

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of the Republic of the Philippines will cooperate with each other in implementing the Project, anticipated to support the efforts being made under the Bohol Integrated Area Development Project (hereinafter referred to as "BIADP") and thus contributing to the enhancement of the agricultural development in the Province of Bohol.
2. The Project will be implemented in line 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 paragraph 1 above and their families will be granted in the Republic of the Philippines the privileges, exemptions and benefits no less favourable than those accorded to experts of third countries working in the Republic of the Philippines 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 (hereinafter referred to as "the Equipment") 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 equipment referred to in paragraph 1 above will become the property of the Government of the Republic of the Philippines upon being delivered c.i.f. to the BIADP 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.

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3. After consultation with the Japanese experts referred to in Annex II, a part of the equipment referred to in paragraph 1 above may be made available at reasonable rates to farmers in the demonstration plots and a part of consumable items such as fertilizers and agricultural chemicals may also be made available at reasonable prices to the farmers in the demonstration plots. The proceeds from such activities will be used exclusively for the implementation of the Project in accordance with the laws and regulations in force in the Republic of the Philippines.

IV. TRAINING OF THE PHILIPPINE 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 Philippine 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 Republic of the Philippines will take necessary measures to ensure that the knowledge and experience acquired by the Philippine personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V. SERVICES OF PHILIPPINE COUNTERPART PERSONNEL AND ADMINISTRATIVE PERSONNEL

1. In accordance with the laws and regulations in force in the Republic of the Philippines, the Government of the Republic of the Philippines will take necessary measures to secure at its own expense necessary services of Philippine counterpart personnel and administrative personnel as listed in Annex IV.
2. As to the Philippine counterpart personnel, the Government of the Republic of the Philippines will endeavor to assign the necessary number of suitably qualified personnel corresponding to each Japanese expert to be dispatched by the Government of Japan as specified in Annex II, to fulfill the effective and successful transfer of technology under the Project.

VI. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE REPUBLIC OF THE PHILIPPINES

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

the Philippines will take necessary measures to provide at its own expense:

- (1) Land, buildings and facilities as listed in Annex V;
 - (2) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided by the Government of Japan through JICA under Article III;
 - (3) Transportation facilities and travel allowance for Japanese experts for the official travel within the Republic of the Philippines.
2. In accordance with the laws and regulations in force in the Republic of the Philippines, the Government of the Republic of the Philippines will take necessary measures to meet:
- (1) Expenses necessary for the construction or improvement of roads and other facilities necessary for the implementation of the Project in and around the Agricultural Promotion Center (hereinafter referred to as the "APC");
 - (2) Expenses necessary for the transportation within the Republic of the Philippines of the Equipment referred to in paragraph 1, Article III above as well as for the installation, operation and maintenance thereof;
 - (3) Customs duties, internal taxes and any other charges, imposed by the Government of the Republic of the Philippines on the Equipment referred to in paragraph 1, Article III above;
 - (4) All running expenses necessary for the implementation of the Project.

VII. ADMINISTRATION OF THE PROJECT

1. The BIADP Office as represented in the Project by the Project Director, will have the authority and responsibility for the overall coordination and administration of the activities of the Project in connection with the integrated area development of the Province of Bohol.
2. The Ministry of Agriculture, as represented in the Project by its Regional Director, will have the authority and responsibility for the efficient and effective implementation of the Project.

3. The Japanese experts will provide the necessary technical guidance and advice for the implementation of the Project.
4. For the effective and smooth implementation of the Project, a Joint Committee with the function and the composition as referred to in Annex VI will be established. The Joint Committee will meet regularly or upon the request of the Chairman, the Co-Chairman and/or the Japanese Team Leader. The Joint Committee may create subcommittees to deal with specific matters.

VIII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Republic of the Philippines shall be responsible for dealing with claims which may be brought by third parties against the Japanese experts, and shall hold them harmless in respect of claims or liabilities arising in the course of or otherwise connected with the discharge of their duties in the implementation of the Project, except when such claims or liabilities arise from the gross negligence or willful misconduct of the above-mentioned individuals. Should any question arise in connection with the foregoing, both Governments shall immediately consult with each other.

IX. MUTUAL CONSULTATION

There will be mutual consultation between the two Governments for the effective implementation of the Project.

X. TERM OF COOPERATION

The duration of the technical cooperation for the Project under the Attached Document will be five (5) years from the date of signature. However, taking into account the progress of construction works of the buildings, there will be a general review by the Joint Committee on the Project Implementation after two (2) years from the commencement of the cooperation in order to decide if the cooperation should be adjusted for the remaining three (3) more years.

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ANNEX 1. MASTER PLAN

The Project will consist of the three main activities, i.e., research, training and extension that will be carried out at the APC. The details are as follows:

1. Research Activity

In order to develop practical and applicable technologies for the farmers, the Project will focus on the applied research themes as follows:

- (1) Selection of suitable varieties and improvement of cultivation methods of rice and upland crops;
- (2) Chemical and physical soil improvement;
- (3) Promotion of water management efficiency of rice paddy field; and
- (4) Introduction of appropriate farm mechanization system.

2. Training Activity

The training program envisioned under the Project is intended to enhance and accelerate the existing training activities of the Ministry of Agriculture in the Province of Bohol. The subjects of training will be extension methods and technical training on crops, soils, irrigation engineering and agricultural machinery.

3. Extension Activity

The Project will give advice to existing extension activities of the Ministry of Agriculture in the Province of Bohol and will organize demonstration activities of new technologies developed by the research division of the APC.

NOTE: (a) Location of the APC

- a. The main center will be located in Dao, Tagbilaran City.
- b. The sub-center for the rice research will be established in the area of the Bohol Experiment Station in Ubay.
- c. The experimental paddy field will be provided in the Agricultural College in Bilar.

(b) Several demonstration plots will be made in the farmer's fields.

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ANNEX II. JAPANESE EXPERTS

<u>Category</u>	<u>Field</u>
1. Team Leader	
2. Experts	Agronomy (rice and upland crops) Soil Science Extension Agricultural Machinery
3. Liaison Officer	

- NOTE: (1) Additional experts on short term assignment in the fields mentioned above as well as the other fields concerned may also be dispatched, when necessary.
- (2) Experts may concurrently serve as Team Leader or Liaison Officer.
- (3) The expert in the field of Irrigation Engineering will be dispatched, if necessary.

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ANNEX III. LIST OF EQUIPMENT

1. Laboratory equipment, machinery, instruments, tools and spare parts for research.
2. Agricultural machinery and implements including post-harvest equipment and spare parts.
3. Fertilizers, pesticides and other agricultural chemicals.
4. Vehicles.
5. Tools and implements for land survey.
6. Teaching materials including audio-visual aide and mass media equipment.
7. Technical books, documents and other reference materials.
8. Other necessary equipment and materials to be mutually agreed upon between the authorities concerned of the two Governments.

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ANNEX IV. PHILIPPINE COUNTERPARTS AND OTHER PERSONNEL

<u>Category</u>	<u>Field</u>
1. Project Director,	BIADP
2. Project Manager,	APC
3. Technical Staff	Agronomy Soil Science Extension Agricultural Machinery
4. Technicians and Research Aides	
5. Clerical and Service Employees	
6. Operators and Laborers	

NOTE: The counterparts in the field of Irrigation Engineering will be assigned, if necessary.

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ANNEX V. LIST OF LAND, BUILDINGS AND FACILITIES

1. Land

- (1) Land with the size of about nine (9) hectares for the main center of the APC in Dao, Tagbilaran City.
- (2) Land with the size of 1 to 2 hectares for rice research in the Bohol Experiment Station in Ubay.
- (3) Land with the size of about two (2) hectares for the experimental paddy field which will be provided by the Agricultural College in Bilar.

2. Buildings for the APC

(1) Main Center


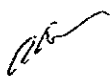
- 1) Research and Training Building
- ii) Canteen
- iii) Office of the Field Trials
- iv) Dormitory and Liaison Office
- v) Experts' House
- vi) Green House
- vii) Other necessary buildings and facilities

(2) Sub-Center

- i) Rice Research Building
- ii) Liaison House
- iii) Other necessary buildings and facilities

NOTE: Japanese grant aid for the construction of most of the above-mentioned buildings is requested by the Government of the Republic of the Philippines. The JICA Implementation Survey Team will recommend to the Government of Japan the favorable consideration of the said request.

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ANNEX VI. THE JOINT COMMITTEE

1. Functions

The Joint Committee composed of members as listed in 2 below will meet once a year and whenever necessity arises, and work:

- (1) To review the overall progress of the Tentative Schedule of Implementation in line with the Master Plan for the Project;
- (2) To review those measures taken by the Government of Japan;
 - i) Assignment of Japanese experts
 - ii) Training of Philippine counterparts in Japan
 - iii) Provision of the Equipment
- (3) To review those measures taken by the Government of the Republic of the Philippines;
 - i) Allocation of necessary budget
 - ii) Assignment of necessary Philippine counterparts
 - iii) Effective utilization of the Equipment provided by the Government of Japan
- (4) To formulate the Annual Working Plan of the Project.

2. Composition

- (1) Chairman : Regional Director, MA, Region VII
Co-Chairman : Project Director, BIADP
Vice-Chairman : Japanese Team Leader

(2) Members:

Philippine Side

Japanese Side

- | | |
|---|--------------------------------------|
| 1) Project Manager, APC | 1) Experts designated by Team Leader |
| ii) Provincial Development Coordinator, Bohol | ii) Liaison Officer |
| iii) Provincial Agricultural Executive Officer, Bohol | iii) Representatives of JICA |

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- iv) Representative, Agricultural Research Office, MA
- v) Representative, Office of the Minister, MA

NOTE: Officials of the Embassy of Japan and other Philippine authorities involved in the implementation of the Project may join in this Joint Committee as observers.

WP1946A

T.M. *[Signature]*

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No-4 Memorandum

2 February 1983

MEMORANDUM

FOR : Mr. Reynaldo de Sagun
Director
Bohol Integrated Area Development Project

Ms. Aurora B. Marcos
Assistant Secretary
Ministry of Agriculture

Subject: Tentative plan and steps for the present on the
Bohol Agricultural Promotion Center Project

This is to confirm the tentative plan and steps to be taken for the present on the Bohol Agricultural Promotion Center Project, which have been talked in the meeting of the Japanese Implementation Survey Team and the Philippine authorities concerned, and are as follows:

1. Activities in the first year will be centering on the research activity concerning rice cultivation and the preparatory work for the rest of the activities.
2. Among the Japanese experts listed in Annex II in the Record of Discussions, the Team Leader and an Agronomist (rice) will be dispatched in April or May this year. It is requested that the Philippine side will submit the official request form for them as soon as possible.

3. Acceptance of the Philippine personnel for training in Japan in fiscal year 1983 will be discussed after the above-mentioned Japanese experts arrive in the Philippines.
4. It is requested that the Philippine side will submit the official request form for the first supply of the equipment as soon as possible.
5. A survey team will be dispatched to discuss the Tentative Schedule of Implementation for the five-year cooperation period with the Philippine side, when the construction plan of the APC building is made concrete.
6. Measures to be taken by the Philippine side are as follows:
 - (1) Provision of lands listed in Annex V in the Record of Discussions for the smooth execution of activities mentioned in paragraph 1, and the setting up of the experimental farms given later.
 - (2) Organization of the APC including assignment of the Project Director, the Project Manager and the staff for the commencement of the Project.
 - (3) Provision of a temporary office for the first year activities of the APC.
7. As for the setting up of the experimental farms, the design and the cost estimation will be worked out in March this year, and the construction work will be needed to be carried

out for Dao and Billar farms so that they will be available for the second year research activities.

The Japanese side is examining the possible budget allocation for the experimental farms, which will be further discussed between ^{the} both sides as special measures taken by the Japanese side.

TOSHIHISA MURATA
Leader
The Japanese Implementation
Survey Team
Japan International Cooperation
Agency

日本国実施協議チームとフィリピン共和国政府関係
当局との間にとりかわされたボホール農業開発計画
に関する討議議事録（仮訳）

日本国、国際協力事業団（以下「事業団」という）から派遣され、村田稔尚氏を団長とする実施協議調査団（以下「調査団」という）は、フィリピン共和国におけるボホール農業開発計画（以下「事業」という）の細部について取極めるため、1月20日から2月4日にかけてフィリピン共和国を訪問した。

調査団はフィリピン国滞在中、上記事業の実施を成功させるために、両国間がとられる望ましい措置に関して、BIADP、農業省、その他フィリピン共和国関係当局と意見交換及び鋭意検討をくりかえした。

上記検討の結果、調査団とBIADP、農業省、その他フィリピン共和国関係当局は、ここに付添された書簡の中で言及されたものをそれぞれの政府に勧告することに同意をみた。

国際協力事業団
実施協議チーム団長
村田稔尚

マニラ、2月2日、1983年
BIADP デ・サグン局長
農業省 オーロラ・マルコス女史

I 両国政府間の協力

1. 日本国政府とフィリピン共和国政府は、BIADPを支援し、コロンボ農業の振興を図るべく、相互に協力して本事業を実施するものとする。
2. 事業は付表 I に記載されている基本計画により実施される。

II 日本人専門家の派遣

1. 日本国政府は、日本国の現行法令に従い、コロンボ計画に基づく通常の手続きによって、付表 II に掲げる日本人専門家の役務を自己の負担において提供するために、事業団を通じて必要な措置をとる。
2. 上記 1 に言う日本人専門家並びにその家族は、フィリピン共和国において、コロンボ計画の下にフィリピン国内で働く第三国の専門家に与えられるよりも不利でない特権、免除および便宜が与えられる。

III 機材、設備の供与

1. 日本国政府は日本国の現行法令に従い、コロンボ計画に基づく通常の手続きによって、事業の実施のために必要な付表 III に掲げる機械、設備、及び資材を自己の負担において供与するために、事業団を通じて必要な措置をとる。
2. 1 にいう物品は陸揚港ないし、空港において C I F 建てで、B I A D P に引き渡された時に、フィリピン共和国政府の財産となり、付表 II に掲げた日本人専門家と協議して事業の実施のために効率的に利用される。
3. 物品は付表 II に掲げる日本人専門家と協議して適正な価格で展示圃の農家に貸与するものとし、これによって生じた利益は、フィリピン共和国の現行法令に従い、事業の効果的実施のために使われるものとする。

IV フィリピン人専門家の研修

1. 日本国政府は日本国の現行法に従い、コロンボ計画に基づく通常の手続きによって、事業に携わるフィリピン人専門家を技術研修、視察旅行のために、自己の負担において、日本国へ受け入れるために事業団を通じて必要な措置をとる。
2. フィリピン共和国政府は、フィリピン人専門家が日本国における技術研修により得た知識、経験が事業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。

V フィリピン人専門家、その他職員の役務の提供

1. フィリピン共和国政府は、フィリピン共和国の現行法令に従い、自己の負担において、付表 IV に掲げるフィリピン人専門家その他の職員の役務を提供するために必要な措置をとる。

2. フィリピン共和国政府は、本事業において効果的、継続的な技術移転がなされることを確保するために十分な資格を有すフィリピン人専門家を付表Ⅱに掲げる日本人専門家に対応して配属するよう努力する。

VI フィリピン共和国政府のとする措置

1. フィリピン共和国政府は、フィリピン共和国の現行法令に従い、自己の負担において、次のものを提供するために必要な措置をとる。
 - (1) 付表Ⅴに掲げる土地、建物及び施設
 - (2) 事業の実施に必要な機械、設備、器具、車輛、工具、予備部品及びその他の資材の補充、但しⅢに記載された日本国政府から事業団を通じて供与されたものは除く。
 - (3) 日本人専門家がフィリピン共和国国内で、公務上、旅行するための交通機関と旅費
2. フィリピン共和国政府は、フィリピン共和国の現行法令に従い次のような経費を負担するために必要な措置をとる。
 - (1) 農業開発センター（以下「APC」という。）及びその関係機関における事業の実施に必要な道路及びその他施設の建設及び改良に必要な経費。
 - (2) Ⅲ項にいう物品のフィリピン共和国国内における輸送並びにこれらの物品の据え付け、操作及び維持に必要な経費
 - (3) Ⅲ項にいう物品について、フィリピン共和国において課される関税、内国税、及びその他の課徴金
 - (4) 事業の実施に必要なすべての運営費

VII 事業の運営

1. B I A D P がプロジェクト・ダイレクターを代表として、ボホール州の総合地域開発との関連において、本事業活動の全般的な調整及び運営に関して権利と責任を負う。
2. 農業省が第7管区農政局長を代表として事業の効率的・効果的实施に関して権利と責任を負う。
3. 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。
4. 事業の効果的、円滑な実施のために、付表Ⅳに定める構成員及び機能を持つ運営委員会を設置する。この委員会は定期的に、あるいは委員長、副委員長、及び日本人専門家チームリーダーの要請に応じて開催される。また、この委員会は個別事項を取扱う下部委員会を設置しうる。

VIII 日本人専門家に対する請求

フィリピン共和国政府は事業に従事する日本人専門家のフィリピン共和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、その他その遂行に関連する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ことを約束する。ただし、日本人専門家の故意又は重大な過失から生じる責任については、この限りではない。

また以上のことに関し、問題が生じたときは両国政府はすみやかに協議する。

IX 相互協議

両国政府は事業の効果的実施のために相互に協議する。

X 協力期間

この付属文書による技術協力の期間は署名日より5年間とする。しかしながら、建物施設の建設の進捗状況によっては、プロジェクト開始2年後に残る3年間の事業実施に関する協力の調整の必要性につき運営委員会において見直すものとする。

付表Ⅰ 事業の基本計画

本事業は3つの主要な活動、即ち研究、訓練、及び普及の各活動により構成され、APCにおいて実施される。詳細は以下の通り。

1. 研究活動

農民への実用・適用技術を開発するために、以下の応用研究を中心に行う。

- (1) 稲及び畑作物の適正品種の選択及び栽培方法の改善
- (2) 化学的・物理的な土壌の改良
- (3) 水田における水管理方法の改善
- (4) 農業機械化体系の導入

2. 訓練活動

農業省が行う現在の訓練事業を拡充することを目的とし、栽培、土壌、かんがい、農業機械に関する各技術訓練及び普及方法を内容とする。

3. 普及活動

農業省が行う現在の普及活動を指導・助言するとともに、APCの研究部門で開発された新技術の普及活動を組織化する。

注) a APCの位置

- a) メインセンターをタグピララン市ダオに置く
- b) 稲作研究を行うサブセンターをウバイのボホール試験場内に置く
- c) 水稻の実験圃場をピラール農科大学内に設ける
- b) 数ヶ所の展示圃を農家圃場に設ける

付表Ⅱ 日本人専門家

1. チームリーダー

2. 専門家

作物栽培(稲作及び畑作)

土壌肥料

普及

農業機械

3. 業務調整員

注) 1. 必要に応じ、上記の長期専門家のほかに、同分野及びその他の分野の短期専門家が派遣される。

2. 専門家はチームリーダー及び業務調整員に協力する。

3. 必要があれば、かんがい分野の専門家が派遣される。

付表Ⅲ 日本国政府から供与される物品

1. 研究用 —— 実験機器及びスベアパーツ
2. 農業機材及びスベアパーツ
3. 肥料、農薬、化学薬品
4. 車 輛
5. 土壌調査用機器
6. 視聴覚機器、放送機器、教材
7. 書籍、事務機器
8. 両国政府関係当局の合意に基づく、その他必要な諸機材

付表Ⅳ フィリピン人専門家及びその他職員

- | | |
|------------------|-----------------------------|
| 1. プロジェクト・ダイレクター | B I A D P |
| 2. プロジェクト・マネージャー | A P C |
| 3. 専 門 家 | 作物栽培
土壌肥料
普 及
農業機械 |
| 4. 専門家及び研究補助員 | |
| 5. 事務職員 | |
| 6. 役務職員 | |

注) 必要があれば、かんがい分野の専門家が派遣される。

付表Ⅴ 土地、建物、その他施設

1. 土 地
 - (1) ダオのAPCセンター用に約9 ha
 - (2) ウバイの稲作試験用に1～2 ha
 - (3) ビラール農科大学内の水稻実験用に約2 ha
2. 建 物
 - (1) メインセンター
 - Ⅰ) 研究、訓練棟
 - Ⅱ) 食 堂
 - Ⅲ) 圃場活動用建物
 - Ⅳ) 寄 宿 舎
 - Ⅴ) 専門家寄宿舍

- vi) ガラス室、網室
- vii) その他必要な建物、施設
- (2) サブセンター
 - i) 稲作研究室
 - ii) 事務室
 - iii) その他必要な建物、施設

注) 上記建物、施設の大部分に対する無償資金協力の要請が比国政府よりなされており、調査団は日本国政府に対し本要請の考慮方勧告する。

付表VI 運営委員会

1. 機能

運営委員会は下記委員により構成され年1回あるいは必要に応じて開催されるものとする。

その機能は、

- (1) 事業の基本計画に基づく実施計画に照らした進ちょく状況の見直し
- (2) 日本国政府によりとられた措置の見直し
 - i) 日本人専門家の派遣
 - ii) フィリピン人専門家の日本における研修
 - iii) 機材の供与
- (3) フィリピン共和国政府によりとられた措置の見直し
 - i) 必要な予算措置
 - ii) 必要なフィリピン人専門家の配属
 - iii) 日本国政府より供与された機材の効果的使用
- (4) 事業の年次活動計画の作成

2. 構成

- (1) 議長 : 第7管区農政局長
- 副議長 : B I A D P、プロジェクト・ディレクター
- 副議長 : 日本人専門家チームリーダー
- (2) メンバー

日 本 側	フィリピン側
i) チーム・リーダーの指名する専門家	i) A P C、プロジェクト・マネージャー
ii) 業務調整員	ii) ボホール州開発局長
iii) J I C A マニラ事務所代表	iii) 農業省州事務所長
	iv) 農業省農業研究所代表
	v)

注) 日本国大使館員及び事業に関係するその他の比側当局は傍聴者として運営委員会の会合に出席できる。

18. ホンジュラス農業開発研修センター計画・討議々事録及び暫定実施計画

THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE
IMPLEMENTATION SURVEY TEAM AND AUTHORITIES CONCERNED
OF THE REPUBLIC OF HONDURAS ON THE TECHNICAL COOPERATION
FOR THE AGRICULTURE DEVELOPMENT TRAINING
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. Akiyoshi Tamaoka visited the Republic of Honduras from May 11 to May 21, 1983 for the purpose of working out the details of the technical cooperation project concerning the Agriculture Development Training Center Project in the Republic of Honduras (hereinafter referred to as "the Project").

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

As a result of the discussions, the Team and the Honduran authorities concerned agreed to recommend to their respective Governments the matters referred to



In the document attached hereto.

Tegucigalpa, D.C. May 19, 1983.

五島昭義

Akiyoshi Tamaoka
Leader, the Japanese Implementation
Survey Team, Japan International
Cooperation Agency

M. Lardizabal

Ing. Miguel Lardizabal B
Director, Water Resources
Bureau,
Ministry of Natural Resources

Witness:

R. Quezada

Ing. Regino Quezada
Vice Minister
Ministry of Natural Resources

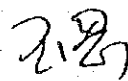

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of the Republic of Honduras will cooperate in implementing the Project for the purpose of improving technology necessary for the promotion of irrigated agriculture in order to increase agricultural productivity in the Republic of Honduras.
2. The Project will be implemented in line 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 the Government of Japan.
2. The Japanese experts referred to in paragraph 1 above and their families will be granted in the Republic of Honduras the privileges, exemptions and benefits no less favourable than those accorded to experts of third



countries or of international organizations performing similar missions in the Republic of Honduras, and will include the followings:

- (1) Exemptions from income taxes 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 charges imposed in respect of personal and household effects (including one motor vehicle per family) which may be brought into the Republic of Honduras from abroad;
- (3) Free medical services and facilities to the Japanese experts and their families;
- (4) Issuance of identification cards to the Japanese experts and their families, to secure the cooperation of the authorities concerned of the Republic of Honduras.

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 (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in Annex III through the normal procedures under the technical cooperation scheme of the

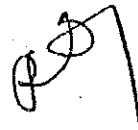
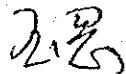
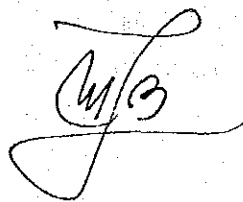


Government of Japan.

2. The equipment referred to in paragraph 1 above will become the property of the Government of the Republic of Honduras upon being delivered c.i.f. to the Honduran 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 HONDURAN 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 Honduran personnel connected with the Project for technical training in Japan through the normal procedures under the technical cooperation scheme of the Government of Japan.
2. The Government of the Republic of Honduras will take necessary measures to ensure that the knowledge and experience acquired by the Honduran personnel from technical training in Japan will be utilized effectively for the implementation of the Project.



V. SERVICES OF HONDURAN COUNTERPART PERSONNEL AND ADMINISTRATIVE PERSONNEL

1. In accordance with the laws and regulations in force in the Republic of Honduras, the Government of the Republic of Honduras will take necessary measures to secure at its own expense necessary services of the Honduran counterpart personnel and administrative personnel as listed in Annex IV.
2. As to the Honduran counterpart personnel, the Government of the Republic of Honduras will endeavor to allocate the necessary number of suitably qualified personnel corresponding to each Japanese expert to be dispatched by the Government of Japan as specified in Annex II, to fulfill the effective and successful transfer of technology under the Project.

VI. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE REPUBLIC OF HONDURAS

1. In accordance with the laws and regulations in force in the Republic of Honduras, the Government of the Republic of Honduras will take necessary measures to provide at its own expense:
 - (1) Land, buildings and facilities as listed in Annex V;
 - (2) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided by the Government of Japan through JICA under III above;

MB *RS*

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

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

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

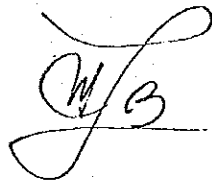
(1) Expenses necessary for the transportation within the Republic of Honduras of the Equipment referred to in paragraph 1 Article III above as well as for the installation, operation and maintenance thereof;

(2) Customs duties, internal taxes and any other charges, imposed in the Republic of Honduras on the Equipment referred to in paragraph 1, Article III above;

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

VII. ADMINISTRATION OF THE PROJECT

1. The Director of Water Resources Bureau, Ministry of Natural Resources will bear overall responsibility for the implementation of the Project.



2. The Director of the Agriculture Development Training Center (hereinafter referred to as "the Center") will be responsible for operational and administrative matters of the Project.
3. The Japanese Team Leader will represent Japanese experts and advise the Director of Water Resources Bureau, Ministry of Natural Resources, and the Director of the Center on technical matters concerning the operation of the Project.
4. The Japanese experts will provide technical guidance and advice to the Honduran counterpart personnel of the Project.
5. There will be close consultation on any matters concerning the implementation of the Project between both sides. For this purpose, the Joint Committee will be established with the functions and composition as specified in Annex VI.

VIII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Republic of Honduras 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 Honduras except for those arising from the willful misconduct or gross negligence of the Japanese experts.

IX. MUTUAL CONSULTATION

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

X. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this attached Document will be five (5) years from July 1, 1983. However, there will be a general review by the Joint Committee on the progress of the implementation of the Project during the second year from the commencement of the cooperation taking into account measures to be taken by the two Governments in order to decide as to whether the cooperation should be modified for the rest of the period.

ANNEX 1. MASTER PLAN

1. Objective of the Project

The Center in Comayagua which will act as a core organization for the promotion of irrigated agriculture in the Republic of Honduras is expected to contribute to the improvement of agricultural productivity of the Country.

2. Activities of the Technical Cooperation Program

The activities of the Japanese technical cooperation program during the term of cooperation are:

- (1) Collection of data and information, and survey for making curricula, textbooks and training programs
- (2) Tests and analyses for making curricula, textbooks and training programs
- (3) Making training programs, curricula and textbooks for training.
- (4) Training course.
 - (i) Advanced course (A)

Qualification of trainees:

University or college graduates
with the degree of civil engineering

Contents:

- a) Advanced irrigation engineering
(survey, design, construction management, etc.);

- b) Practical aspects of agronomy
in general

(ii) Advanced course (B)

Qualification of trainees:

University or college graduates with the
degree of agronomy

Contents:

- a) Irrigation engineering in general;
- b) Agronomy with emphasis on water utilization, etc.

(iii) Middle course

Qualification of trainees:

High school graduates with qualification
or surveyor, draftsman, assistant agricultural
engineer, extension workers, etc.

Contents:

- a) Practical aspects of irrigation technology;
- b) Practical aspects of agronomy

(iv) Basic course

Qualification of trainees:

Leaders of villages and others


Contents:

- a) Management of irrigation facilities;
- b) Basic idea of irrigated agriculture

ANNEX II, JAPANESE EXPERTS

1. Team Leader
2. Irrigation and Drainage
3. Cultivation
4. Liaison Officer

Note: Supplementary experts for short-term assignment in the fields mentioned above as well as in other fields may be dispatched when necessity arises, for the smooth implementation of the Project.



ANNEX III. LIST OF THE EQUIPMENT

1. Equipment and machinery for soils and concrete tests
2. Equipment and machinery for cultivation tests
3. Equipment and machinery for surveying and hydrology
4. Construction machinery and instruments
5. Agricultural machinery and instruments
6. Equipment and machinery for meteorological observation
7. Vehicles
8. Audio-visual aids and books
9. Others

ANNEX IV. HONDURAN COUNTERPARTS AND OTHER PERSONNEL

1. Counterpart personnel
 - (1) Director of the Center
 - (2) Deputy Director of the Center
 - (3) Irrigation and Drainage
 - (4) Cultivation

The number of counterparts from (1) to (4) will be eight.

2. Technical staff
3. Other staff

- (1) Clerical personnel
- (2) Typists
- (3) Drivers
- (4) Labourers
- (5) Others

ANNEX V. LIST OF LAND, BUILDINGS AND FACILITIES

1. Main office building
2. Training facilities
3. Laboratories
4. Auditorium
5. Accommodation
6. Farm management facilities
7. Workshops and warehouses
8. Farm facilities
9. Other necessary land, buildings and facilities

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ANNEX VI. THE JOINT COMMITTEE

1. Function

The joint committee composed of those members as listed in 2 below will meet at least once a year or whenever necessity arises, and work on the followings:

- (1) To review the overall progress of Tentative Implementation Schedule of the Project;
- (2) To review those measures taken by the Government of Japan;
 - i) Dispatch of Japanese experts;
 - ii) Acceptance of the Honduran counterpart personnel in Japan for training;
 - iii) Provision of machinery and equipment;

M/B

(3) To review those measures taken by the Government of the Republic of Honduras;

i) Allocation of necessary budget (including local cost expenditures);

ii) Assignment of counterpart personnel;

iii) Utilization of the Equipment provided by the Government of Japan;

(4) To formulate the annual working plan of the Project;

2. Composition

(1) Chairman: Minister of Natural Resources

(2) Honduran side

i) Director of Water Resources Bureau

ii) Director of Sectorial Planning Bureau

iii) Director of General Agriculture Bureau

iv) Director of the Center

v) Other personnel appointed by the chairman

(3) Japanese side

i) Team Leader


ii) Experts designated by the team leader

iii) Representative of JICA

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

SUPPLEMENTARY NOTE ON THE RECORD OF DISCUSSIONS
BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM AND
AUTHORITIES CONCERNED OF THE
REPUBLIC OF HONDURAS ON THE
TECHNICAL COOPERATION FOR THE AGRICULTURE DEVELOPMENT
TRAINING 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. Akiyoshi Tamaoka and Honduran authorities concerned exchanged views on the special measures to supplement a portion of the local cost expenditures of the Agriculture Development Training Center Project.

 As a result of the discussions, both sides agreed to recommend to their respective Governments the following for the successful implementation of the Project;

For fostering the smooth promotion of the Project the Government of Japan, in accordance with the laws and regulations in force in Japan, will take necessary measures through JICA to supplement a portion of the local cost expenditures for the execution of the improvement works of the physical Infrastructure of the Project, such as construction work of the experimental



field with irrigation and drainage facilities.

玉 厚 昭 義

AKIYOSHI TAMAOKA
Leader, the Japanese Implementation
Survey Team, Japan International
Cooperation Agency

ING. MIGUEL CARDIZABAL B
Director, Water Resources
Bureau.
Ministry of Natural RESOUR-
CES.

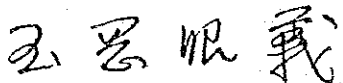
Witness

Ing. Regino Quezada
Vice Minister Of Natural Resources

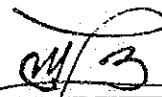
TENTATIVE SCHEDULE OF IMPLEMENTATION
AND TECHNICAL COOPERATION PROGRAM OF
THE AGRICULTURE DEVELOPMENT TRAINING CENTER PROJECT

The Japanese Implementation Survey Team and the Honduran authorities concerned have jointly formulated the Tentative Schedule of Implementation and the Technical Cooperation Program of the Project as annexed hereto. These have been formulated in connection with the attached document of the Record of Discussions signed between the Japanese Implementation Survey Team and the Honduran authorities concerned on the conditions that necessary budget will be allocated for the implementation of the Project by both sides, and that the above-mentioned schedule and Program are subject to change within the framework of the Record of Discussions when necessity arises in the course of implementation of the Project.

Tegucigalpa, May 19, 1983



Akiyoshi Tamaoka
Leader,
The Japanese Implementation
Survey Team,
Japan International Coopera-
tion Agency



Miguel Angel Lardizabal B.
Director,
Water Resources Bureau,
Ministry of Natural Resources

ANNEX I. TECHNICAL COOPERATION PROGRAM OF THE PROJECT

	1983	1984	1985	1986	1987	1988
I. Collection of data and information, and survey on existing conditions in the Republic of Honduras.						
			<ul style="list-style-type: none"> a) Meteorology-hydrology and soils b) Irrigation planning c) Construction engineering d) Water management e) Methodology on crop cultivation f) Varieties of crops g) Agricultural machinery h) Organization and activities of agricultural extension i) Teaching materials (university and high-school students) 			
II. Tests and analyses						
				<ul style="list-style-type: none"> a) Physical tests of soils b) Material tests c) Concrete tests d) Physio-chemical tests of soils e) Verification trials on cultivation f) Selection tests of optimum varieties 		

	1983	1984	1985	1986	1987	1988
III. Drawing up of training curricula and textbooks.			Study and drawing up of the curricula and textbooks (the personnel concerned of the Project, the Water Resources Department and Universities, etc., will be involved).	Review of curricula and textbooks based upon the results of training.		
IV. Training						
1. Advanced course (A)						<p>Meteorology-hydrology, irrigation planning, Drainage planning, engineering on facilities (channel, etc) General Agriculture, General Agronomy, Physical soil tests, Water Resources Development, Concrete tests, Construction Materials, Land reclamation, Construction Management, exercise of planning, experimentation, practical training, observation.</p>
2. Advanced course (B)						<p>Meteorology-hydrology, irrigation planning, drainage planning, engineering on facilities, survey and various kinds of testing methods, agricultural machines and practical training, irrigated agriculture and water management, irrigated cultivation, experimentation, practical training, observation.</p>

	1983	1984	1985	1986	1987	1988
3. Middle course						
						<p>Meteorology-hydrology, irrigation planning, drainage planning, engineering on facilities, physical soil tests, concrete tests, construction machine operation, agricultural machine operation, general agronomy, construction management, observation.</p>
4. Basic course						
						<p>Guidances for irrigated agricultural techniques, introduction of irrigation projects, maintenance of facilities, cultivation, agricultural machinery, observation.</p>
5. Evaluation of the results of training.						
						<p>Evaluation of the results of training.</p>

ANNEX II. JAPANESE COOPERATION

ITEMS	1983	1984	1985	1986	1987	1988
1. Dispatch of expert (long-term assignment) (1) Team Leader (2) Irrigation and Drainage (3) Irrigation and Drainage (4) Cultivation (5) Liaison Officer	→	→	→	→	→	→
2. Dispatch of expert (short-term assignment)	↔	↔	↔ (Several with necessity)	↔	↔	↔
3. Training of Honduran Personnel in Japan	↔	↔	↔ (Several each year)	↔	↔	↔
4. Provision of the equipment	↔	↔	↔	↔	↔	↔

ANNEX III. HONDURAN RESPONSIBILITIES

ITEMS	1983	1984	1985	1986	1987	1988
1. Honduran Counterparts and other personnel (1) Director of the Center (2) Deputy Director of the Center (3) Counterparts (4) Typists (5) Drivers (6) Technical staff (7) Clerical personnel (8) Labourers for farms	→	→	→	→	→	→
2. Running expenses	→	→	→	→	→	→

19. ビルマ中央農業開発訓練センター計画・討議々事録及び付属説明書


THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE
IMPLEMENTATION SURVEY TEAM AND THE AUTHORITIES
CONCERNED OF THE GOVERNMENT OF THE SOCIALIST
REPUBLIC OF THE UNION OF BURMA ON THE JAPANESE
TECHNICAL COOPERATION PROJECT FOR THE CENTRAL
AGRICULTURE DEVELOPMENT TRAINING CENTRE

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. Masamichi Shinada, visited the Socialist Republic of the Union of Burma, from June 30 to July 18, 1983 in order to work out the details of the technical cooperation project concerning the Central Agriculture Development Training Centre.

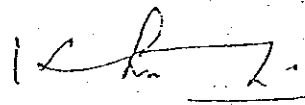
During its stay in the Socialist Republic of the Union of Burma, the Team exchanged views and had a series of discussions with the Burmese authorities concerned in respect of the desirable measures to be taken by both Governments for the successful implementation of the above-mentioned project.

As a result of the discussions, both parties agreed to recommend to their respective Governments the matters referred to in the documents attached hereto.

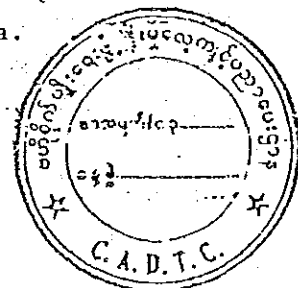
Rangoon, 29 Sep. 1983



Mr. Masamichi Shinada
Leader, Implementation Survey Team
Japan International Cooperation
Agency, Japan.



U Khin Win
Managing Director
Agriculture Corporation
The Socialist Republic of the
Union of Burma.



THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of the Socialist Republic of the Union of Burma will cooperate with each other in implementing the Project on the Central Agriculture Development Training Centre (hereinafter referred to as "the Project") for the purpose of enhancing the training on agricultural extension through the application of agricultural technology and thus contributing to improvement of agricultural productivity.

2. The Project will be carried out at the Central Agriculture Development Training Centre (hereinafter referred to as "CADTC") which will be established under the Japanese grant aid agreed between the two Governments by the Exchange of Notes dated June 30, 1982.

3. The Project will be implemented in line with the Master Plan which is given in Annexure 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 Japanese experts as listed in Annexure II through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

2. The Japanese experts referred to in par 1 above and their families will be granted in the Socialist Republic of the Union of Burma privileges, exemptions and benefits no less favourable than those accorded to experts of third countries, performing similar missions in the Socialist Republic of the Union of Burma under the Colombo Plan Technical Cooperation Scheme.

3. The Japanese Experts referred to in par 1 above and their families will be granted leaves as mutually agreed upon.

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 materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in Annexure III

through the normal procedures under the Colombo Plan Technical Co-operation Scheme.

2. The Equipment will become the property of the Government of the Socialist Republic of the Union of Burma upon being delivered c.i.f. to the Burmese 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 Annexure II.

IV. TRAINING OF BURMESE 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 Burmese 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 Socialist Republic of the Union of Burma will take necessary measures to ensure that the knowledge and experience acquired by the Burmese personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V. SERVICE OF BURMESE COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. In accordance with the laws and regulations in force in the Socialist Republic of the Union of Burma, the Government of the Socialist Republic of the Union of Burma will take necessary measures through the Agriculture Corporation, Ministry of Agriculture and Forests, (hereinafter referred to as "AC"), to secure at its own expense the necessary services of Burmese counterpart and administrative personnel as listed in Annexure IV.

2. The Government of the Socialist Republic of the Union of Burma will allocate, through AC, the necessary number of suitably qualified personnel corresponding to each Japanese expert to be dispatched by the Government of Japan as specified in Annexure II for the effective and successful implementation of the Project.

VI. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF THE UNION OF BURMA.

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

- (1) Land, buildings and facilities as listed in Annexure V;
- (2) Supply or replacement of machinery, equipment, instrument, vehicles, tools spare parts and any other materials available locally which are necessary for the implementation of the Project other than those provided through JICA under Annexure III above;
- (3) Transportation facilities and travel allowance for the Japanese experts for the official travel within the Socialist Republic of the Union of Burma; and
- (4) Suitably furnished accommodations for the Japanese Experts and their families.

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

- (1) Expenses necessary for the transportation of the Equipment Within the Socialist Republic of the Union of Burma as well as for the installation, operation and maintenance thereof;
- (2) Custom duties, internal taxes and any other charges imposed on the Equipment in the Socialist Republic of the Union of Burma;
- (3) All running expenses necessary for the implementation of the Project.

VII. ADMINISTRATION OF THE PROJECT

1. The Managing Director of AC will bear overall responsibility for the implementation of the Project.
2. The Project Manager of CADTC, as the Head of the Project, will be responsible for the administrative and managerial matters of the Project.
3. The Japanese Team Leader will provide necessary recommendation and advice on technical and administrative matters concerning the implementation of the Project to the Head of the Project and the members of the Training Implementation Committee, AC.
4. The Japanese experts will provide necessary technical guidance and advice to the Burmese counterpart personnel on matters pertaining to the implementation of the Project.

5. For the effective and successful implementation of the Project, a Joint Committee will be established with the functions and composition as referred to in Annexure VI.

6. The Project will be implemented with close cooperation extended by the agricultural agencies and institutions concerned of the Ministry of the Agriculture and Forests, of the Socialist Republic of the Union of Burma.

III. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Socialist Republic of the Union of Burma 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 Socialist Republic of the Union of Burma except for those arising from the willful misconduct or gross negligence of the Japanese experts.

IX. MUTUAL CONSULTATION

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

X. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be basically four (4) years from October 1, 1983. However, there will be a general review by the Joint Committee on the progress of the implementation of the Project, before the end of the second year of the cooperation period, taking into account measures to be taken by the two Governments in order to decide if the cooperation should be continued for two (2) more years.

MASTER PLAN

The objective of the Japanese Technical Cooperation Project is to give technical guidance and advice to the Burmese counterpart personnel engaged in the agricultural extension activities in the following fields:

1. Planning, monitoring and evaluation activities which cover the training system, training programme and training practice for the central, regional, and local levels.
2. Implementation of the on-the-job training and in-service training courses including those at high technology demonstration plots of selected town-ships.
3. Development and improvement of the training materials.

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1. One expert in each field of:

Training Instruction (Training Method)

Training Instruction (Agricultural Machinery)

Training Instruction (On-farm Level Water Management)

Note: One of the above-mentioned experts will be nominated as the Team Leader.

2. One Coordinator

3. Short-term experts who are mutually agreed upon, may be dispatched when necessity arises, for the smooth implementation of the Project.

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LIST OF MACHINERY AND EQUIPMENT

- (1) Equipment, machinery, implements and tools for technical guidance and training
- (2) Laboratory equipment
- (3) Teaching materials including audio-visual aids
- (4) Vehicles
- (5) Books and other necessary printed matters
- (6) Other necessary equipment, machinery, materials and their spare-parts mutually agreed upon

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LIST OF BURMESE COUNTERPART AND ADMINISTRATIVE PERSONNEL

- (1) Project Manager (Head of the Project)
- (2) Deputy Project Manager
- (3) Lecturers
- (4) Assistant Lectures
- (5) Training Instructors
- (6) Training Assistants
- (7) Demonstrators
- (8) Field Work Staff
- (9) Audio-visual and Publication Staff
- (10) Clerical and Service Employees
- (11) Operators, Drivers and Labourers

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LIST OF LAND, BUDDING AND FACILITIES

1. Land

- (1) Land with an area of about eight (8) hectares for CADTC at Zayat Kwin, Hlegu town-ship, Rangoon division
- (2) Land with an area of about ten (10) hectares for the demonstration farm for training
- (3) Demonstration plots of selected town-ships

2. Buildings and Facilities

- (1) Office in AC, Rangoon
- (2) Administrative building
- (3) Training Building
- (4) Workshop and Warehouse
- (5) Canteen
- (6) Tube Walls, Pump House and Reservoir
- (7) Garage
- (8) Staff's and Labourers' quarters
- (9) Guest House
- (10) Trainees' Dormitory
- (11) Other necessary Buildings and Facilities mutually agreed upon

Note: (1) Provision of land mentioned above under item 1 for Buildings and Facilities, demonstration farms for training, and demonstration plots of selected town-ships, have been undertaken by AC.

- (2) Buildings and Facilities mentioned above under item 2--(2) to (10), are under construction at Zayat Kwin, according to the Exchange of Notes of June 30, 1982.

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THE JOINT COMMITTEE

1. Functions

The Joint Committee will meet at least once a year and whenever necessity arises, and work:

- (1) To formulate the Annual Working Plan of the Project in line with the Tentative Implementation Programme formulated under the framework of this Record of Discussions;
- (2) To review the overall progress of the Project as well as the achievement of the above mentioned Annual Working Plan;
- (3) To review and exchange views on major issues arising from or in connection with the Project.

2. Composition

- (1) Chairman:
Managing Director, AC
- (2) Burmese Side
 - (a) General Managers concerned of AC
 - (b) Project Manager of CADTC (Secretary)
- (3) Japanese Side
 - (a) Team Leader
 - (b) Coordinator

- Notes: (1) Personnel concerned to be dispatched by JICA and other Japanese experts of CADTC may attend the Committee, as observers.
- (2) In case the Managing Director, AC cannot attend the Committee, alternative member of AC may act as the Chairman of the Committee.

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LIST O'

-計画に関する技術協力のための
マ連邦社会主義共和国政府関係

1.

」という。)によって編成され、品田正道氏を団長とする日本国実施
という。)は、中央農業開発訓練センター計画に関する技術協力計画の詳
年6月30日から7月18日までビルマ連邦社会主義共和国を訪問した。

マ連邦社会主義共和国滞在中、ビルマ国政府関係当局者と上記に述べる計画を成功
、両国政府がとるべき望ましい措置につき意見を交換するとともに討議を重ねた。

の結果、両当事者は、各々の政府に対し、ここに添附する附属文書に記載する諸事項について
勧告することに同意した。

ラングーン、 1983年9月19日

(署 名)

日 本 国
国際協力事業団
実施協議チーム
団長 品田正道

(署 名)

ビルマ連邦社会主義共和国
農 業 公 社
総 裁 キーン ウィン

I 両国政府の協力

1. 日本国政府とビルマ連邦社会主義共和国政府は、農業技術の適用を通じて農業普及に関する訓練を促進し、その結果として農業生産性の改善に寄与することを目的とした中央農業開発訓練センター計画（以下「プロジェクト」という）の実施において相互に協力を行う。
2. プロジェクトは1982年6月30日付交換公文により両国政府間で合意した日本の無償援助に基づき建設される中央農業開発訓練センター（以下「CADTC」という）にて実施される。
3. プロジェクトは附表Ⅰの基本計画に基づいて実施される。

II 日本人専門家の派遣

1. 日本国において施行されている法律及び規則に従い、日本国政府はコロンボ・プラン技術協力計画の通常手続きにより附表Ⅱに掲げる日本人専門家の役務を自己の負担において提供するため、JICAを通じ必要な措置をとる。
2. 上記1項にいう日本人専門家及びその家族は、コロンボ・プラン技術協力計画に基づきビルマ連邦社会主義共和国において専門家活動に従事する第三国に与えられている特権、免除及び便宜に比べ、それに劣らないものを付与される。
3. 上記1項にいう日本人専門家及びその家族は、相互の合意に基づき休暇を授与される。

III 機 材 供 与

1. 日本国において施行されている法律及び規則に従い、日本国政府は、コロンボ・プラン技術協力計画の通常手続きにより附表Ⅲに掲げる当該プロジェクトの実施に必要な機械、装置及び資料等（以下「資機材」という）を自己の負担において供与するため、JICAを通じ必要な措置をとる。
2. 上記1項にいう資機材は、陸揚の港あるいは空港にてビルマ側当局へ c. i. f. 建てにて引渡される時、ビルマ連邦社会主義共和国の財産となる。又、それらの資機材は附表Ⅲに掲げる日本人専門家との協議をもって当該プロジェクトの実施のためのみに使用される。

IV ビルマ研修員の受入れ

1. 日本国において施行されている法律及び規則に従い、日本国政府はコロンボ・プラン技術協力計画の通常手続きにより日本における技術研修のため当該プロジェクトに関係するビルマ人を自己の負担において受入れるため、JICAを通じ必要な措置をとる。

V ビルマ人カウンターパート及び事務職員の役務

1. ビルマ連邦社会主義共和国において施行されている法律及び規則に従い、ビルマ連邦社会主義共和国政府は、附表Ⅳに掲げるビルマ人カウンターパート及び事務職員の必要な役務を自己の負担において確保するため農林省農業公社（以下「AC」という）を通じ必要な措置をとる。
2. ビルマ連邦社会主義共和国政府は、当該プロジェクトに基づき、効果的かつ好結果を生む技術の移転のために附表Ⅲに分類する日本国政府が派遣する個々の日本人専門家に対し、ACを通じ

適格な職員を必要な人数配置する。

VI ビルマ連邦社会主義共和国のとるべき措置

1. ビルマ連邦社会主義共和国において施行されている法律及び規則に従がい、ビルマ連邦社会主義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に必要な措置をとる：
 - (1) 附表Vに掲げる土地、建物及び施設；
 - (2) 上記ⅢのJICAを通じて供与される機材以外で当該プロジェクト実施に必要な地方で入手できる機械、装置、工具、車輛、道具、補充部品及びその他の物品の調達もしくは取替；
 - (3) ビルマ連邦社会主義共和国国内において公務出張における日本人専門家に対する交通の便宜及び旅費；及び
 - (4) 日本人専門家及びその家族に対する適当な家具付住居施設
2. ビルマ連邦社会主義共和国において施行されている法律及び規則に従がい、ビルマ連邦社会主義共和国は次の経費を負担するために必要な措置をとる：
 - (1) 資機材のビルマ連邦社会主義共和国内における輸送、据付け、操作及び維持に必要な経費；
 - (2) 資機材に対するビルマ連邦社会主義共和国内で課される関税、国内税及びその他の課徴金；
 - (3) 当該プロジェクト実施に必要な全ての運営費

VII プロジェクトの管理

1. ACの総裁は当該プロジェクトの実施についてすべての責任を負う。
2. CADTCのプロジェクト・マネージャーはプロジェクトの長としてプロジェクトの管理及び運営に関し責任を負う。
3. 日本人チーム・リーダーは当該プロジェクトの長及びACの訓練実施委員会の委員に対し、当該プロジェクトの実施に係る技術上及び管理上の必要な勧告及び助言をする。
4. 日本人専門家はビルマ人カウンターパート職員に対し、プロジェクトの実施に関する技術上の指導及び助言をする。
5. プロジェクトの効果的な実施のために、附表VIに掲げる機能及び構成による合同委員会を設置する。
6. プロジェクトは、ビルマ連邦社会主義共和国農林省関係の農業機関及び研究機関の密接な協力を得て実施される。

VIII 日本人専門家に対する請求

ビルマ連邦社会主義共和国政府は、日本人専門家のビルマ連邦社会主義共和国内における職務の遂行に起因し、または、その遂行中に、または、その遂行に関連して発生する日本人専門家に対するクレームが生じた場合には、そのクレームに関する責任を負う。但し、日本人専門家の故意または重大な過失により生ずる責任についてはこの限りではない。

IX 相互協議

1. 両国政府は本附属文書から生ずる、あるいは本附属文書に関連する主要事項について相互協議

を行う。

X 協力期間

本附属文書に基づくプロジェクトの技術協力期間は、1983年10月1日から基本的に4年間とする。しかしながら、協力2年目が終了する前に、合同委員会はプロジェクトの実施の進捗に関し両国政府がとるべき措置を考慮しつつ、全般的な再検討を行い、協力をさらに2年間続けるかどうかを決定する。

I 基本計画

日本の技術協力計画の目的は、農業普及活動に従事するビルマ人カウンターパート職員に対し次の分野において技術の指導及び助言を与えることとする。

1. 中央、地域及び地区レベルの研修体系、研修計画及び研修実施に関する企画、勧告及び評価活動
2. 選抜した地域での高度技術展示圃における研修コースを含む実務研修及び専門技術研修コースの実施
3. 教材の開発及び改善

II 日本人専門家

1. 次の各分野の1人の専門家：

研修指導（研修方法）

研修指導（農業機械）

研修指導（ほ場レベル水管理）

注：上記に述べる専門家の一人は、チーム・リーダーに指名される。

2. 業務調整員

3. プロジェクトの円滑な実施のため、必要が生じた時、相互に合意した短期専門家を派遣することができる。

III 資機材リスト

- (1) 技術指導及び研修のための設備、機械、器具及び工具
- (2) 研究室用資機材
- (3) 視聴覚機材を含む教材
- (4) 車 輛
- (5) 書籍及びその他の必要な印刷物
- (6) 両者で合意するその他の必要な設備、機械、資材及びそれらの予備部品

IV ビルマ人カウンターパート及び職員

- (1) プロジェクト・マネージャー（プロジェクトの長）
- (2) 副プロジェクト・マネージャー
- (3) 講 師
- (4) 補 助 講 師
- (5) 研修指導官
- (6) 補助指導官
- (7) 実習指導官

- (8) は場実習職員
- (9) 視聴覚及び広報職員
- (10) 事務職員及び業務員
- (11) オペレーター、運転手及び労務者

V 土地、建物及び施設のリスト

1. 土地

- (1) ラングーン地区レグ市ザヤット・クウィンにおけるCADTCのための約8ヘクタールの土地
- (2) 訓練展示は場用の約10ヘクタールの土地
- (3) 選抜した地区における展示は

2. 建物及び施設

- (1) ラングーンのAC内の事務所
- (2) 管理棟
- (3) 研修棟
- (4) 作業棟及び倉庫
- (5) 食堂
- (6) 井戸、ポンプ室及び貯水池
- (7) 車庫
- (8) 職員及び労働者宿舎
- (9) ゲストハウス
- (10) 研修生寮
- (11) 他の相互に同意した必要な建物及び施設

注：(1) 上記1.に述べる建物、施設、訓練展示は場および選抜した地区における展示は用の土地はACによって対処済みである。

(2) 上記2-(1)から(10)に述べる建物及び施設は、1982年6月30日付交換公文書に基づき、ザヤット・クウィンに建設中である。

VI 合同委員会

1. 機能

合同委員会は少なくとも年1回、また、必要が生じた時開催され、次の作業を行う：

- (1) 本討議議事録の枠内で策定される暫定実施計画にそってプロジェクトの年次事業計画を作成すること；
- (2) プロジェクト全体の進捗状況とともに上記に述べる年次事業計画の業績を検討すること；
- (3) プロジェクトから、または、プロジェクトに関連して生じる重要な事柄に関し、検討するとともに意見交換を行うこと。

2. 構成

(1) 委員長

AC総裁

(2) ビルマ側

(a) AC関係部長

(b) CADTCプロジェクト・マネージャー（書記）

(3) 日本側

(a) チーム・リーダー

(b) 業務調整員

注：(1) JICAが派遣する関係者及びCADTCの他の日本人専門家はオブザーバーとして委員会に出席できる。

(2) AC総裁が委員会に出席できない場合は、ACの代理人が委員会の委員長を代行する。

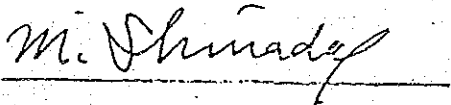
SUPPLEMENTARY NOTE ON THE RECORD OF DISCUSSIONS
BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM
AND THE AUTHORITIES CONCERNED OF THE SOCIALIST
REPUBLIC OF THE UNION OF BURMA ON THE JAPANESE
TECHNICAL COOPERATION PROJECT FOR THE CENTRAL
AGRICULTURE DEVELOPMENT CENTRE

The Japanese Implementation Survey Team organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Masamichi Shinada and Burmese authorities concerned exchanged views on the special measures to supplement a portion of the local expenditure of the Technical Cooperation Project for the Central Agriculture Development Training Centre (hereinafter referred to as "the Project").

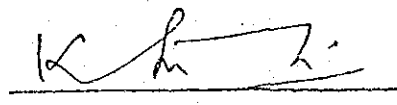
As the result of discussions, both sides agreed to recommend to their respective Governments the following for the successful implementation of the Project:

For fostering the smooth promotion of the Project, in accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to support a portion of the local expenditures for the execution of the improvement works of the physical infrastructure such as construction work of a farm when necessity arises.

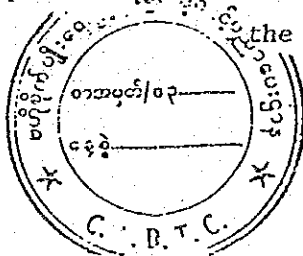
Rangoon, 19 SEP. 1983



Mr. Masamichi Shinada
Leader, Japanese Implementation
Survey Team,
Japan International Cooperation
Agency, Japan



U Khin Win
Managing Director,
Agriculture Corporation,
The Socialist Republic of
the Union of Burma

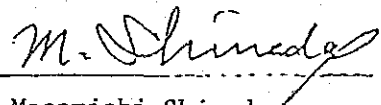


TENTATIVE IMPLEMENTATION PROGRAMME ON THE JAPANESE TECHNICAL
COOPERATION PROJECT FOR THE CENTRAL AGRICULTURE DEVELOPMENT
TRAINING CENTRE

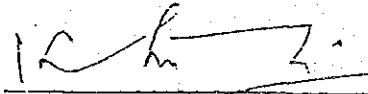
Within the scope of the Record of Discussions signed on 19, Sep. 1983 the Japanese Implomontation Survey Team and the Agriculture Corporation of the Government of the Socialist Republic of the Union of Burma have jointly formulated the Tentative Implementation Programme for the smooth implementation of the Japanese Technical Cooperation Project for the Central Agriculture Development Training Centre (hereinafter referred to as "the Project") as annexed hereto.

The Tentative Implementation Programme is subject to change in the course of the implementation of the Project within the framework of the above mentioned Record of Discussions, and also subject to the conditions that necessary budget will be allocated for the implementation of the Project.

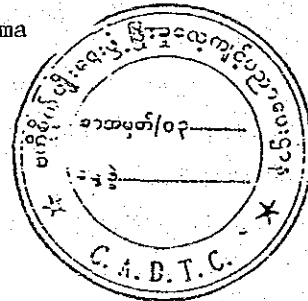
Rangoon, 19 Sep. 1983



Mr. Masamichi Shinada
Leader, Japanese Implementation
Survey Team,
Japan International Cooperation
Agency, Japan



U. Khin Win
Managing Director,
Agriculture Corporation,
The Socialist Republic of the
Union of Burma



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ANNEX I. TECHNICAL COOPERATION PROGRAMME OF THE PROJECT

Item	1983	1984	1985	1986	1987
I. Planning of Training Programme					
II. Development of Teaching Materials					
III. Training Method					
IV. Agricultural Technology					
V. Evaluation of Training					

See/14783.

ANNEX II. JAPANESE ASSISTANCE

Item	Year					Remarks
	1983	1984	1985	1986	1987	
I. Dispatch of Japanese Experts						
1. Long-term assignment						
(1) Training Instruction (Training Method)	↓					
(2) Training Instruction (Agricultural Machinery)	↓					
(3) Training Instruction (On-farm Level Water Management)	↓					
(4) Coordinator	↓					
2. Short-term assignment	↔	↔	↔	↔	↔	Several when necessity arises
II. Provision of Machinery and Equipment	↔	↔	↔	↔	↔	
III. Training of Burmese Personnel in Japan	↔	↔	↔	↔	↔	Several each year

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ANNEX III. BURMESE RESPONSIBILITIES

Item	Year				
	1983	1984	1985	1986	1987
I. Burmese counterpart and other personnel					
1. Project Manager	-----	-----	-----	-----	-----
2. Deputy Project Manager	-----	-----	-----	-----	-----
3. Lecturers	-----	-----	-----	-----	-----
4. Assistant Lecturers	-----	-----	-----	-----	-----
5. Training Instructors	-----	-----	-----	-----	-----
6. Training Assistants	-----	-----	-----	-----	-----
7. Demonstrators	-----	-----	-----	-----	-----
8. Field Work Staff	-----	-----	-----	-----	-----
9. Audio-visual and Lubrication Staff	-----	-----	-----	-----	-----
10. Clerical and Service Employees	-----	-----	-----	-----	-----
11. Operators, Drivers and Labourers	-----	-----	-----	-----	-----
II. Construction of buildings and other necessary facilities of the Central Agriculture Development Training Centre					
1. Office in Agriculture Corporation, Rangoon		-----	-----	-----	-----
2. Administrative Building		-----	-----	-----	-----
3. Training Building		-----	-----	-----	-----
4. Workshop and Warehouse		-----	-----	-----	-----
5. Canteen		-----	-----	-----	-----
6. Tube Wells, Pump House and Reservoir		-----	-----	-----	-----
7. Garage		-----	-----	-----	-----
8. Guest House		-----	-----	-----	-----
9. Trainees' Dormitory		-----	-----	-----	-----
10. Staff's and Labourers' Quarters		-----	-----	-----	-----
11. Other necessary Buildings and Facilities		-----	-----	-----	-----
III. Running expenses		-----	-----	-----	-----

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List of the Articles requested for the Implementation of the CADTC Project

No.	Particulars	Qty.	1983	84	85	86
<u>A. Equipments for Agro-Biology Laboratory</u>						
1.	Vacuum Cleaner	2			x	
2.	Dissecting Tray	50	x			
3.	Insect Collection Boxes	50	x			
4.	Rubber Glove	50	x			
5.	Refrigerator	2			x	
6.	Seed Straining Equipment	1	x			
7.	Wide Neck Bottle for specimen (Sample)	50	x			
8.	Flask for Specimen	30	x			
9.	Slide Cabinet	1	x			
<u>B. Equipment for Agro-Chemistry Laboratory</u>						
1.	Alluminium Moisture Cup	400	x			
2.	Boring Stick	5	x			
3.	Chemicals for Experiment	1 lot	x			
4.	Dehumidifier	1	x			
<u>C. Equipments for Farm Machinery</u>						
1.	Electric Lubrication and Washing Equipment	1			x	
2.	Thresher with Winnower	3			x	
3.	Dryer (2 ton capacity)	2			x	
4.	Stop Watch	20	x			
5.	Measure Tape 50 Metres	10	x			
	" " (steel) 2M	50	x			
	" " 5M	50	x			
6.	Portable Generator (10 KVA)	2	x		x	
7.	Grass Cutter (Engine Driven)	2			x	
8.	Hand Tractor (Rotary, 8 HP)	14	x		x	
9.	Paddy Hallow	14	x		x	
10.	Trailer	14			x	
11.	Seed Drill	5			x	
12.	Swath Sprayer	5			x	

No.	Particulars	Qty.	Year			
			1983	84	85	86
13.	Cut Model Engine (Air Cooling Gasoline)	1	x			
14.	" " " (Diesel)	1	x			
15.	Gasoline Engine (3HP Air Cooling)	10	x			
16.	Diesel Engine (5HP Water Cooling)	10	x			
17.	Tools with Tool Box	10	x			
18.	Power Mist Sprayer (Knapsack Type)	14		x		
19.	Power Sprayer with Engine and complete accessories	14	x	x		
20.	Power Sprayer (Knapsack Type)	14	x	x		
21.	Sprayer (shoulder hanging Type)	14	x	x		
22.	Nursery Box	200		x		
23.	Power Transplanter (Paddy)	2		x		
24.	Paddy Harrow attached Tractor (45HP)	1	x			
25.	Swath Sprayer with Tractor Mounted	1		x		
26.	Binder	2	x			
27.	Harvester	5	x			
28.	Scale 1 kg	10	x			
29.	" 5 kg	10	x			
30.	" 50 kg	5	x			
31.	Tractor (Ditcher & Trencher & other attachment 20-25 HP)	5	x	x		
32.	Tractor attach Trailer (dump type)	3	x	x		
33.	Tractor attach Rotary	2		x		
34.	Tractor attached plow	2		x		
35.	Tractor attached Disc Harrow	2		x		
36.	Winnower	10	x			
37.	Hand Tools	20		x		
38.	Battery Charger	2	x			
39.	Rice Milling Laboratory Equipment (Complete set)	1 set	x			
40.	Grain Crack Analyser	1	x			
41.	Rice Mill Model Type	1 set	x			

No.	Particulars	Qty	Year			
			1983	84	85	86
<u>D. Equipments for Audio-Visual Aids</u>						
1.	Video Tape Recorder with complete all accessories	1		x		
2.	Public Address system	3		x		
3.	35 mm Movie Projector with sound systems	1	x			
4.	Voltage Stabilizer (5 KVA)	3	x			
5.	VTR Tapes	60 pcs	x			
6.	Battery packs for Camera	12	x			
7.	Camera Extension Cable	20 M	x			
8.	Connecting Cable	20 M	x			
9.	Over Head Projector	1	x			
10.	Generator (3.5 KVA Gasoline)	3	x			
11.	Plastic Frames for Slides (35 mm)	5000 pcs	x			
12.	Chart for Trainees (Ready Made)	1 lot	x			
13.	Slides for Trainees (Ready Made)	1 lot	x			
14.	16 mm Film for Trainees (Ready Made)	50 rolls	x			
<u>E. Equipments for General Affairs</u> (Vehicles for Transportation)						
1.	Pick up Truck	1		x		
2.	Jeep 4 wheel drive	2		x		
3.	Jeep (Toyota Land Cruiser including Audio Visual Equipment)	1	x			
4.	Station Wagon (General Use)	2	x			
5.	Motor Bicycle (Off road type)	5	x			
6.	Motor Bicycle (On road type)	2	x			
7.	Bus (32 passengers)	2	x	x		
8.	Bicycle	10	x			
9.	Spare parts for (20% from the original cost)		x	x	x	x
<u>F. Workshop Equipment</u>						
	Black Board	1		x		
	Table for Engine	10		x		

No.	Particulars	Qty	Year			
			1983	84	85	86
<u>G. Equipments for Tissue Culture</u>						
1.	Clean Bench and Accessories	2 sets		x		
2.	Automatic Voltage Transformer	1		x		
3.	Ultraviolet Ray Sterilizing Lamp	20		x		
4.	Erlenmeyer Flask 25 cc (22/42 m Height 65 mm)	500 pcs.		x		
5.	Erlenmeyer Flask 25 cc (32/43 65 mm)	500 pcs.		x		
6.	Erlenmeyer Flask 50 cc 34/51 85 mm	500 pcs.		x		
7.	Petri Dishes	100 "		x		
8.	Blender CB-6 5l Spare Blade	1		x		
9.	Forceps (Dissecting and Microscope)	100		x		
10.	Surgical Blade (No. 3)	100		x		
11.	Air Conditioner	5	x	x		
12.	Cork Stopper and Cork Borer (Each size)	100		x		
13.	Alluminium Foil	100 rolls		x		
<u>H. Equipments for Water Management</u>						
1.	Tension meter 20 cm	10	x			
2.	" " 40 cm	10	x			
	" " 80 cm	2	x			
2.	Appliance for Sound Water Depth	2	x			
3.	Appliance for Measure Evaporation	2	x			
<u>I. Equipments for Field and Field Use</u>						
1.	Green House (40 x 20 x 10 feet)	1*		x		
2.	Nets for Bird Protection 4000 m ²	1		x		
3.	Sprinkler system for 5 Hectres (Complete Unit)	1		x		
4.	Cheese cloth 1000 m ²	1		x		
5.	Plastic Pot 5 cm	20,000		x		
6.	Plastic Pot 10 cm	20,000		x		
7.	Number Calculating Machine	20	x			
<u>J. Literature and Office Equipments (Stationary)</u>						
1.	Books for Trainees	100	x	x	x	x
2.	Stationery	1 lot	x	x	x	x

II-2. 研修計画について

2-1. 研修体系及び研修の種類

1. 研修体系

ビルマ中央農業開発訓練センター(CADTC)設立に併い、ビルマ国農業普及職員に対する研修は、CADTCを中枢機関として次のように体系化されるよう計画されている。この体系は、1981年12月に派遣された農林水産省経済局国際協力課海外技術協力室長、土屋晴男氏を団長とするビルマ中央農業開発訓練センター・コンタクト・ミッションの協議をふまえて、翌1981年3月に派遣された農林水産省農林水産研究所農業技術研修館長、高平保氏を団長とするビルマ中央農業開発訓練センター技術協力事前調査団が、ビルマ側との協議を経て明らかにしたものである。

(1) 中央研修

CADTCが実施する研修で、主として全国の中堅以上の農業普及職員を対象に、CADTC専任スタッフが中心となって、関係機関外来講師の協力を得ながら実施するものである。

(2) 地域研修

7州、7管区に所在する農業普及事務所が実施する研修で、県(Township)普及職員、郡(Village Tract)普及職員、農民団体等を対象に、地域訓練センター、農業研究所、地域農試、州農場等の研修施設を利用して行われるものである。

(3) 地区研修

県農業普及事務所が実施する研修で、郡または町村(Village)レベルの普及職員、農民等を対象に、プロダクションキャンプ、県事務所、展示農場等で行われるものである。

なお、地域研修、地区研修での講師陣は、CADTCでの研修受講者のほか、農業専門技術員となっている。

2-2. 研修の種類

全研修の中で中央研修として位置づけられたCADTCでの研修は、① 新任者研修、② 実務研修、③ 専門技術研修に大別されている。この研修区分も、ビルマ中央農業開発訓練センター・コンタクト・ミッション及び事前調査団による「技術協力調査報告書」(1982年7月、国際協力事業団発行)によって明らかにされているものである。そしてその後派遣された第一次及び第二次実施協議チームは、この研修区分を前提として協議してきたものである。

それぞれの研修内容の概要は次のとおりである。

(1) 新任者研修 (Induction Training)

農業公社の新規採用者のための必須研修で、1979年度から実施されているものである。1981年度には大卒102名、農高卒206名、合計452名がイエジンの農業研究所で受講して

いる。計画では、研修対象を毎年500名の新規採用者とし、この研修受講者の9割強が改良普及員として各現場に配属されることとなる。従ってこの研修は、普及員養成コースともみることが出来る。そして農業公社の組織、役割、農業開発計画施策、農業新技術、普及事業の一般的概論等について、2カ月間研修するものである。

(2) 実務研修 (On - the - Job Training)

普及業務に従事している中堅職員以上、主に県レベルを対象として、農業普及業務経営・管理、現業農業政策の指針、新技術の習得、課題解決法について研修するもので、研修規模は、年間、州・管理レベル職員45名、県レベル職員250名、町村レベル職員420名、合計715名としている。研修期間は、州管区レベルで1～2週間、年間対象者を3回に分けて実施する。また県レベルは2～4週間、5回に分けて実施、さらに町村レベルは1～3カ月とし6回に分けて実施するよう計画されている。研修方法としては、座学と実習を7：3の割合で実施することとしている。

(3) 専門技術研修 (Inservice Training)

本研修は普及業務に必要な高度な専門知識を習得させる研修であり、さらに次のコースに区分される。

① 専門技術員コース

専門技術員 (SMS) は、県レベル以上に配属されており、現在90名となっている。このコースは農学一般、土壌肥料、土地利用、水管理、作物保護、収穫後処理技術、農業経営等の重点分野について、年間4回、1研修期間3～6カ月、1回当たり20名の受講生を見込んでいる。このコースのねらいは、高度な知識、技術を必要とする専門技術及び指導能力の向上にある。

② 特別強化コース

上級普及職員 (県普及事務所長、次長等) 及び中央、管区レベル普及職員を対象に、技術課題解決に必要な専門的な知識、技術の向上を目的に行う研修である。研修規模としては、州管区レベル職員に対して1回当たり10名、3カ月を年間2回、県レベル職員には1回30名を6カ月、2回実施、町村レベル職員8名に10カ月の研修が計画されている。

③ 農業普及・農業一般コース

県レベル普及職員を対象に、現地普及員の指導的立場にある職員の資質向上を目的として、普及方法論を中心に行う研修である。研修規模は1回当たり30名、3カ月研修を年間2回実施するとしている。

④ 企画、分析コース

県普及事務所長、次長レベル以上の普及職員を対象に、普及業務に必要な企画・分析についての実務的知識の習得を目的として行う研修である。年間20名を3カ月間研修する。

以上がCADTCでの研修計画の概要であり、座学と併せて圃場、実験室での実習も行うもので

ある。

2-3. 日本側が技術協力て実施する主要分野

CADTCは中央訓練センターとして設立されるが、センターでは主として中堅レベル以上の農業普及職員を中心とした訓練を行うとともに、ビルマ全体の農業普及職員訓練計画作成及び実施に関し、中枢機関としての役割を果たすことが期待されている。

具体的には、ビルマ側は前掲のとおりこのセンターで次の3種の研修を予定している。

- ① 新任者研修 (Induction Trainig)
- ② 実務研修 (On - the - Job Trainig)
- ③ 専門技術研修 (Inservice Trainig)

これらの研修のうち、① 新任者研修については、ビルマ農業公社に採用される新規学卒者のためのものであり、本来ビルマ側自身によって行われるべきものである。そこでこの研修については本技術協力の対象としない旨、すでにコンタクト・ミッション、事前調査団が報告をしている。従って、② 実務研修、③ 専門技術研修を日本側技術協力の直接対象とすることが、今回派遣された第1次、第2次実施協議でも確認をされた。

そして、国際協力事業団技術顧問有松 晃氏を団長とする、第1次実施協議団が派遣された際、これら2研修について基準課程が協議され第1次案ができ上がった。続いて1983年6月、第2次実施協議団が農林水産省農蚕園芸局普及部長品田 正道氏を団長として派遣された際、ビルマ側からの第1次案についての修正意見が提議され、これらの協議を経て別添資料に示すような研修基準課程が作成され、それらの研修を実施するために必要な供与機材についても、おおよその計画が樹てられた。

第1次実施協議で研修基準課程の協議の際、とくに日本側からセンター内研修の具体的評価活動の場として、研修履修者による現地展示圃 (Demonstration Plot) の必要性が提案され、同時にこの展示圃は現地普及員の研修の場としても、普及活動展開の拠点としても活用できることから、ビルマ側の賛同を得ていた。そして専門技術研修、特別強化コースの中に、とくに町村レベル普及員8名を対象に、その旨の基準課程が加えられた。その後第2次実施協議の際、この具体的方法がさらに協議され、次のような合意がなされている。それは、

- ① 町村レベルに設置する展示圃は4カ所とする。ここでは、地域に適應する応用技術及び普及性のある新技術を開発、実証する機能を備えるようはかること。
- ② そのため、展示圃の設置場所については、いろいろな条件(土壌、水利等)を考慮し、日本人専門家との合意の上決定するようにすること。
- ③ また対象作物は、稲及びその他畑作物とし、8名の研修員を4カ所の県 (Town Ship) から選び、展示圃に必要な最少限の資材(例えばトラクター、耕うん機、収穫機等)は供与すること。

以上のような協議の結果、全体として日本側技術協力の分野が明らかにされた。

2-4. 供与機材リストの作成

第1次実施協議チームが作成した供与機材リスト素案に基づき、ビルマ側と本計画の実施に必要な供与機材につき協議した。協議の結果、別添資料第10表のとおり、機材供与計画案を作成したが、今後日本人専門家が赴任しプロジェクト運営を開始した時点で再度検討する必要がある。

第1次実施協議チームの供与機材リストと今回作成したリストの異った点は次のとおりである。

- ① 無償資金協力事業に基づく機材とプロジェクト方式技術協力事業に基づく機材との重複をさけた。
- ② 実験室用機材を大巾に削除し、その分を事務用機材にまわした。
- ③ 温室（40×20×10フィート）の必要度が低いと思われたが、ビルマ側から強い要望がありリストに掲げている。この機材の供与に関しては再度検討する必要がある。
- ④ 35mmプロジェクターは、日本国内での調達は困難と思われるのでその旨、ビルマ側に申し出てある。
- ⑤ ほ場整備に係るかんがい用機材は、無償ベース、供与機材ベース及びプロジェクト基盤整備ベースと3者に関係しており、ほ場整備に関する実施設計チームの調査終了後に整理する必要がある。

附 属 資 料

- 第 1 表 CADTCにおける業務研修及び専門技術研修のコース別内容と研修対象者
- 第 2 表 CADTCにおける業務研修のコース別内容
- 第 3 表 CADTCにおける専門技術研修のコース別内容（専門技術員コース）
- 第 4 表 CADTCにおける専門技術研修のコース別内容（特別強化コース）
- 第 5 表 CADTCにおける専門技術研修のコース別内容（普及方法と農業一般コース）
- 第 6 表 CADTCにおける専門技術研修のコース別内容（企画／分析コース）
- 第 7 表 CADTCにおける業務研修に関するカリキュラム案の例（郡レベル普及員コース）
- 第 8 表 CADTCにおける専門技術研修に関するカリキュラム案の例（専門技術員コース）
- 第 9 表 CADTCにおける専門技術研修に関するカリキュラム案の例
（特別強化コース－郡レベル普及員－）
- 第 10 表 CADTCにおける機材供与計画案
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- 第 1 図 ビルマ農林省の組織
- 第 2 図 農業公社組織図
- 第 3 図 CADTC組織図

第1表 CADTCにおける業務研修及び専門技術研修のコース別内容と研修対象者

Classification of Training	Training Course	No. of Trainees Trained in 4 Years	No. of Trainees Per Course	Term of Course	No. of Courses Implemented Per Year	Required Circulation For Trainees	Present No. of Trainees on the Roll
1. On-the-job Training (業務研修)	1. Division level	125 person	15 person	1 - 2 week	3 time	2.8 year	125 person
	2. Township level	608	50	2 - 4 week	5	2.4	608
	3. Village level	1,680	70	1 - 1 ¹ / ₂ month	6	4.0	7,825
2. In-service Training (専門技術研修)	1. Subject Matter Specialist Course	90	20	3 - 6 month	4	1.1	90
	2. Special Comprehensive Course						
	(1) Central and Division Level	80	10	3 month	2	4.0	125
	(2) Township Level	240	30	6 month	2	4.0	608
	(3) Village Level	8	8	10 - 12 month	1	1.0	7,705
3. Extension and General Agriculture Course	(1) Township Level	240	30	3 month	2	4.0	603
	4. Planning and Project Analysis Course	80	20	3 month	1	4.0	608
	(1) Township Level						

第2表 CADTCにおける業務研修のコース別内容

Classification of Training	Training Course	Subject	Syllabus	Theoretical Training (Classrooms)	Practical Training (Field)
On-the-job Training	<ol style="list-style-type: none"> 1. Division Level 2. Township Level 3. Village level 	<ol style="list-style-type: none"> 1. Confronting Problems and Countermeasures on Agriculture 2. Improved Countermeasures on Agricultural Techniques 	<ol style="list-style-type: none"> 1. Understanding of Agricultural Situation and Promotion of Policy 1. Introduction of New Recommended Crops and Improvement of Cropping System 2. Reasonable Utilization of Fertilizers 3. New Techniques on Plant Protection 4. Soil Characteristics 5. Bio-fertilizer 6. Water Management 7. Utilization of Agricultural Machinery 	<p>Identification of Pest Insects and Diseases</p> <p>Learning of Kinde and Characteristics of Agricultural Chemicals</p> <p>Soil Classification, and Physical and Chemical Characteristic</p> <p>Fundamental Technique for Cultivation</p> <p>Handling of Engine</p>	<p>Cultivation of New Crops</p> <p>Application of Practical dose of Fertilizer</p> <p>Spraying Practice</p> <p>Extension Method For Prevention of Chemical's Accident</p> <p>Field Survey of Soil Profile</p> <p>Practical Cultivation in Field Level</p> <p>Water Management for Individual Crop</p> <p>Operation of Agricultural Machinery</p>
	<ol style="list-style-type: none"> 3. Management of Agricultural Extension Activity 		<ol style="list-style-type: none"> 1. Recruitment and Posting of Agricultural Extension Personnel 2. Welfare Management for Agricultural Extension Personnel 3. Management of Facilities, Machinery and Vehicles 4. Application of Extension Method 5. Method of Field Survey 6. Method of Guidance 7. Management of Information 8. Establishment of Extension Planning 	<p>Application Method on Discussion, Interview, Audio-visual Aids, etc.</p> <p>Theoretical and Practical Surveying Method</p> <p>Theoretical and Practical Method of Guidance</p> <p>Knowledge of Information Organization and Information Collection</p> <p>Utilization of Information</p> <p>Method of Problem Extraction and Countermeasure Formulation</p> <p>Formulation of Annual Extension Plan</p>	<p>Setting Up and Management of Demonstration Field</p> <p>Case Study at Demonstration Plot</p> <p>Practice at Model Plot (Man and Individual)</p> <p>Practice of Information Collection and Transmission</p> <p>Model Extension Activity in the Field</p> <p>Formulation of Extension Plan and Evaluation at Model Plot</p>

Note: The table shows general examples of each training course. The trainees of each course will participate some parts of the training course according to the necessity.

第3表 CADTCにおける専門技術研修のコース別内容(専門技術員コース)

Classification of Training	Training Course	Subject	Syllabus	Theoretical Training (Classroom)	Practical Training (Field)
In-service Training	Subject Matter Specialist Course	<ol style="list-style-type: none"> Cultivation Technique for Main Crops Techniques for Water Management Agricultural Meteorology Agricultural Machinery Soil Chemistry and Land Use Agricultural Economics and Farm Management Tillage Culture Post Harvest Technology 	<ol style="list-style-type: none"> Cropping Pattern and Economic situation of Rice, Oil Crops, Industrial Crops, and Horticultural Crops Plant Protection Amelioration of Fertilizer Management of Water 	<p>Seed Selection and Preparation for Planting</p> <p>Identification of Injurious and Insecticidal Characteristics of Agricultural Chemicals and their Management, Protection of Accident by Agricultural Chemicals</p> <p>Safety Storage of Agricultural Chemicals</p> <p>Characteristics of New Fertilizer and its Treatment</p> <p>Meteorological Datum Collection and its Use</p> <p>Handling of Engine</p> <p>Physical and Chemical Analysis of Soil</p> <p>Drawing of Soil Map</p> <p>Drawing of Distribution Chart on Plant Adaptability</p> <p>Practice of Tillage Culture</p>	<p>Cultivation of Each Crop</p> <p>Test Harvest of Each Crop</p> <p>Practice of Irrigation</p> <p>Practice of Fertilization (Basal, Top Dressing and Soil Conservation)</p> <p>Utilization of Bio-fertilizer</p> <p>Water Management of Early Crop</p> <p>Measurement of Evaporation, Depth of water, etc.</p> <p>Handling of Tension Metre</p> <p>Practice of Survey by Simple Apparatus</p> <p>Practice of Operation of Machinery</p> <p>Application of Machinery to Crop Cultivation</p> <p>Soil Survey at Model Plot</p> <p>Soil Analysis at Demonstration Plot</p>

第4表 CADTCにおける専門技術研修のコース別内容(特別強化コース)

Classification of Training	Training Course	Subject	Syllabus	Theoretical Training (Classrooms)	Practical Training (Field)
In-service Training	Special Comprehensive Course a. Central/Division Level b. Township Level	<ol style="list-style-type: none"> Cultivation Techniques for Main Crops Soil and Fertilizer Seed Propagation Agricultural Renovation and Farm Management Water Management Agricultural Machinery 	<ol style="list-style-type: none"> Cropping Patterns Physics and Chemical Characteristics of Soil Soil Improvement Amelioration of Fertilizer Breeding Technique Seed Treatment and Storage Seed Multiplication and Extension Income Collection and Analysis Agricultural Accounting Loan and Fund Programs Water Management in Each Crop Basic Theory of Agricultural Machinery Significance of Mechanization Operation Technique and its Method 	<p>Seed Treatment</p> <p>Cultivation Method for Each Crop</p> <p>Formulation of Cultivation Calendar</p> <p>Soil Analysis</p> <p>Drawing of Soil Map</p> <p>Drawing of Distribution Chart for Plant Adaptability</p> <p>Datum Collection and Analysis</p> <p>Exercise of Book-keeping</p> <p>Handling of Engine</p>	<p>Cultivation Practice at Demonstration Plot</p> <p>Economic and Productivity Analysis through Cultivation</p> <p>Application Practice of Fertilizer</p> <p>Practice for Soil Conservation by Using Compost, Bio-fertilizer, and Green Manure</p> <p>Field Survey of Soil</p> <p>Practice of Hybridization and Breeding</p> <p>Learning of Seed Extension System</p> <p>Practice of Economics Survey at Model Plot</p> <p>Practice of Water Management at Model Plot</p> <p>Measurement of Depth of water, Evaporation, etc.</p> <p>Practice of Machine Operation and Application Machinery to Crop Cultivation</p>
		Typical cropping pattern.	Year	Contents	Num of Selected Trainees
	Demonstration Plots	(e.g.) Rice - Oil Crops	1st Year	Plot selection and Preparation	8 Trainees are selected from 4 Townships
			2nd Year	Training at SAIRC*	1 Production Camp is selected from 1 Township.
			3rd Year	Practical and Concentrated Training at the Plot and Supplemental Training	2 Trainees are selected from each Production Camp.
			4th Year	Same as 3rd Year	

* Contents of the training are almost the same as Township Level as shown above according to the specialties.

第5表 CADTCにおける専門技術研修のコース別内容(普及方法と農業一般コース)

Classification of Training	Training Course	Subject	Syllabus	Theoretical Training (Classroom)	Practical Training (Field)
In-service Training	Extension and General Agriculture Course	<ol style="list-style-type: none"> 1. Formulation of Agricultural Extension Plan 2. Method of Extension Guidance 3. Evaluation Method 4. Home Improvement 5. General Agriculture and Extension Activity 	<ol style="list-style-type: none"> 1. Understanding of Agricultural Situation 2. Formulation of Agricultural Extension Plan 1. Interview Method 2. Guidance Method for Group 3. Discussion Method 4. Utilization of Information 5. Utilization of Audio-visual Aids 6. Preparation of Extension Materials 1. Formulation of Evaluation Standard 2. Evaluation Method 1. Farm Management and Home Economics 2. Principle of Home Economics 1. Extension Activities Concerning Crops and Necessary Techniques 	<p>Method of Problem Extraction</p> <p>Formulation of Long-term Plan</p> <p>Formulation of Annual Plan</p> <p>Formulation of Practical Plan for each Objective</p> <p>Exercise</p> <p>Handling of Apparatus</p> <p>Practical Exercise</p> <p>Practical Exercise for Evaluation</p>	<p>Village Survey</p> <p>Village Survey</p> <p>Case Study</p> <p>Roll Play</p> <p>Roll Play</p> <p>Roll Play</p> <p>Roll Play</p> <p>Practical Exercise</p> <p>Evaluation Practice on the Result of Training and/or Productivity at Model Plots</p> <p>To Think about Practical Home Improvement Measure at Plots</p> <p>Cultivation and Extension Practice</p>

第6表 CADTCにおける専門技術研修のコース別内容(企画/分析コース)

Classification of Training	Training Course	Subject	Syllabus	Theoretical Training (Classroom)	Practical Training (Field)
In-Service Training	Planning/Project Analysis Course	<p>1. Datum Collection and Analysis</p> <p>2. Method of Economic Analysis</p> <p>3. Planning of Training Programme for Township and Village Level (Including reinforcing Relationship and Co-operation between CADTC and Local Training Organizations)</p> <p>4. Project Management and Evaluation</p>	<p>1. Analysis and Application of Various Statistical Data</p> <p>2. Formulation of the Plan on Productivity of Crops</p> <p>3. Survey and Analysis for Plant Growth and Yield</p> <p>4. Analysis and Application of Result of Experiments</p> <p>1. Collection and Analysis of Information of Agricultural Policy</p> <p>2. Planning of Farm Management</p> <p>3. Agricultural Book-keeping</p> <p>4. Marketing of Agricultural Product</p> <p>5. Planning of Regional Agricultural Development</p> <p>1. Formulation of Training Schedule in Local Level</p> <p>2. Preparation of Training Curriculum in Each Organization</p> <p>1. Project Management</p> <p>2. Project Evaluation</p>	<p>Practical Exercise and Preparation of Study Materials Concerned</p> <p>- ditto -</p> <p>- ditto -</p> <p>- ditto -</p> <p>Practical Exercise</p> <p>- ditto -</p> <p>- ditto -</p> <p>- ditto -</p> <p>Practical Exercise</p> <p>- ditto -</p>	<p>Survey at Model Plot</p> <p>Survey in Local Area</p> <p>Survey of Situation in each Organization - ditto -</p> <p>Visiting Project</p>

第7表 CAETCにおける業務研修に関するカリキュラム案の例(郡レベル普及コース)

Classification of Training	Training Course	Subject	Purpose of Study	Method	Equipment Required	Allotment of Time(Hour)
On-the-job Training	Township Level	1. Confronting Problems and Countermeasures on Agriculture 2. Improved Countermeasures on Agricultural techniques 3. Management of Agricultural Extension Activity	1. Understanding of Agricultural Situation and Promotion of Agricultural Policy	Lecture Discussion		12
			1. Introduction of Important Crops and Improvement of Cropping System	Lecture Practice	Fertilizer	16
			2. To Study Reasonable Utilization of Fertilizer	Lecture Practice		8
			3. To Study Habit of Insects and Diseases, and How to Control	Lecture Experiment Practice	Microscope Chemicals Power Mist Sprayer Swath Sprayer Hand Sprayer Hand Tractor with Attachments	24
			4. To Study Soil Classification and Characteristics, and to Master Soil Analysis	Lecture Experiment Practice Survey	Boring Stick Shaking Machine Soil Penetrometer Aluminium Moisture Cap Soil Auger Soil Analysis Apparatus	16
			5. To Study Algae Cultivation and its Application as Bio-fertilizer	Lecture Experiment Practice	Microscope	12
			6. To Study Effective Water Management	Lecture Practice	Tension Meter	8
			7. To Study Agricultural Machinery	Lecture Practice	Model Engine Tool Set Tractor with Attachment and Post Harvest Machinery	16
			1. To Study System of Agricultural Management	Lecture Survey		4
			2. ----- 3. -----	----- -----	----- -----	----- -----

第8表 CADTCにおける専門技術研修に関するカリキュラム案の例(専門技術員コース)

Classification of Training	Training Course	Subject	Purpose of Study	Method	Equipment Required	Allotment of Time (Day)
In-service Training	Subject Matter Specialist Course	1. Cultivation Techniques for Main Crops	1. To Study Cultivation of Rice, Oil Crops, Industrials Crops etc., and to Learn Cropping Pattern of Newly introduced Crops	Lecture Experiment Practice	Germination Tester Agricultural Machinery Agricultural Chemical Test Harvester	6
			2. To Study Identification of Insects and Diseases, and Handling of Pesticide	Lecture Experiment Practice Survey	Microscope Pesticide Sprayer Specimen	6
			3. To Study Soil Improvement and Reasonable Fertilization	Lecture Experiment Practice	Apparatus of Soil Analysis Fertilizer Sample Cultivator Scale	6
		2. Water Management	1. To Study Effective Water Management	Lecture Practice	Tension Meter Evaporation and Water Depth Sound Appliance	6
			3. Agricultural Meteorology	1. To Study Analysis and Application of Meteorological Data	Lecture Practice	Apparatus of Meteorological Survey
		4. Agricultural Machinery	1. To Study Significance of Mechanization	Lecture Practice	Model Engine Machinery with Attachments Tools	8
			2. To Study Planning of Mechanization	Lecture Practice	Boring Stick Soil Penetrometer	10
			5. Soil Chemistry and Land Use	1. To Study Method of Soil Survey and Analysis 2. To Study Soil Improvement 3. To Study Relationship Between Soil and Crops	Lecture Practice Lecture Practice Lecture Practice	Apparatus of Soil Analysis Chemicals for Soil Analysis
6. Agricultural Economics and Farm Management	1. To Study Relation on Price and Productivity	Lecture Discussion	Lecture Discussion		2	
	2. To Study Method of Datum Collection and Analysis	Lecture Discussion	Lecture Discussion		2	
7. Tissue Culture	3. To Study Loan System and Fund Problem	Lecture Discussion	Lecture Discussion		2	
	1. To Study Theory and Technique of Tissue Culture	Lecture Experiment Practice	Lecture Experiment Practice	Apparatus of Tissue Culture	10	
8. Post Harvest Technology					Post Harvest Equipment	

第9表 CADTCにおける専門技術研修に関するカリキュラム案の例(特別強化コース-郡レベル普及員-)

Classification of Training	Training Course	Subject	Purpose of Study	Method	Equipment Required	Allotment of Time (day)
In-Service Training	Special Comprehensive Course - Township Level -	1. Cultivation Technique for Main Crops	1. To Study Cultivation and Cropping Pattern of Main Crops	Lecture Practice	Agricultural Tools and Machinery Agricultural Chemicals Fertilizer Thermometer Test Harvester Germinator Tester Seed Cabinet Text Books	26
			2. To Study Seed Preparation	Practice		4
			3. To know up Cultivation Calendar	Lecture Practice		4
		2. Soil and Fertilizer	1. To Study Soil Characteristics	Lecture Experiment Survey	Soil Auger Apparatus for Soil Analysis Balance Chemicals Fertilizer Boring Stick Agricultural Machinery - ditto - Textbook	12
			2. To Study Soil Improvement	Lecture Practice		6
			3. To Study Fertilizer and Amelioration	Lecture Practice		12
			4. To Study Soil Classification in Relation to Plant Growth	Lecture Practice		6
		3. Seed Multiplication	1. To Study Breeding Technique	Lecture Practice	Test Harvester Thresher and Other Machinery Concerned	24
			2. To Study Seed Treatment and Storage	Lecture Practice	Seed Cabinet Seed Moisture Tester Dryer Seed Straining Equipment	6
			3. To Study Seed Multiplication and Extension	Lecture Survey Practice	Seed Straining Equipment	6
		4. Agricultural Economics and Farm Management	1. To Study Datum Collection and Analysis	Lecture Survey	Textbooks	12
			2. To Study Bookkeeping	Lecture Practice	Textbook	6
			3. To Study Loan System and Fund Problem	Lecture Survey		6
		5. Water Management	1. To Study Water Management Technique in Each Crops and Measurement of Water Capacity	Lecture Practice	Tension Meter Apparatus for Measuring Evaporation and Water Depth	12
			2. To Study Mechanism of Engine	Lecture Practice	Model Engine Tools	4
			3. To Learn Operation of Machinery	Lecture Practice	Machinery with Attachment Tools	6
			3. To Study Significance of Mechanization	Practice Discussion		2

No.	Particulars	Qty.	Year			
			1983	84	85	86
13.	Out Model Engine (Air Cooling Gasoline)	1	x			
14.	" " " (Diesel)	1	x			
15.	Gasoline Engine (3HP Air Cooling)	10	x			
16.	Diesel Engine (5HP Water Cooling)	10	x			
17.	Tools with Tool Box	10	x			
18.	Power Mist Sprayer (Knapsack type)	14		x		
19.	Power Sprayer with Engine and Complete accessories	14	x			
20.	Power Sprayer (Knapsack type)	14	x	x		
21.	Sprayer (Shoulder Hanging Type)	14	x	x		
22.	Nursery Box	200		x		
23.	Power Transplanter (paddy)	2		x		
24.	Paddy Harrow attached Tractor (45HP)	1	x			
25.	Swath Sprayer with Tractor Mounted	1			x	
26.	Binder	2	x			
27.	Harvester	5	x			
28.	Sickle 1 kg	10	x			
29.	" 5 kg	10	x			
30.	" 50 kg	3	x			
31.	Tractor (Ditcher & Trencher & other attachment 20-25 HP)	5	x	x		
32.	Tractor attached Trailer (dump type)	3	x	x		
33.	Tractor attached Rotary	2		x		
34.	Tractor attached plow	2		x		
35.	Tractor attached Disc Harrow	2		x		
36.	Winnower	10	x			
37.	Hand Tools	20		x		
38.	Battery Charger	2	x			
39.	Rice Milling Laboratory Equipment (Complete set)	1 set	x			
40.	Grain Crack Analyser	1	x			
41.	Rice Mill Model Type	1 set	x			

No.	Particulars	Qty.	Year			
			1983	84	85	86
<u>D. Equipments for Audio-Visual Aids</u>						
1.	Vedeo Tape Recorder with complete all accessories	1			x	
2.	Public Address System	3			x	
3.	35mm Movie Projector with sound systems	1	x			
4.	Voltage Stabilizer (5KVA)	3	x			
5.	VTR Tapes	60 pcs	x		x	
6.	Battery packs for Camera	12	x			
7.	Camera Extension Cable	20 M	x		x	
8.	Connecting Cable	20 M	x			
9.	Over Head Projector	1	x			
10.	Generator (3.5 KVA Gasoline)	3	x			
11.	Plastic Frames for Slides (35mm)	5000 pcs	x			
12.	Chart for Trainees (Ready Made)	1 lot	x			
13.	Slides for Trainees (Ready Made)	1 lot	x			
14.	16 mm Film for Trainees (Ready Made)	50 rolls	x	x	x	x
<u>E. Equipments for General Affairs</u>						
1. (Vehicles for Transportation)						
1.	Pick up Truck	1			x	
2.	Jeep 4 wheel drive	2			x	
3.	Jeep (Toyota Land Cruiser including Audio Visual Equipments)	1	x			
4.	Station Wagon (General Use)	2	x			
5.	Motor Bicycle (Off road type)	5	x			
6.	Motor Bicycle (On road type)	2	x			
7.	Bus (32 passengers)	2	x		x	
8.	Bicycle	10	x			
9.	Spare Parts for (20% from the original cost)				x	x x
<u>WORKSHOP EQUIPMENTS</u>						
1.	Black Board	1			x	
2.	Table for Engine	10			x	

No.	Particulars	Qty.	Year			
			1983	84	85	86
<u>F. Equipments for Tissue Culture</u>						
1.	Clean Bench and Accessories	2 sets		x		
2.	Automatic Voltage Transformer	1		x		
3.	Ultraviolet Ray Sterilizing Lamp	20		x		
4.	Erlenmeyer Flask 25 cc (22/42 m Height 65mm)	500 pcs		x		
5.	Erlenmeyer Flask 25cc (32/43 65mm)	500 pcs		x		
6.	Erlenmeyer Flask 50cc 34/51 85mm	500 pcs		x		
7.	Petri Dishes	100 "		x		
8.	Blender CB-6 51 Spare Blade	1		x		
9.	Forceps (Dissecting and Microscope)	100		x		
10.	Surgical Blade (No. 3)	100		x		
11.	Air Conditioner	5	x	x		
12.	Cork Stopper and Cork Borer (each size)	100		x		
13.	Aluminium Foil	100 rolls		x		
<u>G. Equipments for Water Management</u>						
1.	Tension meter 20cm	10		x		
	" " 40cm	10		x		
	" " 80cm	2		x		
2.	Appliance for Sound Water Depth	2		x		
3.	Appliance for Measure Evaporation	2		x		
<u>H. Equipments for Field and Field Use</u>						
1.	Green House (40 x 20 x 10 feet)	1*		x		
2.	Nets for Bird Protection 4000m ²	1		x		
3.	Sprinkler System for 5 Hectres (Complete Unit)	1		x		
4.	Cheese cloth 1000 M ²	1		x		
5.	Plastic Pot 5 cm	20,000		x		
6.	Plastic Pot 10cm	20,000		x		
7.	Number Calculating Machine	20		x		
<u>I. Books , Literature</u>						
1.	Books for Trainees	100	x	x	x	x

No.	Particulars	Qty.	Year			
			1983	84	85	86
J. Office Equipments						
1.	Plain paper for copying machine (A-4) 2500 sheets /package/year	10 pkgs	x	x	x	x
2.	(B-4) 2500 sheets/package/year	5 "	x	x	x	x
2.	Spare parts for Plain Paper Copier drums	2 Nos.	x			
	rollers	4 Nos.	x			
3.	Chemical for copying machine for 3 years			x	x	x
4.	File Cabinet, 30 Drawer letter (steel) 30x36½x16 inches (Frost Tan Color)	10		x		
5.	File Cabinet (Art Steel) 10x11 ³ / ₈ x16 " Note: Inside drawer dimensions-8 ³ / ₄ x1 ¹ / ₂ x15 ³ / ₄	10		x		
6.	Plastic Tape for decorating and book repair (1½x130 6 rolls per box)	100 boxes	x			
7.	Heavy duty stapler	3	x			
8.	Heavy duty paper punch	3	x			
9.	Office shears (cissors) Oval pattern Enamel handles 12" long	3	x			
10.	Typewriter correcting fluid (Fast dry, Water Base)	4 doz	x			
11.	Erasers	2 dozs	x			
12.	Markers (Assorted colors)	10 dozs	x			
33.	Drafting Instruments	2 sets	x			
14.	Templates (circle gauge, triangle set circular protractor, lettering)	2 sets	x			
15.	Numbering machines	2 Nos	x			
16.	Daters (self inking)	2 "	x			
17.	Bankers Box (Files storage)	10 dozs		x		
18.	Paper Cutter	2 Nos	x			
19.	Printing Machine accessories for 3 years (including ink and others)			x	x	x
20.	Photographic Chemicals and paper for 3 years			x	x	x
21.	Executive Shredder (Size 20x15x12) w/t.21lbs.	3	x			
22.	Data Centre Cabinet(Size 48 ³ / ₄ x16 ³ / ₄ x45)	3		x		
23.	Technical pens series(Contains 4 drawingunits (00,0,1,2,) 4 barrels/1 cone extractor, 1 joint adaptor, 1 ink bottle, 1 manual, individually boxed	1 doz	x			
24.	Tapewriter kit (includes 2rolls avocado & black)	1 doz	x			
25.	Catalog Rack (Large size)	1 Gross	x			

20. タイ・東北タイ農業開発研究計画・討議々事録及び暫定実施計画


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

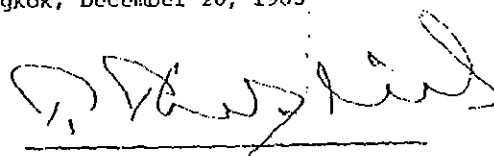
The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Dr. Yoshiharu TOKUNAGA visited the Kingdom of Thailand from December 11 to December 21, 1983 for the purpose of working out the details of the technical cooperation program concerning the Agricultural Development Research Project in Northeast Thailand.

During its stay in the Kingdom of 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.

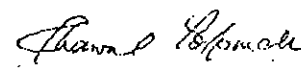
As a result of the discussions, both parties, taking account of the provisions of the Agreement on Technical Cooperation between the Government of Japan and the Government of the Kingdom of Thailand, signed at Bangkok on November 5, 1981 agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Bangkok, December 20, 1983


Dr. Yoshiharu TOKUNAGA
Leader
Implementation Survey Team
Japan International Cooperation
Agency, Japan


Dr. Thalerng Thamrong Nawasawat
Permanent Secretary
Ministry of Agriculture and
Cooperatives


for the Rector, Khon Kaen University
In the presence of


for
Director-General
Department of Technical and
Economic Cooperation
The Kingdom of Thailand

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of the Kingdom of Thailand will cooperate with each other in implementing the Agricultural Development Research Project in Northeast Thailand (hereinafter referred to as "the Project") for the purpose of strengthening research activities and thus contributing to the agricultural development in Northeast Thailand.
2. The Project will be implemented in accordance with the Master Plan which is given in I of Annex.
3. The Project will be carried out mainly at the Agricultural Development Research Center in Northeast Thailand (hereinafter referred to as "ADRC") which will be established under the Japanese grant aid agreed between the two Governments by the Exchange of Notes dated December 8, 1983.

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 II of Annex 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 Kingdom of Thailand the privileges, exemptions and benefits no less favourable than those accorded to experts of third countries or international organizations performing similar missions in the Kingdom of Thailand.

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 (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in III of Annex through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The Equipment will become the property of the Government of the Kingdom 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 II of Annex.

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 the Kingdom 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. SERVICES OF THAI COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. In accordance with the laws and regulations in force in the Kingdom of Thailand, the Government of the Kingdom of Thailand will take necessary measures to secure at its own expense the necessary services of Thai counterpart and administrative personnel as listed in IV of Annex.
2. The Government of the Kingdom of Thailand will allocate the necessary number of suitably qualified personnel corresponding to each Japanese expert to be dispatched by the Government of Japan as specified in II of Annex for the effective and successful transfer of technology under the Project.

VI. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE KINGDOM OF THAILAND

1. In accordance with the laws and regulations in force in the Kingdom of Thailand, the Government of the Kingdom of Thailand will take necessary measures to provide at its own expense:
 - (1) Land, buildings and facilities as listed in V of Annex;
 - (2) 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;
 - (3) Transportation facilities and travel allowance for the official travel of Japanese experts within the Kingdom of Thailand;
 - (4) Suitably furnished accommodations for the Japanese experts and their families.

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

- (1) Expenses necessary for the transportation of the Equipment within the Kingdom of Thailand as well as for the installation, operation and maintenance thereof;
- (2) Customs duties, internal taxes and any other charges, imposed on the Equipment in the Kingdom of Thailand;
- (3) All running expenses necessary for the implementation of the Project.

VII. ADMINISTRATION OF THE PROJECT

1. Permanent Secretary, Ministry of Agriculture and Cooperatives, as the Chairman of the Coordinating Committee, will bear overall responsibility for the implementation of the Project.

2. Representatives of the related organizations listed below, will be responsible for the administrative and managerial matters of the Project.

- (1) Director General, Department of Agriculture (hereinafter referred to as "DA"), Ministry of Agriculture and Cooperatives (hereinafter referred to as "MOAC")
- (2) Director General, Land Development Department (hereinafter referred to as "LDD"), MOAC

- (3) Director, Foreign Agricultural Relations Division (hereinafter referred to as "FARD"), MOAC
- (4) Dean, Faculty of Agriculture, Khon Kaen University (hereinafter referred to as "KKU")
3. The Japanese Team Leader will provide necessary recommendation and advice on technical and administrative matters concerning the implementation of the Project to the Director and Deputy Directors of ADRC.
4. The Japanese experts will give necessary technical guidance and advice to the Thai counterpart personnel on matters pertaining to the implementation of the Project.
5. For the effective and successful implementation of the Project, a Joint Committee will be established with the function and composition as referred to in VI of Annex, while the Coordinating Committee established at the Headquarters in Bangkok is to administer and coordinate the Project.
6. The Project will be implemented in line with organizational chart as shown in VII of Annex.
7. The project will be implemented in close cooperation with the KKU Research Development Project being extended by the United States Agency for International Development (USAID), within the framework of Japanese Technical Cooperation Scheme.

VIII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Kingdom 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 the Kingdom of Thailand except for those arising from the willful misconduct or gross negligence of the Japanese experts.

IX. MUTUAL CONSULTATION

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

X. 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 signing of this Record of Discussions.

However, there will be a general review by the Joint Committee on the progress of the implementation of the Project during the third year of the cooperation period in order to assess whether the term of cooperation should be modified for the successful implementation of the Project.

ANNEX

I. MASTER PLAN

1. Objectives of the Project

The Project aims at strengthening agricultural research activities in the Northeast, especially those directed at; assesment of natural environment and resources to design proper land use; development of agronomic technology suited to locality; and identification and elimination of the existing production constrains.

2. Technical Cooperation will be implemented in line with the following framework;

<u>Research programs</u>	<u>Main Institutions</u>	<u>Related Organizations</u>
(1) Assessment of natural environment and resources		
(a) Land classification and planning land use	ADRC	OPS, LDD
(b) Stochastic analysis of rainfall	the Annex of ADRC	KKU
(2) Improvement of crop performance		
(a) Interaction among environment, water stress and crop performance	the Annex of ADRC	KKU
(b) Appropriate crops (annual and perennial) for drought conditions	ADRC, FCRC, the Annex of ADRC	OPS, DA, KKU
(3) Soil conditions and its improvement		
(a) Amelioration of soil salinity	ADRC,	OPS, LDD
(b) Recycling of organic materials	ADRC, the Annex of ADRC	OPS, LDD, KUU
(c) Conservation of soil fertility	ADRC, FCRC	OPS, DA

3. The activities mentioned in 2. above will be conducted at ADRC, the Annex of ADRC. Khon Kaen Field Crop Research Center (hereinafter referred to as "FCRC") and four satellite experiment stations (Kalasin, Maha Sarakham, Roi Et and Loei).

4. The Project takes two steps of the First phase (Preparatory stage) and the Second phase (Implementation stage).

Note: Abbreviations

ADRC	Agricultural Development Research Center
FCRC	Field Crop Research Center (Khon Kaen)
OPS	Office of Permanent Secretary
KKU	Khon Kaen University
DA	Department of Agriculture
LDD	Land Development Department

II. JAPANESE EXPERTS

1. Team Leader
2. Coordinator/Liaison Officer
3. Long-term experts in the fields of;
 - (1) Plant breeding
 - (2) Agronomy
 - (3) Soil science (Soil fertility)
 - (4) Soil science (Soil classification)
 - (5) Chemical engineering

Note: Short-term experts may be dispatched when necessity arises,
for the smooth implementation of the Project.

III. LIST OF EQUIPMENT

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

IV. LIST OF THAI COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. Director and deputy directors of ADRC
2. Counterpart personnel in the fields of:
 - (1) Plant breeding
 - (2) Agronomy
 - (3) Soil science (Soil fertility)
 - (4) Soil science (Soil classification)
 - (5) Chemical engineering
 - (6) Other fields corresponding to Japanese short-term experts
3. Laboratory assistants
4. Field workers
5. Administrative personnel
 - (1) Administration
 - (2) Accounting
 - (3) Other necessary supporting staff

V. LIST OF LAND, BUILDINGS AND FACILITIES

1. Land

Experimental fields of ADRC, the Annex of ADRC, FCRC and four satellite experimental stations

2. Buildings and facilities

(1) ADRC

a) Main building

b) Dormitory

c) Net house

d) Green house

e) Garage

f) Workshop

g) Storage

(2) The Annex of ADRC

(3) FCRC

3. Offices in Bangkok and in Khon Kaen for the preparatory stage

4. Other necessary lands and buildings

VI. THE JOINT COMMITTEE

1. Functions

The Joint Committee will meet at least once a year and whenever necessity arises, and work:

- (1) To formulate the Annual Work Plan of the Project in line with the Tentative Schedule of Implementation formulated under the framework of this Record of Discussions;
- (2) To review the overall progress of the technical cooperation program as well as the achievements of the above-mentioned Annual Work Plan;
- (3) To review and exchange views on major issues arising from or in connection with the technical cooperation program.

2. Composition

(1) Chairman

Permanent Secretary, MOAC

(2) Thai side:

(a) Director-General, DA, MOAC

(b) Director-General, LDD, MOAC

(c) Director, FARD, MOAC

(d) Dean, Faculty of Agriculture, KKU

(e) Representative of Department of Technical & Economic Cooperation

(f) Representatives of the Research Committee

(g) Director and Deputy Directors of ADRC

(h) Representative of Research Development Institute, KKU

(i) Other officials nominated by the Chairman

(3) Japanese side:

(a) Team Leader

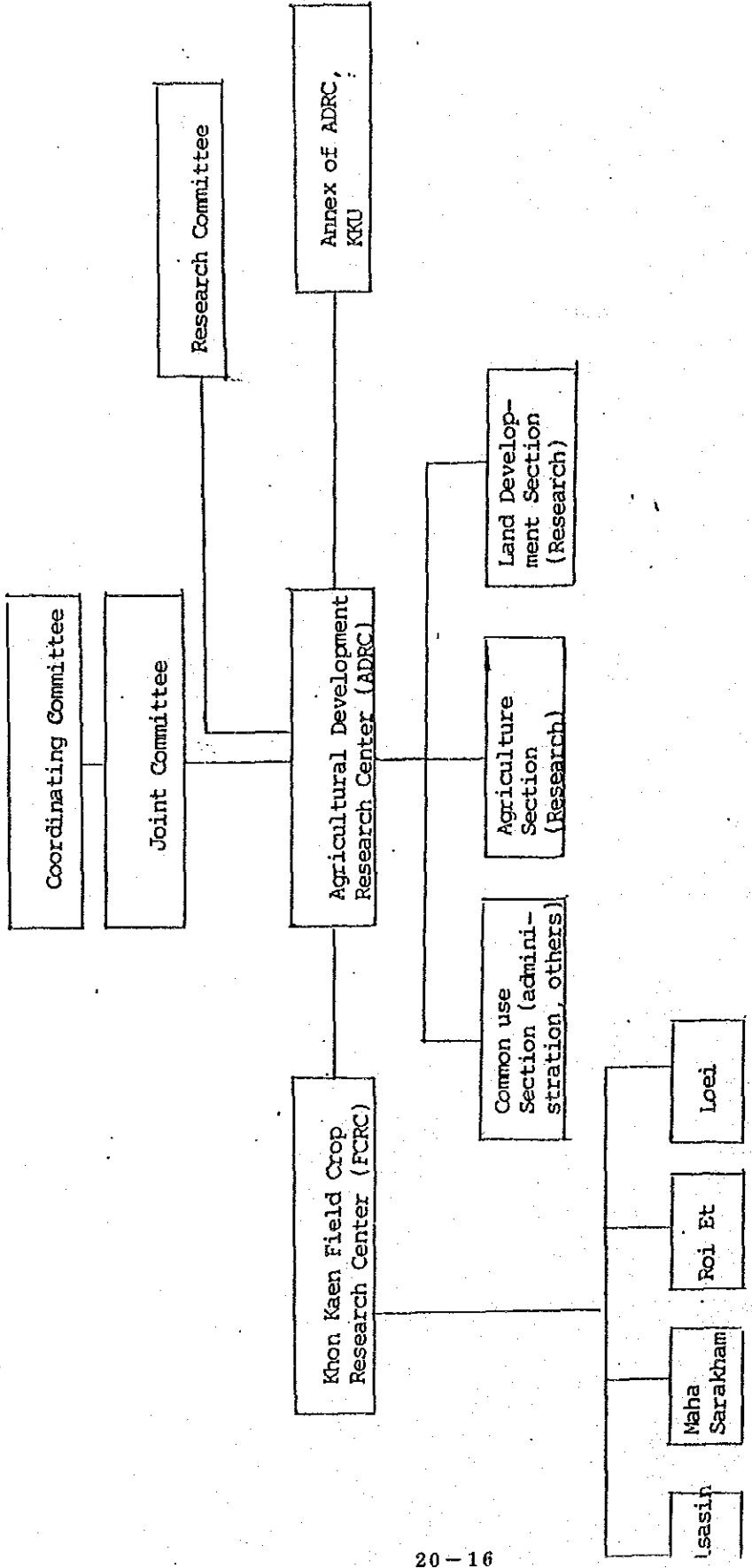
(b) Coordinator/Liaison Officer

(c) Other experts and personnel concerned to be dispatched by
JICA, if necessary

(d) Representatives of JICA

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

VII. ORGANIZATIONAL CHART OF THE PROJECT IMPLEMENTATION



(Satellite Experiment Stations)

Note : Research Committee
 A research committee will be established at ADRC with a function of coordinating research activities under the project from technical points of view.

Ⅳ 東北タイ農業開発研究計画実施のための技術協力に関する日本 側実施協チームとタイ国政府関係当局間における討議議事録

国際協力事業団（以下「JICA」と言う）により組織され、徳永美治氏を団長とする実施協
議チーム（以下「チーム」と言う）は、タイ国における東北タイ農業開発研究計画に係る技術
協力プログラムの詳細計画作成を目的として、昭和58年12月11日から12月21日までタイ
国を訪問した。

タイ国滞在中、同チームは本計画を成功裡に実施するため、向国政府によりとるべき諸事項
につき、タイ国政府関係当局と数回に亘り意見交換および討議を行った。

討議の結果、同チーム及びタイ国政府関係当局は1981年11月5日日本、タイ両国政府に
よる技術協力協定を考慮し、以下の付属文書にある事項に関し本計画を実施することで、両国
政府に勧告することに合意した。

バンコック，1983年12月20日

国際協力事業団
実施協議チーム団長
徳永美治

農業協同組合省
Dr. Thalerng Thamrourg
Nawasawat 農業次官

経済・技術協力局
総局長代理

コンケン大学学長代理

付 属 文 書

I 両国政府間の協力

1. 日本国政府とタイ国政府は研究活動の強化を図ることにより、東北タイの農業開発に寄与することを目的として東北タイ農業開発研究計画（以下「本計画」と言う）を、相互に協力して実施する。
2. 本計画は、付表 I の基本計画に基づき実施する。
3. 本計画は 1983 年 11 月 8 日両国政府が交換公文を締結し、無償資金協力により設立する東北タイ農業開発研究センター（以下「ADRC」と言う）を中心として活動を実施する。

II 日本人専門家の派遣

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、かつ、コロombo計画の通常の手続きにより JICA を通じて付表 II に掲げる日本人専門家の派遣を自己の負担において実施するため必要な措置をとる。
2. 上記 1. に言及する日本人専門家及び家族は、コロombo計画に基づきタイ国内で同様の任務に基づき活動する第 3 国または国際機関の専門家よりも不利でない特権、免除及び便宜を与える。

III 資機材の供与

1. 日本国政府は、日本国で施行している法令に従い、かつコロombo計画に基づき通常の手続きにより JICA を通じて付表 III に掲げるプロジェクトの実施に必要な資機材（以下「機材」と言う）の自己の負担において供与するために必要な措置をとる。
2. その機材は、CIF 建てによりタイ国の港又は、空港においてタイ国の政府関係当局に引き渡された時点でタイ国の財産となる。また、これらの機材は付表 II に掲げる日本人専門家と協議の上、本計画の実施のためのみ使用する。

IV タイ国人の日本における研修

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、かつコロombo計画に基づく通常の手続きによって JICA を通じて自己の負担において本計画に携わるタイ国人を日本国で受入れ技術研修を行うための必要な措置をとる。
2. タイ国政府は、タイ国人が日本における技術研修で修得した知識及び経験をプロジェクトの実施に有効に利用するために必要な措置をとる。

V カウンターパート及びその他職員の配置

1. タイ国政府は、タイ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付表Ⅳに掲げるカウンターパート及びその他職員を配置する。
2. タイ国政府は本計画の円滑かつ効果的に技術移転を行うため、付表Ⅳに掲げる日本人専門家に対し適格な資格を有する必要な人数を配置する。

VI タイ国政府がとるべき措置

1. タイ国政府は、タイ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、次のものを提供する。
 - (1) 付表Ⅴに掲げる土地、建物及び付帯施設
 - (2) 前記Ⅳに基づき JICA を通じて供与された資機材以外の本計画運営に必要な機械、機材、器具、車輛、工具、それらの予備部品及びその他の資材の提供及び更新
 - (3) 職務遂行のための日本人専門家に対する交通の便宜及び交通費
 - (4) 日本人専門家及びその家族のための適当な家具付住宅
2. タイ国政府は、タイ国において施行されている法令に従い、以下の負担をするため必要な措置をとる。
 - (1) タイ国内における機材の輸送並びにこれら物品の据付け、操作及び維持に必要な経費
 - (2) タイ国内で課せられることがある関税、国内税及びその他の課徴金
 - (3) 本計画の実施に必要な運営費

VII 本計画の運営

1. 調整委員会の委員長である農業協同組合省次官は、本計画の実施のための全責任を負う。
2. 下記に掲げる関係機関の代表者は本計画の管理及び運営のための責任を負う。
 - (1) 農業協同組合省農業局総局長
 - (2) 農業協同組合省土地開発局総局長
 - (3) 農業協同組合省国際部長
 - (4) コンケン大学農学部長
3. 日本人専門家のチームリーダーは本計画の実施にあたって運営及び技術的事項について必要な勧告及び助言を与える。
4. 日本人専門家は本計画の実施のための技術的事項について、タイ側カウンターパートに必要な技術指導及び助言を与える。
5. 本計画の円滑かつ効果的な実施のため付表Ⅵに掲げる委員によって構成される合同委員会を設置する。さらに調整委員会をバンコックの本省に設置し、本計画の調整及び管理を

行う。

6. 本計画は付表Ⅷに示す組織図により実施する。
7. 本計画は日本の技術協力計画の範囲内において、The United States Agency for International Development (USAID) が協力しているコンケン大学研究開発計画と緊密な協力を保ちながら実施する。

Ⅷ 日本人専門家に対する請求

タイ国政府は、日本人専門家の、タイ国における職務遂行に起因し、その遂行中に発生し又はその遂行に関連して、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ことを約束する。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。

Ⅸ 相互協議

この付属文書に起因し、又は関連して生ずるいかなる重要な事項についても両国政府は相互に協力する。

X 協力期間

この付属文書による本計画の技術協力期間は、本 R/D 署名日から5ケ年間とする。

しかし、本プロジェクト開始3年後に、残り2年間の協力内容を見直すかどうかの決定のため、タイ国政府によりとられる措置を勘案しながら合同委員会による本プロジェクトの実進捗状況に関する全般的検討を行う。

付表Ⅰ 基本計画

1. 本計画の目的

本プロジェクトは東北タイにおける農業研究活動の強化を図ることを目的とし特に(1)合理的な土地利用計画を策定するための自然環境条件を天然資源の評価(2)地域に適合した作物生産技術の開発(3)農業生産技術の阻害要因の解明と改善策の樹立について実施する。

2. 技術協力は下記の枠組にそって実施する。

<u>研究プログラム</u>	<u>主な施設</u>	<u>関係機関</u>
(1) 自然環境条件と天然資源の評価		
(a) 土地分級と土地利用計画	ADRC	OPS, LDD
(b) 降雨の確率論的解析	The Annex of ADRC	KKU
(2) 作物生産改善		

- | | | |
|---------------------------|-------------------------------|---------------|
| (a) 水不足，環境要因，作物の生育収量の相互関係 | The Annex of ADRC | KKU |
| (b) 乾燥条件に適する作物（1年及び多年生） | ADRC, FCRC, The Annex of ADRC | OPS, DA, KKU |
| (3) 土壌条件及び改良 | | |
| (a) 塩類土壌の改良 | ADRC | OPS, LDD |
| (b) 有機物のリサイクル利用 | ADRC The Annex of ADRC | OPS, LDD, KKU |
| (c) 土壌肥沃度の維持管理 | ADRC, FCRC | OPS, DA |
3. 上記2に述べた活動は農業開発研究センター，農業開発研究センターの別館，コンケン畑作研究センター（以下「FCRC」と言う）及び4ヶ所のサテライト試験場（ガラシン，マハサラカン，ロイ・エト，ロエイ）において実施する。
4. 本計画は第一段階（準備期）と第二段階（実施期）の2段階に分割する。

注：略語

ADRC	農業開発研究センター
FCRC	コンケン畑作研究センター
OPS	農業協同組合省官房
KKU	コンケン大学
DA	農業局
LDD	土地開発局

付表II 日本人専門家

1. チームリーダー
2. 業務調整
3. 分野別専門家
 - (1) 作物育種
 - (2) 栽培
 - (3) 土壌科学（土壌肥沃度）
 - (4) 土壌科学（土壌分類）
 - (5) 化学工学

注：本プロジェクトを円滑に実施するために必要に応じ短期専門家を派遣する。

付表Ⅲ 供 与 機 材

1. 実験室用機材，機械，器具，工具，部品及び他の資材
2. 圃場試験用機材，機械，器具，工具，部品及び他の資材
3. 肥料，農薬
4. 視聴覚教育用其他
5. 車 輛
6. 書籍，その他必要な印刷物
7. その他必要な小規模の資機材

付表Ⅳ タイ国人カウンターパート及びその他の職員の表

1. 農業開発研究センター所長及び副所長
2. 分野別カウンターパート
 - (1) 作物育種
 - (2) # 栽培
 - (3) 土 壤 科 学(土壤肥沃度)
 - (4) 土 壤 科 学(土壤分類)
 - (5) 化 学 工 学
3. 研 究 助 手
4. 圃 場 作 業 員
5. 事務関係職員
 - (1) 事務職員
 - (2) 会計職員
 - (3) その他の要員

付表Ⅴ 土地，建物及びその他の付属施設

1. 土 地
農業開発研究センター，農業開発研究センター別館，コンケン畑作研究センター及び4つのサテライト農業試験場の圃場
2. 建物及び施設
 - (1) 農業開発研究センター
 - (a) 本 館
 - (b) 寄 宿 舎
 - (c) 網 室

- (d) ガラス室
 - (e) ガレージ
 - (f) ワークショップ
 - (g) 貯蔵室
- (2) 農業開発研究センターの別館
 - (3) コンケン畑作研究センター
- 3. 準備期におけるバンコック及びコンケン事務所
 - 4. その他必要な土地及び建物

付表VI 合同委員会

1. 機能

合同委員会は年1回または必要に応じ開催する。合同委員会の機能は次の通りである。

- (1) 討議議事録の枠組に基づき策定された暫定計画に従って本計画の年次事業計画を策定する。
- (2) 技術協力計画の全般的進捗状況並びに上記年次事業計画の実績に関し協議する。
- (3) 技術協力計画に関連して生ずることがあるいかなる重要事項について協議する。

2. 構成

(1) 委員長

農業協同組合省次官

(2) タイ側

- (a) 農業協同組合省農業局総局長
- (b) " 土地開発局総局長
- (c) " 官房外国部長
- (d) コンケン大学農学部長
- (e) D'TECの代表
- (f) 研究委員会の代表
- (g) 農業開発研究センターの所長及び副所長
- (h) コンケン大学研究開発部(RDI)の代表
- (i) その他委員長が任命するタイ国人

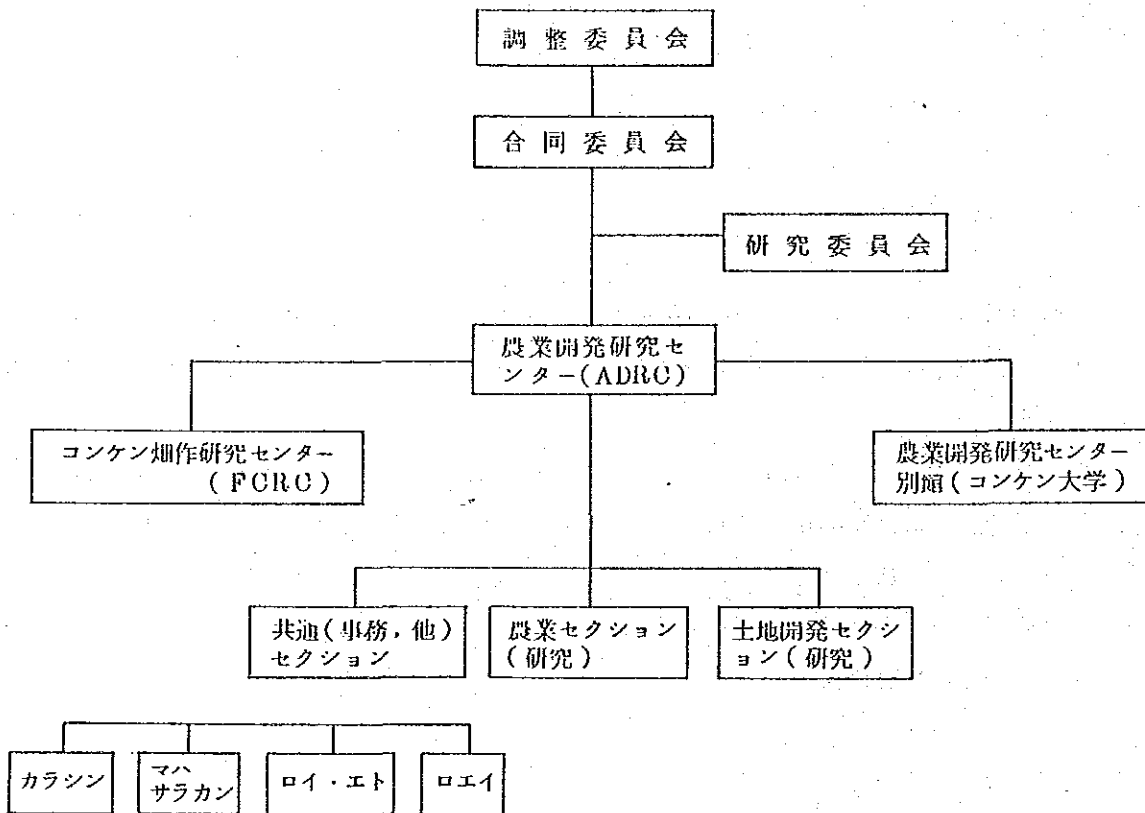
(3) 日本側

- (a) チームリーダー
- (b) 調整員
- (c) 必要と認めるその他の専門家及びJICA関係者

(d) 国際協力事業団の代表

注：日本国大使館員及びUSAIDの関係者は、オブザーバーとして委員会に出席することが出来る。

Ⅶ プロジェクト組織図



(サテライト農業試験場)

(注)：研究委員会

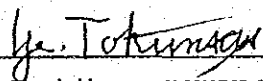
研究委員会は本計画の技術事項の調整を行うため農業開発研究センターに設置する。

TENTATIVE SCHEDULE OF IMPLEMENTATION FOR THE FIRST PHASE
(PREPARATORY STAGE) OF THE AGRICULTURAL DEVELOPMENT RESEARCH
PROJECT IN NORTHEAST THAILAND

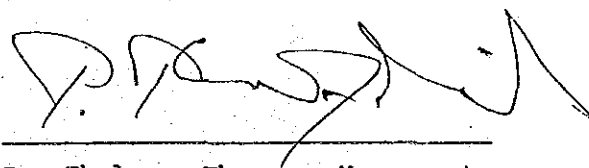
Within the scope of the Record of Discussions signed on December 20, 1983, the Japanese Implementation Survey Team and the Thai authorities concerned have jointly formulated the Tentative Schedule of Implementation for the first phase (preparatory stage) of the Agricultural Development Research Project in Northeast Thailand (hereinafter referred to as "the Project") as annexed hereto.

The Tentative Schedule of Implementation is subject to change in the course of the implementation of the Project within the framework of the above mentioned Record of Discussions, and also subject to the conditions that necessary budget will be allocated for the implementation of the Project

Bangkok, December 20, 1983



Dr. Yoshiharu TOKUNAGA
Leader
Japanese Implementation Survey Team,
Japan International Cooperation
Agency, Japan

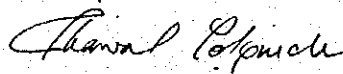


Dr. Thalerng Thamrong-Nawasawat
Permanent Secretary
Ministry of Agriculture and
Cooperatives



for the Rector, Khon Kaen University

In the presence of



for Director-General
Department of Technical and
Economic Cooperation

ANNEX

TENTATIVE SCHEDULE OF IMPLEMENTATION FOR THE FIRST PHASE
(PREPARATORY STAGE) OF THE PROJECT

1. Term of the first phase
December 20, 1983 through March 31, 1985
2. Technical cooperation programme
 - a. Collection of relevant information on research activities for the second phase (implementation stage)
 - b. Advice and guidance on the set-up of the research programme in more detail
 - c. Advice and guidance on research planning and management
 - d. Advice and guidance on other necessary technical matters related to the Project mutually agreed upon by both parties of Japan and the Kingdom of Thailand
3. Japanese contribution
 - (1) The following Japanese experts will be assigned to the Project.
 - Long term basis
 - a. Team Leader
 - b. Coordinator/Liason Officer
 - c. Expert in the field of Chemical engineering
 - Short term basis
Experts on;
 - a. Plant breeding
 - b. Agronomy
 - c. Soil science (Soil fertility)
 - d. Soil science (Soil classification)
 - e. Other necessary fields
 - (2) Provision of equipment and materials necessary for implementation of the first phase cooperation
 - (3) Acceptance of trainees into Japan
 - Observation tour
 - Technical training

4. Thai contribution

- (1) Appointment of Director and Deputy Directors of ADRC
- (2) Assignment of counterpart experts, and administrative and supporting staff
- (3) Provision of offices (Department of Agriculture in Bangkok and Land Development Center of Land Development Department in Khon Kaen) for Japanese experts and transportation facilities
- (4) Allocation of the necessary operational budget

5. The Joint Committee

The Joint Committee will meet at least twice during the period of the first phase to formulate the working plans for the first phase and the second phase.

V 東北タイ農業開発研究計画第一段階（準備期）の暫定計画

日本側実施協議チームとタイ国政府関係当局は、1983年12月20日署名された討議議事録の範囲において、ここに添付する東北タイ農業開発研究計画第一段階（準備期）の暫定計画を共同で作成した。

本暫定計画は本計画の実施に必要な予算措置がなされ、また、前述の討議議事録の範囲内で本計画の実行を変更することが出来る。

バンコック、1983年12月20日

国際協力事業団
実施協議チーム団長
徳永美治

農業協同組合省
Dr. Thalerng Thamrong
Nawasawat 農業次官
コンケン大学学長代理

経済、技術協力局総局長代理

付表

本計画第一段階の暫定計画

1. 第一段階の期間

1983年12月20日から1985年3月31日まで

2. 技術協力プログラム

- a. 第2段階（実施期）のための研究活動に関する情報の収集を行う。
- b. 詳細な研究プログラムの策定に関し指導，助言を行う。
- c. 研究計画及び管理に関する指導，助言を行う。
- d. 日本及びタイ双方が合意した本計画に関する他の必要な技術的事項に関し指導，助言を行う。

3. 日本側の措置

(1) 下記の日本人専門家を本計画に派遣する。

- 長期専門家

- a. チームリーダー
- b. 業務調整
- c. 化学工学

- 短期専門家

- a. 作物育種
- b. 栽培
- c. 土壌科学（土壌肥沃度）
- d. 土壌科学（土壌分類）
- e. 他の分野

(2) 第一段階の協力を実施するための資機材を提供する。

(3) 数名の研修員を受入れる。

- 視察

- 技術研修

4. タイ側の措置

(1) 農業開発研究センター所長及び副所長を任命する。

(2) カウンターパート専門家，事務職員及びその他職員を任命する。

日本人専門家の職務遂行のための交通の便宜，事務所（農業局及びコンケンの土地開発センター）を提供する。

(3) 本計画の運営に必要な経費の負担する

5. 合同委員会

合同委員会は第一段階に少なくとも2回開催し第一段階及び第二段階のための運営計画を策定する。

VI 第1フェーズ暫定実行計画

(◎ 主業務 ○ Sub業務)

研究課題	長期専門家		短期専門家				その他情報表示	
	チームリーダー	調整員	化学工業	作物育種	栽培	土壌科学		
						肥力度		分類
(研究計画)								
1. 自然環境条件と天然資源の評価								
1.1 土地分級と土地利用計画								
- 現在まで実施された土壌調査の分析	○			○		○	○	
- 自然環境条件に関する情報の収集	○			○		○	○	
- 土地分級方法についての検討	○			○		○	○	
1.2 降雨の確率的解析								
- 確率分析方法についての検討	○						◎	
- 特定地域における降雨分布に関する予備的研究	○						◎	
2. 作物生産改善								
2.1 水不足、環境要因、作物の生育収量の相互関係								
- いくつかの畑作物の耐干性に関する予備的試験	○			○				
- 一次期シーズンにおける実験計画	○			○				
2.2 乾燥条件に適する作物(1年性及び多年生作物)								
2.2.1 東北タイに適応する耐干性作物の開発								
- 現在まで実施された関連試験の分析	○			◎				
- 現行試験の観察と分析	○			◎				
2.2.2 高収性ナシヨウアラギリの改良								
- 現在まで収集されたナシヨウアラギリ品種の評価	○			○				
- 優良品種の探索	○			○				
2.2.3 東北タイに適応する多年生作物の探索								

研究課題	長期専門家		短期専門家					
	チームリーダー	調整員	化学工業	作物育種	栽培	土壌科学 肥灰度 分類	気象	その他 情報表示
一優良多年性作物の収集と種え付け	〇		◎	〇				
3. 土壌条件とその改良								
3.1 塩類土壌の改良	〇		〇	〇	◎	◎		
一現在まで実行された調査・研究の検討と分析								
3.2 有機物のリサイクル利用								
3.2.1 堆肥の製造法とその施用が作物の生育収量に及ぼす影響	〇			〇	◎	◎		
一堆肥施用の現状についての評価と分析								
3.2.2 土地生産力に及ぼす有機物の効果	〇					◎	〇	
一データ収集と分析	〇					◎	〇	
一異なった条件下における有機物の腐熟に関する予備的研究								
3.3 土壌肥灰度の維持管理								
3.3.1 場レベルでの水分保持を高める土壌管理								
3.3.2 土壌肥灰度の維持改善のための施肥法								
3.3.3 生物的窒素固定								
一これまでの実験、研究の検討と分析	〇					◎	〇	
一現行実験の観察と分析	〇					◎	〇	
(プロジェクト実行計画への準備)								
1. 計画準備のための関係機関及び団体との協議	〇							
2. 合同委員会、研究委員会及びその他必要な団体の組織化についての助言	〇							
3. 必要とされるタイ側カウンセラー・パートナー任命のための関係機関との討議及び交渉	〇							
4. プロジェクトにおいて提供する研究機器のリストアップ	〇							
5. タイ側カウンセラー・パートナーの日本招聘計画作成	〇							
専門家の派遣時期	R/D 締結後すみやかに派遣(さらに、育種、栽培、土壌専門家が1984年末には派遣される)		2か月(7月~8月)		2か月(5月~6月)		1か月(11月~12月)	

Ⅶ 第1フェイズ実行計画(ADRRC)(東北タイ)

	1984年1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	1985年1月	2月	3月	備	考
1) 日本人専門家 (長期) チームリーダー 調整員 化学工学																	要請書(A1)が専門家派遣の少なくとも3カ月前までに日本政府に提出されなければならぬ。
(短期) 作務員 栽培 土壌科学(肥沃度) (分類) 気象 情報展示																	
2) 器材の準備 要請書(A4)の準備と 日本政府への提出																	
3) 研修員の選入(A2, A3, A4)																	
4) タイ 側 (1) ADRRCの所長及び次長の決定 (2) カウンターパートの任命 DA(農薬局) LDD(土地開発局) (3) 研修の準備 DA(パンコック) LDD(コンケン) (4) 予算の配置																	
5) その他 (1) ADRRC建物 (2) 合同委員会 (3) 研究委員会																	