished accommodations for the Japanese experts and their families.

2.

2. In accordance with the laws and regulations in force in Thailand, the Government of Thailand will take necessary measures:

(1) To meet expenses necessary for the transportation within Thailand of the articles referred to in III above as well as for the installation, operation and maintenance thereof;

(2) To exempt customs duties, internal taxes and any other charges, imposed in Thailand on the articles referred to in III above;

(3) To meet all running expenses necessary for the implementation of the Project.

VI. ADMINISTRATION OF THE PROJECT

1. The Rector of Kasetsart University will be responsible for the administration and the implementation of the Project, and the Japanese experts will provide necessary technical guidance and advice for the implementation of the Project.

2. There will be close consultations between the Japanese experts and the officials concerned of the Government of Thailand for the effective implementation and smooth progress of the Project. For this purpose, a Joint Committee which decides important matters for the implementation of the Project will be established as specified in Annex VI. The Joint Committee will meet at least twice a year.

VII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of Thailand undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occurring in the course of, or otherwise connected with, the discharge of their official functions in Thailand except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VIII. MUTUAL CONSULTATIONS

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

IX.

IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be five (5) years from the date of signature of the Record of Discussions.

ANNEX I : MASTER PLAN

1. Objectives

The project is designed to promote agricultural research and development and to enhance research capabilities of Thai staff in Kasetsart University.

In the Project, following activities will be carried out to attain the above objectives in an effective manner.

2. Activities

The Project envisages research and development programs concerning:

- (1) Sweet-corn and yard-long bean seed production.
 - (a) Basic cultural experiments
 - (b) Disease and insect control
 - (c) Multiplication of foundation seeds, and
 - (d) Others

- (2) Fermentation for energy resources
 - (a) Ethanol fermentation from sugar canes, cassava and other carbohydrates,
 - (b) Production of biogas and other energy resources from by-products of sugar industry, and
 - (c) Others including enzyme production.

Note: Details of the above activities will be worked out in due course soon after Japanese experts arrive in Thailand.

ANNEX II : JAPANESE EXPERTS

| | CATEGORY | FIELD |
|----|-----------------|----------------------------|
| 1. | Team Leader | |
| 2. | Experts | Vegetables Fermentation |
| 3. | Liaison Officer | |

- Notes:**
1. Experts mentioned in 2. above may be dispatched in short-term assignment.
 2. Short-term experts in other fields will be dispatched as necessity arises.

ANNEX III : LIST OF THE ARTICLES

1. Equipment, machinery, instruments, tools, spare parts and other materials for laboratory and field works,
2. Fertilizers, pesticides and chemicals,
3. Audio-visual aids and related articles,
4. Vehicles,
5. Books and other necessary printed matters, and
6. Other necessary equipment and materials.

ANNEX IV : LIST OF THAI STAFF

1. Project Leader
2. Coordinator of the Project
3. Research Group Leaders
4. Researchers
5. Counterpart officials to the Japanese experts
6. Laboratory assistants
7. Clerical and service staff, and
8. Field staff and workers

ANNEX V : LIST OF LAND, BUILDINGS AND FACILITIES

1. Central Laboratory Building,
2. Green houses,
3. Store-houses for machinery and other materials,
4. Facilities for seed storage,
5. Garages,
6. Experimental fields and their incidental facilities, and
7. Other necessary land and buildings.

ANNEX VI : JOINT COMMITTEE

1. Composition

- | | |
|--------------------------|--|
| 1-1. Chairman | Rector of Kasetsart University |
| Secretary-General | Vice Rector for Academic Affairs (Project Leader) |

1-2. Thai members

- (1) Dean of Faculty of Agriculture**
- (2) Dean of Faculty of Science and Arts**
- (3) Director of Kasetsart University Research and Development Institute**
- (4) Coordinator of the Project**
- (5) Vegetable Seed Production Group Leader**
- (6) Fermentation Group Leader**

1-3. Japanese members

- (1) Team Leader**
- (2) Experts**
- (3) Liaison Officer**
- (4) Representative of JICA**

Note: Officials of the Embassy of Japan may attend the Joint Committee as observers

2. Functions

- (1) Formulation of annual operational plan of the Project**
- (2) Examination of draft Thai budget necessary for the implementation of the Project**
- (3) Recruitment and appointment of staff for the Project**
- (4) Others**

PROPOSAL OF RESEARCH PROJECTS
TO BE CARRIED OUT AT
CENTRAL LABORATORY AND GREEN HOUSE COMPLEX
KAMPHAENGAEN CAMPUS
KASETSART UNIVERSITY

.....

I. TITLE :

" FERMENTATION FOR ENERGY RESOURCES "

GROUP LEADER

DR. JAROON KUMNUANTA

SUB-PROJECT 1.

"Ethanol Fermentation from Sugarcane, Cassava
and other Carbohydrates."

Sub-Project Leader :

DR. JAROON KUMNUANTA (Dr. Agr.)

Microbiologist

Department of Biology

Research Associates :

Dr. Supamong Dhuwathanapun (Ph.D)

Biotechnologist

Department of Food Sci. & Technology

Mr. Charan Chettanachitara (M.S.)

Microbiologist

Department of Biology

Mr. Prasote Thamarat (M.S.)

Microbiologist

Institute of Food Research and Product
Development

Mrs. Kanitta Sangkaha (M.S.)

Microbiologist

Central Laboratory and Green House Complex.

• Miss Vichuporn Vongsuwanalert (M.S.)

• 2 Technicians

• 1 Lab. Assistant

SUB-PROJECT 2.

**" Production of Biogas and other Energy Resources from
By-Products of Sugar Industry."**

Sub-Project Leader :

Mr. Sornthep Thanavasorn (M.S.)
Agriculture
Department of Animal Husbandry

Research Associates :

Dr. Gaysorn Dhavises (Ph.D)
Microbiologist
Department of Biology

Mr. Kuanuan Tunpun (M.S.)
Agricultural Engineer
Department of Agricultural Engineering

Mrs. Napawan Neparatnaraporn (M.S.)
Microbiologist
Department of Biology.

- 1 Researcher
- 1 Technician
- 1 Lab. Assistant.

SUB-PROJECT 3.

"Enzyme Production."

Sub-Project Leader :

Dr. Yongyut Chiezcheieri (Ph.D)
Biochemist
Department of Chemistry

Research Associates :

Dr. Orapin Khusibhamorn (D.Sc.)
Enzyme Technologist
Department of Food Science and Technology.

Mr. Savitree Liathong (M.S.)

Microbiologist
Department of Biology

• 2 Researchers

• 2 Technicians

• 1 Lab. Assistant.

- Researchers, technicians and lab. assistants to be employed in April 1980.

II. DURATION OF THE PROJECT :

FIVE (5) Years : From April 1980 to March 1985.

III. OPERATION PLAN :

Summaries of the operation plan are illustrated in APPENDIX I.

Sub-Project 1 :

- (1) 1980-81 : Isolation of thermophilic yeasts and bacteria for the maximum yield of ethanol from molasses, cane juice and cassava.
- (2) 1981-83 : Optimization of the conditions for ethanol production from the selected strains using batch, fed-batch and continuous cultures.
- (3) 1983-85 : Evaluation of the best possible yeast and bacterial strains and scaling-up of the fermentation process.

Sub-Project 2 :

- (1) 1980-82 : Biogas production in laboratory scale and investigation on the parameters enhancing the efficiency of biogas production.

Isolation and identification of microorganisms concerned with biogas production from various raw materials including alcohol stillage.

- (2) 1982-85 : Optimization of the digestion and methane production processes.

Application of seed cultures and stabilization of biogas production at the larger scale.

Study on improving biogas reactor design.

Sub-Project 3 :

- (1) 1980-82 : Screening of microorganisms for the production of amylase and cellulase.

- (2) 1980-82 : Hydrolysis of cellulose-based materials by mixed cultures.

- (3) 1982-85 : Improvement of the strains by mutation.

Optimization of the conditions for the production of enzymes.

III, BUDGET

Sub-Project 1 : Total 6,925,000 Baht

Sub-Project 2 : Total 6,050,000 Baht

Sub-Project 3. : Total 6,405,000 Baht

Breakdown of the budget is summarized in the
Tables I, II & III

TABLE I Total Budget of Sub - Project 1.

| Items. | Amount in Baht. | | |
|-------------------------------------|-----------------|-----------|-----------|
| | 1980 - 81 | 1981 - 83 | 1983 - 85 |
| 1. Salaries and wages. | 125,000 | 250,000 | 250,000 |
| 2. Operating and maintaining costs. | 150,000 | 300,000 | 350,000 |
| • 3. Equipment and capital costs. | 2,500,000 | 2,000,000 | 1,000,000 |
| Total | 2,775,000 | 2,550,000 | 1,600,000 |

•• : For details of equipment see APPENDIX II & III

TABLE II Total Budget of Sub - Project 2.

| Items | Amount in Baht. | |
|------------------------------------|-----------------|-------------|
| | 1980 -1982 | 1982 - 1985 |
| 1. Salaries and wages. | 200,000 | 300,000 |
| 2. Operating and maintaining costs | 200,000 | 350,000 |
| **3. Equipment and capital costs. | 2,500,000 | 2,500,000 |
| Total. | 2,900,000 | 3,150,000 |

** : For details of equipment see APPENDIX II & III

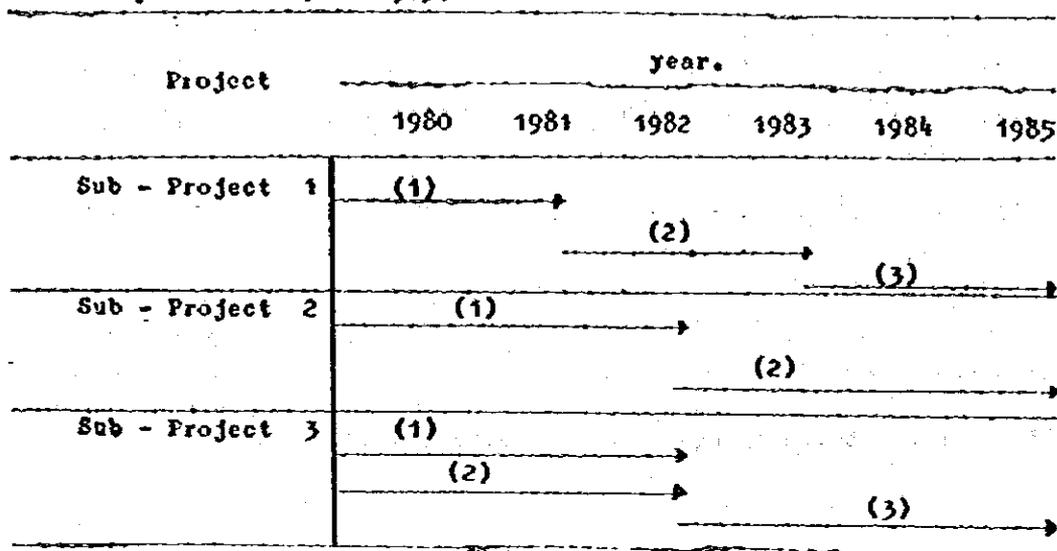
TABLE III Total Budget of Sub - Project 3.

| Items | Amount in Dabt | |
|-----------------------------------|------------------|------------------|
| | 1980 - 1982 | 1982 - 1985 |
| 1. Salaries and wages | 250,000 | 375,000 |
| 2. Operating and maintaining cost | 300,000 | 480,000 |
| ***3. Equipment and capital cost | 2,500,000 | 2,500,000 |
| Total, | 3,050,000 | 3,355,000 |

*** : For details of equipznt see APPENDIX II & III

APPENDIX I

Phasing Chart showing the operation
plan from 1980 -1985.



REQUIREMENT OF EXPERTS STUDY TOUR AND TRAINING PROGRAM

| | 1980 | 1981 | 1982 | 1983 | 1984 |
|--|------|------|------|------|------|
| <u>JAPAN TO THAILAND</u> | | | | | |
| 1. Senior scientists (1 month period) | 2 | 1 | 1 | 1 | 1 |
| 2. Junior scientists (4-6 months period) | - | 2 | 2 | 2 | 2 |
| <u>THAILAND TO JAPAN</u> | | | | | |
| 1. Senior scientists and project leaders (1 months study tour) | 1 | 2 | 1 | 1 | 1 |
| 2. Research associates (6 months training) | 2 | 2 | 2 | 2 | 2 |

APPENDIX II

Priority list of equipments in 1980-1981. for "Fermentation for Energy Resources

| No. | Equipment | Supplier and Equivalent model | No. of Units and allocation |
|-----|--|-------------------------------------|-----------------------------|
| 1. | Freeze dryer for drying microorganisms, with accessories including 24 ports manifold, sealing torch and vacuum tester. | Tokyo Nikakikai FD 1 | 1 (a) |
| 2. | Continuous fermentor 2 L. capacity with accessories | Karubishi | 1 (a) |
| 3. | Bench top fermentor 10 L. capacity with accessories | Karubishi | 1 (a) |
| 4. | Incubator shaker | Lab-Line 1579 - 1 | 1 (a) |
| 5. | VIS/UV spectrophotometer | Jasco UVIDEC - 505 | 1 (c) |
| 6. | Cold water circulator | Tokyo Nikakikai | 1 (a) |
| 7. | Bench top centrifuge with rotors for 15 and 50 ml. tubes. | Kakusan H - 103 N 1 | 2 (a,c) |
| 8. | Autoclave | Hirayama HA - 3D Hirayama SM 302 | 1 (a) 2 (b,c) |
| 9. | Anaerobic chamber | Aither Thomas 6134 - F 20 | 1 (b) |
| 10. | Gas Chromatograph with accessories | Hitachi 163 S | 1 (a) |

a : to be installed at Culture Collection Unit for sub-project 1

b : to be installed at Environmental Science Unit for sub-project 2

c : to be installed at Central Biochemistry Unit for sub-project 3

| No. | Equipment | Supplier and Equivalent model | No. of Units and allocation |
|-----|---|----------------------------------|-----------------------------|
| 11. | Refrigerated centrifuge | Hitachi | 1 (c) |
| 12. | Spectrophotometer | Hitachi 8429-M50 | 2 (a,b) |
| 13. | Micro-kjeldahl apparatus | Mitamura Riken | 1 (c) |
| 14. | Incubator | Hirayama LS-70 D | 2 (a,b) |
| 15. | Water bath | Tokyo Rikakikai T-80+S3-24 | 4 (a,b,2c) |
| 16. | Vacuum pump | Ogawa Seiki CF-3072 | 1 (b) |
| 17. | Dessicator | Shibata | 4 (a,b,2c) |
| 18. | Motorcycle (100cc.) | | 1 |
| 19. | Deep freezer | Sanyo MDF 390 ATI | 1 (b) |
| 20. | Rotary shaker for 250 and 500 ml. flasks. | Karubishi TM 1 | 2 (a,c) |
| 21. | Water bath shaker for 250 ml. flasks | Karubishi WTR 1 | 2 (a,c) |
| 22. | Hot air oven | Hirayama DA-40 Hirayama DA-80 | 1 (b) 1 (a) |
| 23. | Top loading balance | Kensei TOP 1200-L | 2 (a,b) |
| 24. | Phase contrast microscope | Olympus RHA+3H-PC-PA | 1 |
| 25. | pH meter | Tea FV 1279 | 3 (a,b,c) |
| 26. | Stirring hot plate | Eyela RCH-10 | 3 (a,b,c) |

a) to be installed at Culture Collection Unit for sub-project 1

b) to be installed at Environmental Science Unit for sub-project 2

c) to be installed at Central Biochemistry Unit for sub-project 3

| No. | Equipment | Supplier and Equivalent model | No. of Units and allocation |
|-----|--|--|-----------------------------|
| 27. | Whirl mixer | Yamato MT 11 | 3 (a,b,c) |
| 28. | Heating mantle for 1,5 liter flasks. | Arthur Thomas 5910-C20 Arthur Thomas 5910-C35 | 1 (a) 1 (c) |
| 29. | Thermo regulator | Tokyo Rikakikai T-800 | 2 (a,c) |
| 30. | Alcohol distilling apparatus | Lab conco 6-000 | 1 (a) |
| 31. | The Roll tube apparatus (12 tubes) | | 1 |
| 32. | Gas pressure regulator | Arthur Thomas 5596-330 | 3 |
| 33. | Peristaltic pump (5-270 ml./h.) | Eyela KP-201 Eyela KP-3 | 2 (a) 2 (b) |
| 34. | Wet test gas meter | Arthur Thomas 5648-3 10 | 1 (b) |
| 35. | Anaerobic jar | | 1 (b) |
| 36. | Magnetic stirrer | Eyela RC-20 | 4 (a,b,2c) |
| 37. | Lab cart | Arthur Thomas 2420-QS0 Arthur Thomas 2419 F26 | 3 (a,b,c) 2 (a,b) |
| 38. | Analytical balance | Kensei KY-3 | 2 (a,c) |
| 39. | Rotary evaporator | Tokyo Rikakikai N 1 | 1 (c) |
| 40. | Laminar flow cabinet | Hitachi KMV 720 CS | 1 (a) |
| 41. | Stereo microscope with incident light. | Olympus JK-Tr + LSD + TE- 2 | 1 (a) |
| 42. | Refrigerator | Sanyo FS-2246 | 2 (b,c) |
| 43. | Water auto still | Eyela WHT-15 | 1 (a) |

- a : to be installed at Culture Collection Unit for sub-project 1
b : to be installed at Environmental Science Unit for sub-project 2
c : to be installed at Central Biochemistry Unit for sub-project 3

APPENDIX III

Priority list of equipments in 1981-82 for "Fermentation for Energy Resources"

| No. | Equipments | Supplier and equivalent model | No. of Units |
|-----|--|-------------------------------|--------------|
| 1. | Fermentor 5-6 L. with controlling unit and accessories | Marubishi | 1 (a) |
| 2. | Peristaltic pump | Eyela 10-201 | 2 (a) |
| | | Eyela KP-3 | 2 (a) |
| 3. | Micro pipette | Justor 1100 Y | 2 (a,b) |
| 4. | Incubator | Hirayama IS-70 D | 2 |
| 5. | Incubator shaker | Lab-Line 1579-1 | 2 |
| 6. | Continuous syringe | Justor 2100 | 2 |
| 7. | Membrane filter | | 3 |
| 8. | High speed centrifuge ($\approx 15,000$ rpm.) | | 1 |
| 9. | Autoclave | Hirayama MD-Y | 1 |
| 10. | Varing blender | (Electricity) | 3 |
| 11. | CO ₂ analyzer (0-5 % CO ₂) | Fuji Electronic Type ZAR | 1 |
| 12. | O ₂ analyzer (1-30 % oxygen) | | 2 |
| 13. | Soxhlet extraction | | 3 |
| 14. | Whirl mixer | | 2 |
| 15. | Water bath shaker | Marubishi WTR 1 | 1 |
| 16. | Hot air oven | Hirayama DA-80 | 1 |
| 17. | Liquid Chromatography with UV detector and recorder | | 1 |
| 18. | Muffle furnace | Sybron ThermoLyne 1730 | 1 |
| 19. | Column chromatographic apparatus | | 1 |
| 20. | Rotary shaker | Marubishi IM | 1 |
| 21. | Densitometer (double beam) | | 1 |
| 22. | Thin layer apparatus | | 1 |
| 23. | Dessicator | | 1 |

| No. | Equipments | Supplier and equivalent model | No. of Units |
|-----|-----------------------------|--------------------------------|--------------|
| 24. | Electrophoresis apparatus | Fuji Riken | 1 set |
| 25. | Homogenizer | | 1 |
| 26. | Grinder | Riya 5 D (514) | 1 |
| 27. | BOD Incubator | | 1 |
| 28. | Vacuum Drying oven | Yazato | 1 |
| 29. | Spectrophotometer | Hitachi 100-60 | 1 |
| 30. | Lab cart | | 3 |
| 31. | Liquid nitrogen tank | | 1 |
| 32. | Ice cube maker | Hoshigaki IM-306 | |
| 33. | Spectrophotometer | Bausch & Lomb spectronic 20 | 1 |
| 34. | Deep freezer | Sanyo MDF 390 ATI | 1 |
| 35. | Micrometer | | 2 |
| 36. | Haemocytometer | | 2 |
| 37. | BOD determination apparatus | | 1 |

MASTER PROJECT TITLE

Study on Vegetable Seed Production in Thailand

Justification

Vegetable seeds are imported about 500 tons annually for using in crop production throughout the Kingdom. Besides, they are produced locally about 500 tons yearly. Seeds produced by farmers are in low quality both genetic and physical purity and germination, also found to be contaminated with diseases and insects. There is no true seed farm at the farmer's level, whereas few commercial seed farms are being established. Demand of seeds used for this country is expected to be raised every year because of increase of the population and greater demand for exportation. If farmers are capable to produce good quality seeds and have excess amounts to be put into the commercial channel, it will help to increase their income. It is also to fill up the need and to reduce the amount of imported seeds. There are numerous problems to be tackled in the production of vegetable seeds at the farmer level such as lack of knowledge in fertilization, insects and diseases. These problems can cause low quality and yield. Vegetable seed production set up by Kasetsart University would help the farmers in the region around Kamphaengsean Campus as well as throughout the country to be able to produce high standard quality seeds and also to obtain high yield. The climatological data in MaeKlong Basin showed that the environmental conditions are suitable for some vegetable which do not need low temperature for flower bud differentiation and seed set. Crops fit to the climates of this region would be selected for this project.

Objectives

1. To search for technical knowhow for producing good quality seed and high yield of sweet corn (Zea mays), and yard long bean (Vigna sesquipedalis).
2. To maintain stock seeds with highly genetic purity.
3. To develop the modern technique for seed production.
4. To develop a pattern of seed farming.

Duration 5 years.

Location Kamphaengsaen Campus, Kasetsart University, and other farmer's plots.

Work plan

Two vegetable crops to be promoted in this phase are sweet corn, and yardlong bean. This project would be conducted by a group of researchers who will work close together and be responsible for entire project. Subproject, may be set according to the problems needed to be solved or investigated in each crop. One coordinator will be assigned to each crop. This first initial phase is 5 years.

First year

1. To establish a seed multiplication farm by using available information at the present.
2. To observe and collect information from the seed multiplication farms.
3. To multiply the foundation seed.
4. To survey on the Kachlong Basin growing areas and others places of these crops for the information regarding demand and supply of each crop.

Second year

1. To multiply of the foundation seed.
2. To test the quality.
3. To investigate on cost of production at farm level.
4. To investigate on the cropping system, fertilization, insects and diseases, yield performance, harvesting, processing and storage conditions.

Third year

1. To produce certified seed at farmer's plots and Kamphaengsaen Campus's experimental fields.
2. To establish the seed quality test.
3. To introduce new techniques for improvement of seed production technology.
4. To repeat the experiments on cropping system and other cultural practises.
5. To evaluate the work done during the period of the first three years.

Fourth and fifth year

1. To establish a standard of cultural practises of seed production, including insects and diseases control, multiplication technique of stock seed.
2. To establish the seed processing technology including packaging and storage recommendation.

Expected results

1. To improve seed quality and set up the stock seed production program.

2. To maintain the stock seed.
3. To demonstrate a pattern of seed farming.

Subprojects to be included in the Vegetable Seed Production Project
are as follows:

1. Production of sweet corn, yard long bean seeds.

Studies on seed production technology of these crops for better quality and higher yield. Refer to the work plan on page 3 for the work to be done by year.

Leader: H.L. Anothai Choossai

2. Study on property of the soil with special emphasis to essential elements for seed production.

Leader: Mr. Suradej Jintakanon

Work plan 1st year: To set up soil analysis, and conventional fertilizer application.

2nd year: To conduct fertilization experiment in seed plot and physical property study.

3rd to 5th year: To repeat and modify the 2nd year work and set up the recommendation.

3. Control of downy mildew of sweet corn.

Leader: Mr. Udom Pupipat

Work plan 1st year: To Survey and evaluation of losses from the diseases and finding for control measures.

2nd year: (1) To Repeat the first year work.

(2) To Screen resistant varieties.

3rd year to 5th year: To establish the methods of control on this disease.

4. Seed health certification scheme

Leader: Mr. Chalermarub Chuziprasit

Work plan: 1st year: Observation of the diseases and establish the pattern of seed health certification scheme.

2nd year: Field trials for seed health certification.

3rd to 5th year: Repeat and modify second year work and release disease-free seed.

5. Studies on insect pests of sweet corn and their controls.

Leader: Mrs. Penseok Tauthong

Work plan:

1st year: (1) Survey of insect pests of sweet corn.
(2) Bionomic and ecological studies of some economic important insects.

2nd year: Find out the most effective control measures.

3rd to 5th year: Apply results obtained for screening program for resistant varieties.

6. Studies on insect pests of yard long bean and their controls.

Leader: Mr. Natapol Wanleelag

Work plan: as described in subproject no. 5.

7. Insect pollination of yard-long bean.

Leader: Miss Sawitree Malaiphon

Work plan: 1st year: Survey kinds and quantity of insect pollinators.

2nd year: Increase the quantity of insect pollinators.

3rd to 5th year: Investigate seed's yields when insect pollinators are applied.

8. Studies on insect pest of stored seeds.

Leader: Mrs. Pensook Tauthong

Work plan: 1st year: Survey and evaluation the loses of stored seeds by insect.

2nd year: Study on bionomic and ecology of some economic important insects.

3rd to 5th year: Establish the methods of control on stored insects.

9. Studies on yard long bean nodule bacteria for seed production.

Leader: Miss Lerluck Buranakarl

Work plan:

1st year: Survey and isolation of nodule bacterias in yard long bean.

2nd year: Screen of effective strain (s) for nodulation and seed yield.

3rd to 5th year:

Establish recommendation of application in seed plot and production of seed culture.

Personnels

| | | | Position | Department |
|-----------------------------------|-------|-------------------|-----------------|----------------------------|
| 1. M.L. Anothai Choosai | Ph.D. | Leader & breeder | Asst.Prof. | Horticulture |
| 2. Mrs. Somporn Drabyasara | M.S. | breeder | " | " |
| 3. Mr. Tavat Lavapauraya | B.S. | " | " | " |
| 4. Mr. Kasea Pileuk | M.S. | Veg.Hort. | " | " |
| 5. Mrs. Sutevee Sukprakarn | M.S. | " | " | " |
| 6. Mr. Chairerg Sigwangpyakorn | M.S. | " | " | " |
| 7. Mrs. Pensook Tauthong | Ph.D. | Entomologist | Lecturer | Entomology |
| 8. Mr. Natapol Vanleelag | Ph.D. | " | Asst.Prof. | " |
| 9. Mrs. Somsri Kantaratankul | Ph.D. | " | Lecturer | " |
| 10. Mr. Chalermarb Chauprasit | Ph.D. | Plant Pathologist | " | Plant Pathology |
| 11. Mr. Udom Pupilat | M.S. | " | Asst.Prof. | " |
| 12. Mrs. Chintana Chana | M.S. | " | Lecturer | " |
| 13. Mr. Somsiri Jevsakul | M.S. | " | Asst.Instructor | " |
| 14. Mr. Anant Suvanarit | Ph.D. | Soil Scientist | Asst.Prof. | Soil Science |
| 15. Mr. Suradej Jintakanon | M.S. | Soil Scientist | Lecturer | Soil Science |
| 16. Mr. Yattana Svanyatipati | M.S. | Extensionist | " | Agr.Extension |
| 17. Mr. Seraphol Buengsung | M.S. | Agr.Engineer | " | Agr.Engineering |
| 18. Mr. Jerachon Srisawatleg | Ph.D. | Economist | " | Economic and Business Adm. |
| 19. Miss Sawitree Malaiphan | Ph.D. | Entomologist | " | Entomology |
| 20. Mr. Pongthep Akarathankul | Ph.D. | " | " | " |
| 21. Miss Chantravipha Dhanasobhon | Ph.D. | Breeder | " | Horticulture |
| 22. Mr. Wiloon Boonyatharokul | Ph.D. | Irr.Engineer | " | Irrigation Engineering |
| 23. Miss Lerluck Buranakari | M.S. | Microbiologist | " | Microbiology |

Training requirement

| | <u>1980</u> | <u>1981</u> | <u>1982</u> |
|---|-------------|-------------|-------------|
| 1. Seed technology (processing and packaging) | 1 | - | - |
| 2. Soil science (analysis, fertilizer application for seed crops) | 1 | - | - |
| 3. Horticulture (seed production, cultural practice, field inspection) | - | 1 | - |
| 4. Seed health certification (plant pathology, seed pathology) | - | 1 | - |
| 5. Seed storage problems. (Insect pests in store) | - | - | 1 |

Experts

| | | | |
|--|---|---|---|
| 1. Vegetable specialist (seed production technology) | 1 | 1 | 1 |
| 2. Seed technologist (quality test, processing ect.) | 1 | 1 | - |
| 3. Seed health certification (seed pathology and plant pathology) | 1 | - | - |
| 4. Seed storage (entomology, physiology) | - | 1 | - |
| 5. Irrigation system in seed farming | - | 1 | - |

Appendix II

Priority list of equipment required for the seed production research.

Year 1980-81

| Items | Model or Equivalent model | Quantity |
|---|---|-------------|
| 1. Seed thresher | Spec. sheet no. 46 | 1 |
| 2. Seed dryer | " 41 | 1 |
| 3. Seed cleaner and grader (大量用) | " 40 | 1 |
| 4. Seed treater | - 45 | 1 |
| 5. Transfer chamber (clean bench) (未知) | 34 | 1 |
| 6. Rapid chemical tester for soil and plant material | - ✓ 横田式 | 1 (1~5万円) |
| 7. Station wagon | - ✓ | 1 |
| 8. Garden tractor with attachment | - ✓ 久保田 | 1 |
| 9. Abbe's refractometer (0% - 50%) | - ✓ フジ | 1 |
| 10. Hand refractometer (0% - 90%) | - 49 | 4 |
| 11. Gravity table for seed separation (少量用) | 21 | 1 |
| 12. Research compound microscope (with micro-projector) | Spec. sheet no. 22 | 1 |
| 13. Stereoscopic microscope | " 23 | 2 |
| 14. Drying oven with ventilation system | - 12 | 1 |
| 15. Freeze drying oven | - ✓ | 1 |
| 16. Germinator | - 2 | 2 |
| 17. Torsion balance (0-1,000 mg.) | ✓ | 1 |
| 18. Torsion balance (0-500 mg.) | ✓ | 1 |
| 19. Refrigerator | ventilation, control temp. 4-10°C, 18 cu.ft. 12 | 1 |
| 20. Analytical balance | spec. Sheet no. 4 | 1 (10~50万円) |

| Items | Model or Equivalent model | Quantity |
|--|---------------------------------|----------|
| 21. Top loading balance | spec. Sheet no. 4 (HD-10) | 1 |
| 22. Muffle furnace | ✓ | 1 |
| 23. Air pump | Spec. Sheet no. 31 | 1 |
| 24. Bag sealer | Spec. Sheet. no. 142 | 1 |
| 25. Can seamer | - ✓ | 1 |
| 26. Knap sack sprayer | Spec. Sheet. no. 43 | 6 |
| 27. Tensio meter | - ✓ | 5 |
| 28. Thin layer, paper and gel-electrophoretic and chromatographic apparatus (with densitometer) (並製) | - 36 | 1 |
| 29. Clinical centrifuge | (おのりまき心臓いもの) ✓ 35H (4000rpm) | 1 |
| 30. Flame photometer | - 56 | 1 |
| 31. Digestion apparatus | ND-BL 55 | 1 |
| 32. Conductivity meter | CH-2A 11, 54 (並製) | 1 |
| 33. Auto-analyser | - 51 | 1 |
| 34. Colour measurement device | - ✓ | 1 |
| 35. Tenderometer for soft seed (with graphical recording system) | ✓ | 1 |
| 36. Tenderometer for hard seed (with graphical recording system) | ✓ | 1 |
| 37. pH-meter | HX-20 E 59 | 1 |
| 38. Shaker | SA-31 60 | 1 |
| 39. Soil grinder | 316 61 | 1 |
| 40. Specific ion meter | 1 K-20 B 62 | 1 |
| 41. Rotary evaporator | RE-4613 38 | 1 |
| 42. Vacuum counter | Spec. Sheet no. 117 | 1 |

Year 1981-1982

| Items | Model or Equivalent model | Quantity |
|--|--|----------|
| 1. Portable platform scale (0-200 kg.) | Toledo 5 | 1 |
| 2. Triple beam balance | Spec. Sheet no. 6 | 1 |
| 3. Freez drying oven | - | 1 |
| 4. Autoclave | Spec. Sheet no. 1 | 1 |
| 5. Digital moisture tester | - 8 | 1 |
| 6. Seed divider | - 9-10 | 1 |
| 7. Low temperature incubator | Spec. Sheet no. 14 | 1 |
| 8. Station wagon | | 1 |
| 9. Timer | Spec. Sheet no. 15 | 4 |
| 10. Seed hand screen (a set of different ϕ perforation) | - 16 | 1 |
| 11. Scarifier | - | 1 |
| 12. Hot water bath | Spec. Sheet no. 19 | 2 |
| 13. Seed blower | Burrow 1-1833 20 | 1 |
| 14. Ultraviolet lamps | 40 W 24 | 15 |
| 15. Ultraviolet lamps | 20 W 25 | 15 |
| 16. Purity working board | Burrow 1-1829 | 10 |
| 17. Grain thermometer | - 28 | 1 |
| 18. Relative humidity indicator | Burrow 1-0175 30 | 1 |
| 19. Grain probe | 33 | 1 |
| 20. Spectrophotometer | UV 3603, Spec. Sheet No. 37 AA-640-13 | 1 |
| 21. Thermohygrograph | Spec. Sheet no. 32 | 6 |

| Items | Model or Equivalent model | Quantity |
|-------------------|------------------------------|----------|
| 22. Hand sprayer | - | 6 |
| 23. Grinding Mill | S-DC 514 57 | 1 |
| 24. Hot plate | HP-A 2235 K 58 KH-61 | 1 |

(注) 番号はヤマト科学のカタログ号

Fertilizer and chemical annual requirement for 4 acres

| | | |
|--------------------------|-------|--------|
| 1. Ammonius sulphate | 1,000 | Kg. |
| 2. Urea | 500 | " |
| 3. Double superphosphate | 1,500 | " |
| 4. Potassium sulphate | 1,000 | " |
| 5. Insecticide | 4,000 | U.S.\$ |
| 6. Fungicide | 3,000 | U.S.\$ |
| 7. Herbicide | 1,500 | U.S.\$ |

General equipment
(office equipment)

Year 1980-1981

| Items | Model or Equivalent model | Quantity |
|--------------------------|------------------------------|----------------------|
| 1. Copying machine | | 1 |
| 2. Stencil duplicator | | 1 |
| 3. Type writer (Thai) | | 1 |
| 4. Type writer (English) | | 1 |
| 5. Vacuum cleaner | | 1 |
| 6. Floor machine | | 1 |
| 7. Calculator | Fx-3 | 1 |
| 8. Camera | | 2 |
| 9. Journal and text book | | list to be submitted |

Text book requirement

- (1) Physical Properties of Biological Materials by Mohsenin, Pennsylvania State University.
- (2) Agricultural and Horticultural Seeds Production. FAO, Rome.
- (3) Seeds - FAO year book, FAO, Rome.
- (4) Vegetable Seed Production in tropical and sub-tropical countries.
Suteki Shinohara - JICA's International Training Center,
Ibaragi, Japan. (1979)
- (5) Others.

20 タイ雑草研究計画討議議事録

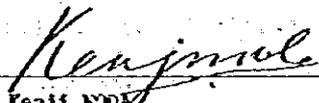
THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THAILAND ON THE JAPANESE TECHNICAL COOPERATION FOR THE NATIONAL WEED SCIENCE RESEARCH INSTITUTE PROJECT

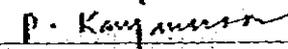
The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Dr. Kenji NODA visited Thailand from 9th to 23rd April 1980 for the purpose of working out the details of the technical cooperation program concerning the National Weed Science Research Institute (hereinafter referred to as "NWSRI") Project in Thailand.

During its stay in Thailand, the Team exchanged views and had a series of discussions with the Thai authorities concerned in respect of the desirable measures to be taken by both governments for the successful implementation of the above-mentioned Project.

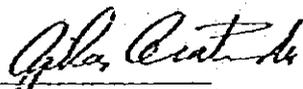
As a result of the discussions, the Team and the Thai authorities concerned agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Bangkok, THAILAND, 18th April 1980


Dr. Kenji NODA
Leader
Japanese Implementation Survey Team
Japan International Cooperation Agency
JAPAN


Dr. Prakob KANJASOON
Director General
Department of Agriculture
Ministry of Agriculture and Cooperatives
THAILAND

In the presence of


Mr. Apilas OSATANANDA
Director General
Department of Technical and Economic Cooperation
THAILAND

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of Thailand will cooperate with each other in implementing the National Weed Science Research Institute Project (hereinafter referred to as "the Project") through basic and applied weed researches for the purpose of crop production increase and environmental improvement in Thailand.
2. The Project will be implemented in accordance with the Master Plan which is given in Annex I.

II. DISPATCH OF JAPANESE EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in Annex II through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The Japanese experts referred to in 1 above and their families will be granted in Thailand the privileges, exemptions and benefits no less favorable than those accorded to experts of third countries working in Thailand under the Colombo Plan Technical Cooperation Scheme.

III. PROVISION OF MACHINERY AND EQUIPMENT

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials necessary for the implementation of the Project as listed in Annex III, through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The articles referred to in 1 above will become the property of the Government of Thailand upon being delivered c.i.f. to the Thai authorities concerned at the ports and/or airports of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.

IV. TRAINING OF THAI PERSONNEL IN JAPAN

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Thai personnel connected with the Project for technical training in Japan through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The Government of Thailand will take necessary measures to ensure that the knowledge and experience acquired by the Thai personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THAILAND

1. In accordance with the laws and regulations in force in Thailand, the Government of Thailand will take necessary measures to provide at its own expense:-
 - (1) Services of the Thai counterpart personnel and administrative personnel as listed in Annex IV;
 - (2) Lands, buildings and facilities as listed in Annex V;
 - (3) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided through JICA under III above;
 - (4) Transportation facilities and travel allowance for the Japanese experts for the official travel within Thailand;
 - (5) Suitably furnished accommodations for the Japanese experts and their families.

2. In accordance with the laws and regulations in force in Thailand, the Government of Thailand will take necessary measures:-
 - (1) To meet expenses necessary for the transportation within Thailand of the articles referred to in III above as well as for the installation, operation and maintenance thereof;
 - (2) To exempt customs duties, internal taxes and any other charges, imposed in Thailand on the articles referred to in III above;
 - (3) To meet all running expenses necessary for the implementation of the Project.

VI. ADMINISTRATION OF THE PROJECT

1. Director General of the Department of Agriculture, Ministry of Agriculture and Cooperatives, the Government of Thailand will be responsible for the administration and implementation of the Project, and the Japanese experts will provide necessary guidance and advice on technical matters for implementation of the Project.
2. For the effective implementation of the Project, a Joint Committee consisting of the members as listed in Annex VI will be established and meet at least once a year.
3. The Committee will formulate the details of the Master Plan referred to in Annex I and the annual work plan of the Project. The details of the Master Plan and the annual work plan will be submitted to the authorities concerned of the two Governments.

VII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of Thailand undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in Thailand except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VIII. MUTUAL CONSULTATION

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

IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be five (5) years from the date of signature.

ANNEX I. MASTER PLAN

1. In Thailand weeds cause severe reduction of crop production, particularly of direct-seeded rice, short-height field crops, rubber, pineapple and so on, as well as contamination in environment such as aquatics and unarable lands.

The solution of weed problem is, therefore, so important to achieve the targets of Thailand's Fourth National Development Plan. Weed Research in Thailand, however, are far behind that of diseases and pest insects in the plant protection fields, This project will be carried out at the NWSRI, Bangkok and other relevant local experiental stations, which conducts basic and applied research for weed control and/or management procedures without having its side-effects.

2. The Project will comprise the following activities;

- 1) Research in the following:-

- a) Ecology and physiology of principal weeds for their control
- b) Weed control and/or management procedures in paddy and field crops
- c) Control methods of weeds harmful to environment
- d) Herbicide residues and proper application of herbicide

- 2) Exchange of research information, materials and reports
- 3) Developent of research capabilities of the Thai weed researchers in the field in 1) above
- 4) Other activities to be agreed upon between the authorities concerned of the two Governzents.

ANNEX II. JAPANESE EXPERTS

1. Team Leader
2. Experts:-
 - 1) Weed Biology
 - 2) Weed Control
 - 3) Herbicide Biochemistry
3. Coordinator/Liaison Officer

Notes:-

- 1) Short-term experts of the above-mentioned fields or others may be dispatched when necessities arise.
- 2) Experts on herbicide biochemistry may be dispatched on short-term assignment.

**ANNEX III. LIST OF THE ARTICLES TO BE PROVIDED BY THE GOVERNMENT
OF JAPAN**

- 1. Equipment, instruments, tools, their spare parts and other materials for laboratory work.**
- 2. Machineries, instruments, tools, their spare parts and other materials for field work.**
- 3. Fertilizers, agricultural chemicals and materials for research work.**
- 4. Audio-visual aids and related articles.**
- 5. Books and other necessary printed matters.**
- 6. Vehicles.**
- 7. Other necessary equipment and materials.**

EX IV. LIST OF THAI COUNTERPART OFFICIALS AND OTHER PERSONNEL

- 1. Counterpart to Japanese Team Leader (Director of Technical Division, Department of Agriculture)**
- 2. Counterpart Researchers to the Japanese Experts**
- 3. Assistant Researchers**
- 4. Clerical and other personnel including a secretary, a typist and drivers**
- 5. Field workers**

ANNEX V. LIST OF LANDS, BUILDINGS AND FACILITIES

1. Lands:-

- 1) Experimental fields at NWSRI
- 2) Other necessary fields at local experimental stations

2. Buildings at NWSRI:-

- 1) Office rooms for the Japanese Team Leader and Experts
- 2) Laboratory rooms
- 3) Green houses
- 4) Store-houses
- 5) Shed and workshop
- 6) Car garages

3. Other necessary lands and buildings

ANNEX VI. COMPOSITION OF THE JOINT COMMITTEE

1. Chairman:-

Director General, Department of Agriculture (DOA),
Ministry of Agriculture and Cooperatives (MOAC)

2. Thai-side:-

Director of Technical Division, DOA
Director of Rice Division, DOA
Director of Field Crop Division, DOA
Director of Horticulture Division, DOA
Director of Agricultural Engineering Division, DOA
Director of Rubber Division, DOA
Director of Foreign Agricultural Relation Division, MOAC
Representative of Budget Bureau
Representative of DTEC
Chief of NWSRI, Technical Division, DOA
Other personnel appointed by the Chairman

3. Japanese-side:-

Team Leader
Experts (Long-term)
Coordinator/Liaison Officer
Representative of JICA

Note: An Official of the Embassy of Japan may also
attend the Joint Committee as an observer.

21. アフガニスタン稲作開発センター計画・討議議事録

THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE DEMOCRATIC REPUBLIC OF AFGHANISTAN ON THE JAPANESE TECHNICAL COOPERATION FOR THE RICE DEVELOPMENT CENTER PROJECT

The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as JICA) and headed by Mr. Shoji KANATSU, Director of Agricultural Development Cooperation Department, Japan International Cooperation Agency, visited the Democratic Republic of Afghanistan from March 4 to April 3, 1979 for the purpose of working out the details of the technical cooperation program concerning the Rice Development Center Project in the Democratic Republic of Afghanistan.

During its stay in the Democratic Republic of Afghanistan, the Team exchanged views and had a series of discussions with the Afghan authorities concerned in respect of the desirable measures to be taken by both Governments for the successful implementation of the above-mentioned Project.

As a result of the discussions, the Team and the Afghan authorities concerned agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Kabul, March 14, 1979



Mr. Shoji KANATSU
Head of the Japanese
Implementation Survey
Team
Japan International
Cooperation Agency,



Mr. Mohammad Hassan Paiman
General President of Extension
and Agricultural Production,
Ministry of Agriculture and
Land Reforms

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of the Democratic Republic of Afghanistan will cooperate with each other in implementing the Rice Development Center Project (hereinafter referred to as "the Project") for the purpose of promoting agricultural development based on the policy of the Government of the Democratic Republic of Afghanistan to reach self-sufficiency in food production henceforth laying the firm foundation for improved rural living standards through high farm household income.
2. The Project will be implemented in accordance with the Master Plan which is given in Annex I.

II. DISPATCH OF JAPANESE EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in Annex II through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The Japanese experts referred to in 1 above and their families will be granted in the Democratic Republic of Afghanistan the privileges, exemptions and benefits no less favourable than those accorded to experts of third countries working in the Democratic Republic of Afghanistan under the Colombo Plan Technical Cooperation Scheme.

III. PROVISION OF MACHINERY AND EQUIPMENT

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials necessary for the implementation of the Project as listed in Annex III, through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

2. The articles referred to in 1 above will become the property of the Government of the ^{Democratic} Republic of Afghanistan upon being delivered c.i.f. to the Afghan authorities concerned at Kabul, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to Annex II.

IV. TRAINING OF AFGHAN PERSONNEL IN JAPAN

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Afghan personnel connected with the Project for technical training in Japan through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The Government of the Democratic Republic of Afghanistan will take necessary measures to ensure that the knowledge and experience acquired by the Afghan personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE DEMOCRATIC REPUBLIC OF AFGHANISTAN

1. In accordance with the laws and regulations in force in the Democratic Republic of Afghanistan, the Government of the Democratic Republic of Afghanistan will take necessary measures to provide at its own expense:
 - (1) Services of the Afghan counterpart personnel and administrative personnel as listed in Annex IV;
 - (2) Land, buildings and facilities as listed in Annex V;
 - (3) Electricity supply for the activities of the Rice Development Center and irrigation water supply for the paddy field of the Center;
 - (4) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided through JICA under III above;
 - (5) Transportation facilities and travel allowance for the Japanese experts for the official travel within the

Democratic Republic of Afghanistan;

- (6) Suitably furnished accommodations for the Japanese experts and their families.
2. In accordance with the laws and regulations in force in the Democratic Republic of Afghanistan, the Government of the Democratic Republic of Afghanistan will take necessary measures to meet:
 - (1) Expenses necessary for the transportation within the Democratic Republic of Afghanistan of the articles referred to in III above as well as for the installation, operation and maintenance thereof;
 - (2) Customs duties, internal taxes and any other charges, imposed in the Democratic Republic of Afghanistan on the articles referred to in III above;
 - (3) All running expenses necessary for the implementation of the Project.

VI. ADMINISTRATION OF THE PROJECT

1. The Government of the Democratic Republic of Afghanistan will be responsible for the administration and implementation of the Project, and the Japanese experts will provide necessary technical guidance and advice for the implementation of the Project.

2. Kabul Liaison Office referred to in Annex V-3 for the Project will be provided within the Ministry of Agriculture and Land Reforms by the Government of the Democratic Republic of Afghanistan for Japanese experts and their counterparts in order to carry out the Project effectively under close cooperation with other activities of the Ministry of Agriculture and Land Reforms.

3. A Joint-Committee will be established for the successful implementation of the Project. The composition of the Joint-Committee is specified in Annex VI. The Joint-Committee will meet at least two times a year.

The activities of the Joint-Committee are as follows:

- (1) to make an implementation and management program of the Project;
- (2) to make an annual work plan of the Project, (including the utilization plan of the special fund referred to

in 5.)

- (3) to clarify responsibility and duty of each expert and Afghan staff assigned to the Center.
- (4) to decide important matters for the implementation of the Project.

4. A part of the articles referred to in III-1 may be rented at reasonable rates, in accordance with laws and regulations in force in the Democratic Republic of Afghanistan, and a part of consumable items such as fertilizer and agricultural chemicals, etc. may also be transferred at reasonable prices, to be determined likewise to the pilot farmers as may be decided by the Joint-Committee.

5. The proceeds from such rentals or transfers will constitute a special fund for the Project, which will be used exclusively for the implementation of the Project in accordance with laws and regulations in force in the Democratic Republic of Afghanistan.

VII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Democratic Republic of Afghanistan undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occurring in course of, or otherwise connected with the discharge of their official functions in the Democratic Republic of Afghanistan except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VIII. MUTUAL CONSULTATION

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

IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be five (5) years from March 14, 1979.

The objective of the Project is to contribute toward increasing rice production and promoting intensive and diversified agriculture in the Rice Belt region in the Democratic Republic of Afghanistan, through introduction of improved agricultural technology, improved rice varieties and multicropping patterns coupled with suitable rotation system.

The Master Plan of the Project consists of the following two (2) components.

1. Rice Development Center

The Center with about ten (10) hectare attached farm has been established at the Governmental farm in Jalalabad, Nangarhar Province as referred to the Exchange of Notes (E/N) between the two Governments dated August 28, 1978.

The activities of the Center are the following:

- (1) to collect and analyze existing data on rice and other crops.
- (2) to formulate adaptable improved technics suitable for extension and to test it at the Center.
- (3) to verify and demonstrate the trial results on pilot farmers' fields.
- (4) to train and educate Agricultural Extension Agents and selected candidates for Extension Agents.
- (5) to multiply and distribute the qualified seeds to pilot farmers.
- (6) to give necessary advice and training regularly to the pilot farmers (including the operation of the equipment and machinery).

2. Pilot Farmers Program

- (1) The objective of the pilot farmers program is to disseminate improved agricultural technology to the farmers, through its demonstration especially that of farm management and farmer's income, at farmer's level.
- (2) Pilot farmers shall be selected out of ten (10) exten-

sion units within the Project area, (Nangarhar and Laghman Provinces). The total area of pilot farmers should not be extended more than forty (40) hectares.

- (3) Pilot farmers programs are the following.
- i. The pilot farmers shall adopt the improved technics under the guidance and advice by the Center.
 - ii. The extension supervisor and agents of each unit shall record and report of the pilot farmer's activities for farther analysis.
 - iii. Any potential problems identified in the pilot farmer's field in the course of operations shall be fed back to the Center.
- (4) According to progress of this program, the extension supervisor shall select the new pilot farmers in consultation with the Japanese Team Leader.

ANNEX II**JAPANESE EXPERTS**

| CATEGORY | FIELD |
|-----------------------------------|---|
| 1. Team Leader | |
| 2. Experts (long-term assignment) | Agronomy Extension Agricultural Machinery Horticulture |
| 3. Liaison Officer | |

Note 1. As necessity arises, short-term experts in the fields mentioned above, and in the fields such as land consolidation, irrigation, plant protection, soil and fertilizer and etc., will be dispatched.

2. The number of long-term experts to be dispatched will not be more than 6 persons in total.

ANNEX III

**LIST OF THE ARTICLES PROVIDED BY
THE GOVERNMENT OF JAPAN**

1. Laboratory equipment, machinery, instruments, tools and their spare parts, and other materials for research.
2. Agricultural machinery, implements and their spare parts.
3. Fertilizer and other agricultural chemicals.
4. Vehicles.
5. Field facilities and implements.
6. Teaching materials including audio-visual aids.
7. Other necessary equipment and materials.

ANNEX IV

LIST OF AFGHAN STAFF

| <u>CATEGORY</u> | <u>STAFF</u> |
|--|---|
| 1. The Rice Development Center | |
| (1) Head of the Rice Development Center | |
| (2) Staff of the Administration Dept. | Accountants Administrator Typists Drivers Other necessary staff |
| (3) Staff of the Test, Trial and Demonstration Dept. | Agronomy Extension Agricultural Machinery Horticulture Operators Farm Laborers |
| (4) Staff of the Supervision Dept. | Extension Farm Management |
| (5) Staff of the Training Dept. | Planner Information Officer Training Officer |
| 2. The Kabul Liaison Office for the Project | |
| (1) Staff of the Kabul Liaison Office | Administrator Typists Drivers Other necessary staff |

ANNEX V

LIST OF LAND, BUILDINGS AND
FACILITIES

1. Land
 - (1) Land for the Rice Development Center
(about ten (10) hectares)
 - (2) Land for pilot farmer program
2. Building for the Rice Development Center
 - (1) Office Building
 - (2) Training Building (Laboratory and classroom, etc.)
 - (3) Common Building and Connecting Corridor
 - (4) Dormitory for Students
 - (5) Dormitory for Specialists (2 houses)
 - (6) Farm Management House
 - (7) Rice Mill and Storage House
 - (8) Workshop and Garage
 - (9) Gate House
 - (10) Garage (1 and 2)
 - (11) Others
3. Kabul Liaison Office for the Project
 - (1) Office
 - (2) Other necessary facilities

JAPANESE SIDE

1. Team Leader
2. Experts
 - Agronomy
 - Extension
 - Agricultural Machinery
 - Horticulture
3. Liaison Officer
4. Other Short-Term Experts

AFGHAN SIDE

1. General President of Extension and Agricultural Production Ministry of Agriculture and Land Reforms (Chairman)
2. President of Extension, Ministry of Agriculture and Land Reforms
3. President of Research, Ministry of Agriculture and Land Reforms
4. President of Planning, Ministry of Agriculture and Land Reforms
5. Head of the Rice Development Center
6. Director of Agricultural Extension in Nangarhar and Laghman Provinces
7. Director General of Cereals (Kabul Liaison Officer)

Note: Officials of the Embassy of Japan and representatives of other Afghan authorities involved in the implementation of the Project may attend the Joint-Committee meeting as observer.

22. マダガスカル北部畜産開発計画討議事録

MINUTE DES DISCUSSIONS ENTRE LA MISSION JAPONAISE
D'ETUDES ET LE GOUVERNEMENT MALGACHE A PROPOS DE
COOPERATION TECHNIQUE RELATIVE AU DEVELOPPEMENT DE
L'ELEVAGE DANS LA REGION NORD DE MADAGASCAR -

La Mission Japonaise, (ci-après dénommée " Mission " dirigée par Mr. Sugano Tetsumitsu, Chef-Adjoint du Service de l'Elevage, Direction de l'Elevage du Ministère de l'Agriculture et des Forêts, et envoyée par l'Agence Japonaise pour la Coopération Internationale (JICA), s'est rendue à Madagascar du 24 Octobre 1977 au 12 Novembre 1977 afin d'établir le programme détaillé du projet de coopération technique pour le développement de l'élevage dans la région Nord de Madagascar.

Durant son séjour à Madagascar la Mission a échangé des vues avec les autorités concernées du Gouvernement Malgache sur les mesures à prendre pour mener à bien la réalisation du projet de coopération technique en matière de développement de l'élevage dans la région Nord de Madagascar.

Comme résultat des discussions, la Mission et les autorités Malgaches concernées sont tombées d'accord pour recommander les points décrits dans les documents joints aux gouvernements respectifs.

Tananarive, le 11/11/77.

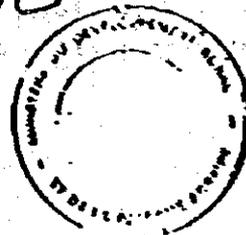
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Pour et au nom de la Japan
International Cooperation
Agency (JICA)

Le Chef de la Mission Japonaise
de l'Agence Japonaise pour la
Coopération Internationale
légalement mandaté par le
Gouvernement Japonais

菅野哲光

SUGANO TETSUMITSU



SIGNATURE

Pour et au nom de la République
Démocratique Malgache,

Le Ministre du Développement
Rural & de la Réforme Agraire
et par délégation
Le Directeur de l'Elevage
& de la Pêche Maritime

Dr. RANITIA RABRYELAKA S.O.
Vétérinaire Inspecteur en Chef

DOCUMENTS JOINTS

I) Coopération entre les deux gouvernements :

- 1) Les gouvernements des deux pays s'engagent à coopérer mutuellement dans la réalisation du projet de coopération technique pour le développement de l'élevage dans la région Nord de Madagascar (ci-dessous mentionné "Projet"), afin de contribuer à l'expansion de l'élevage;
- 2) Le projet est régi par le plan fondamental établi dans le document annexe I et exécuté selon un programme annuel qui sera dressé par le Comité Mixte prévu à l'article VI-2.

II) Envoi d'experts

- 1) Conformément aux lois et règlements en vigueur au Japon, le Gouvernement Japonais prendra les mesures nécessaires par l'intermédiaire de JICA pour fournir, à sa propre charge les services d'experts japonais comme prévu dans le document annexe II, selon les procédures normales du plan de coopération technique japonais (formulaire A1 et B1).
- 2) Les experts japonais prévus en 1) et leurs familles jouiront à Madagascar de privilèges, d'exemptions et de facilités comme prévu dans le document annexe III.

III) Fourniture de machines et de matériels

- 1) Conformément aux lois et règlements en vigueur au Japon, le Gouvernement Japonais prendra les mesures nécessaires par l'intermédiaire de JICA pour fournir des machines, outillages, instruments, véhicules, outils, pièces de rechange ou tout autre matériel nécessaire à la réalisation du Projet comme prévu dans le document annexe IV, selon les procédures normales du plan de coopération technique du Japon (Formule de demande A4).
- 2) Les fournitures définies en 1) ci-dessus deviendront la propriété du Gouvernement Malgache lorsqu'elles seront remises C.A.F. aux autorités malgaches concernées aux ports de débarquement ou aux aéroports, et de plus, ces fournitures seront utilisées exclusivement pour la réalisation du projet, après consultation avec l'expert en Chef Japonais comme prévu dans le document annexe II.

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IV) Stage de formation au Japon pour le personnel malgache

- 1) Conformément aux lois et règlements en vigueur au Japon, le Gouvernement Japonais prendra les mesures nécessaires par l'intermédiaire de JICA afin de prendre en charge le personnel malgache prenant part au Projet pour lui donner une formation technique en vertu des procédures normales du plan de coopération technique japonais (formule de demande A2, A3).
- 2) Le Gouvernement de Madagascar prendra les mesures nécessaires pour s'assurer que l'expérience et les connaissances acquises par le personnel malgache lors de son stage de formation au Japon seront utilisées efficacement dans le cadre de la réalisation du Projet.

V.) Mesures à prendre par le Gouvernement de Madagascar

- 1) Conformément aux lois et règlements en vigueur à Madagascar le Gouvernement devra prendre les mesures nécessaires pour mettre à la disposition du projet, et à sa charge :
 - (1) les spécialistes malgaches ou les autres personnels tels que prévus dans le documents annexe V.
 - (2) les terrains, bâtiments et autres facilités tels que prévus dans le documents annexe VI
 - (3) La fourniture ou le remplacement des machines, outillage instruments, véhicules, outils, pièces de rechange ou tout autre matériel nécessaire à la réalisation du Projet à l'exception de ceux fournis par l'organisation responsable au sein du Gouvernement Japonais comme prévu à l'article III ci-dessus;
 - (4) des logements pour les experts japonais et leurs familles et le cas échéant une allocation forfaitaire mensuelle prévue par la réglementation en vigueur à Madagascar.

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II) Conformément aux lois et règlements en vigueur à Madagascar, le Gouvernement Malgache prendra à sa charge les mesures nécessaires pour :

- (1) couvrir les dépenses nécessaires au transport à l'intérieur de Madagascar du matériel prévu à l'article III-2 aux frais d'installation, de fonctionnement et d'entretien dudit matériel ;
- (2) acquitter des droits de douane et toute autre charge à payer à Madagascar pour tous les matériels prévus à l'article III-1 ;
- (3) acquitter toutes les dépenses administratives nécessaires à la réalisation du projet ;
- (4) faciliter et régler les indemnités et les frais de transport pour les déplacements d'ordre professionnel des experts japonais.

VII) Administration et gestion du Projet

- 1) Le gouvernement Malgache assumera la responsabilité de l'administration et de la réalisation du Projet, tandis que les experts japonais donneront les indications techniques et les conseils nécessaires à la réalisation du Projet, le Gouvernement Malgache pourra donner les conseils nécessaires relatifs au plan de développement de l'élevage dans la province de Diego-Suarez.
- 2) Afin que les experts japonais puissent avoir des entretiens fréquents en vue de réaliser ce Projet d'une manière efficace et harmonieuse, un Comité Mixte sera établi, la structure en étant prévue dans le document annexé VII.

Le Comité Mixte se réunira au moins deux fois par an.

VIII) Immunité pour les experts japonais

Le Gouvernement de Madagascar s'engage à assumer la responsabilité relative aux poursuites au cas où celles-ci seraient faites contre les experts japonais, résultant de l'exercice de leurs fonctions à l'intérieur du pays (Madagascar), ou au cours de l'exercice de leurs fonctions ou en relation avec l'exercice de leurs fonctions, à l'exception toutefois des poursuites

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provenant de fautes graves ou intentionnelles de la part des experts japonais.

VIII) Consultation réciproque

Les deux gouvernements devront se consulter réciproquement sur les problèmes concernant la réalisation du Projet et pour tous ceux résultant de l'application de la présente minute de discussion.

IX) Durée de la coopération

La durée de la coopération technique sera de trois (3) ans à partir du 11 Novembre 1977

L'opportunité de la poursuite de la coopération technique régie par la présente minute de discussion sera étudiée par les deux gouvernements à la lumière des résultats acquis durant la réalisation du Projet.

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A N N E X E I.

Plan fondamental du Projet

Contenu du Projet

1) Zones d'action du projet

- Faritany d'Antoaboka
(Province de Diégo-Suarez)

2) Description du Projet

Outre la mise en place d'un centre d'appui technique à l'élevage dans le Fivondronan-pokontany de Diégo-Suarez, le projet consiste à :

a) former et recycler les techniciens de l'élevage du Faritany sur les matières suivantes :

- élevage des animaux domestiques
- hygiène des animaux domestiques
- alimentation des animaux domestiques

b) Améliorer les techniques de vulgarisation dans la zone du projet. Des formations itinérantes seront organisées en vue de mettre au point des techniques appropriées en matière de vulgarisation pour la protection sanitaire des animaux et de l'amélioration de la production animale.

c) participer dans la zone d'action au développement efficace de la protection sanitaire et à l'amélioration de l'alimentation animale en fournissant les médicaments, les instruments ou tout autre matériel nécessaire à la réalisation de cette activité.

d) améliorer l'alimentation en eau des animaux par l'aménagement de puits d'eau potable dans les principaux pâturages des régions d'Ambilobe et de Vohémar.

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A N N E X E II

Experts Japonais

(experts par tâche)

(1) expert en Chef

(2) expert

(3) contrôleur professionnel
(Adjoint Administratif)

(spécialité)

- Elevage

- vétérinaire

- 1^{re} amélioration
des pâturages

Remarques :

- 1. A la demande du Comité Mixte, des missions de courte durée peuvent être exécutées par des experts japonais pour des problèmes particuliers.
- 2. L'Expert en Chef sera nommé parmi ces experts par la JICA.
- 3. Le nombre des experts japonais pourra être modifié sur décision du Comité Mixte.

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A N N E X E III.

Privilèges, exemptions et facilités accordés aux experts japonais et à leurs familles :

1) Exonération de l'impôt et de toute autre taxe en rapport avec le revenu et les indemnités versés par le Japon aux experts japonais et à leurs familles;

2) L'admission en franchise des objets et effets personnels appartenant aux experts japonais ainsi qu'aux membres de leurs familles;

Entre autres, les articles énumérés ci-après peuvent être considérés comme objets et effets personnels :

(1) meubles

(2) frigidaire-congélateur ménager

(3) climatiseur

(4) aspirateur électrique

(5) machine à laver

(6) batterie de cuisine

(7) poste radio stéreo

(8) poste de télévision

(9) magnétophone

(10) machine à coudre

(11) cuisinière

(12) bicyclette

3) exemption de la T.U.T. pour l'achat par les experts de véhicules dont le montage a été fait à Madagascar;

4) L'exemption de la taxe T.U.T. citée à l'article 3 ne peut être faite qu'une seule fois pendant la durée des fonctions d'un expert;

Cependant, en cas de perte ou de destruction de la voiture par force majeure dûment constatée, le Gouvernement Malgache autorisera, sur demande de l'expert, l'achat d'un véhicule de rechange avec exemption de la taxe T.U.T.

5) Le décret N°66-270 du 20.06.66 de la législation malgache sera applicable aux experts japonais et leurs familles, soit exemption des 80 l des soins médicaux et

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d'hospitalisation dispensés dans des formations sanitaires agréés par l'Etat.

A N N E X E IV

Machines et matériels à fournir par la JICA

- 1) Machines et matériels nécessaires à la détection des épizooties, à l'examen, aux soins médicaux et à la lutte contre les épizooties.
- 2) Machines et matériel nécessaires à l'auffioration et à la vulgarisation des techniques de production des animaux domestiques;
- 3) Machines et matériel nécessaires à l'auffioration et à la vulgarisation des techniques de production de fourrages des animaux domestiques;
- 4) Machines et matériel audiovisuel nécessaires à la formation des stagiaires et à la vulgarisation;
- 5) Machines de forage de puits, équipements et matériels pour la fourniture d'eau potable;
- 6) Véhicules;
- 7) Toute autre machine et tout autre matériel nécessaires et pièces de rechange.

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A N N E X E V

Experts et autres personnels malgaches

| (personnel par tâche) | (spécialité) |
|--|---------------------------|
| 1) Directeur du Projet | - élevage |
| 2) Techniciens | - vétérinaire |
| 3) Contrôleur professionnel (Adjoint administratif) et fonctionnaire - | - cultures fourragères |
| 4) Ouvriers | |

A N N E X E VI

Bâtiments et établissements annexes

- 1) Bureau pour les experts japonais au Service Provincial de l'Elevage et de la Pêche Maritime de la Province de D/Suarez
- 2) Centre d'appui technique de l'Elevage :
 - (1) Cabinet de travail
 - (2) salle de recherche et d'expérience du personnel
 - (3) Dortoir des employés
 - (4) Dortoir des chercheurs
 - (5) Garage, hangar à machines agricoles
 - (6) Etables et locaux dépendants
 - (7) Fermes, pâturages et annexes pour la formation et la démonstration pour stagiaires
 - (8) Bâtiments et établissements annexes ou dépendants nécessaires.

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A N N E X E VII

Composition du Comité Mixte :

Président : Le Directeur de l'Élevage et de la Pêche Maritime
du Ministère du Développement Rural et de la
Réforme Agricole (M.D.R.R.A.)

Partie Japonaise

1. Expert en Chef
2. Experts dont la nécessité
est reconnue par l'expert
en Chef
3. personnel chargé de
coordination

Partie Malgache

- Chef du Service de l'Élevage
à la Direction de l'Élevage
de la Pêche Maritime
- Chef du Service Vétérinaire
à la Direction de l'Élevage
- Chef du Service Provincial
de l'Élevage de D/Suez

Remarque

Les membres de l'Ambassade
du Japon à Madagascar pourront
comme observateurs assister à la
session du Comité Mixte.

- Directeur du Projet

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Nous soussignés :

- Monsieur Tetsumitsu SUGANO
Directeur de la Mission japonaise d'Etudes
à propos de la Coopération Technique
relative au Développement de l'Elevage
dans la région Nord de Madagascar,

d'une part,

et

- Monsieur RAKOTO RABEVAZAHIA
Directeur de l'Elevage et de la Pêche
Maritime, Ministère du Développement Rural
et de la Réforme Agraire de la République
Démocratique de Madagascar,

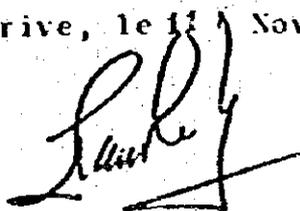
d'autre part,

avons l'honneur de confirmer par la présente, selon accord convenu communément entre nous, l'interprétation du paragraphe 3 des Remarques de l'Annexe II de "la Minute des discussions entre la Mission japonaise d'Etudes et le Gouvernement Malgache à propos de la Coopération Technique relative au Développement de l'Elevage dans la région Nord de Madagascar" ainsi formulé : "le nombre des experts japonais pourra être modifié sur décision du Comité mixte" mais qui doit être lu et compris comme suit : "le Comité mixte pourra proposer au Gouvernement du Japon une modification du nombre des experts japonais, et que seul donc le Gouvernement japonais prendra la décision finale à cet égard".

Fait à Tananarive, le 11 Novembre 1977



Tetsumitsu SUGANO



RAKOTO RABEVAZAHIA

マダガスカル北部畜産開発に対する技術協力のための日本国
調査団とマダガスカル国政府との討議議事録 (仮称)

国際協力事業団によって組成された農林省、畜産局家畜生産課長橋佐菅野哲光氏を団長とする日本国調査団(以下チームという)はマダガスカル国北部地域の畜産開発技術協力プロジェクトの具体的協力計画を策定するため、1977年10月24日から11月12日までマダガスカル国を訪問した。

同調査団はマダガスカルに滞在し、同国政府関係者と北部畜産開発技術協力プロジェクトを成功させるため、両当事者により実施されるべき諸事項につき意見を交換した。

同調査団による調査及び両当事者間の協議の結果を両当事者は、各々の政府に対して別添文書中にある事項について勧告することにつき合意に達した。

タナナリブ 1977年11月12日

マダガスカル民主人民共和国を代表して

農地改革地方開発省代表

畜水産局長

(サイン)

Dr. RAKOTO RABEVAZAHIA

国際協力事業団(JICA)を代表して、

日本政府から正式に委任された国際協

力事業団の日本調査団々長

(サイン)

菅野哲光

附 属 文 書

第 I 両国政府間の協力

1. 両国政府は、マダガスカル国北部地域における畜産の振興に貢献することを目的としてマダガスカル国北部地域畜産開発技術協力プロジェクト（以下「プロジェクト」と呼ぶ）を相互に協力して実施する。
2. プロジェクトは付表 I に定める基本計画に基づき実施される。プロジェクトは第 IV の 2 にいう「合同委員会」が毎年作成する年次計画に従って実施される。

第 II 専門家派遣

1. 日本国政府は、日本国において施行されている法令に従い、付表 II に掲げる日本人専門家の役務を、日本の技術協力計画の通常の手続（要請書様式 A1 及び B2）によって自己の負担において供与するため、J. I. C. A. を通じて必要な措置をとる。
2. 1. の日本人専門家とその家族は、マダガスカル国において、付表 III に掲げる特権、免除及び便宜が与えられる。

第 III 機材供与

1. 日本国政府は、日本国において施行されている法令に従い、付表 IV に掲げるプロジェクトの実施に必要な機材、設備、器具、車輛、工具、予備部品及びその他の資材を、日本の技術協力計画の通常の手続き（要請書様式 A 等）によって、自己の負担において供与するため J. I. C. A. を通じて必要な措置をとる。
2. 1. にいう物品は陸揚港及び或いは空港において、c. i. f. 建てでマダガスカル国政府関係当局に引渡されたときにマダガスカル国政府財産となり、かつこれらの物品は、付表 V に示す日本人プロジェクトリーダーと協議のうえプロジェクト実施のためにのみ使用される。

第 IV 日本国におけるマダガスカル国人の研修

1. 日本国政府は、日本国において施行されている法令に従い、プロジェ

クトに携わるマダガスカル国人を日本国での研修のために、日本の技術協力計画の通常の手続き（要請書様式A2, A3）によって、自己の負担において受入れるためにJ. I. O. A. を通じて必要な措置をとる。

2. マダガスカル国政府は、マダガスカル国人が日本国における技術訓練により得た知識及び経験がプロジェクトの実施のために、効果的に利用されることを確保するために必要な措置をとる。

第V マダガスカル国政府によりとられるべき措置

1. マダガスカル国政府は、マダガスカル国において施行されている法令に従い、自己の負担において次のものを準備するために必要な措置をとる。

- (1) 付表Vに掲げるマダガスカル国人専門家及びその他の職員
- (2) 付表VIに掲げる土地、建物及び付帯施設
- (3) 上記第IIIによる日本国政府関係当局によって供与されたものを除くプロジェクトの実施のために必要な設備、機材、器具、車輛、工具、予備部品及びその他の資材の供給或いは代替
- (4) 日本人専門家及びその家族の住宅のあっせん、場合により手当金としてマダガスカルの効力ある規定の下に準備された月額を負担する。

2. マダガスカル国政府は、マダガスカル国において施行されている法令に従い、次のものを負担するために必要な措置をとる。

- (1) 第IIIの1にいう物品について、マダガスカル国内における輸送並びにこれらの物品の据付け、操作及び維持に必要な経費
- (2) 第IIIの1にいう物品について、マダガスカル国内で課せられることのある関税、内国税及びその他の課徴金
- (3) プロジェクトの実施に必要なすべての運営費
- (4) マダガスカル国内における日本人専門家の公用旅行に対する便宜及び旅費の支給

第VI プロジェクトの運営、管理

1. マダガスカル国政府は、プロジェクトの運営及び実施について責任を

負い、日本人専門家はプロジェクト実施のために必要な技術上の指導及び助言を与えると共に、Diego-Suarez 州の畜産振興計画についても必要な助言を行うことができる。

2. プロジェクトを円滑に推進し、効果的に実施させるために日本人専門家及びマダガスカル国政府関係者は、緊密に協議するものとし、付表Ⅲに掲げる構成による合同委員会を設置する。

委員会は少なくとも年2回は開催されるものとする。

第Ⅴ 日本人専門家に対する免責

マダガスカル国政府は、日本人専門家のマダガスカル国における職務の遂行に起因し、その遂行中に発生し、又はその他の遂行に関連し、日本人専門家に対する請求が生じた場合には、その請求に関する責任を負う。

ただし、日本人専門家の故意又は重大な過失から生ずる責任についてはこの限りではない。

第Ⅵ 相互協議

この討議議事録に関連して生ずるプロジェクトの実施に関する問題について必要に応じ両国政府は相互に協議する。

第Ⅶ 協力期間

この討議議事録による技術協力の期間は1977年11月11日から3カ年とする。

この討議議事録にもとづく技術協力のその後については、協力期間中の評価によって二国間で適当な時期に検討する。

付 表 Ⅰ
プロジェクトの基本計画

事業の内容

1) プロジェクトの実施地域

アントンボカ フアリタニー(ディゴスワレス州)

2) プロジェクトの概要

ディゴスワレス州 フィボンドロナム ポコタニーに畜産技術指導所を設置する。

プロジェクトはa)以下により成立つ。

a) 次の分野に関するフアリタニーの畜産技術者に対する訓練と巡回指導

家 畜 飼 育

家 畜 衛 生

家 畜 飼 料

b) プロジェクト実施地域内における、技術の改善及び指導は家畜衛生、家畜生産の分野について現地に適応する技術を普及する。

c) この活動に必要な機械、設備、薬品の供給により、プロジェクト実施地域において予防衛生や家畜飼料の改善の効果ある普及。

d) Ambilobe 地方、Vohemar 地方の主要放牧地に対し、家畜のための飲水用井戸掘削、飲水施設の改善を行う。

付 表 Ⅱ

日本人専門家

(専門家の教別)

(分 野)

(1) リーダー

(2) 専門家

畜 産
獸 医
飼 料

(3) 業務調整員

備 考

1. 合同委員会はプロジェクト実施中の特殊問題解決のために日本人専門家を通じて短期専門家を要請することができる。
2. リーダーは国際協力事業団が専門家の中から指命する。
3. 日本人専門家の数は合同委員会の決定により変更され得る。

付 表 Ⅱ

日本人専門家及びその家族に対する特権、免除及び便宜

1. 日本国から支払われる日本人専門家及びその家族への給与、諸手当に対して、又はこれに関連して課される所得税、その他課徴金の免除。
2. 日本人専門家及びその家族により海外からマダガスカル国へ持込まれることがある必要な身廻り品及び家財に対して課せられる関税、その他の課徴金の免除。

とりわけ次の物品に類するものは見廻品とみなす。

- | | |
|-------------|-----------------|
| (1) 家具 | (7) ラジオ、ステレオセット |
| (2) 冷蔵庫、冷凍機 | (8) テレビジョン |
| (3) 空調機 | (9) 録音機 |
| (4) 電気掃除機 | (10) ミシン |
| (5) 電気洗濯機 | (11) 天火 |
| (6) 料理用具 | (12) 自転車 |

3. 日本人専門家が個人用自動車として、現地ノックダウン車を購入する場合における国内取引税 (T.U.T.) の免除
4. 上記3のT.U.T. 税免除は専門家の任期につき1回与えられる。
たゞし、十分立証された不可抗力による自動車の紛失ないし、破損の場合にはマダガスカル政府は専門家の要請により国内取引税 (T.U.T.) 免除による代替車の購入を認める。
5. 1966年6月20日付第66-270号のマダガスカル法令を日本人専門家及びその家族に適用し、国の認める医療施設において支払われる医療費、及び入院費の80%を免除する。

付 表 IV

供 与 機 材

1. 家畜疾病調査，診察，治療及び防疫のための機械及び資材
2. 家畜の生産技術改善，普及のための機械及び資材
3. 家畜飼料生産技術改善，普及のための機械及び資材
4. 訓練指導，普及のための視聴覚資材
5. 井戸掘削用機械，給水設備及び機械
6. 車輛
7. その他必要な機械，資材及びスペアパーツ

付 表 Y

マダガスカル国人専門家及びその他の職員

| (職員の種別) | (分野) |
|------------------|------------------|
| (1) プロジェクトディレクター | |
| (2) 技術者 | 畜産 獣医 貝科作物 |
| (3) 事務職員及び業務員 | |
| (4) 労務者 | |

付 表 II

建物及び附帯施設

1. Diego-Suarez 州畜水産局において、日本人専門家のための事務室
2. 畜産技術指導所
 - (1) 事務室
 - (2) 研修実験室
 - (3) 職員宿舍
 - (4) 研修員宿舍
 - (5) 車庫・農機具庫
 - (6) 畜舎及び附帯施設
 - (7) 訓練、展示のための園場、放牧地及び附帯施設
 - (8) その他必要な建物及び附帯施設

付 表 Ⅳ
合同委員会の構成

委員長 マダガスカル国畜産局長

| 日 本 側 | マダガスカル側 |
|-------------------|----------------------------|
| 1. リーダー | 畜産局畜産課長 |
| 2. リーダーが必要と認める専門家 | カ 衛生課長 |
| 3. 業務調整員 | ディゴスワレス州畜産局長 プロジェクトリーダー |

備 考

在マダガスカル国，日本大使館員は合同委員会の会合にオブザーバーとして出席することができる。

23. タンザニア・キリマンジャロ農業開発センター計画・討議議事録

THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE
IMPLEMENTATION SURVEY TEAM (NEGOTIATION TEAM)
AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT
OF THE UNITED REPUBLIC OF TANZANIA
ON THE JAPANESE TECHNICAL COOPERATION
FOR THE IMPLEMENTATION OF KILIMANJARO AGRICULTURAL
DEVELOPMENT CENTER AND KILIMANJARO INDUSTRIAL
DEVELOPMENT CENTER PROJECTS

The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as JICA) and headed by Mr. Michimoto Goto, Director of the Planning Division, the Planning Department, Japan International Cooperation Agency, visited the United Republic of Tanzania from 27th August 1978 to 13th September 1978 for the purpose of working out the details of the technical cooperation program concerning Kilimanjaro Agricultural Development Center (hereinafter referred to as KADC) and Kilimanjaro Industrial Development Center (hereinafter referred to as KIDC) Projects in the United Republic of Tanzania.

During its stay in the United Republic of Tanzania, the Team exchanged views and had a series of discussions with the Tanzanian authorities concerned in respect of the necessary measures to be taken for the immediate implementation of the above-mentioned Projects.

As a result of the discussions, the Team and the Tanzanian authorities concerned agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of the United Republic of Tanzania will cooperate in implementing KADC and KIDC Projects (hereinafter referred to as "the Projects") for the purpose of contributing to the promotion of the regional development in Kilimanjaro Region through the agricultural development project which aims at the improvement of agricultural infrastructure and the increase in productivity and through the industrial development project which aims at the establishment of the industrial infrastructure and the promotion of industrialization.
2.
 - (1) The Projects which will be implemented by the Government of Japan and the Government of Tanzania will comprise of the completion of the buildings and facilities necessary for the implementation of the Projects as outlined in Annex I
 - (2) The Projects will be implemented in accordance with the annual work plan to be formulated by the Regional Management Team (hereinafter referred to as RMT).

II. DISPATCH OF EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in Annex II through normal procedures under the Technical Cooperation Scheme of Japan and Tanzania.
2. The Japanese experts referred to in 1 above and their families will be granted in the United Republic of Tanzania the privileges, exemptions and benefits as listed in Annex III and normal privileges, exemptions and benefits given to the similar experts in Tanzania.

III. PROVISION OF MACHINERY AND EQUIPMENT

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials necessary for the implementation of the Projects as listed in Annex IV, through the normal procedures under the Technical Cooperation Scheme of Japan.**
- 2. The articles referred to in 1 above will become the property of the Government of the United Republic of Tanzania upon being delivered c.i.f. to the Tanzanian authorities concerned at the ports and/or airports of disembarkation, and will be utilized exclusively for the implementation of the Projects.**

IV. TRAINING OF TANZANIAN PERSONNEL IN JAPAN

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Tanzanian personnel connected with the Projects for technical training in Japan through the normal procedures under the Technical Cooperation Scheme of Japan.**
- 2. The Government of the United Republic of Tanzania will take necessary measures to ensure that the knowledge and experience acquired by the Tanzanian personnel from technical training in Japan will be utilized effectively for the implementation of the Projects.**

V. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE UNITED REPUBLIC OF TANZANIA

- 1. In accordance with the laws and regulations in force in the United Republic of Tanzania, the Government of the United Republic of Tanzania will take necessary measures to provide at its own expense:**

- (1) Services of the Tanzanian counterpart personnel and administrative personnel as listed in Annex V;
 - (2) Land, temporary buildings and facilities necessary for the activities at the beginning of the Projects;
 - (3) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Projects other than those provided through JICA under III above;
 - (4) Whenever necessary, transportation facilities and travel allowance for the Japanese experts for the official travel within the United Republic of Tanzania;
 - (5) Suitably furnished accommodation for the Japanese experts and their families to the best of its capacities.
2. In accordance with the laws and regulations in force in the United Republic of Tanzania, the Government of the United Republic of Tanzania will take necessary measures to meet:

- (1) Expenses necessary for the transportation within the United Republic of Tanzania of the articles referred to in III above as well as for the installation, operation and maintenance thereof;
- (2) Customs duties, internal taxes and any other charges, imposed in the United Republic of Tanzania on the articles referred to in III above;
- (3) All running expenses necessary for the implementation of the Projects.

VI. ADMINISTRATION OF THE PROJECTS

1. The Regional Development Director (hereinafter referred to as RDD) of Kilimanjaro Region, will bear overall responsibility for the implementation of the Projects under the supervision of Prime Minister's Office.
2. The Japanese experts will take the appropriate care on the technical matters and provide the advisory services on technical and managerial matters for the Projects in close collaboration with the Tanzanian counter-

part personnel concerned.

3. The activities for the implementation of the Projects will be carried out by the Tanzanian counterpart personnel with an assistance of the Japanese Experts.
4.
 - (1) A Regional Management Team shall be empowered to ensure successful and effective implementation of the Projects.
 - (2) The meeting of RMT, under the chairmanship of RDD, will be held regularly.
 - (3) Japanese experts will attend the meeting of RMT as advisors.

VII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the United Republic of Tanzania undertakes to bear claims, if any arises against the Japanese experts engaged in the Projects resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the United Republic of Tanzania except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VIII. MUTUAL CONSULTATION

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

IX. TERM OF COOPERATION

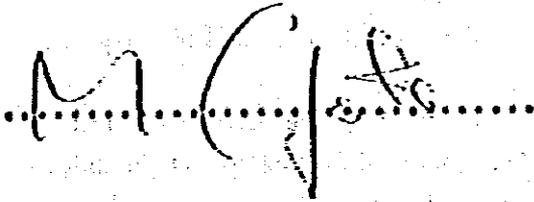
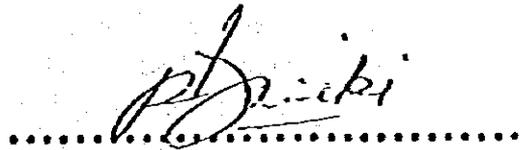
This Record of Discussions will be effective from the date of its signing and will be terminated after four (4) years from this date, or otherwise terminated or extended by mutual consultation.

Dar es Salaam, September 13, 1978

FOR THE JAPANESE DELEGATION FOR THE TANZANIAN DELEGATION

Michimoto Goto
Director of the Planning Division
Planning Department
Japan International Cooperation
Agency

Richard E. Mariki
Director of External Finance,
Ministry of Finance and Planning

Handwritten signature of Michimoto Goto in cursive script, positioned above a horizontal dotted line.Handwritten signature of Richard E. Mariki in cursive script, positioned above a horizontal dotted line.

ANNEX I ACTIVITIES FOR THE PREPARATORY STAGE

During the preparatory Stage, the Projects will consist of the following functional activities:

A. Kilimanjaro Agricultural Development Centre Project

1. Activities for the Preparatory Stage

(1) Technical Advice and Supervisory Works

Technical advice and supervisory works will be provided to carry out the following activities:

- To conduct planning and survey to improve agricultural infrastructure in Lower Moshi Area (about 3,000 ha) which includes pumping station, irrigation and drainage canal and farm road;
- To conduct surveys for water resources development in Mt. Kilimanjaro area, Lower Hai area, Lower Rombo area, North Pare area, and West Pare area;
- To construct buildings and utilities of the KADC;
- To establish facilities of the Agricultural Mechanical Center.

(2) Establishment of Trial Farm

A trial farm (10 ha) will be constructed in Chakereni and Mtakuja villages. Following activities will be carried out:

- To conduct studies and designing for a trial farm;
- To construct the trial farm;
- To cultivate rice and vegetables in the trial farm;
- To test the cultivation techniques for rice and vegetables to apply to other areas in Lower Moshi.

(3) Extension Services

Extension services will be conducted to farmers by mobile units in order to improve the techniques of:

- Cultivation for rice and vegetables;
- Agricultural machinery with spare parts provided in Section III above for better use and repair.

(4) Training of Manpower

- On-the-job training will be carried out by the Japanese experts in consultation with the Tanzanian counterpart personnel.
- Appropriate Tanzanian counterpart personnel will be trained in Japan.

(5) Planning and Coordination

- Detailed implementation programme will be made up in consultation with the Tanzanian counterpart personnel.
- Coordination among various functional activities and programmes will be made in consultation with Tanzanian counterpart personnel.

B. Kilimanjaro Industrial Development Centre Project

1. Activities for the Preparatory Stage

(1) Studies and Surveys

- Surveys will be conducted to establish feasible workshops (foundry, forging, mechanical engineering and testing facilities) and pilot factories (ceramic and briquet) on raw materials, supplementary goods, order-made products to be produced.
- Feasibility studies will be conducted to identify the potential industries for investment.

(2) Technical Advice and Supervisory Works

Technical advice and supervisory works will be provided to carry out the following activities:

- To construct buildings and utilities of the KIDC and its annexes;
- To establish common facilities and pilot factories in the Moshi Industrial Estate, and other facilities in the extensional service stations (Rombo and Pare Industrial Stations) and unit (Moshi Exhibition Unit) of the KIDC;
- To select and make specifications of machines and equipment to be installed in the factories in the Moshi Industrial Estate.

(3) Industrial Promotion Services

- Industrial Promotion Services will be provided by mobile units

on technological matters, marketing methods, management methods, new investments, etc.

(4) Training of Manpower

- On-the-job training will be carried out by the Japanese experts in consultation with the Tanzanian counterpart personnel.
- Appropriate Tanzanian counterpart personnel will be trained in Japan.

(5) Planning and Coordination

- Organization of the KIDC will be set up in accordance with the normal Government machinery in this Region.
- Detailed implementation programmes will be made up in consultation with the Tanzanian counterpart personnel.
- Coordination among various functional activities and programmes will be made in consultation with the Tanzanian counterpart personnel.

ANNEX II JAPANESE EXPERTS

1. Project Manager
- (A) Agricultural Team
2. Team Leader
3. Experts in the fields of;
 - Irrigation and drainage
 - Land Consolidation
 - Water Resources
 - Agronomy
 - Agricultural Machinery
 - Extension
- (B) Industrial Team
4. Team Leader
5. Experts in the fields of;
 - Management
 - Mechanical Engineering
 - Electroplating
 - Foundry
 - Forging
 - Eathenware
 - Briquet

- Note:
1. Agricultural or Industrial Team Leader may assume the post of Project Manager concurrently.
 2. If necessary, short term experts will be dispatched.
 3. Above Annex II is subject to change by mutual consultation between the two Governments.

ANNEX III PRIVILEGES, EXEMPTIONS AND BENEFITS

- 1. Exemptions from income tax and charges of any kind imposed on or in connection with the living allowances remitted from abroad.**
- 2. Exemptions from import and export duties and any other charge in respect of personal and household effects, including one motor vehicle per family, which may be brought into the United Republic of Tanzania from abroad.**
- 3. Free medical services and facilities to the Japanese experts and their families.**

ANNEX IV LIST OF MACHINERY AND EQUIPMENT

A. Kilimanjaro Agricultural Development Centre Project

- 1. Construction machinery and equipment, including pumps and their accessories, and their spare parts**
- 2. Agricultural machinery and implements and their spare parts**
- 3. Machines and tools for repair work**
- 4. Equipment and materials for public utilities**
- 5. Vehicles**

B. Kilimanjaro Industrial Development Centre Project

- 1. Mobile units with tools and equipment for industrial extension services**
- 2. Machines and tools for training purposes**
- 3. Machines and tools for repair work**
- 4. Vehicles**

Note: Other necessary machines, equipment, tools and materials to be mutually agreed upon the implementation of the Project.

ANNEX V LIST OF TANZANIAN PERSONNEL

A. Kilimanjaro Agricultural Development Centre Project

- 1. Project Director**
- 2. Engineer**
- 3. Staff**
- 4. Worker**
- 5. Driver**

B. Kilimanjaro Industrial Development Centre Project

- 1. Project Director**
- 2. Department Manager**
- 3. Engineer**
- 4. Staff (Qualified and Non-qualified)**
- 5. Worker**
- 6. Secretary**
- 7. Driver**

Note: Above Annex V is subject to change by mutual consultation between the two Governments.

タンザニア・キリマンジャロ農業開発センター計画・実施計画試案

TEMPERATIVE IMPLEMENTATION PROGRAM
FOR THE
KILIMANJARO AGRICULTURAL DEVELOPMENT CENTER
AND
KILIMANJARO INDUSTRIAL DEVELOPMENT CENTER

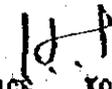
Within the scope of the Record of Discussions signed on September 13, 1978, the representatives of Japan International Cooperation Agency and Kilimanjaro Regional Development Director's Office have jointly formulated the Tentative Implementation Program for the implementation of Kilimanjaro Agricultural Development Center and Kilimanjaro Industrial Development Center Projects.

This tentative Implementation Program is subject to change in accordance with the progress of implementation of the Projects.

November 25, 1978


KAZUHIKO BESSIKAWA

Representative
Japan International
Cooperation Agency
in Tanzania


HORACE KOLIHRA
Principal Secretary
Prime Minister's Office

I. Kilimanjaro Agricultural Development Center Project

1. Objectives

Kilimanjaro Agricultural Development Center Project (hereinafter referred to as KADC) aims at contributing to the promotion of agricultural development in Kilimanjaro region through the improvement of agricultural infra-structure, cultivation techniques and mechanized agriculture and their extension.

2. Functions and Facilities

KADC has the following functions and facilities to achieve its objectives:

- (1) To plan and supervise construction of agricultural infra-structure such as irrigation canals and farm roads**

Facilities: Office Rooms with Design Equipment

- (2) To improve cultivation techniques for agricultural development in Lower Moshi Area**

Facilities: Trial Farm (10ha)

Experimental Facilities

- (3) To diffuse agricultural techniques by extension services**

Facilities: Agricultural Mechanical Service Center

Mobile Unit

Garage

- (4) To train manpower**

Facilities: KADC

- (5) To plan and coordinate the activities of KADC**

Facilities: Office Room

Meeting Room

Car Park

3. Programs

(1) Program for the Activities of KADC

Chart 1 shows the tentative program for the activities of KADC by function for four years stipulated in the Record of Discussions.

(2) Program for the Dispatch of Japanese Experts

Chart 2 shows the tentative program for the Japanese Experts to be dispatched to KADC.

(3) Program for the Training of Tanzanian Personnel

Chart 3 shows the tentative program for the training of Tanzanian personnel in Japan.

(4) Special Support by the Japanese Side

Japan International Cooperation Agency provides the following special support to the KADC by dispatching experts teams wherever necessary:

Technical Support Team

Evaluation Team

4. Organization

(1) Staffing

Chart 4 shows the organization and staffing plan of the KADC during four years stipulated in the Record of Discussions.

(2) Job Description of the Staff

A. Japanese Experts

a. Team Leader

- (i) To advise and assist the Tanzanian Project Director for programming, operation and administration of the project.
- (ii) To coordinate the activities of Japanese Experts attached to the Project as the head of the Japanese team.
- (iii) To represent Japanese Experts in KADC and KIDC as necessity arises.

b. Experts

- (i) To advise and assist Tanzanian counterparts in their respective fields.
- (ii) To provide farmers with technical guidance in their respective fields.

c. Liaison Officer

- (i) To support the Japanese Team Leader and Experts for programming and administration of the Project.
- (ii) To conduct accounts work and others in accordance with the regulations in force in Japan and to take charge of contract business concerning construction of Trial Farm.
- (iii) To prepare the progress reports on the achievement of targets of the Project which are to be submitted to both Tanzanian and Japanese authorities concerned.

B. Tanzanian Counterparts

a. Project Director

- (i) To manage and coordinate all the operational activities for the implementation of the Project.
- (ii) To manage all the Tanzanian personnel engaged in the Project.

b. Technical Staff

- (i) To prepare and implement the detailed action programs in their respective fields.
- (ii) To submit progress report to the Project Director in their respective fields.

5. The Government of Japan will consider the construction of buildings and equipment of KADC as will be agreed between the two Governments.

6. The Government of Tanzania will take necessary measures to enable the Government of Japan to expedite the construction of buildings of KADC as follows;

- (1) To secure the land necessary for the construction of buildings of KADC and to readjust it.
- (2) To prepare for facilities such as electric supply, water supply, drainage and other incidental facilities outside the site if necessary.

7. Temporary Facilities

For the Preparatory Stage, the following facilities are temporarily secured by the Tanzanian side;

Office room , Meeting room , Garage, Others

8. Machinery and Equipment

Following machinery and equipment will be provided by the Japanese side;

Furniture

Equipment for documentation

Audio-visual aids

Vehicle

Refrigerator

Machinery and equipment with attachment for soil preparation

Machinery and equipment with attachment for cultivation and processing

Experimental equipment

Agricultural tool

Construction machinery and equipment for trial farm

Machine and tool for repair work

Equipment for survey

Boring machine with attachment for well

Equipment for water supply on trial farm

Fertilizer and pesticide

Others

Chart 1. Program for the Activities of KADC

| Activities | Contents | Implementation Schedule | Probable |
|---|---|--|---|
| 1. Establishment of Trial Farm | <p>A. Design of Trial Farm</p> <p>B. Construction of Trial Farm</p> <p>C. Test for applicability of the improved farming techniques</p> <p>D. Field practice for training</p> | <p>A. Survey and Planning Sub- A. Improvement of Farming Technique Sub. B. Training and Extension Sub. C. Construction Sub.</p> <p>A. Improvement of Farming Technique Sub. B. Training and Extension Sub.</p> | <p>A. Early in 1979</p> <p>B. Late in 1979</p> <p>C. 1980 ~</p> <p>D. 1990 ~</p> |
| 2. Training in KADC Trainees will be selected in Lower Mochi Area, but those in other areas in Kilimanjaro region also attend the training by permission of R.D.D. | <p>In KADC, following training courses will be conducted during four years stipulated in the Record of Discussions.</p> <p>A. Cultivation Course Lecture : At Site Office of KADC Practice : At Trial Farm</p> <p>B. Agricultural Machinery Course Lecture : At Site Office of KADC Practice : Repair work at Agricultural Mechanical Center " Better use work at Trial Farm</p> <p>C. Agricultural Extension Course Lecture : At Site Office of KADC Practice : At Trial Farm and Farmstead in this area</p> | <p>A. Training and Extension Sub. A. Improvement of Farming Technique Sub. B. Training and Extension Sub.</p> <p>C. Training and Extension Sub.</p> | <p>A. Immediately after completion of KADC facilities B. -do- C. -do-</p> |
| 3. Technical Advice and Supervisory work | <p>A. A series of basic studies for following matters : A. Improvement works agricultural infrastructure in Lower Mochi Area (about 3000 ha) B. Water resources development in Kilimanjaro region</p> <p>B. Construction work of agricultural infrastructure in Lower Mochi Area</p> | <p>A. Survey and Planning Sub. B. -do- C. Construction Sub.</p> | <p>A. 1979 ~ B. -do- C. -do-</p> |

Foot Note : 1. This program is subject to conditions that necessary budget will be acquired for the implementation of the Project.

2. This scope of Technical Cooperation is subject to change, if necessity arises in the future, within the scope of the provisions given in the " Record of Discussions " .

Chart 2. Program for the Dispatch of Japanese Experts

| Field | 1978 | 1979 | 1980 | 1981 | 1982 |
|--|--------------|---------------------|--------------|------|------|
| (Construction of Buildings and Facilities) | Basic Design | Construction Design | Construction | | |
| 1 Team leader | | | | | |
| 2 Irrigation and Drainage | | | | | |
| 3 Land Consolidation | | | | | |
| 4 Water Resources | | | | | |
| 5 Agronomy (two persons) | | | | | |
| 6 Agricultural Machinery | | | | | |
| 7 Extension | | | | | |
| 8 Liaison Officer | | | | | |

Foot Note : 1 This program is subject to conditions that necessary budget will be acquired for the implementation of the Project.

2 This Scope of Technical Cooperation is subject to change, if necessity arises in the future, within the scope of the provisions given in the "Record of Discussions".

3 Tanzanian side suggested to have one Liaison Officer for KADC and KIPC.

Chart 3. Program for the Training of Tanzanian Personnel

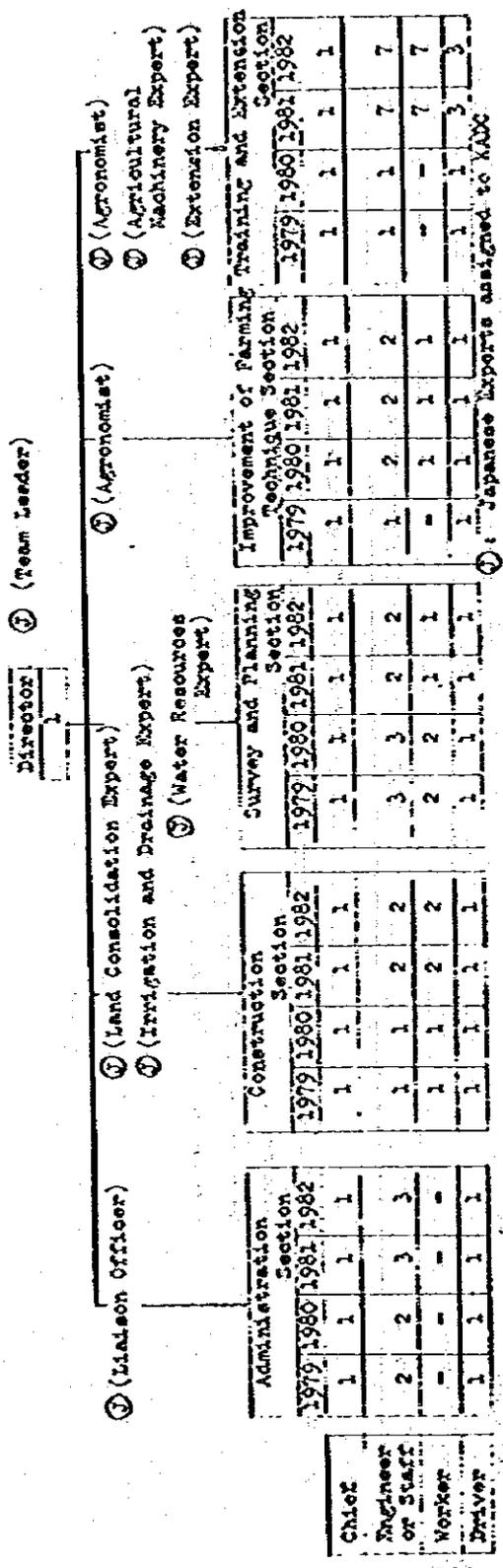
(Unit : Person)

| Fiscal Year | 1978 | | | | 1979 | | | | 1980 | | | | 1981 | | | | 1982 | | | |
|-----------------------------------|------|--|--|--|----------|--|--|--|---------|--|--|--|---------|--|--|--|---------|--|--|--|
| | | | | | | | | | | | | | | | | | | | | |
| Field | | | | | | | | | | | | | | | | | | | | |
| 1 Study Tour (about 3 weeks) | | | | | 2 (2) | | | | (2) | | | | | | | | 2 (0) | | | |
| 2 Training | | | | | | | | | | | | | | | | | | | | |
| (1) Irrigation and Drainage | | | | | 1 (3) | | | | 1 (1) | | | | 1 (1) | | | | | | | |
| (2) Land Consolidation | | | | | (2) | | | | 1 (1) | | | | | | | | 1 (1) | | | |
| (3) Water Resources | | | | | (2) | | | | 1 (1) | | | | 1 (1) | | | | | | | |
| (4) Agronomy | | | | | 1 (1) | | | | | | | | 1 (1) | | | | 1 (1) | | | |
| (5) Agricultural Machinery | | | | | (2) | | | | 1 (1) | | | | 1 (1) | | | | 1 (1) | | | |
| (6) Extension | | | | | | | | | | | | | 1 (1) | | | | 1 (1) | | | |
| Total | | | | | 4 (12) | | | | 4 (6) | | | | 5 (5) | | | | 6 (4) | | | |

Foot Note : 1. This program is subject to conditions that necessary budget will be acquired for the implementation of the Project.

2. This scope Technical Cooperation is subject to change, if necessity arises in the future, within the scope of the provisions given in the " Record of Discussions ".

Chart 4. Organization and Staffing Plan of KADC



Tanzanian Annual Staffing Plan

| | 1979 | 1980 | 1981 | 1982 |
|--------------|-----------|-----------|-----------|-----------|
| Director | 1 | 1 | 1 | 1 |
| Chief | 5 | 5 | 5 | 5 |
| Engineer | 8 | 9 | 16 | 16 |
| OT Staff | 3 | 4 | 11 | 11 |
| Worker | 5 | 5 | 7 | 7 |
| Driver | 22 | 26 | 40 | 40 |
| Total | 44 | 50 | 80 | 80 |

- Foot Note: 1 This program is subject to conditions that necessary budget will be acquired for the implementation of the Project.
 2 This Scope of Technical Cooperation is subject to change, if necessity arises in the future. Within the scope of the provisions given in the "Record of Discussions".
 3 Number of part time labourers and watchmen is excluded from the figures.
 4 Agricultural Mechanical Service Center is one of the facilities of Training and Extension Section.

II. Kilimanjaro Industrial Development Center Project

1. Objectives

This Project aims at establishing Kilimanjaro Industrial Development Center (hereinafter referred to as KIDC) as a regional organization, which will develop small scale industries in Kilimanjaro region by providing technical assistance, extension services and manpower training as well as conducting programming and coordination of the activities on the basis of research and development to be undertaken by KIDC.

2. Functions and Facilities

KIDC has the following functions and facilities to achieve its objectives:

(i) Functions

a. Development of Appropriate Technologies in;

- * Repair and Maintenance
- * New Production Technology
- * Inspection and Testing
- * Product Development
- * Quality Control

b. Promotion of Appropriate Technologies in;

- * Establishment of New Industries
- * Extension Service
- * Consultancy and Information Service
- * Marketing Assistance

c. Training of Manpower;

- * Staff Training (in Japan and Tanzania)
- * Participants Training (Group training in Tanzania)
- * Workers Training in New Industries (On -the- job training in Tanzania)

d. Programming and Coordination;

- * Feasibility Studies
- * Investment Planning
- * Preparation of Detailed Programs of Activities
- * Coordination of Activities

(2) Facilities

a. Administration Building of KIDC

- * Office Room
- * Working Room
- * Meeting Room
- * Car Park

b. Accommodation

- * Dormitory for Trainees
- * Other Necessary Facilities

c. Workshops

- * Foundry Workshop
- * Forging Workshop
- * Mechanical Engineering Workshop
- * Testing and Inspection Facilities

d. Pilot Factories

- Ceransio Factory
- Briquet Factory

e. Other Instrumental Facilities

- Roato Industrial Promotion Station
- Pare Industrial Promotion Station
- Mochi Industrial Exhibition Unit

3. Programs

(1) Program for the Activities of KIDC

Chart 5 shows the tentative program for the activities of KIDC by function for four years.

(2) Program for the Assignment of Japanese Experts

Chart 6 shows the tentative program for the Japanese Experts to be assigned at KIDC.

(3) Program for the Training of Manpower

Chart 7 shows the tentative program for the training of Tanzanian personnel.

- a. Staff training is conducted in Japan and Tanzania for those who are expected to become chiefs and/or instructors of KIDC.
- b. Participants training is conducted for would-be skilled workers in specific industries.
- c. Workers training is conducted for the factory workers in new industries.

(4) Special Support by the Japanese Side

Japan International Cooperation Agency provides the following special support to KIDC by dispatching experts teams wherever necessary;

Installation Experts Team

Technical Support Team

Evaluation Team

4. Organization

(1) Staffing

Chart 8 shows the organization and staffing plan of the KIDC during the Preparatory Stage.

(2) Job Description of the Staff

A. Japanese Experts

a. Team Leader

- (i) To advise and assist the Tanzanian Project Director for programming, operation and administration of the Project.**
- (ii) To coordinate the activities of Japanese Experts attached to the Project as the head of the Japanese team.**
- (iii) To represent Japanese Experts in KADC and KIDC as necessity arises.**

b. Experts

- (i) To advise and assist Tanzanian counterparts in their respective fields.**
- (ii) To provide existing industries with technical guidance in their respective fields.**

c. Liaison Officer

- (i) To support the Japanese Team Leader and Experts for programming and administration of the Project.**

- (ii) To conduct accounts work and others in accordance with the regulations in force in Japan and to take charge of contract business.
- (iii) To prepare the progress reports on the achievement of targets of the Project which are to be submitted to both Tanzanian and Japanese authorities concerned.

B. Tanzanian Counterparts

a. Project Director

- (i) To manage and coordinate all the operational activities for the implementation of the Project.
- (ii) To manage all the Tanzanian personnel engaged in the Project.

b. Technical Staff

- (i) To prepare and implement the detailed action programs in their respective fields.
- (ii) To submit progress report to the Project Director in their respective fields.

5. The Government of Japan will consider the construction of buildings and equipment of KIDC as will be agreed between the two Governments.

6. The Government of Tanzania will take necessary measures to enable the Government of Japan to expedite the construction of buildings of KIDC as follows;

- (1) To secure the land necessary for the construction of buildings of KIDC and to readjust it;
- (2) To prepare for facilities such as electric supply, water supply, and other incidental facilities outside the site if necessary.

7. Temporary Facilities

For the Preparatory Stage, the following facilities are temporarily secured by the Tanzanian side;

Office rooms, Meeting rooms, Workshop, Garage and Others.

8. Machinery and Equipment

Following machinery and equipment will be provided by the Japanese side;

- * Cupola
- * Shot blast
- * Moulding machine
- * Air hammer
- * Oil furnace
- * Cutting machine
- * Engine lathe
- * Milling machine
- * Planer
- * Equipment for material testing
- * Crusher
- * Kiln and furnace
- * Dryer
- * Carbonization furnace
- * Drilling machine
- * Tool
- * Machinery and equipment of new industries for leasing purpose;

Drawing pin

Chisels and carpentry tool

Sheet metal fabrication

Hand sprayer

Sensi'ized paper

Oil extraction

Scrap metal sorting and treatment

U-type cement block

Oil revitalization

Wheel barrow

- * Equipment for documentation
- * Audio-visual aids
- * Furniture
- * Refrigerator
- * Mobile unit
- * Vehicle
- * Others

Chart 5. Program for the Activities of AIDC

| Functions | Functional Activities | 1979 | 1980 | Immediately after the Completion of AIDC Realization |
|---|---|---|---|---|
| (1) Development of Appropriate Technology | Repair and Maintenance New Production Technology Inspection and Testing Quality Control Product Development | <ul style="list-style-type: none"> Research on the needs of sub-materials, materials, energy and tools | <ul style="list-style-type: none"> Research continued Installation and test-run of machinery and equipment | <ul style="list-style-type: none"> Production continued Testing and analysis continued Trial production continued Improvement of design of products |
| (2) Promotion of Appropriate Technology | Establishment of new Industries Extension Service Consultancy and Information Service Marketing Assistance | <ul style="list-style-type: none"> Establishment of new industries Extension service by mobile unit Market research Consultancy on technical problems | <ul style="list-style-type: none"> Establishment of new industries Extension service by Rombo and Pare Station added Consultancy and Information service continued Marketing promoted | <ul style="list-style-type: none"> Establishment of new industries Extension service continued Consultancy and Information services continued Marketing promotion continued |
| (3) Training of Manpower | Staff Training Participants Training Workers Training in New Industries | <ul style="list-style-type: none"> Staff training in Japan | <ul style="list-style-type: none"> Staff training in Japan and Tanzania Workers training for four months | <ul style="list-style-type: none"> Staff training in Tanzania Workers training Participants training in 6 Beginners Courses |
| (4) Programming and Coordination | Feasibility Studies Investment Planning Programming of Activities Coordination of Activities | <ul style="list-style-type: none"> Studies on new industries Action program making for the Preparatory Stage Organizational setup | <ul style="list-style-type: none"> Studies and planning continued Programming for Phase Organizational setup Coordination | <ul style="list-style-type: none"> Studies and planning continued Programming continued Coordination continued |

Foot Note 1. This program is subject to conditions that necessary budget will be acquired for the implementation of the project.
 2. This Scope of Technical Cooperation is subject to change, if necessary arises in the future, within the scope of the provisions given in the record of Discussions.

Chart 6. Program for the Assignment of Japanese Experts to KIDC

| Items | 1978 | 1979 | 1980 | 1981 | 1982 |
|--|--------------|-------------------|--------------|------|------|
| (Construction of Buildings & Facilities) | Basic Design | E/A Detail Design | Construction | | |
| Team Leader | 1 | 1 | 1 | | |
| Mechanical Engineer | 1 | 1 | 1 | | |
| Machining Expert | | | | | |
| Foundry Expert | 1 | 1 | 1 | | |
| Forging Expert in Forming | 1 | 1 | 1 | | |
| Heat Treatment Expert | | | | | |
| Management Expert | | | | | |
| Ceramic Expert | | | | | |
| Briquet Expert | | | | | |
| Wood Pattern Expert | | | | | |
| Short Term Experts | | | | | |
| Installation Experts | | | | | |
| New Industries | | | | | |
| Liaison Officer | | | | | |

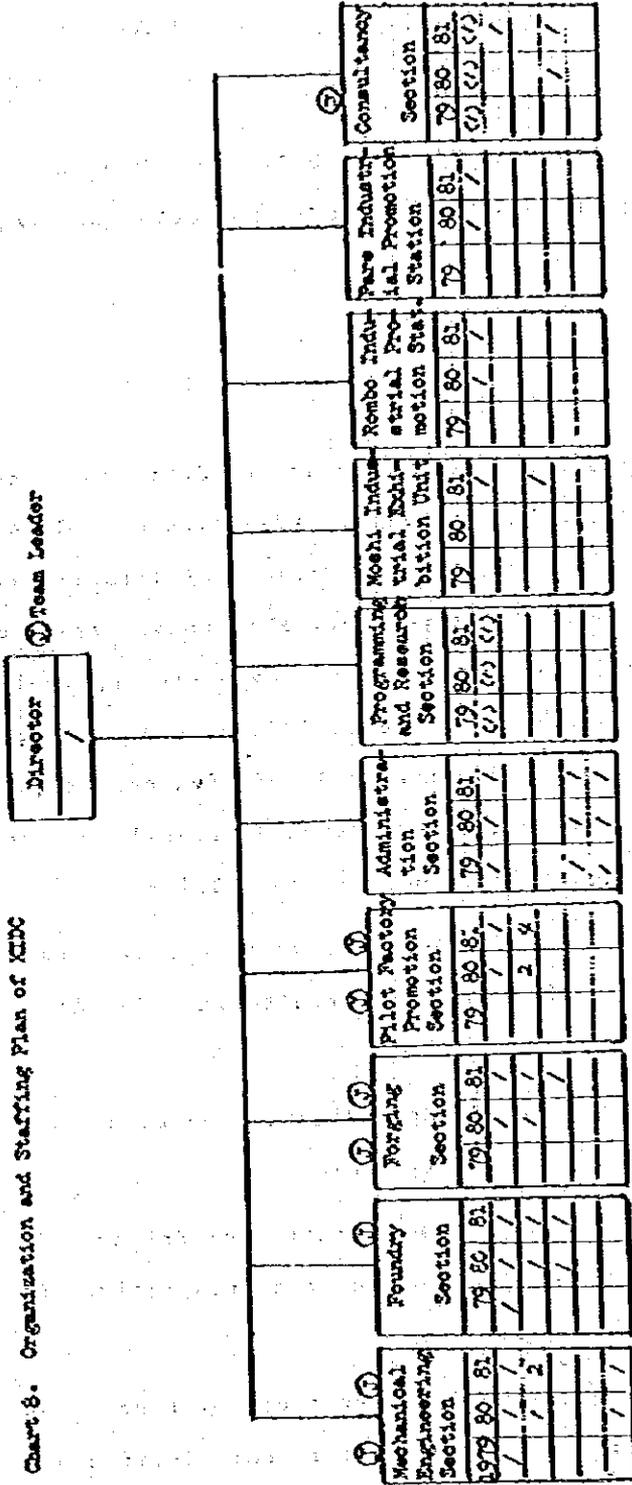
Foot Note: 1. This program is subject to conditions that necessary budget will be acquired for the implementation of the project.
 2. This scope of Technical Cooperation is subject to change, if necessary arises in the future, within the scope of the provisions given in the "Record of Discussions."
 3. Kanazawa side suggested to have one Liaison Officer for KAC and KIDC.

Chart 7. Program for the Training of Tanzanian Personnel.

| Training | Fields of Training | 1979 | 1980 | 1981 | 1982 |
|------------------------------------|------------------------------------|---------------|---------------|---------------|---------------|
| Staff | A: Training in Japan | A-(1) | | A-(1) | A-(1) → B-(1) |
| | B: On-the-job training in Tanzania | A-(1) → B-(1) | A-(1) → B-(1) | A-(1) → B-(1) | A-(1) → B-(1) |
| Training | a: Skilled worker | A-(1) → B-(1) | A-(1) → B-(1) | A-(1) → B-(1) | A-(1) → B-(1) |
| | (): Number of persons | A-(1) → B-(1) | A-(1) → B-(1) | A-(1) → B-(1) | A-(1) → B-(1) |
| Participants | Beginners | A-(1) | A-(1) | A-(1) | A-(1) |
| | Course | | | | |
| Workers Training in New Industries | 1st Group | | | | |
| | 2nd Group | | | | |
| | 3rd Group | | | | |

Foot Note: 1. This Program is subject to conditions that necessary budget will be acquired for the implementation of the project.
 2. This Scope of Technical Cooperation is subject to change, if necessity arises in the future, within the scope of the provisions given in the "Record of Discussions."

Chart 8. Organization and Staffing Plan of KIDC



C Japanese Experts assigned to KIDC
 SK Skilled Worker
 VSK Non-skilled Worker
 D Secretary/Driver

Tenshoan Annual Staffing Plan

| Ab. | Staff | 1979 | 1980 | 1981 | 1982 |
|-----|--------------------|------|------|------|------|
| C | Director | / | / | / | / |
| C | Chief | 3 | 7 | 8 | 8 |
| SK | Skilled Worker | | 5 | 9 | 9 |
| VSK | Non-skilled Worker | | 1 | 3 | 3 |
| D | Secretary/Driver | / | 2 | 2 | 2 |
| | Total | 6 | 18 | 25 | 25 |

⑩: Japanese Experts assigned to KIDC

Foot Note: 1. This Program is subject to conditions that necessary budget will be acquired for the implementation of the project.
 2. This Scope of Technical Cooperation is subject to change, if necessity arises in the future, within the scope of the provisions given in the "Record of Discussions."

VI: Number of part-time laborers and watchmen is excluded from the figures.

24. ブラジル・リベイラ川流域農業開発計画・討議議事録

ATA DE ENTENDIMENTOS ENTRE O GOVERNÔ DO ESTADO DE SÃO PAULO E A
MISSÃO AGRÍCOLA JAPONESA SOBRE O DESENVOLVIMENTO AGRÍCOLA DO VALE
DO RIBEIRA.

Após a vinda da Primeira Missão Agrícola, enviada em dezembro de 1971, e da Segunda Missão Agrícola, enviada em fevereiro de 1974, a Terceira Missão Agrícola, organizada pela Japan International Cooperation Agency - JICA, e chefiada pelo Dr. Shigekatsu Watanabe (Diretor do Departamento de Cooperação de Desenvolvimento Agrícola da JICA), esteve no Brasil de 22 de janeiro de 1975 a 13 de março de 1975, para promover os detalhes dos termos da efetiva cooperação técnica entre os Governos da República Federativa do Brasil e do Japão, sobre o desenvolvimento agrícola do Vale do Ribeira.

A Missão Agrícola realizou estudos "in loco", e manteve entendimentos com o Governo do Estado de São Paulo, a respeito da referida cooperação técnica.

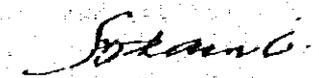
O presente documento constitui a Ata de Entendimentos entre o Governo do Estado de São Paulo e a Missão Agrícola.

A Missão Agrícola e as autoridades competentes do Estado de São Paulo acordam em recomendar este documento aos respectivos Governos.

Esta Ata de Entendimentos não obriga legalmente os Governos da República Federativa do Brasil e do Japão, mas entende-se que,

servirá de base para os Ajustes Complementares ao Acordo Básico de
Cooperação Técnica entre o Brasil e o Japão, firmado em Brasília no
dia 22 de setembro de 1970, e em vigor desde 15 de julho de 1971,
conforme Decreto Federal nº 69.003, de 4 de agosto de 1971.

São Paulo, 10 de março de 1975.


SHIGEKATSU WATANABE
CHEFE DA MISSÃO DA JICA


LAUDO NATEL
GOVERNADOR DO ESTADO DE
SÃO PAULO

1. Visando promover o desenvolvimento agrícola harmonico e eficaz da região do Vale do Ribeira, o Governo da República Federativa do Brasil, através do Governo do Estado de São Paulo, e o Governo do Japão, executarão, mediante cooperação mútua um programa denominado "Projeto de Desenvolvimento Agrícola do Vale do Ribeira" (adiante referido como "Projeto"), no Estado de São Paulo, de acôrdo com o Projeto Básico de Cooperação constante do Anexo I, e com fundamento no Acôrdo Básico de Cooperação Técnica entre o Brasil e o Japão, firmado em Brasília no dia 22 de setembro de 1970, e em vigor desde o dia 15 de julho de 1971 (adiante referido como "Acôrdo Básico").
2. (1) Observadas as leis em vigor no Japão, o Governo Japonês tomará as medidas necessárias para enviar às suas expensas, os peritos das áreas específicas indicadas no Anexo II, mediante os procedimentos normais previstos no Plano de Cooperação Técnica, do Governo do Japão.
- (2) Observadas as leis em vigor no Japão, o Governo Japonês tomará as medidas necessárias para enviar, às suas expensas, peritos para curta estada e outros peritos para auxiliar os peritos mencionados no Anexo II.
- (3) Observadas as leis em vigor no Brasil, o Governo do Estado de São Paulo, na qualidade de órgão executivo indicado pelo Governo da República Federativa do Brasil, solicitará aos órgãos competentes da União, para que os peritos japoneses e respectivas famílias gozem dos privilégios, isenções e benefícios previstos nos artigos VI, VII e VIII do "Acôrdo Básico".
- (4) Observadas as leis em vigor no Brasil, o Governo do Estado de São Paulo, na qualidade de órgão executivo indicado pelo Governo da República Federativa do Brasil, tomará as medidas adequadas para, às suas expensas, conceder as facilidades previstas no ítem (1)(III) e (2) do artigo V do "Acôrdo Básico", aos peritos japoneses.

3. (1) Observadas as leis em vigor no Japão, o Governo Japonês tomará as medidas necessárias para fornecer, às suas expensas, os materiais, maquinários e equipamentos indicados no Anexo III, mediante os procedimentos normais previstos no Plano de Cooperação Técnica, do Governo do Japão.
- (2) Os materiais, maquinários e equipamentos acima referidos passarão à propriedade do Governo da República Federativa do Brasil, após a entrega CIF no porto de desembarque às autoridades brasileiras competentes. Observadas as leis em vigor no Brasil, o Governo do Estado de São Paulo, na qualidade de órgão executivo indicado pelo Governo da República Federativa do Brasil, providenciará medidas para tomar posse e atender as formalidades previstas no item (3) do artigo IX do "Acordo Básico".
- (3) Os materiais, maquinários e equipamentos acima referidos serão empregados exclusivamente na execução do "Projeto", mediante entendimentos entre as autoridades brasileiras interessadas e os peritos japoneses.
4. (1) Observadas as leis em vigor no Japão, o Governo Japonês tomará as medidas necessárias para promover o treinamento no Japão dos peritos brasileiros relacionados com o "Projeto", mediante os procedimentos normais previstos no Plano de Cooperação Técnica, do Governo do Japão.
- (2) Os conhecimentos e as experiências adquiridas por tais peritos através do treinamento recebido no Japão deverão ser proveitosamente aplicados na execução do "Projeto".
5. Observadas as leis em vigor no Brasil, o Governo do Estado de São Paulo na qualidade de órgão executivo indicado pelo Governo da República Federativa do Brasil, tomará as medidas necessárias para, às suas expensas, providenciar o seguinte:

- (i) peritos brasileiros de contrapartida e os funcionários previstos no Anexo IV;
 - (ii) terrenos, prédios e instalações indicados no Anexo V;
 - (iii) materiais, maquinários e equipamentos complementares necessários à execução do "Projeto".
6. (1) Parte dos materiais, maquinários e equipamentos referidos no item 3. (1), e doados pelo Governo do Japão, poderão, com a aprovação da Comissão Coordenadora de que trata o item 2., ser objeto de locação por um justo aluguel, aos agricultores abrangidos pelo "Projeto", com prioridade às áreas de demonstração a que se refere o Anexo I.
- (2) As receitas provenientes das locações acima referidas serão utilizadas na execução do "Projeto", mediante programa de aplicação aprovado pela Comissão Coordenadora.
7. (1) Observadas as leis em vigor no Brasil, o Governo do Estado de São Paulo, na qualidade de órgão executivo indicado pelo Governo da República Federativa do Brasil, tomará as medidas necessárias para, às suas expensas, custear o seguinte:
- (i) construção e reparo de estradas, sistema de irrigação e outros itens necessários à execução do "Projeto";
 - (ii) instalação, operação e manutenção dos materiais, maquinários e equipamentos indicados no Anexo III;
 - (iii) materiais diversos, de escritório, combustível, consertos e seguros de veículos, consumo de água e luz e demais despesas administrativas necessárias à plena execução do "Projeto".
- (2) Observadas as leis em vigor no Brasil, o Governo do Estado de São Paulo, na qualidade de órgão executivo do Governo da República Federativa do Brasil, solicitará aos órgãos competentes da União, as isenções previstas no item (2) do artigo IX do "Acordo Básico", referentes aos materiais, maquinários e equipamentos indicados no Anexo III.

8. Os peritos japoneses e os peritos brasileiros de contrapartida terão responsabilidade de natureza técnica na execução do "Projeto", cabendo a responsabilidade administrativa e operacional aos órgãos brasileiros competentes.
9. (1) Fica criada a Comissão Coordenadora, referida no Decreto Estadual nº 5.523, de 20 de janeiro de 1975 para a elaboração dos Planos Anuais e a execução harmoniosa e eficaz do "Projeto", com a composição estabelecida no Anexo VI.
- (2) Havendo assuntos que não estiverem ao alcance do poder de decisão da Comissão Coordenadora, os respectivos representantes, levarão tais assuntos à consideração de seus superiores.
10. Esta Ata de Entendimentos servirá de base para execução do "Projeto" até a assinatura do Ajuste Complementar, ficando em princípio, estabelecido em 5 (cinco) anos o prazo de cooperação técnica, depois de pronovido o referido Ajuste Complementar baseado no artigo II do "Acôrdio Básico".

ANEXO I

PROJETO BÁSICO DE COOPERAÇÃO

Linhas Gerais do Projeto Básico

Visando promover o aumento da renda e elevar o nível de vida da população rural do Vale do Ribeira, em especial a melhoria da região de várzea (cerca de 45.000ha.), que no momento é considerada da mais alta prioridade para o desenvolvimento, este "Projeto" prevê a instalação de um Centro de Desenvolvimento Agrícola (adiante referido como "Centro") junto a Estação Experimental de Pariquera-Açu, do Instituto Agronômico.

No presente "Projeto", o "Centro" manterá estreitos contatos com os órgãos envolvidos no desenvolvimento agrícola do Vale do Ribeira, realizará atividades como a seguir vão mencionadas, e terá ainda a missão de difundir progressivamente, às regiões vizinhas, as técnicas de exploração desenvolvidas no "Centro".

Atividades do Centro de Desenvolvimento Agrícola

1. Orientação e aconselhamento técnico sobre os itens necessários ao desenvolvimento agrícola do Vale do Ribeira.
2. Coleta, análise e fornecimento de dados relativos à renda da população rural, exploração agrícola, preços dos produtos agrícolas e outros itens.
3. Desenvolvimento de técnicas agrícolas e de engenharia agrícola, baseadas em "polders".
 - a) Elaboração de projetos relativos à construção de "polders" e desenvolvimento de técnicas para sua mecanização.
 - b) Construção de "polders" de 50 ha. na Estação Experimental de Pariquera-Açu, elaboração de projetos de irrigação e drenagem

- dentro de "polders", bem como projetos de recuperação de áreas.
- c) Desenvolvimento de técnicas para a utilização racional das terras.
4. Experiências práticas e pesquisas para o desenvolvimento de técnicas necessárias ao desenvolvimento agrícola.
- a) Seleção de espécies e de variedades de culturas adequadas que devam ser introduzidas; métodos de fertilização; sistemas de plantio; pesquisa; experimentação e divulgação sobre o controle de pragas e doenças.
- b) Pesquisa, experimentação e divulgação relativas à conservação do solo, irrigação, controle da água, mecanização agrícola e sistemas de utilização de máquinas agrícolas.
5. Treinamento teórico e prático dos agentes de divulgação, e de agricultores sobre as técnicas agrícolas desenvolvidas.
6. Difusão das modernas técnicas agrícolas aos agricultores das regiões vizinhas, através de orientação itinerante, tendo como base as Áreas de Demonstração.
7. Multiplicação e distribuição de sementes, no caso de ser desenvolvida uma espécie de alta qualidade, válida para o desenvolvimento agrícola.
8. Áreas de Demonstração.
- Organização de Áreas de Demonstração de 40 a 60 ha. cada uma, em 3 (três) locais, sendo 2 (duas) no município de Registro, e 1 (uma) no município de Sete Barras, para ir difundindo as modernas técnicas agrícolas desenvolvidas no "Centro"; dentro de cada Área de Demonstração serão instalados Campos de Observação de 5 a 10 ha. para a comprovação da aplicabilidade local das técnicas.

ANEXO II

RELAÇÃO DOS PERITOS JAPONESES

1. Líder
2. Assistente
3. Consultor Técnico
4. Perito em Engenharia Rural
5. Perito em Orizicultura
6. Perito em Horticultura
7. Perito em Programas de Difusão Agrícola
8. Perito em Doenças e Pragas
9. Perito em Pedologia e Fertilizantes
10. Perito em Máquinas Agrícolas
11. Perito em Administração Agrícola

NOTAS:

(1) Os peritos acima referidos serão enviados na medida do desenvolvimento do "Projeto".

(2) O Consultor Técnico ficará sediado no Gabinete do Secretário da Agricultura.

ANEXO III

LISTA DOS MATERIAIS E EQUIPAMENTOS A SEREM FORNECIDOS
PELO JAPÃO

1. Máquinas e materiais para construção; peças sobressalentes.
2. Máquinas e implementos agrícolas; peças sobressalentes.
3. Defensivos agrícolas e fertilizantes.
4. Máquinas, aparelhos e ferramentas para consertos.
5. Aparelhos para exames e outros instrumentos.
6. Aparelhos e materiais para experimentação e pesquisa.
7. Materiais necessários à difusão e treinamento.
8. Aparelhos e instrumentos topográficos e meteorológicos.
9. Outros materiais, maquinários e equipamentos necessários.

ANEXO IV

RELAÇÃO DOS PERITOS BRASILEIROS DE CONTRAPARTIDA E
FUNCIONÁRIOS NECESSÁRIOS AO "PROJETO"

I - Peritos Brasileiros de Contrapartida

1. Co-Executor do Projeto
2. Assessor Técnico
3. Perito em Orizicultura
4. Perito em Olericultura
5. Perito em Difusão Agrícola
6. Perito em Doenças e Pragas
7. Perito em Pedologia e Fertilizantes
8. Perito em Máquinas Agrícolas
9. Perito em Engenharia Rural
10. Perito em Administração Agrícola

II - Funcionários

- | | |
|--|------------|
| 1. Auxiliares de Engenheiro Agrônomo | 11 pessoas |
| 2. Operadores de máquinas | 9 pessoas |
| 3. Motoristas | 6 pessoas |
| 4. Mecânicos | 2 pessoas |
| 5. Marceneiro | 1 pessoa |
| 6. Escriturários | 5 pessoas |
| 7. Encarregado do Depósito de Materiais | 1 pessoa |
| 8. Vigias | 4 pessoas |
| 9. Serventes | 4 pessoas |
| 10. Trabalhadores (contratar conforme necessidade) | |

ANEXO V

RELAÇÃO DOS TERRENOS, PRÉDIOS E INSTALAÇÕES

I - Terreno (para atividades agrícolas e para construção)

1. Estação Experimental de Pariquera-Açu
2. Áreas de Demonstração

II - Prédios e Instalações

(A) - Na Estação Experimental de Pariquera-Açu

1. Escritório (sede)
2. Laboratório
3. Garagem
4. Galpão para Máquinas Agrícolas, com oficina de montagem e conserto, depósito para peças e ferramentas, e depósito de combustível.
5. Unidade de Armazenagem e Beneficiamento
6. Galpão para serviços
7. Casa de bombas
8. Casa de força
9. Local de lavagem de máquinas
10. Rede hidráulica
11. Rede de comunicações
12. Rede elétrica
13. Posto Meteorológico
14. Casa de hóspede
15. Moradias para funcionários

(B) - Nas áreas de Demonstração.

1. Escritórios simples
2. Depósito simples para máquinas e implementos agrícolas.

(C) - Na cidade de Registro (SP)
Residências para os peritos do "Projeto"

NOTA: Os prédios existentes na Estação Experimental do Instituto Agrônomo de Campinas, em Pariqueira-Açu (SP), poderão ser utilizados mediante reformas ou no estado atual.

ANEXO VI

COMPOSIÇÃO DA COMISSÃO COORDENADORA

Presidência: Secretário da Agricultura

Assessoria Especial: Assessor Técnico do Secretário da Agricultura

Membros Brasileiros:

Representante da Superintendência do Desenvolvimento do Litoral Paulista

Representante do Departamento de Águas e Energia Elétrica

Representante da Coordenadoria de Pesquisa Agropecuária

Representante do Instituto Agronômico

Representante da Coordenadoria de Assistência Técnica Integral

Representante da Coordenadoria de Pesquisa de Recursos Naturais

Membros Japoneses:

Líder do Projeto

Consultor Técnico

Peritos Japoneses que o Líder do Projeto indicar

OBSERVAÇÃO:

Os funcionários oficiais da Embaixada ou do Consulado Geral do Japão poderão participar das reuniões da Comissão Coordenadora na qualidade de Observadores.

リベイラ川流域農業開発に関するサンパウロ州政府
と日本国農業調査団との間の討議議事録（仮訳）

1971年12月の第一次農業調査団、1974年2月の第二次農業調査団の派遣ののちに、国際協力事業団によって組織され、渡辺啓祐（国際協力事業団、農業開発協力部長）を団長とする第三次農業調査団は、リベイラ川流域農業開発について、ブラジル連邦共和国政府と日本国政府との間に具体的な技術協力の内容を検討するため、1975年1月22日から3月18日までブラジル国を訪問した。

調査団は、協力対象地域において実地調査を行ない、さらに上記協力に關してサンパウロ州政府と一連の討議を行なった。

これは、サンパウロ州政府と調査団との間の討議議事録である。調査団とサンパウロ州政府関係当局は、本討議議事録をそれぞれの政府に提呈することに合意する。

この討議議事録は、ブラジル連邦共和国政府と日本国政府とを合法的に拘束するものではないが、技術協力に關する日本国政府とブラジル連邦共和国政府との間の基本協定（1970年9月22日ブラジリアで署名され、1971年7月15日に効力発生した）による補足取極の基礎になるであろうものと発覚される。

サンパウロにおいて
1975年3月10日
渡辺啓祐
SICA 副総長 Sd/ LAUDO NATAL
サンパウロ市長 Sd/

- 1 リベイラ川流域の内で効率的な農業開発を推進するため、ブラジル連邦共和国政府は、サンパウロ州政府を通じて、日本国政府とサンパウロ州においてリベイラ川流域農業開発プロジェクト（以下「プロジェクト」という。）と呼ばれる計画を附表1に示される基本計画に従い、技術協力に關する日本国政府とブラジル連邦共和国政府との間の基本協定（1970年9月22日ブラジリアで署名され1971年2月15日に効力発生した。以下「基本協定」という。）に基づき相互に協力して実施する。
- 2 (1) 日本国政府は、日本国において施行されている法令に従い、自己の負担で附表2に示される分野の専門家を技術協力計画に基づく通常の手続きを経て採選するための必要な措置を講じる。
- (2) 日本国政府は、日本国において施行されている法令に従い、自己の負担で短期専門家及び附表2に示される専門家を補佐する専門家を採選するための必要な措置を講じる。
- (3) ブラジル連邦共和国政府の指定する実施機関であるサンパウロ州政府は、ブラジル国において施行されている法令に従い、基本協定第六条、第七条、第八条にのべている特権、免除及び便宜を日本人専門家及びその家族に享受させるよう連邦の関係機関に要請する。
- (4) ブラジル連邦共和国政府の指定する実施機関であるサンパウロ州政府は、ブラジル国において施行されている法令に従い、自己の負担で、日本人専門家に対し、基本協定第2条(1)の事及

- ひ(2)にのべられている便宜を与えるための適切な措置を講じる。
- 3 (1) 日本国政府は、日本国において施行されている法令に従い、自己の負担で附表のⅡに示される資機材を技術協力計画に基づく通常的手段により供与するため必要な措置を講じる。
- (2) 上記資機材は、陸揚港において OIF 建で、ブラジル関係当局に引渡された時にブラジル連邦共和国政府の財産となる。ブラジル連邦共和国政府の指定した実施機関であるサンパウロ州政府は、ブラジル国に先行されている法令に従い、機材を受けとり基本協定第9条の(2)にのべられている費用を負担するための適切な措置を講じる。
- (3) 上記の資機材は、ブラジル関係当局と日本人専門家との協議によりプロジェクト実施のためにのみ使用される。
- 4 (1) 日本国政府は、日本国に施行されている法令に従い、プロジェクトに関係するブラジル人専門家を技術協力計画に基づく通常の手続きにより日本で研修するための必要な措置を講じる。
- (2) 上記ブラジル人専門家が日本国における研修により得た知識経験は、プロジェクト実施のために効果的に使用される。
- 5 ブラジル連邦共和国の指定する実施機関であるサンパウロ州政府は、ブラジル国に施行されている法令に従い、自己の負担で次のものを提供するための必要な措置を講じる。
- (1) 附表Ⅲに示されるブラジル人カウンターパート及び職員
- (2) 附表Ⅳに示される土地、建物及び施設
- (3) プロジェクト実施のため必要な資機材の補充
- 6 (1) 3の(1)でのべられた日本国政府から供与された資機材の一部は、適正な料金をプロジェクト内の農民、附表Ⅴに示される畜及農場の農民に対し優先的に7の(1)でのべられる合同委員会の承認のち、貸付けることが出来る。
- (2) 上記の貸付けから生じる収益は、合同委員会の承認する使途計画によりプロジェクト実施のために使用される。
- 7 (1) ブラジル連邦共和国政府の指定する実施機関であるサンパウロ州政府は、ブラジル国に施行されている法令に従い自己の負担で、次のものを負担するための必要な措置を講じる。
- (1) プロジェクト実施のために必要な、道路、かんがい施設などの建設及び整備
- (2) 附表Ⅵに示される資機材の据付、操作及び維持
- (3) プロジェクトの完全な実施に必要な、事務用品、車輛の燃料、修理及び保険、電気及び水通代、その他の行政経費
- (2) ブラジル連邦共和国政府の指定する実施機関であるサンパウロ州政府は、ブラジル国に施行されている法令に従い、附表Ⅵに示される資機材に対し、基本協定第9条の(2)にのべている免除をするもの、ブラジル連邦の関係当局に要請する。
- 8 日本人専門家とブラジル人カウンターパートは、プロジェクト実施に係わる技術的な事務に関

して責任を有し、ブラジル関係当局は、行政的、運営的な事柄に関して責任を有する。

9(1) 年間実行計画の作成及びその円滑で効果的なプロジェクトの実施のために、附表4に示される構成により、1975年1月20日の州知事令第5523号においてのべられる合同委員会が設置される。

(2) 合同委員会の決定する事が出来ない事柄については、それぞれの代表者はその問題をそれぞれの上級機関の協議に付する。

10 この討議議事録は、基本協定第2条に基づき補足取極が成立したのち、原則として技術協力期間を5年間とするが、同補足取極が署名されるまでプロジェクト実施のための基礎として役立つものになる。

附 表 1 協力の基本計画

プロジェクトの概要

リベイラ川流域の農民の所得の増加及び生活水準の向上を目的として特に当面、最も開発プライオリティーの高い低地域(約1万5千ha)の開発のため、本プロジェクトは農業試験場のパライケイラスー試験分場内に農業開発センター(以下「センター」という。)を設置する。

このプロジェクトは、リベイラ川流域開発に関係する諸機関と密接な連絡をとりながら、センターにおいて次のような活動を行ない、開発された技術を周辺地域に連続的に波及せしめようとするものである。

農業開発センターの活動

- 1 リベイラ川流域の農業開発のために必要な事項に関する指導、助言
- 2 農民の所得、栄養、農産物の価格などに関する資料の収集、解析及び情報の提供
- 3 モデルによる農業土木技術の開発
 - a) モデル建設に関する計画の立案、機械化技術の開発
 - b) パライケイラスー試験分場内に50haのモデルの建設、モデル内でのかんがい、排水計画、防汚施設計画の策定
 - c) 土地改良方式の確立
- 4 農業開発に必要な技術を開発するための実用試験
 - a) 導入されるべき適作物の選定、適品種の選定、施肥方法、作付体系、病虫害の防除に関する試験、実験、展示
 - b) 土壌保全、かんがい、水管理、農業機械化及び農業機械の利用体系に関する試験、実験、展示
- 5 普及員及び農民に対する改良された農業技術の産益的及び実用的な示

- 6 普及農場を核とした巡回指導による周辺農民への改良農業技術の普及
- 7 農業開発に有効な優良な作物が開発された場合には、その種子の増殖と配布
- 8 普及農場

センターにおいて開発された改良農業技術を波及させるため40～60haからなる普及農場をレジストロ島2ヶ所、セッテバラス島1ヶ所の計3ヶ所に設置し、その普及農場の中に現地適応性を実証するため5～10haの試験圃場を設置する。

附 表 Ⅱ

日本人専門家の表

- 1 リーダー
- 2 計画調整員
- 3 テクニカルアドバイザー
- 4 農業土木
- 5 稲作栽培
- 6 野菜栽培
- 7 農業普及
- 8 病虫害
- 9 土壌肥料
- 10 農業機械
- 11 農業経営

注 (1) 上記分野の専門家は、プロジェクトの進展に応じ派遣する。

(2) テクニカルアドバイザーは、農務局に配属される。

附 表 Ⅲ

日本から供与される機材の表

- 1 建設用機材、食材及びそれらの予備部品
- 2 農業用機材、器具及びそれらの予備部品
- 3 農業肥料
- 4 修繕作業用機材工具類

- 5 検査用器具及び工具
- 6 実験研究に必要な機材
- 7 普及訓練に必要な機材
- 8 測量機材及び気象観測機材
- 9 その他必要な資機材

附 表 第 一

ブラジル人カウンターパート及びプロジェクトに必要な職員

1 ブラジル人カウンターパート

- (1) プロジェクトディレクター
- (2) テクニカルアドバイザーのカウンターパート
- (3) 船 作 技 師
- (4) 漁 業 作 務
- (5) 農 業 普 及
- (6) 病 虫 害
- (7) 土 壌 肥 料
- (8) 農 業 機 械
- (9) 農 業 土 木
- (10) 農 業 経 営

2 職 員

- (1) 農業技術の助手 11名
- (2) 飼養オペレーター 9名
- (3) 運 転 手 6名
- (4) 修 理 工 2名
- (5) 大 工 1名
- (6) 書 記 5名
- (7) 資 材 倉 庫 係 1名
- (8) 守 衛 員 4名
- (9) 雑 役 夫 4名
- (10) 労 働 者 必要に応じて雇用

附 表 Ⅰ

土地、建物及び施設の表

1 土 地（農用地及び建設用地）

- (1) パリケイラヌー試験分場
- (2) 普 及 農 場

2 建物及び施設

A パリケイラヌー試験分場内

- (1) 事務所（本館）
- (2) 実験研究室
- (3) 車 庫
- (4) 農業機械倉庫、組立修理工場、総務倉庫、燃料庫
- (5) 収獲貯蔵庫及び加工作業場
- (6) 雨天作業場
- (7) モ ン プ 室
- (8) 発 電 室
- (9) 洗 車 場
- 01 上水道施設
- 02 通信施設
- 03 電気施設
- 04 気象観測施設
- 05 ゲストハウス
- 09 職員用宿舎

B 普及農場内

- (1) 簡易事務所
- (2) 簡易機材倉庫

C レジストロ市内

専門家用住宅

注 カンピーナス農業試験場のパリケイラヌー試験分場にある既存の建物は、改良もしくは現状のまま使用することが出来る。

附 表 Ⅳ
合同委員会の構成

委 員 長 農務長官
事 務 局 長 農務局技術補佐官
ブラジル側メンバー

サンパウロ沿岸開発庁 (SUDELPA) の代表者

水道電力部 (DAEE)

農牧調査局

農業試験場

総合技術改良普及局

自然資源調査局

日 本 側

プロジェクトリーダー

テクニカルアドバイザー

プロジェクトリーダーが必要と認める日本人専門家

注 大使館員又は総領事館員は、合同委員会の会合に、オブザーバーの資格で参加することが出来る。

○技術協力に関する日本国政府とブラジル連邦共和国政府との間の基本協定

(昭和45年8月4日)
(外務省告示第145号)

昭和45年9月22日にブラジリアで、次の技術協力に関する日本国政府とブラジル連邦共和国政府との間の基本協定の署名が行われ、この協定は、昭和46年7月15日に効力を生じた。

(訳文)

技術協力に関する日本国政府とブラジル連邦共和国政府との間の基本協定
日本国政府及びブラジル連邦共和国政府は、技術協力の促進により両国間に存在する友好関係を一段強化することを希望し、また、両国の経済及び社会発展を促進することがもたらす相互の利益を考慮して、
次のとおり協定した。

第1条

両政府は、両国間の技術協力を促進するよう努力する。

第2条

両政府は、相互に合意する協定の技術協力計画を実施するため、交換公文その他類似の形式により協定趣旨を締結する。

第3条

日本国政府は、この協定の目的を達成するため、日本国において施行されている法令に従い、かつ、第2条の取極に基づき、自己の資金で次の取極をとる。

- (I) 日本国における技術支援のための研修手当をブラジル国民に支給すること。
- (II) 日本人の専門家ブラジルに派遣すること。
- (III) 設備、機械及び資料をブラジル連邦共和国政府に供与すること。
- (IV) ブラジルの経済及び社会開発を促進するため資金をブラジルに送附すること。
- (V) 相互に合意するその他の形の技術協力を行なうこと。

第4条

- (I) 日本国政府が派遣する専門家は、ブラジル連邦共和国政府が指定する機関を通じて、両政府と緊密に連絡を保つものとし、その任務遂行に必要な両政府の指示に

技術協力
三三〇一

第3編 関係法令等 (技術協力に関する日本国政府とブラジル連邦共和国政府との間の基本協定)

従う。

- (2) ブラジル連邦共和国政府は、第3条(1)に規定する日本の技術協力の結果としてブラジル国民が取得した技術及び知識がブラジルの経済及び社会発展に寄与することを確保する。

第5条

- (1) 日本国政府が第3条(1)の規定に従い専門家を派遣する場合には、ブラジル連邦共和国政府は、自己の負担で次の措置をとる。

- (i) 専門家の任務遂行に必要な事務所その他の施設を提供し、かつ、その維持費を負担すること。
(ii) 専門家の任務遂行に必要な現地要員(専門家に対応するブラジル人要員を含む。)を提供すること。
(iii) 専門家の次の経費を負担すること。

- (a) 通勤費
(b) ブラジル内の公用出張旅費
(c) 公用通信費

- (2) ブラジル連邦共和国政府は、同政府が特足取極中に指定する機関を通じ、(1)の専門家及びその家族に対し、次のものを提供する。

- (i) 現地の条件及び前記の機関の財政能力を考慮したうえ適当な家具付住宅
(ii) 稼働の結果又は現地の環境条件の結果生ずる事故又は疾病に対する無料の医療便宜

第6条

- (1) 日本国政府がこの協定の特足取極に従いブラジルに派遣する専門家は、その到着後6箇月の間に行なう次のものの輸入に関し、輸入許可、為替証明、領事手数料及び関税その他賦徴金を免除される。ただし、特定の役務の提供の対価である料金は、この限りでない。

- (i) 専門家及びその家族の携帯荷物
(ii) 専門家及びその家族用としてブラジルに持ち込まれる身用品、家財及び消費財で、ブラジルの現行の法令によつて認められるもの
(iii) 専門家用として専門家又はその配偶者名義で輸入される自動車1台(ただし、専門家がブラジルに1年以上滞在する場合に限る。)、自動車の輸入許可は、日本国大使館の事前の申請があり次第ブラジル外務省により発給される。

3302(-3311)

〔技術協力〕 三三〇二六一三三三三二

第3回 関係法令等 (技術協力に関する日本国政府とブラジル産
邦共和国政府との間の基本協定)

自動車1台を輸入する前記の様物は、ブラジルで生産された自動車1台をブラジルにおいて施行されている法令に従って与えられる特別の条件の下で購入する様物と代えることができる。ブラジルに輸入された自動車は、ブラジルにおいて施行されている法令に従って売却又は譲渡することができる。

(2) ブラジル産邦共和国政府は、現行の国内法令に従い、前記の物品の輸出につき同様の便宜を(1)の専門家を与える。

(3) ブラジル産邦共和国政府は、また、次の附則をとる。

(1) 専門家及びその家族に対し出入国在留を無料と、かつ、申請次第すみやかに発給すること。

(2) 専門家及びその家族に対し身分証明書を交付し、かつ、専門家の任務遂行のために必要なすべての政府機関の協力を確保すること。

第7条

ブラジル産邦共和国政府は、日本国政府が派遣する専門家のこの協定の情状取極に定める任務の遂行に基因し、その遂行中に発生し、又はその也その遂行に関連する専門家に対する請求が生じた場合には、その請求に關する責任を負う。ただし、両政府が、その請求が専門家の重大なる過失又は故意から生じたことを合意した場合は、この限りでない。

第8条

日本国政府がこの協定の約尾取極に従って派遣する専門家は、1964年12月29日にリオ・デ・ジャネイロで署名されたブラジルと西露連合、その専門員及及び西露原子力機構との間の技術援助基本協定に規定される特権、免除及び便宜を与えられる。

第9条

(1) 日本国政府が第3条の規定に従ってブラジル産邦共和国に供与する設備、機械及び資材は、陸揚港においてCIF建てでブラジルの関係当局に引き渡された時にブラジル産邦共和国政府の財産となる。これらの設備、機械及び資材は、両政府が合意した技術協力の目的のために使用される。

(2) (1)の設備、機械及び資材は、そのブラジルへの輸入に際し、輸入許可及び為替証明書並びに関税、領事登録料その他経費を免除される。

(3) (1)の設備、機械及び資材のブラジル内の輸送及びその補充のための費用は、ブラジル産邦共和国政府が負担する。

(4) 第3条(1)及び(2)の専門家及び調査団がその任務用に携行する設備、機械及び資

3323

第3編 関係法令等 (技術協力に関する日本国政府とブラジル連邦共和国政府との間の基本協定)

材は、別段の合意がある場合を除くほか、日本国政府の財産であり、(2)に規定する免除に加えて、ブラジルにおいて課されることがある内国民その他課税金を免除される。これらの物品の再輸出を容易にする措置がとられる。

(5) (4)の設備、機械及び資材のブラジル内の移送のための費用は、ブラジル連邦共和国政府が負担する。

第10条

両政府は、必要な場合には、この協定の実施から生ずるいかなる事項についても協議を行なう。

第11条

(1) この協定は、日本国政府がブラジル連邦共和国政府からこの協定の効力発生のために必要な手段を終了した旨の通告を受領した日に効力を生ずる。

(2) この協定は、1年間効力を有するものとし、いずれか一方の政府が他方の政府に対し少なくとも6箇月の予告をもつて協定を終了させる意思を書面により通告しない限り、毎年自動的に1年ずつ更新される。

以上の証拠として、下名は、正者に委任を受けて、この協定に署名した。

1969年9月22日にブラジリア市で、英語によつて本附2通を作成した。

日本国政府のために 愛知 豊一

ブラジル連邦共和国政府のために マリオ・ギブソン・バルボーズ

EXCHANGE OF NOTES BETWEEN THE GOVERNMENT OF JAPAN AND THE GOVERNMENT OF THE FEDERATIVE REPUBLIC OF BRAZIL CONCERNING THE AGRICULTURAL RESEARCH CO-OPERATION IN BRAZIL

Exchanged at Brasilia, September 30, 1977

Entered into force, September 30, 1977

Décembre 1977

Ministère des Affaires Etrangères

(参考)

この取組は、我が国政府がブラジル政府の要請に基づき、セラード地域の農業生産技術の開発を図るため、同地域における農業研究協力の実施につき、ブラジルとの技術協力基本協定（昭和四十六年三國間条約集及び条約集第二〇四四号参照）第二条の規定を行い、日本・ブラジル農業研究協力事業を相互に協力して実施することについて定めたものである。

ブラジル
側書簡

ブラジル領事館)

(訳文)
書簡をもつて啓上いたします。本官は、ブラジル並むけの農
業研究協力に際する取極を添付した本日付けの閣下の次の書簡
を受領したことを確認する光榮を有します。

(日本領事館)

本官は、ブラジル連邦共和国政府が閣下の書簡に述べらるる
提案に同意するとともに、閣下の書簡及びこの返答が貴政府側
の合意を構成するものとみなし、その合意が本日効力を生ずる
ことを確認することを閣下に通報する光榮を有します。

本官は、以上を申し進めるに際し、ここに重ねて閣下に向か
つて敬意を表します。

千九百七十七年九月三十日にブラジリアで

外務大臣臨時代理

ラミロ・サライヴァ・グレイド

日本国特命全権大使 吉田健三閣下

ブラジルとの農業研究協力取極

(Brazilian Note)

Brasilia, September 30, 1977

Excellency,

I have the honour to acknowledge receipt
of your Excellency's Note of today's date
enclosing the arrangement attached thereto
concerning the agricultural research co-
operation in Brazil, which reads as follows:

"(Japanese Note)"

"In response, I inform your Excellency that
the Government of the Federative Republic of
Brazil agrees with the proposal set forth in
your Excellency's Note and to confirm that
your Excellency's Note and this reply shall
be regarded as constituting an agreement be-
tween the two Governments, which will come
into force today."

I avail myself of this opportunity to renew
to your Excellency the assurance of my highest
consideration.

(Signed) Kamiro Saraiwa Guerreiro,
Minister of Estado, Interim,
das Relações Exteriores

Mrs. Excellency Kenzo Yoshida
Ambassador Extraordinary and
Plenipotentiary of Japan.

4 オブザーバー

次の代表は、オブザーバーとして委員会に出席することができる。

- a 日本農政府の關係農業研究機関の代表
- b 日本國大使館の館員一名及び同館が指名した者
- c ブラジル連邦共和國農務省の代表
- d 國際技術協力の調整に關するブラジル内閣機關の代表

4. Observers

The following representatives may attend the Committee as observers:

- a. Representatives of the agricultural research institutions concerned of the Government of Japan
- b. An official of the Embassy of Japan and any other person designated by the Embassy of Japan
- c. Representatives of the Ministry of Agriculture of the Federative Republic of Brazil
- d. Representatives of the Brazilian interministerial system of coordination of international technical co-operation

物その他
施設の表

付表 II

合同委員
会の構成

| | | | |
|---|--------------------------|---|---------------------------------------|
| 2 | 実験室 | 1 | 委員長 EMBRAPAの技術担当理事 |
| 3 | ガラス室 | 2 | 日本側 a 付表 I 1 について团长 b 日本人専門家の代表 |
| 4 | 実験現場 | 3 | 国際協力事業団の代表 |
| 5 | 事業の実施のための設備、園林その他資材の保管施設 | | |

付表 M

合同委員会の構成

ブラジルとの農業協力取組

3 ブラジル側
 a OPAOの所長
 b OPAOの技術担当次長
 c セラードにおける上じよう、気候及び植物資源の利用計画のための OPAO の調整員

- 1. Laboratory
- 2. Glass houses
- 3. Experimental field
- 4. Facilities for storing materials, machinery and other accessories for the implementation of the project

Annex VI

Composition of the Joint Committee

- 1. Chairman
 Technical Director of EMBRAPA
- 2. Japanese side
 a. Leader referred to in Annex II, 1
 b. Representative of the Japanese experts
 c. Representative of Japan In-charge national Cooperation Agency
- 3. Brazilian side
 a. General Director of CPAC
 b. Associate Technical Director of CPAC
 c. Coordinator of CPAC for the plans of utilization of soils, climate and plant resources of cerrado

ブラジルとの調査研究協力取手

- 6 書籍その他の必要な印刷物
- 7 その他必要な小規模の設備及び資材

付表 N

付表 N

ブラジル人の専門家その他職員の表

ブラジル人の専門家その他職員の表

- 1 団長 CPAAOの所長
- 2 日本人研究者の相手方となる研究者
- 3 実験助手
- 4 随場作業員
- 5 タイピスト、事務員、運転手及び通訳を含む事務職員及び役務職員
- 6 日本人専門家の団長の秘書一名

付表 V

付表 V

土地、建物その他施設の表

土地、建

- 1 日本人専門家用の事務室

10

- 6. Books and other necessary printed matters
- 7. Other necessary minor equipment and materials

Annex IV

List of Brazilian experts and other personnel

- 1. Leader - General Director of CPAC
- 2. Counterpart researchers to the Japanese researchers
- 3. Laboratory assistants
- 4. Field workers
- 5. Clerical and service personnel, including a typist, clerks, drivers and a translator
- 6. A private secretary for the leader of the Japanese experts

Annex V

List of land, buildings and other facilities

- 1. Offices for the Japanese experts

付表 I

設備、機械及び資材の表

研究者は、必要に応じ、付表 I に掲げる他の機関において研究活動を行うことができる。

(2) 前記(1)から(4)の分野における専門家は、十二箇月を超えない短期間の任務を行う専門家として派遣される。

(3) 専門家は、技術上の助言を与え、また、情報を交換するためヒアード地域に所在する付表 I に掲げる機関以外の研究機関を訪問することができる。

付表 II

設備、機械及び資材の表

1 実験室用の電子器材を含む設備、機械、器具、工具、それらの予備部品その他資材

2 農場作業用の設備、機械、器具、工具、それらの予備部品その他資材

3 特殊車両

4 肥料、農薬及び化学的防除用資材

5 研修及び普及活動のための視覚教材及び物品

ブラジルの農業研究協力取組

The researchers may conduct research activities at any other institutions referred to in Annex I upon necessity and in accordance with the conditions of the contract.

(2) The researchers in the field of ... to which will be dispatched as experts on short-term assignment not exceeding twelve months.

(3) The experts may visit any other research institutions located in ... to give technical advice and exchange information.

Annex III

List of equipment, machinery and materials

1. Equipment including electronic articles, machinery, instruments, tools, spare parts thereof and other materials for laboratory work
2. Equipment, machinery, instruments, tools, spare parts thereof and other materials for field work
3. Specialized mobile units
4. Fertilizer, pesticide and materials for chemical control
5. Audiovisual aids and articles for office training and extension work

ブラジルの農業研究協力政策

パトス・デ・ミナス農業試験場

生産システム及びその経済的評価に関する研究及び応用研究の実施

アルト・パラナイーバ開拓計画農業試験場

研究業務に関連する実用試験

付表 I

日本人専門家の表

日本人専門家の表

- 1 部長
- 2 次の分野に関する研究者
 - (a) 植物病理
 - (b) こん虫
 - (c) 作物栽培
 - (d) 土じょうり作物—水分系
 - (e) 作物育種
 - (f) 農業機械
 - (g) 農業気象
 - (h) 農業経営及び経済分析
- 3 連絡員

注 (1) 専門家は、事業の進展を考慮されて CPAC に派遣される。

八

Factor de Minas Agricul-
tural Experiment Station
Implementation of applied research and research on production system and its economic evaluation
Agricultural Expert-
ment Station of the Settlement Programme in Alto Paranaíba
trial experiment in connection with the research work

Annex II

List of Japanese experts

1. Leader
2. Researchers covering the following fields:
 - a. Plant pathology
 - b. Entomology
 - c. Agronomy
 - d. Soil-plant-water relationship
 - e. Plant breeding
 - f. Agricultural machinery
 - g. Agricultural meteorology
 - h. Farm management and economic analysis
3. Liaison Officer

Notes:

(1) The experts will be dispatched to CPAC taking into account the progress of the project.

2 事業は、次の活動から成る。

a 1にいう分野に関する研究業務

b 事業に必要な情報、標本、資料及び研究報告の交換

c 1にいう分野における両国の研究者の研究能力の開発

d 両政府の関係当局間で合意するその他の活動

3 2にいう活動は、主にOPRAにおいて行われる。CPAA
0は、事業の総合的な調整及び管理の任務を行うEBRA
P Aの管理の下で、4に掲げる他の機関と協力してこの活動を
行う。

4 他の機関及びその機能

機 関 名
ミナス・ジェライス州農業
研究公社

機 能
ミナス・ジェライス州にお
けるセラード開発計画の促
進のための研究調整

ウベラバ農業試験場

生産システム及びその経済
的評価に関する研究及び実
用研究の実施

ブラジルの農業研究協力取組

nation of soil, climate and plant resources
in Cordeiro.

2. The Project will consist of the following
activities:

a. Research work on the fields referred
to in 1 above

b. Exchange of information, samples,
materials and research reports
necessary for the Project

c. Development of research capabilities
of the researchers of both countries
in the fields referred to in 1 above

d. Other activities to be agreed upon
between the authorities concerned of
the two Governments

3. The activities mentioned in 2 above will be
conducted mainly at CPAC. CPAC will conduct
such activities as mentioned above in co-
operation with other institutions listed in
1 below, under the control of EMBRAPA, which
will exercise the functions of overall
adjustment, coordination and management of
the Project.

4. Other institutions and their functions:

name of institution functions
Agricultural Research coordination of
Enterprise of the State research for the
of Minas Gerais promotion of the
Cerrado Development
Scheme in Minas Gerais

Uberaba Agricultural
Experiment Station

implementation of
applied research and
research on production
system and its economic
evaluation

合同委員
会の設置
運営

9 事業の効果的な実施のため、付表Ⅱに掲げる構成員から成る農業研究協力に関する合同委員会を設け、少なくとも年一回会合する。

この委員会は、Ⅰにいう基本計画の科目及び事業の年間作業計画を作成する。基本計画の科目及び年間作業計画は、両政府の関係当局の承認を得るために同当局に提出される。

協
議

10 両政府は、この取極から又はこれに関連して生ずることがあるいかなる事項についても相互に協議する。

発効、有
効期間及
び終了

11 この取極は、署名の日に効力を生じ、五年の期間効力を有する。もつとも、いずれの政府も、他方の政府に対していつでもこの取極を終了させる意思を通告することができ、その場合には、この取極は、そのような通告が行われた後六箇月で終了する。

付表 Ⅰ

付表 Ⅰ

事業の基本計画

1 事業は、セラードにおける土じょうり、気候及び植物資源の利用計画に寄与するため、植物病理、こん虫、作物生理を含む作物栽培、土じょうり作物—水分系、農業気象、農業機械、作物育種及び農業経営及び経済分析の分野において実施される。

ment of Japan on the other hand.

9. For the effective implementation of the Project, a Joint Committee on the Agricultural Research Co-operation, consisting of the members as listed in Annex VI, will be established and meet at least once a year. The Committee will formulate the details of the Basic Plan referred to in paragraph 1 and the annual operational work plan of the Project. The details of the Basic Plan and of the annual operational work plan will be submitted to the authorities concerned of the two Governments for their approval.

10. The two Governments will consult with each other in respect of any matter that may arise from or in connection with this Arrangement.

11. This Arrangement will come into force on the date of signature and remain in force for a period of five years. However, either Government may, at any time, give notice to the other Government of its intention to terminate the Arrangement, in which case it will terminate six months after such notice has been given.

Annex I

Basic Plan of the Project

1. The project will be implemented in the fields of plant pathology, entomology, agronomy including crop physiology, soil-plant-water relationships, agricultural meteorology, agricultural machinery, plant breeding, and farm management and economic analysis with a view to contributing to the plans of util-

事業の実施に必要なブラジル人専門家、土地建物、資材等の提供

運営費の負担

事業の管理及び実施についての責任

両国の研究機関の緊密な関係維持

5 ブラジル連邦共和国政府は、自己の負担において次のものを提供するため必要な措置をとる。

(a) 付表Bに掲げる事業の実施に必要なブラジル人の専門家その他の職員の仕事

(b) 付表Yに掲げる事業の実施に必要な土地、建物及び附帯施設

(c) 事業の実施に必要な設備、図様、車両、器具、工具その他の資材又はそれらの補充品（日本国政府によつて供与されるものは除く）

6 ブラジル連邦共和国政府は、事業の実施に必要なすべての運営費を負担するため必要な措置をとる。

7 ブラジル農業研究公社の技術担当理事は、事業の管理及び実施について責任を負い、また、日本人専門家は、事業の実施に必要な技術上の事項につき指導及び助言を行う。

8 事業の実施を成功させるため一方においてセラード地域農業研究所（以下「OPAO」という）、ブラジル農業研究公社（以下「EMBRAPA」という）及び付表I-IKのブラジル研究機関と他方において日本国政府の関係農業研究機関との間に緊密な関係を維持する。

ブラジルとの農業研究協力取極

sub-paragraph (1) herein.

5. The Government of the Federative Republic of Brazil will take necessary measures to provide as its own expertise:

(a) The services of Brazilian experts and other personnel, necessary for the implementation of the project, as listed in Annex IV;

(b) Land and buildings necessary for the implementation of the project, as listed in Annex V, as well as incidental facilities; and

(c) Supply or replacement of equipment, machinery, vehicles, instruments, tools and other materials necessary for the implementation of the project, other than those provided by the Government of Japan.

6. The Government of the Federative Republic of Brazil will take necessary measures to meet all running expenses necessary for the implementation of the project.

7. The Technical Director of the Brazilian Agricultural Research Enterprise will be responsible for the administration and implementation of the project, and Japanese experts will provide guidance and advice on technical matters necessary for the implementation of the project.

8. For the successful implementation of the project, close relationship will be maintained between the Agricultural Research Center for the Cerrado Region (hereinafter referred to as "CPAC"), the Brazilian Agricultural Research Enterprise (hereinafter referred to as "EMBRAPA"), and the Brazilian research institutions referred to in Annex I, on the one hand, and Japanese agricultural research institutions concerned of the Govern-

設備、機
材及び資
材の供与

ブラジル
人研究者
等の受入

第七条及び第八条の規定は前記(1)及び(2)にいう日本人専門家に適用される。

3 (1) 日本国政府は、事業の実施のために必要であつてブラジルで生産されない設備、機械及び資材を自己の負担において供与するため日本国の現行法令に従ひ、必要な措置をとる。

(2) 必要な設備、機械及び資材の表は、付表Ⅱの範囲内で両政府の関係当局間で合意される。

(3) 技術協力に関する基本協定第九条の規定は前記(1)及び(2)にいう設備、機械及び資材に適用される。

(4) ブラジル連邦共和国政府は、前記(1)及び(2)にいう設備、機械及び資材の送付、運用及び維持に必要な経費を負担する。

4 (1) 日本国政府は、日本国の現行法令に従ひ、日本国政府の技術協力計画に基づく通常の手續によつて事業に従事するブラジル人の研究者及び研究管理者を調査及び研修旅行のために日本国に受け入れるため必要な措置をとる。

(2) 基本協定第四条(2)の規定は、前記(1)にいう研究者及び研究管理者により取得された技術及び知識に対し適用される。

2

(1) (1) and (2), VI, VII and VIII of the Basic Agreement will apply to the Japanese experts referred to in subparagraphs (1) and (2) above.

3. (1) The Government of Japan will, in accordance with the laws and regulations in force in Japan, take necessary measures to provide, at its own expense, the equipment, machinery and materials required for the implementation of the project and not produced in Brazil.

(2) The list of equipment, machinery and materials required will be agreed upon between the authorities concerned of the two Governments within the scope of those stipulated in Annex III.

(3) The provisions of Article IX of the Basic Agreement on Technical Cooperation will apply to the equipment, machinery and materials referred to in subparagraphs (1) and (2) above.

(4) The Government of the Federative Republic of Brazil will bear the expenses necessary for the installation, operation and maintenance of the equipment, machinery and materials referred to in subparagraphs (1) and (2) above.

4. (1) The Government of Japan will, in accordance with the laws and regulations in force in Japan, take necessary measures to receive Brazilian researchers and research administrators engaged in the project for training and study tour in Japan through the normal procedure under Technical Cooperation Plan of the Government of Japan.

(2) The provisions of Article IV (2) of the said Basic Agreement will apply to the techniques and knowledge acquired by the researchers and research administrators mentioned in

ブラジルにおける農業研究協力に関する日本国政府とブラジル連邦共和国政府との間の取極

技術協力に関する日本国政府とブラジル連邦共和国政府との間の基本協定第二条の規定に基づき、次の規定が両政府により適用される。

日本・ブラジル農業研究協力事業の実施協力

日本人専門家

1 (1) 日本国政府とブラジル連邦共和国政府は、併せて農林省の少ないセラード地域における農業開発計画の方向の指針となる農業生産技術を開発することを目的として日本・ブラジル農業研究協力事業（以下「事業」という）を相互に協力して実施する。

(2) 事業は、付表Iに規定する事業の基本計画に従い実施される。

2 (1) 日本国政府は、日本国の現行法令に従い、付表IIに掲げる日本人専門家の役割を自己の負担において供与するため必要な措置をとる。

(2) 日本国政府の技術協力計画に基づく通常の手段によつて、専門家を必要に応じて短期間追加派遣することができ、

(3) 基本協定の第四条(1)、第五条(1)目、第五条(2)、第六条、

ブラジルの農業研究協力取極

Arrangement between the Government of Japan and the Government of the Federative Republic of Brazil concerning the Agricultural Research Cooperation in Brazil

Pursuant to the provisions of Article 11 of the Basic Agreement on Technical Cooperation between the Government of Japan and the Government of the Federative Republic of Brazil, the following provisions will be applied by the two Governments:

1. (1) The Government of Japan and the Government of the Federative Republic of Brazil will cooperate with each other in implementing the Japan-Brazil Agricultural Research Cooperation Project (hereinafter referred to as "the project") for the purpose of developing the technology of agricultural production which will serve as a guideline for agricultural development plans in semi-arid and poorly vegetated regions of Cerrado.

(2) The project will be implemented in accordance with the basic plan of the project as stipulated in Annex I.

2. (1) The Government of Japan will, in accordance with the laws and regulations in force in Japan, take necessary measures to provide at its own expense, the services of Japanese experts as listed in Annex II.

(2) Some additional experts may also be dispatched on short term assignment through the normal procedures under the Technical Cooperation Plan of the Government of Japan when necessary arises.

(3) The provisions of Articles IV (1), V

ブラジルとの親善研究協力取等

千九百七十七年九月三十日にブラジリアで

日本国特命全権大使 吉田健三

外務大臣臨時代理

ラミロ・サライヴァ・ゲレイロ 閣下

11

(Signed) KENZO YOSHIDA
Ambassador Extraordinary and
Plenipotentiary of Japan

His Excellency
Ambassador Ramiro Saraiva Guerreiro,
Minister of Interam for
External Relations

日本側書簡
技術協力
基本協定
第二条の
規定によ
る農業研
究協力

ブラジルにおける農業研究協力に関する日本国政府とブラジル連邦共和国政府との間の交換公文

(日本側書簡)

(訳文)

書簡をもつて啓上いたします。本使は、千九百七十年九月二十二日にブラジリアで署名された技術協力に関する日本国政府とブラジル連邦共和国政府との間の基本協定及びブラジルにおける農業研究協力に関する両政府の代表者で行われた最近の討議に言及するとともに基本協定第二条の規定に従い、この書簡に添付されているブラジルにおける農業研究協力に関する日本国政府とブラジル連邦共和国政府との間の取極を日本国政府に代わつて提案する光榮を有します。

ブラジル連邦共和国政府が前記の提案に同意する場合は、この書簡及びブラジル連邦共和国政府の同意を表明する閣下の返簡が、閣下の返簡の日付の日に効力を生ずる両政府間の合意を構成するものとみなすことを提案する光榮を有します。

本使は、以上を申し進めるに際し、ここに重ねて閣下に向かつて取意を表します。

ブラジルとの農業研究協力取極

Excellency,

I have the honour to refer to the Basic Agreement on Technical Cooperation between the Government of Japan and the Government of the Federative Republic of Brazil, signed at Brasilia, September 22, 1970, and to the recent discussions held between the representatives of the two Governments concerning the agricultural research cooperation in Brazil, and to propose, on behalf of the Government of Japan, pursuant to the provisions of Article II of the Basic Agreement, the Arrangement between the Government of Japan and the Government of the Federative Republic of Brazil, attached hereto, concerning the agricultural research cooperation in Brazil.

In case the Government of the Federative Republic of Brazil agrees with the said proposal, I have further the honour to suggest that this note and Your Excellency's reply, expressing the agreement of the Government of the Federative Republic of Brazil shall be regarded as constituting an agreement between the two Governments, which will come into force on the date of Your Excellency's reply.

I avail myself of this opportunity to renew to Your Excellency the assurance of my highest considerations.

(Japanese Note)

Brasilia, September 30, 1977

| | | |
|---------|-------------------|---|
| 7 | 事業の管理及び実施についての責任 | 五 |
| 8 | 両国の研究機関間の緊密な関係維持 | 五 |
| 9 | 合同委員会の設置、運営 | 六 |
| 10 | 協議 | 六 |
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| 付表I | 事業の基本計画 | 六 |
| 付表II | 日本人専門家名表 | 六 |
| 付表III | 設備、機械及び資材名表 | 九 |
| 付表IV | ブラジルの専門家その他の総職員名表 | 〇 |
| 付表V | 土地、建物その他の施設名表 | 〇 |
| 付表VI | 合同委員会の構成 | 一 |
| ブラジル側書簡 | | 三 |

◎ブラジルにおける農業研究協力に関する日本国政府と
ブラジル連邦共和国政府との交換公文

(略称) ブラジルとの農業研究協力取極

昭和五十二年九月三十日 ブラジリアにて
昭和五十二年九月三十日 効力発生
昭和五十二年十一月十六日 告示
(外務省告示第一五五号)

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| ○ブラジルにおける農業研究協力に関する日本国政府とブラジル連邦共和国政府との協定の取極..... | 三 |
| 1 日本・ブラジル農業研究協力事業の実施協力..... | 三 |
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(備考) 略称、署名その他の年月日、目次、綴外の見出し、
注書及び末尾の参考は執務上の便宜に資するため、編集に
当たり作成したものである。なお、署名欄は、署名者の氏
名を記載したものであって、署名本書等の原本における署
名振りとは必ずしも一致していない。

25. ブラジル農業研究計画・協定

条約集 (分冊)

(2721)

外務省条約局

昭和五十二年十一月編纂

ブラジルにおける農業研究協力に関する日本国政府と
ブラジル連邦共和国政府との間の交換公文

略称「ブラジルとの農業研究協力取極」

昭和五十二年(一九七七年)九月三十日にブラジリアで
同 年(同 年)九月三十日に効力発生

(出所「交換公文本巻」)

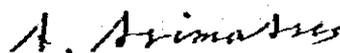
19. パラグアイ農林業開発計画・討議議事録

THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE
IMPLEMENTATION SURVEY TEAM AND THE AUTHORITIES
CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF
PARAGUAY ON THE JAPAN-PARAGUAY TECHNICAL
COOPERATION FOR THE AGRICULTURE AND FORESTRY
DEVELOPMENT PROJECT IN THE SOUTHERN PARAGUAY

The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Akira ARIMATSU, Executive Director, JICA, visited the Republic of Paraguay from March 11, 1979, to March 18, 1979, for the purpose of working out the details of the technical cooperation program concerning the Agriculture and Forestry Development Project in the Southern Paraguay.

During its stay in the Republic of Paraguay, the Team exchanged views and had a series of discussions with the Paraguayan authorities concerned in respect of the desirable measures to be taken by both Governments for the successful implementation of the above-mentioned Project.

As a result of the discussions, the Team and the Paraguayan authorities concerned agreed to recommend to their respective Government the matters referred to in the document attached hereto based on "ACUERDO SOBRE COOPERACION TECNICA ENTRE EL GOBIERNO DEL JAPON Y EL GOBIERNO DE LA REPUBLICA DEL PARAGUAY (AGREEMENT ON TECHNICAL COOPERATION BETWEEN THE GOVERNMENT OF JAPAN AND THE GOVERNMENT OF THE REPUBLIC OF PARAGUAY)", signed at Asunción on February 9, 1979.



Mr. Akira ARIMATSU

Head

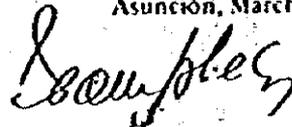
of

the Japanese Implementation Survey Team

(Executive Director,

Japan International Cooperation Agency)

Asunción, March 16, 1979



Ing. Luis PAMPLIEGA C.

Director General

Ministry of Agriculture

and Live-Stock

The Republic of Paraguay

THE ATTACHED DOCUMENT

I- COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Governments of Japan and the Governments of the Republic of Paraguay will cooperate with each other in implementing the Agriculture and Forestry Development Project in the Southern Paraguay (hereinafter referred to as "the Project") for the purpose of contributing to the agriculture and forestry development in the Southern Paraguay, mainly in Itapua Department.
2. The Project will be implemented in accordance with the Master Plan which is given in Annex I.

II- DISPATCH OF JAPANESE EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in Annex II through the normal procedures under the Technical Cooperation Scheme of Japan.
2. The Japanese experts referred to in 1. above and their families will be granted in the Republic of Paraguay the privileges, exemptions and benefits as listed in Annex III and will be granted privileges, exemptions and benefits no less favourable than those granted to experts of third countries or international organizations performing similar missions.

III- PROVISION OF MACHINERY AND EQUIPMENT

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials necessary for the implementation of the Project as listed in Annex IV, through the normal procedures under the Technical Cooperation Scheme of Japan.
2. The articles referred to in 1. above will become the property of the Government of the Republic of Paraguay upon being delivered c.i.f. to the Paraguayan authorities concerned at the ports and/or airports of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.

IV- TRAINING OF PARAGUAYAN PERSONNEL IN JAPAN

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Paraguayan

personnel connected with the Project for technical training in Japan through the normal procedures under the Technical Cooperation Scheme of Japan.

2. The Government of the Republic of Paraguay will take necessary measures to ensure that the knowledge and experience acquired by the Paraguayan personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V-- MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE REPUBLIC OF PARAGUAY

1. In accordance with the laws and regulations in force in the Republic of Paraguay, the Government of the Republic of Paraguay will take necessary measures to provide at its own expense:

(1) Services of the Paraguayan counterpart personnel and administrative personnel as listed in Annex V;

(2) Land, building and facilities as listed in Annex VI;

(3) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than these provided through JICA under III-1, above;

(4) Transportation facilities and travel allowance for the Japanese experts for the official travel within the Republic of Paraguay;

(5) Suitably furnished accommodations for the Japanese experts and their families.

2. In accordance with the laws and regulations in force in the Republic of Paraguay, the Government of the Republic of Paraguay will take necessary measures to meet:

(1) Expenses necessary for the transportation within the Republic of Paraguay of the articles referred to in III-1 above as well as for the installation, operation and maintenance thereof;

(2) Customs duties, internal taxes and any other charges, imposed in the Republic of Paraguay on the articles referred to in III-1 above;

(3) All running expenses necessary for the implementation of the Project.

VI-- ADMINISTRATION OF THE PROJECT

1. The Ministry of Agriculture and Livestock of the Republic of Paraguay will be responsible for the administration and implementation of the Project, and the Japanese experts will provide necessary technical guidance and advice for the implementation of the Project.

2. For the successful implementation of the Project, a Joint-Committee will be established as specified in Annex VII and meet more than once a year. The Joint-Committee will formulate the details of the Master Plan referred to in Annex I and annual operational work plan of the Project. The details of the Master Plan and the annual operational work plan will be submitted to the authorities concerned of the two Governments for the approval.

Under the Joint-Committee, Agriculture, Agricultural Machinery and Forestry Sub-Committees may be established to discuss specific matters when necessity arises.

3. For the close cooperation between the Ministry of Agriculture and Livestock and other agencies concerned of the Republic of Paraguay and Japanese experts the Project Central Office will be established at Asunción and the Japanese General Coordinator will be assigned there. The General Coordinator will support the successful implementation of the three Programs through advice and coordination.

4. The Project will be implemented in contact with agricultural and forestry research stations concerned in the Republic of Paraguay.

VII- CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Republic of Paraguay undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Republic of Paraguay except for those arising from the willful misconduct or gross negligence on the Japanese experts.

VIII- MUTUAL CONSULTATION

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

IX- TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be five years from March 16, 1979, to March 15, 1984. The authorities concerned will hold mutual consultation concerning the necessity of extending the terms of cooperation with a view to the progress of the Project and may recommend to their respective Governments the extension of the duration.

ANNEX I: MASTER PLAN OF THE PROJECT

1. The Project consists of the following three programs.

(1) Centro Regional de Investigación y Extensión Agrícola (hereinafter referred to as "CRIA") Strengthening Program;

(2) Agriculture Mechanization Program;

(3) Forestry Development and Training Program.

2. The objectives and activities of the three Programs are as follows.

(1) CRIA Strengthening Program:

For the purpose of strengthening the experimental and extension activities at CRIA, Capitan Miranda, Itapua Department, the following activities will be implemented at CRIA.

i) Breeding of upland crops including wheat and soybean for improvement of their stability and productivity;

ii) Experiment on new crop productivity;

iii) Adaptability trial and demonstration of the new varieties and cultivation techniques developed at CRIA;

iv) Multiplication of elite seeds;

v) Development of techniques to conserve the soil;

vi) Development of techniques to control diseases and pest insects;

vii) Supporting extension activity to disseminate the developed techniques to the farmers.

(2) Agriculture Mechanization Program:

For the betterment of the operation, maintenance and repairing techniques for cultivation and reclamation machines and tools, Centro de Mecanización Agrícola (hereinafter referred to as "CEMA") will be established in Pirapo, Itapua Department, and the following activities will be implemented.

i) Fostering the operators and the mechanics for the improved agricultural mechanization;

ii) Technical training on operation of the cultivation and reclamation machines;

iii) Technical training on repair and maintenance of the machines and tools.

(3) Forestry Development and Training Program:

For the purpose of developing forestry in the Southern Paraguay, mainly in Itapua Department, the Centro de Desarrollo Forestal (hereinafter referred to as "CEDEFO")

will be established in Pirapo, Itapua Department, which consists of two departments, namely Wood Processing Guidance Department and Afforestation Guidance Department.

i) Wood Processing Guidance Department will conduct the technical training and development of sawmilling, wood working, wood preservation and utilization of non-commercial wood;

ii) Afforestation Guidance Department will conduct the technical training and development of logging, nursery practice, mechanical afforestation and afforestation practice.

ANNEX II: LIST OF JAPANESE EXPERTS

| | <u>Category</u> | <u>Field</u> |
|---------------------------|--|---|
| 1. Project Central Office | (1) General Coordinator (2) Liaison Officer | |
| 2. CRIA | (1) Expert | Agronomy |
| 3. CEMA | (1) Expert | Mechanics Operation |
| 4. CEDEFO | (1) Expert | Sawmilling Wood working Nursery practice Afforestation Forestry machinery |

- Note: (1) A team Leader will be assigned among the experts of 2., 3. and 4. above respectively.
- (2) Experts in the above-mentioned fields are long-term ones, and short-term experts in the fields mentioned above as well as others may be dispatched when necessity arises.

ANNEX III: PRIVILEGES, EXEMPTIONS AND BENEFITS

1. Exemptions from income tax and charges of any kind imposed on or in connection with the living allowances remitted from abroad;
2. Exemptions from import and export duties and any other charge in respect of personal and household effects, including one motor vehicle per family, which may be brought into the Republic of Paraguay from abroad;
3. Free medical services and facilities to the Japanese experts and their families.

ANNEX IV: LIST OF THE ARTICLES

1. The Agriculture Sector:
 - (1) Agriculture and reclamation machines and equipment, and their spare parts;
 - (2) Machines and tools for repair work;
 - (3) Equipment, instruments, tools and their spare parts for laboratory and field experiments;
 - (4) Fertilizers, agricultural chemicals and other materials;
 - (5) Teaching and extension materials including audio-visual aids;
 - (6) Vehicles and their spare parts;
 - (7) Radio communication equipment and its spare parts;
 - (8) Other necessary equipment, tools and materials to be mutually agreed upon for the effective implementation of the Project.
2. The Forestry Sector:
 - (1) Forestry machines and equipment, and their spare parts;
 - (2) Machines and tools for repair work;
 - (3) Equipment, instruments, and their spare parts for experiments;
 - (4) Fertilizers, agricultural chemicals and other materials;
 - (5) Teaching materials including audio-visual aids;
 - (6) Vehicles and their parts;
 - (7) Radio communication equipment and its spare parts;
 - (8) Other necessary equipment, tools and materials to be mutually agreed upon for the effective implementation of the Project.

ANNEX V: LIST OF PARAGUAYAN STAFF

| | <u>Category</u> | <u>Field</u> |
|---------------------------|--|---|
| 1. Project Central Office | (1) Project Coordinator (2) Clerk | |
| 2. CRIA | (1) Project Manager (2) Expert (3) Clerical and service employee | Agronomy |
| 3. CEMA | (1) Project Manager (2) Expert (3) Clerical and service employee | Mechanics Operation |
| 4. CEDEFO | (1) Project Manager (2) Expert (3) Clerical and service employee | Sawmilling Wood working Nursery practice Afforestation Forestry Machinery |

Note: In addition to the above-mentioned, necessary labores are included in 2., 3 and 4. respectively.

ANNEX VI: LIST OF LAND, BUILDINGS AND FACILITIES

1. Project Central Office
 - (1) Rooms for General Coordinator and Liaison Officer
 - (2) Parking Lot
2. CRIA
 - (1) Land
 - i) Land for builings
 - ii) Land for the experimental field

(2) Buildings and facilities

- i) Main office (laboratory, seed-storage room, lecture room, library, meeting room, etc.)**
- ii) Storage for farming materials**
- iii) Storage for machinery and equipment**
- iv) Management office for the experimental field**
- v) Green house and glass house**
- vi) Generator house**
- vii) Garage**
- viii) Dormitory**
- ix) Houses for Paraguayan staff**
- x) Guest house**
- xi) Others**

3. CEMA

(1) Land

- i) Land for buildings**
- ii) Field for operation training of cultivation and reclamation machines**

(2) Buildings and facilities

- i) Main office (Team leader's room, expert's rooms, meeting room, lecture room, etc.)**
- ii) Workshop for training**
- iii) Storage for equipment and tools**
- iv) Generator house**
- v) Dormitory for trainees**
- vi) Houses for Paraguayan staff**
- vii) Workshop for repair and maintenance of machines**
- viii) Storage for materials**
- ix) Pump house**
- x) Garage**
- xi) Storage for machinery and equipment**
- xii) Others**

4. CEDEFO

(1) Land

- i) Land for buildings
- ii) Land for nursery and practical forest

(2) Buildings and facilities

- i) Main Office (administration office, training rooms, etc.)
- ii) Sawmill and wood factory
- iii) Wood testing rooms
- iv) Garages
- v) Warehouses for equipment
- vi) Dormitory for trainees
- vii) Guest house
- viii) Generator house
- ix) Pump house
- x) Office for nursery (including garage, warehouse, generator house and pump house)
- xi) Office for practical training forest (ditto)
- xii) Houses for Paraguayan staff
- xiii) Others

ANNEX VII: THE COMPOSITION OF THE JOINT-COMMITTEE

- | | |
|-------------------------|--|
| 1. Chairman | Director General of Ministry of Agriculture and Livestock |
| 2. Member | |
| <u>Japanese side</u> | <u>Paraguayan side</u> |
| (1) General Coordinator | (1) Director of Technical Cabinet (Project Coordinator) |
| (2) Team Leaders | (2) Director of Research and Extension for Agriculture and Forestry |
| (3) Experts | (3) Director of Education for Agriculture and Forestry |

Japanese side

- (4) Liaison Officer**
- (5) Representative of JICA**

Paraguayan side

- (4) Director of National Forestry Service**
- (5) Director of Administration**

Note: Representatives of other Ministries concerned and the Embassy of Japan, including Project Managers of the three Programs, may attend the meeting as observers.

**TENTATIVE IMPLEMENTATION PROGRAMME OF
THE AGRICULTURE AND FORESTRY DEVELOPMENT
PROJECT IN THE SOUTHERN PARAGUAY**

The Japanese Implementation Survey Team and Director General of the Ministry of Agriculture and Livestock of the Republic of Paraguay have jointly formulated the Tentative Implementation Programme of the Project as annexed hereto. These have been formulated in connection with I-2, of the Attached Document of the Record of Discussions between the Japanese Implementation Survey Team and Director General of the Ministry of Agriculture and Livestock of the Republic of Paraguay on the Agriculture and Forestry Development Project in the Southern Paraguay for its reference on such condition that necessary budget will be allocated for the implementation of the Project, and are subject to change within the framework of the Record of Discussions when necessity arises in the course of implementation of the Project.

Asunción, March 16, 1979

Mr. AKIRA ARIMATSU
Head of
the Japanese Implementation Survey Team
(Executive Director,
Japan International Cooperation Agency)

Ing. LUIS PAMPLIEGA C.
Director General
Ministry of Agriculture
and Livestock
The Republic of Paraguay

I- TENTATIVE SCHEDULE OF IMPLEMENTATION

| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 |
|---------------------------|----------------------------|------------------------------|--|------------------------------|---------------|-----------------|
| Japanese Experts | | | 1 person | | | |
| General Coordinator | | | 1 person | | | |
| Liaison Officer | | | 1 person | | | |
| Experts for CRIA | | | 1 person (Breeding) | | | |
| | | | 1 to 2 persons (Pathology, Entomology) | | | |
| Experts for CEDEFO | | | 2 persons (Nursery, Afforestation) | | | |
| | | | 2 persons (Sawmilling, Machinery) | | | |
| | | | 1 person (Woodworking) | | | |
| Experts for CEMA | | | 3 persons (Machinery, Operation) | | | |
| | | | 3 persons (Machinery, Operation) | | | |
| | | | Several persons | | | |
| Training in Japan | | | X | X | X | X |
| Articles, materials, etc. | X | X | | | | |
| Dispatching Survey Team | implementation design team | implementation planning team | guidance team | implementation planning team | guidance team | evaluation team |