

the implementation of the Project as listed in IV of the Annex through the normal procedures under the Technical Cooperation Scheme of the Government of Japan.

2. The Equipment will become the property of the Government of the People's Republic of China upon being delivered c. i. f. to the Chinese 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 the Annex.

IV. TRAINING OF CHINESE 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 Chinese 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 People's Republic of China will take necessary measures through the authorities concerned to ensure that the knowledge and experience acquired by the Chinese personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V. SERVICES OF CHINESE COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. In accordance with the laws and regulations in force in the People's Republic of China, the Government of the People's Republic of China will take necessary measures through the authorities concerned to secure at its own expense necessary services of Chinese counterpart and administrative personnel as listed in V of the Annex.
2. The Government of the People's Republic of China 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 the Annex for the effective and successful transfer of technology under the Project.

VI. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF CHINA THROUGH THE AUTHORITIES CONCERNED

1. In accordance with the laws and regulations in force in the People's Republic of China, the Government of the People's Republic of China will take necessary measures through the authorities concerned to provide at its own expense:
 - (1) Land, buildings and facilities as listed in VI of the 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 traffic fees within city areas for official travel of Japanese experts within the People's Republic of China;
 - (4) Suitably furnished accommodations for the Japanese experts and their families.

2. In accordance with the laws and regulations in force in the People's Republic of China, the Government of the People's Republic of China will take necessary measures through the authorities concerned to meet:
 - (1) Expenses necessary for the transportation of the Equipment within the People's Republic of China as well as for the installation, operation and maintenance thereof;
 - (2) All running expenses necessary for the implementation of the Project.

3. The authorities concerned of the Government of the People's Republic of China will meet the charge of customs duties, internal taxes and other fiscal levies imposed in the People's Republic of China on the Equipment referred to in III above.

VII. ADMINISTRATION OF THE PROJECT

1. The Deputy Director-General of the Foreign Affairs Bureau of the Ministry of Commerce will bear overall responsibility for the implementation of the Project.

2. The Director of the Meat Food Research Center of China, 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 guidance and advice on technical and administrative matters concerning the implementation of the Project to the Head of the Project.
4. The Japanese experts will give necessary technical guidance and advice to the Chinese counterpart personnel on technical 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 VII of the Annex.

VIII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the People's Republic of China 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 People's Republic of China 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 will be five (5) years from the date of the signature of this Record of Discussions.

A N N E X

I. MASTER PLAN

1. Objectives of the Project

To modernize the technology of meat processing in China through research and development of the marketing and the processing technology of meat and meat products, propagation of the results of the research, and development of human resources in the field of meat and meat products.

2. Objectives of the Japanese Technical Cooperation

To cooperate in research and development of the marketing and processing technology of meat and meat products at the Meat Food Research Center of China.

3. Activities of the Project

The activities of this project are as follows.

2. Training program

Areas of cooperation	Items	Detail
<p>Advice and guidance on the training program.</p>	<p>Advice and guidance for the planning and implementation of the training of technicians and administrators.</p>	<p>Advice and guidance will be given for the planning and implementation of the training program on marketing and processing of meat and meat products.</p>

II. JAPANESE EXPERTS

1. Long-term experts

- (1) Team Leader
- (2) in the field of Processing
- (3) in the field of Marketing
- (4) Coordinator

2. Short-term experts

- (1) in the field of Processing
- (2) in the field of Marketing
- (3) Others for the smooth implementation of the Project

Note: Team leader may serve concurrently as expert in Processing or Marketing.

III. PRIVILEGES, EXEMPTIONS AND BENEFITS

1. The Government of the People's Republic of China will grant exemptions from income tax and charges of any kind imposed on or in connection with the living allowance remitted from abroad.
2. The Government of the People's Republic of China will grant exemptions from customs duties in respect of the importation of personal effects by the Japanese experts and their families as well as the importation of machinery and equipment relating to their activities.
3. The Government of the People's Republic of China will provide medical facilities.

IV. THE EQUIPMENT NECESSARY FOR THE IMPLEMENTATION OF THE PROJECT

1. Equipment and spare parts necessary for the technical cooperation in I-2 of the Annex.
2. Vehicles and their spare parts.
3. Other equipment and supplies related to the Project.

V. LIST OF CHINESE COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. Head of the Project
2. Counterpart personnel in the fields of:
 - (1) Processing
 - (2) Marketing
 - (3) Others mutually agreed upon as necessary
3. Administrative personnel
 - (1) Administrative staff
 - (2) Accountant
 - (3) Interpreter
 - (4) Other necessary supporting staff

VI. LIST OF LAND, BUILDING AND FACILITIES

1. Land, Building and facilities of the Meat Food Research Center of China.
2. Room and space necessary for the installation and storage of machinery, equipment and materials provided by the Japanese Government.
3. Office space and necessary facilities for the Japanese Team leader and the other experts.
4. Other facilities mutually agreed upon as necessary.

VII. 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) Chinese Side:

a) Chairman:

The Deputy Director-General of the Foreign Affairs Bureau of the Ministry of Commerce.

b) Members

- (i) Representative of State Scientific and Technological Commission
- (ii) Representative of Ministry of Commerce
- (iii) Representative of Beijing Second Bureau of Commerce
- (iv) Director of the Meat Food Research Center of China
- (v) Other personnel concerned with the Project

(2) Japanese Side:

a) Team Leader

Other experts and personnel concerned to be dispatched for the Project, if necessary, by JICA.

Resident Representative of Beijing Office, JICA

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

中国肉類食品総合研究センタープロジェクトに対する
日本側実施協議チームと中華人民共和国商業部代表団
との討議議事録

国際協力事業団(以下「JICA」という。)が組織し、菊池雅夫を団長とする日本側実施協議チーム(以下「チーム」という。)は、中国肉類食品総合研究センタープロジェクトについての技術協力計画の詳細を策定するため、1985年4月4日より11日までの日程をもって、中華人民共和国を訪問した。

中華人民共和国滞在中、チームは上記プロジェクトの有効な実施のため両国政府がとるべき必要な措置に関して、中華人民共和国商業部代表団と意見を交換し一連の討議を行った。

討議の結果、双方はそれぞれの政府に対し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。

1985年4月10日に北京でひとしく正文である日本語、中国語及び英語による本書2通を作成した。

解釈に相違がある場合には、英語の本文による。

菊池雅夫

菊池雅夫

実施協議チーム団長

日本国国際協力事業団

鄭有茂

鄭有茂

商業部代表団団長

中華人民共和国

附 属 文 書

I 両国政府の協力

1. 日本国政府と中華人民共和国政府は、中華人民共和国において肉類食品流通加工の研究・開発及び技術水準の向上を図るため、中国肉類食品総合研究センタープロジェクト(以下「当該プロジェクト」という。)の実施につき相互に協力を行う。
2. 当該プロジェクトは、1984年9月27日両国間で署名された交換公文により合意された日本政府の無償資金協力に基づき設立される「中国肉類食品総合研究センター」において実施される。
3. 「当該プロジェクト」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. 日本国政府は、日本国において施行されている法律及び規則に従い、日本国政府の技術協力計画の通常の手続きにより、附表Ⅱに掲げる日本人専門家の役務を日本側の自己の負担において提供するため、JICAを通じて必要な措置をとる。
2. 上記1項にいう日本人専門家及びその家族は、中華人民共和国において附表Ⅲに掲げる特権、免除及び便宜を与えられるものとする。日本人専門家は、中華人民共和国において任務を遂行中、中華人民共和国において同様の任務を遂行する第三国の専門家または国際機関の専門家に劣らない特権・免除及び便宜を享受する。

III 機材供与

1. 日本国政府は、日本国において施行されている法律及び規則に従い、日本国政府の技術協力計画の通常の手続きにより附表Ⅳに掲げる当該プロジェクト実施に必要な資機材(以下「機材」という。)を日本側の負担において供与するため、JICAを通じて必要な措置をとる。
2. 機材は、陸揚の港あるいは空港にて中国側関係当局へCIF建てにて引渡される時、中華人民共和国政府の財産となり、また、それらの機材は、附表Ⅱに掲

げる日本人専門家との協議の下に当該プロジェクトの実施のためのみに使用される。

IV 研修員受入れ

1. 日本国政府は、日本国において施行されている法律及び規則に従い、日本国の技術協力計画の通常の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中国人を日本側の負担において受入れるため、JICAを通じて必要な措置をとる。

2. 中華人民共和国政府は、中国人が日本における技術研修から得た知識及び経験が当該プロジェクト実施のため有効に用いられることを保証するため、関係当局を通じて必要な措置をとる。

V 中国人カウンターパート及び事務職員の役務

1. 中華人民共和国政府は、中華人民共和国において施行されている法律及び規則に従い、附表Vに掲げる中国人カウンターパート及び事務職員の役務を中国側の負担において保証するため、関係当局を通じて必要な措置をとる。

2. 中華人民共和国政府は、当該プロジェクトのもとで技術の移転を効果的かつ成功裡に行うため附表IIに定めた日本国政府により派遣される個々の日本人専門家に対応する適切な資質の人員を必要数配置する。

VI 中華人民共和国政府が関係当局を通じてとるべき措置

1. 中華人民共和国政府は、中華人民共和国において施行されている法律及び規則に従い、中国側の負担において下記を提供するために、関係当局を通じて必要な措置をとる。

(1) 附表VIに掲げる土地、建物及び付帯施設

(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機材、器具、車両、工具、予備部品及びその他の物品の調達もしくは取替

(3) 中華人民共和国における公務出張にかかわる日本人専門家に対する交通の便宜及び市内交通費

(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. 中華人民共和国政府は、中華人民共和国において施行されている法律及び規則に従い、次の経費を負担するため、関係当局を通じて必要な措置をとる。

(1) 機材の中華人民共和国内における輸送、据付、操作及び維持に必要な経費

(2) 当該プロジェクトの実施に必要な全ての運営費

3. 中華人民共和国政府関係当局は、上記Ⅲに掲げる機材に対し、中華人民共和国において課せられる関税、国内税及びその他の財政課徴金を負担する。

Ⅶ プロジェクトの管理

1. 商業部外事局副局長は、当該プロジェクトの実施について全責任を負う。

2. 当該プロジェクトの長である中国肉類食品総合研究センター所長は、当該プロジェクトの管理及び運営について責任を負う。

3. 日本人チームリーダーは、当該プロジェクトの長に対して当該プロジェクトの実施に関する技術面及び管理面の事項について、指導及び助言を与える。

4. 日本人専門家は、中国人カウンターパートに対して当該プロジェクトの実施に関して必要な技術的事項について技術指導及び助言を与える。

5. 当該プロジェクトを効果的かつ成功裡に実施するため、附表Ⅶに掲げる機能及び構成による合同委員会が設置される。

Ⅷ 日本人専門家に対する請求

中華人民共和国政府は、日本人専門家の中華人民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、もしくはその遂行に関連して日本人専門家に対する請求事由が発生した場合には、日本人専門家の故意または重大な過失による場合を除きその請求に関する全責任を負う。

Ⅸ 相互協議

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に協議を行う。

X 協力期間

当該プロジェクトの協力期間は、討議議事録(R/D)を締結した日から5年とする。

附 表

I 基本計画

1. 当該プロジェクトの目的

当該プロジェクトは、肉類食品の流通、加工技術の研究・開発、研究成果の普及、肉類食品分野の人的資源の開発を行ない、中国における肉類食品加工の技術水準の近代化を図ることを目的とする。

2. 日本側の技術協力の目的

日本側の技術協力は、中国肉類食品総合研究センターにおける肉類食品の流通、加工技術の研究・開発等に協力することを目的とする。

3. 事業内容

当該プロジェクトに係る事業内容は次のとおりとする。

事業内容

1. 技術協力研究開発課題

協力分野	項目	内容
1 肉類食品の品質性状の解明に関する研究	1) 肉及び肉製品の微細構造に関する研究	屠殺後の筋肉組織の生化学的変化、その微細構造等を研究する。
	2) 肉及び肉製品の微生物に関する研究	肉及び肉製品の腐敗過程における微生物を調査し、と生防腐措置を研究する。衛生基準の策定に資する。
	3) 肉製品の乳化技術に関する研究	大豆蛋白、血液蛋白、乳蛋白等の乳化性を検討し、新しい乳化技術を研究する。
2 肉類食品の流通システムの改善・開発に関する研究	1) 技肉・部分肉の規格基準に関する研究	分割方法及び整形方法を研究し、技肉・部分肉の規格基準の策定に資する。
	2) 包装方法に関する研究	各種の包装方法(窒素充填包装、真空包装及び無菌包装等)と肉質との関係进行研究し、包装技術の改良に資する。
3 肉類食品の加工技術の開発改良に関する研究	ハム及びソーセージ製品等肉類食品の加工技術に関する研究	加熱と非加熱のハム及びソーセージ製品等肉類食品の加工技術を研究する。

2. 訓練事業

協力分野	項目	内容
訓練事業に関する指導・助言	技術者、管理者等の研修に、関係する計画及び実施に関する指導、助言	肉類食品の流通システム及び加工技術等に関する企画立案及び実施の指導、助言を行なう。

II 日本人専門家

1. 長期専門家

- (1) チームリーダー 註
- (2) 加工
- (3) 流通
- (4) 業務調整

2. 短期専門家

- (1) 加工
- (2) 流通
- (3) その他当該プロジェクトを円滑に実施するために必要な専門家

註 チームリーダーが加工又は流通の専門家を兼ねることもある。

III 特権・免除及び便宜

1. 中華人民共和国政府は、海外から送金される報酬に対して、又はそれに関連して課せられる所得税及びその他の課徴金を免除する。
2. 中華人民共和国政府は、日本人専門家及びその家族の持ち込む個人的使用品及び業務に関連する機材に対して関税を免除する。
3. 中華人民共和国政府は、医療の便宜を提供する。

IV 当該プロジェクトの実施に必要な機材

1. 附表1-2の技術協力分野に必要な機材・部品
2. 車輛、部品
3. 当該プロジェクトに必要なその他の機材

V カウンターパート及び事務職員のリスト

1. 当該プロジェクトの長
2. 下記分野のカウンターパート
 - (1) 加工
 - (2) 流通
 - (3) その他双方が必要と認める分野

3. 事務職員

- (1) 管理
- (2) 経理
- (3) 通訳
- (4) その他

VI 土地・建物及び付帯施設のリスト

1. 「中国肉類食品総合研究センター」の用地、建物及び施設
2. 日本政府から供与される機材の据付け及び保管に必要な部屋及びスペース
3. チームリーダー及びその他日本人専門家のための事務室及び必要な施設
4. その他、双方が必要と認める施設

VII 合同委員会

1. 機能

合同委員会は、少なくとも年一回及び必要が生じた時に開催し、次の機能をもつものとする。

- (1) 本討議議事録の枠内で策定された暫定実施計画に沿って当該プロジェクトの年次計画を策定する。
- (2) 技術協力計画全体の進捗及び上記の年次計画の達成に関する検討を行う。
- (3) 技術協力計画から生ずる、あるいは技術協力計画に関連する主要事項につき、検討し意見交換を行う。

2. 構成

(1) 中国側

(a) 委員長

商業部外事局 副局長

(b) 委員

- (i) 国家科学技術委員会の代表
- (ii) 商業部の代表
- (iii) 北京市第二商業局の代表

(iv) 中国肉類食品総合研究所所長

(v) その他当該プロジェクトの関係者

② 日本側

(a) チームリーダー

(b) その他専門家及び必要に応じてJICAより当該プロジェクトのために派遣される関係者

(c) 在北京JICA事務所所長

(注) 在北京日本大使館員は、合同委員会にオブザーバーとして出席できる。

中华人民共和国商业部代表团和日本国方面实施协议团
关于中国肉类食品综合研究中心项目的会谈纪要

为制订中国肉类食品综合研究中心项目的技术合作详细计划，由日本国际协力事业团（以下称“JICA”）组成了以菊池雅夫为团长的日本国方面实施协议团，自1985年4月4日至11日访问了中华人民共和国。

在中华人民共和国逗留期间，中华人民共和国商业部代表团与该团就两国政府为有效地实施上述项目所应采取的措施问题，交换了意见并进行了一系列的讨论。

讨论的结果，双方同意就附件所列的各项向各自政府提出建议。

本纪要于1985年4月10日在北京签字，共2份。每份都用日文、中文和英文写成。如在解释上出现分歧，以英文本为准。

郑有茂

中华人民共和国
商业部代表团团长

郑有茂

菊池雅夫

日本国国际协力事业团
实施协议团团长

菊池雅夫

附 件

一、两国政府的合作

(一) 中华人民共和国政府和日本国政府, 为谋求中华人民共和国在肉类食品流通加工的研究、开发以及技术水平的提高, 对实施中国肉类食品综合研究中心项目(以下称“该项目”)进行相互合作。

(二) ‘本计划’根据1984年9月27日两国之间签署的‘换文’所达成的协议, 由日本政府提供无偿资金合作设立的‘中国肉类食品综合研究中心’执行。

(三) 该项目根据附表一的基本计划而实施。

二、派遣日本专家

(一) 日本政府遵照日本国现行的法律和规章, 将通过JICA, 采取必要措施, 根据日本国政府的技术合作计划的通常手续, 由日本方面承担费用, 提供附表二所列的日本专家的服务。

(二) 上述(一)项中所列的日本专家及其家属在华期间可准予享受附表三所列的优惠待遇、免税及方便。日本专家在华工作期间, 享有与在华执行同样任务的第三国专家或国际机构的专家同等的优惠待遇、免税及方便。

三、提供器材

(一) 日本国遵照日本国现行的法律和规章, 将通过JICA,

采取必要措施，根据日本国政府的技术合作计划的通常手续，由日方承担费用，提供附表四所列的该项目实施所需要的仪器设备和材料（以下称“器材”）。

（二）器材在卸货港口或机场以C I F（到岸价格）交付中国方面有关部门时，即属中华人民共和国政府的财产，而且这些器材只有在与附表二所列的日本专家的协商下，使用于该项目的实施。

四、接受进修人员

（一）日本国政府遵照日本国现行的法律和规章，将通过JICA，采取必要的措施，根据日本国的技术合作的通常手续，由日方承担费用，接受与该项目有关的中国人员在日本进修。

（二）中华人民共和国政府将通过有关部门采取必要的措施，以保证中方人员在日本进修过程中获得的知识和经验，有效地应用于该项目的实施。

五、中国对等人员及工作人员的服务

（一）中华人民共和国政府，遵照中华人民共和国的现行法律和规章，将通过有关部门采取必要的措施，由中国方面承担费用，以保证附表五所列举的中国对等人员及工作人员的服务。

（二）中华人民共和国政府为保证有效并成功地进行该项目中规定的技术转让，应配备必要数量的，与附表二规定的日本国政府派遣的每个日本专家相适应的人员。

六、中华人民共和国通过有关部门应采取的措施

(一) 中华人民共和国政府，遵照中华人民共和国现行的法律和规章，将通过有关部门采取必要的措施，由中国方面承担费用，提供如下条件：

1、附表六中所列的土地、建筑物以及附属设施。

2、除上述第三条中通过 J I C A 所提供的器材之外，为实施该项目所需的仪器、设备、车辆、工具、配件以及其它物品的供应或更换。

3、为日本专家在华期间因公出差提供交通方便以及市内交通费。

4、为日本专家及其家属提供有适当家具的居住设施。

(二) 中华人民共和国政府，遵照中华人民共和国政府现行的法律和规章，将通过有关部门，采取必要的措施，承担下列经费：

1、器材在中华人民共和国国内的运输、安装、操作以及维修等所需经费。

2、实施本项目所需的全部经营费用。

3、中华人民共和国政府有关部门将承担上述第三项中所列器材在国内征收的关税、国内税及其它财政税。

七、项目的管理

(一) 商业部外事局副局长对该项目的实施负有全部责任。

(二) 该项目的实施负责人——中国肉类食品综合研究中心所

长对该项目的管理和经营负责。

(三) 日本专家组就与该项目实施有关的技术和工程方面的事项向项目负责人提出建议和给予指导。

(四) 日本专家就该项目实施方面有关的技术事项向中方对等人员给予技术指导和建议。

(五) 为了有效并成功地实施该项目，应根据附表七甲所列的职能和人员构成成立联合委员会。

八、对日本专家的索赔要求

日本专家在中华人民共和国内由于执行任务或在执行任务中或与执行任务有关而发生对其提出索赔要求时，中华人民共和国政府对该项索赔要求负责。

但由于日本专家故意行为或由于重大过失而引起的追求责任，则不在此限。

九、相互协商

两国政府对本附件中包括的或与本附件有关的主要事项进行相互协商。

十、合作期限

本项目的合作期限自签订会谈纪要(R/D)之日起为期五年。

附 表

一、基本计划

(一) 该项目的目的

该项目将进行肉类食品的流通与加工技术的研究、开发、研究成果的普及，以及肉类食品领域的人才培养，以达到使中国的肉类食品加工技术水平现代化的目的。

(二) 日本方面技术合作的目的

日本方面的技术合作是以在中国肉类食品综合研究中心对肉类食品的流通、加工技术的研究、开发等方面给予协助为目的的。

(三) 技术合作内容

该项目的技术合作内容如下：

技 术 合 作 内 容

1、技术合作研究开发的课题

合 作 范 围	项 目	内 容
1、关于阐明肉类食品的质量和性状的研究	(1)关于肉和肉制品的微细结构的研究	研究屠宰后的肌肉组织的生物化学变化、肉制品的微细结构以及其它组织器官的微细结构
	(2)关于肉和肉制品的微生物的研究	调查在肉和肉制品的腐败过程中微生物的情况。在研究防腐措施的同时协助制定肉和肉制品的卫生标准
	(3)关于肉制品的乳化技术的研究	研究大豆蛋白质、血液蛋白质、乳蛋白质等的乳化性、新的乳化技术
2、关于改善、开发肉类食品的流通系统的研究	(1)关于胴体肉、分割肉的规格标准的研究	研究分割方法和整形方法、协助制定胴体肉、分割肉的规格标准
	(2)关于包装方法的研究	研究各种包装方法(充氮气包装、真空包装和无菌包装等)和肉质量的关系、协助改良包装技术
3、关于肉类食品的加工技术的开发研究	关于火腿和香肠制品等肉类食品的加工技术的研究	研究加热和非加热的火腿和香肠制品等肉类食品的加工技术

2、培训业务

合作范围	项 目	内 容
关于培训业务的指导建议	关于技术人员、管理干部进修的计划和实行方面的指导建议	对有关肉类食品的流通系统和加工技术等进修计划的具体实行方案和实施进行指导建议

二、日本专家

(一) 长期专家

1、专家组长(注)

2、加 工

3、流 通

4、业务协调

(二) 短期专家

1、加 工

2、流 通

3、为了圆满地实施该项目所需要的其它的专家

注：专家组长有时也许兼任加工或流通的专家。

三、优惠待遇、免税和方便

(一) 中华人民共和国政府对国外汇来的薪金，以及与其有关的所得税和其它所需征收的税金予以免税。

(二) 中华人民共和国政府对日本专家及其家属所带进的自用物品以及与业务有关的器材予以免征海关税。

(三) 中华人民共和国政府给予提供医疗方面的方便。

四、该项目的实施所需要的器材

(一) 附表1—2的技术合作范围内所需要的器材、零件。

(二) 车辆、零配件。

(三) 该项目所必需的其他器材。

五、中国对等人员及工作人员

(一) 该项目的负责人

(二) 下列范围的对等人员

1、加工

2、流通

3、其它双方认为必要的范围

(三) 工作人员

1、管 理

2、财 会

3、翻 译

4、其 它

六、土地、建筑物以及附属设施的一览表

(一) “中国肉类食品综合研究中心”的用地、建筑物和设施。

(二) 为日本政府所提供的器材的安装与贮存所用的房屋和物地。

(三) 为专家组和其它日本专家提供办公室和必要的设施。

(四) 双方认为必要的其他设施。

七、联合委员会

(一) 职 能

联合委员会每年至少召开一次或必要时召开，其职能如下：

1、遵照会谈纪要中暂定实施计划制定该项目的年度计划。

2、对技术合作计划的总体进度和年度计划完成情况进行研究。

3、对技术合作计划所产生的、或者与技术协作计划有关的主要问题，进行研究并交换意见。

(二) 组 成

1、中国方面

甲、主 任

商业部外事局副局长

乙、委员

- (1) 国家科学技术委员会的代表
- (2) 商业部的代表
- (3) 北京市第二商业局代表
- (4) 中国肉类食品综合研究中心所长
- (5) 其它该项目的有关人员

2、日本方面

甲、专家组

乙、其它专家以及根据需要由JICA派遣的与该项目有关的人员

丙、JICA驻北京的事务所所长

注：驻北京的日本大使馆官员，可作为该联合委员会的观察员出席。

TENTATIVE SCHEDULE OF IMPLEMENTATION
ON THE TECHNICAL COOPERATION
FOR THE MEAT FOOD RESEARCH CENTER PROJECT

The Japanese Implementation Survey Team and the Representative Team, Ministry of Commerce of the People's Republic of China, have jointly formulated the Tentative Schedule of Implementation of the Project as attached hereto.

These have been formulated in connection with 1-3 of the Attached Document of the Record of Discussions signed between the Japanese Implementation Survey Team and the Representative Team, Ministry of Commerce of the People's Republic of China for the Project, on the condition that necessary budget will be allocated for the implementation of the Project, and are subject to change within the framework of the Record of Discussions when necessity arises in the course of the implementation of the Project.

Done in duplicate in Beijing in the Japanese, Chinese and English languages, each text being equally authentic. In case of any divergence of interpretation, the English text shall prevail.

April 10, 1985

菊池 雅夫

Masao Kikuchi
Leader,
Japanese Implementation
Survey Team
Japan International Cooperation
Agency, Japan

郑有茂

Zheng Youmao
Leader,
Representative Team
Ministry of Commerce
People's Republic of China

TENTATIVE SCHEDULE OF IMPLEMENTATION

1. Annual Program

Year Item	1st	2nd	3rd	4th	5th
	Apr. 1985	1986	1987	1988	1989
1. Research on the quality and the properties of meat and meat products.					
1) Research on the microstructure of meat and meat products.					
2) Research on microorganisms of meat and meat products.					
3) Research on the emulsification techniques of meat products.					
2. Research on improving and developing marketing system of meat and meat products.					
1) Research on the standardization of carcass and cut meat.					
2) Research on the packing methods.					
3. Research on developing and improving the processing techniques of meat products.					
Research on the processing techniques of meat products such as ham and sausage.					
4. Advice and guidance on the training program.					
Advice and guidance for the planning and implementation of the training of technicians and administrators.					

2. Technical Cooperation Program

Item \ Year	1st	2nd	3rd	4th	5th
	Apr. 1985	1986	1987	1988	1989
I. Japanese side					
1. Long-term Experts					
1) Team Leader					
2) Processing					
3) Marketing					
4) Coordinator					
2. Short-term Experts	(Short-term Experts may be dispatched when necessity arises.)				
3. Machinery and equipment required for the implementation of the project.					
4. Counterpart training in Japan.	(Four or five persons every year)				
5. Dispatch of Missions.	(Missions may be dispatched when necessity arises.)				
II. Chinese side					
1. Chinese counterparts					
1) Head of the Project					
2) Counterpart experts	(The Chinese side will assign necessary number of suitably qualified counterparts corresponding to each long/short term Japanese experts)				
3) Administrative personnel					
2. Local cost					
3. Land, Building and Facilities					

THE MINUTES OF MEETING ON THE RECORD OF DISCUSSIONS
ON THE JAPANESE TECHNICAL COOPERATION
FOR THE MEAT FOOD RESEARCH CENTER PROJECT

The Japanese Implementation Survey Team and the Representative Team, Ministry of Commerce of the People's Republic of China signed the Record of Discussions (hereinafter referred to as "the R/D") on the Japanese technical cooperation for the Meat Food Research Center Project.

Understandings reached between both sides are recorded in the following in order to clarify some specific matters concerning the provisions in the R/D.

1. Both sides agreed that the term "Personal effects" as referred to in the Annex III. 2. of the R/D includes household effects which may be brought from abroad for personal use by the Japanese experts (hereinafter referred to as "the Experts") and their families.
2. Both sides agreed that the term "the machinery and equipment related to their activities" as referred to in Annex III. 2. of the R/D includes one motor vehicle per each family which would be used by the Experts and their families.
3. As for the transportation fares as referred to in VI. 1. (3) of the R/D, the Japanese side expressed that travelling expenses between cities would be borne by the Japanese side.
4. As for the housing accommodations referred to in VI. 1. (4) of the R/D, the Chinese side expressed that it would provide suitable residence for the Experts in accordance with the conditions of the existing agreement between the two Governments. Both sides expressed that in case there would be a new agreement between the two Governments concerning housing accommodations and residence charge of Japanese experts in the People's Republic of China, the new agreement will be in force.
5. Both sides agreed that the Japanese long-term experts would be dispatched after the Chinese side prepared the housing in consistence with the terms of 4. above and the Japanese side could select appropriate Experts.

Done in duplicate in Beijing in the Japanese, Chinese and English languages, each text being equally authentic. In case of any divergence of interpretation the English text shall prevail.

April 10, 1985

菊池雅夫

Masao Kikuchi
Leader,
Japanese Implementation
Survey Team
Japan International
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Ministry of Commerce
People's Republic of China

中国肉類食品総合研究センタープロジェクト
のための技術協力に関する暫定実施計画

日本側実施協議チームと中華人民共和国商業部代表団は、当該プロジェクトの暫定実施計画を共同で作成した。

この暫定計画は、日本側実施協議チームと中華人民共和国商業部代表団との間で、当該プロジェクトに必要な予算が確保されることを前提として合意した討議議事録の付属文書中の1-3に基づき策定された。本計画は、当該プロジェクトの実施段階に於て必要が生じた場合、討議議事録の枠内で変更されるものとする。

北京で、ひとしく正文である日本語、中国語及び英語による本書2通を作成した。解釈に相違がある場合には、英語の本文によるものとする。

4月10日、1985年

菊池雅夫

菊池雅夫
実施協議チーム団長
日本国国際協力事業団

鄭有茂

鄭有茂
商業部代表団団長
中華人民共和国

暫定実施計画

1 年次計画

項 目	年 次				
	1 年次 1985年4月	2 年次 1986年	3 年次 1987年	4 年次 1988年	5 年次 1989年
1 肉類食品の品質性状の解明に関する研究					
1) 肉及び肉製品の微細構造に関する研究					
2) 肉及び肉製品の微生物に関する研究					
3) 肉製品の乳化技術に関する研究					
2 肉類食品の流通システムの改善・開発に関する研究					
1) 技術肉・部分肉の規格基準に関する研究					
2) 包装方法に関する研究					
3 肉類食品の加工技術の開発改良に関する研究					
ハム及びソーセージ製品等肉類食品の加工技術に関する研究					
4 訓練事業に関する指導、助言					
技術研修に係る計画及び実施に関する指導、助言					

2 技術協力計画

年次	1年次	2年次	3年次	4年次	5年次
	1985年4月	1986年	1987年	1988年	1989年
I 日本側					
1 長期専門家					
1) チームリーダー(兼)					
2) 加工					
3) 流通					
4) 業務調整					
2 短期専門家		(必要に応じて派遣)			
3 プロジェクトに必要な資機材の供与					
4 カウンターパートの受入れ		(年間4～5名受入れ)			
5 調査団の派遣		(必要に応じて派遣)			
II 中国側					
1 中国人カウンターパート					
1) プロジェクトの長					
2) 専門家のカウンターパート	(中国側は、日本人の長・短専門家に応じ必要なカウンターパートを配置する。)				
3) 事務職員					
2 ローカルコスト					
3 土地、建物及び付帯施設					

中国肉類食品総合研究センタープロジェクト
のための技術協力に関する討議議事録覚書

日本側実施協議チームと中華人民共和国商業部代表団は、相互に合意し、中国肉類食品総合研究センタープロジェクトのための技術協力に関する討議議事録(以下「R/D」という。)に署名した。

以下には、R/D に規定されたいくつかの特定の事項を明確化するために双方により了解された内容を記録することとする。

1. 双方は、R/D 附表Ⅲの2に記載されている「個人的使用品」には日本人専門家及びその家族が個人的に使用するため海外より持ち込むことのある家財道具が含まれることに同意した。
2. 双方は、R/D 附表Ⅲの2に記載されている「業務に関連する機材」には、日本人専門家及びその家族により使用される1家族当たり1台の自動車が含まれることに合意した。
3. R/DのVI条1(3)に述べられている交通費については、日本側は都市間の交通費を日本側にて負担する旨表明した。
4. R/DのVI条1(4)に述べられている住居施設については、中国側は、現在両国政府間で合意している条件に従って、日本人専門家に対し、適切な宿舎を提供する用意がある旨表明した。

なお、双方は日本人専門家の住居施設及び住居費について、後日、両国政府間で新しい合意ができた場合、これに従う旨表明した。

5. 双方は、日本人長期専門家の派遣は、中国側で上記4の要求を満たす住居を提供でき、かつ、日本側で適当な専門家の人選ができた後で行う旨合意した。

北京で、ひとしく正文である日本語、中国語及び英語による本書2通を作成した。解釈に相違がある場合には、英語の本文によるものとする。

4月10日、1985年

菊池雅夫

菊池雅夫
実施協議チーム団長
日本国国際協力事業団

鄭有茂

鄭有茂
商業部代表団団長
中華人民共和国

关于为中国肉类食品综合研究中心
项目提供技术合作的暂定实施计划

中华人民共和国商业部代表团和日本方面实施协议团，共同制订了该项目的暂定实施计划。

此暂定计划是由中华人民共和国商业部代表团和日本方面实施协议团，在确保该项目必需预算前提下，根据双方达成协议的会谈纪要附件一中（三）而制订的。本计划在项目的执行过程中，如有必要可在会谈纪要的范围之内变更。

本暂定实施计划在北京签订，文本分别用中文、日文和英文写成，一式二份，三种文本具有同等效力，在解释上如有分歧，以英文文本为准。

郑有茂

中华人民共和国
商业部代表团团长

郑有茂

菊池雅夫

日本国国际协力事业团
实施协议团团长

菊池雅夫

一九八五年四月十日

暂 定 实 施 计 划

1. 研究项目年度计划

项 目	第一年度	第二年度	第三年度	第四年度	第五年度
	1985年 4月	1986年	1987年	1988年	1989年
1. 关于阐明肉类食品品质性状的研究					
(1)关于肉和肉制品微细结构的研究					
(2)关于肉和肉制品的微生物的研究					
(3)关于肉制品乳化技术的研究					
2. 关于肉类食品的流通系统的改善、开发的研究					
(1)关于胴体肉、分割肉的规格标准的研究					
(2)关于包装方法的研究					
3. 关于肉类食品的加工技术的开发改良的研究					
关于火腿和香肠制品等肉类食品的加工技术的研究					
4. 关于培训专业的指导、建议					
与技术进修有关的计划和关于实施的指导、建议					

2. 技术合作计划

项 目 \ 年 度	第一年度	第二年度	第三年度	第四年度	第五年度
	1985年 4月	1986年	1987年	1988年	1989年
I. 日本方面					
1. 长期专家					
(1) 专家组长 (崇)					
(2) 加 工					
(3) 流 通					
(4) 业务协调					
2. 短期专家		(根据需要派遣)			
3. 供给项目所需要的器材					
4. 接受对等人员		(每年四—五名)			
5. 派遣调查团		(根据需要派遣)			
II. 中国方面					
1. 甲方对等人员					
(1) 项目负责人					
(2) 专家的对等人员		(中国方面为日本的长、短期专家配备必要的对等人员)			
(3) 事务职员					
2. 地方经费					
3. 土地、建筑物及其附属设施					

关于为中国肉类食品综合研究中心项目

提供技术合作的会谈纪要备忘录

中华人民共和国商业部代表团和日本方面实施协议团，一致同意签署了为中国肉类食品综合研究中心项目提供技术合作的会谈纪要（以下简称“R/D”）。

为明确R/D所规定的若干特定事项，现将双方同意的内容记录如下：

一、双方同意R/D附表三的（二）甲所述有关“自用物品”包括日本专家及其家属个人使用从国外带进的家具什物。

二、双方同意R/D附表三的（二）甲所述有关“与业务有关的器材”包括日本专家及其家属所使用的每家一辆汽车。

三、关于R/D附件的六条（一）3甲所述交通费，日本方面表示：城市间交通费由日本方面负担。

四、关于R/D附件的六条（一）4甲所述有关居住设施问题，中国方面表示按照目前两国政府之间同意的条件为日本专家提供适当的宿舍。双方还表示，关于日本专家的宿舍设施和住宿费用问题，如中日两国政府今后另有新的协议时，将遵照新的协议执行。

五、双方同意关于长期专家派遣，在中国方面已可提供能满足第四项要求的住房而在日本方面选好适当专家后方可进行。

本备忘录在北京签订，文本分别用中文、日文和英文写成，一式二份，三种文本具有同等效力，在解释上如有分歧，以英文本为准。

郑有茂

中华人民共和国
商业部代表团团长

郑有茂

菊池雅夫

日本国国际协力事业团
买施协议团团长

菊池雅夫

一九八五年四月十日

27. フィジー稲作研究開発計画・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
FIJI
ON THE JAPANESE TECHNICAL COOPERATION FOR
THE IMPROVEMENT OF RICE CULTIVATION TECHNOLOGY PROJECT IN FIJI

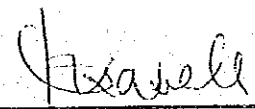
The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Takashi Tauchi visited Fiji from April 9 to April 20, 1985 for the purpose of working out the details of the technical cooperation programme concerning the Improvement of Rice Cultivation Technology Project in Fiji (hereinafter referred to as "the Project").

During its stay in Fiji, the Team exchanged views and had a series of discussions with the Fiji 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, both parties agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Suva, April 18, 1985


Mr. Takashi Tauchi
Leader,
Implementation Survey Team,
Japan International Cooperation
Agency, JAPAN


Mr. James Makasiale
Permanent Secretary,
Ministry of Primary Industries,
FIJI

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of Fiji will cooperate with each other in implementing the Improvement of Rice Cultivation Technology Project for the purpose of development of suitable rice cultivation technology with strengthening of research and extension activities in rice cultivation, and thus contributing to the increase of rice production in Fiji.

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

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 the 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 Fiji the privileges, exemptions and benefits no less favourable than those accorded to experts of third countries working in Fiji 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 III of the Annex through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

2. The Equipment will become the property of the Government of Fiji upon being delivered c.i.f. to the Fiji 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 the Annex.

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

V. SERVICES OF FIJI COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. In accordance with the laws and regulations in force in Fiji, the Government of Fiji will take necessary measures to secure at its own expense the necessary services of Fiji counterpart and administrative personnel as listed in IV of the Annex.

2. The Government of Fiji 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 the Annex for the effective and successful transfer of technology under the Project.

VI. MEASURES TO BE TAKEN BY THE GOVERNMENT OF FIJI

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

- (1) Land, buildings and facilities as listed in V of the Annex;
- (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 through JICA under III above;
- (3) Transportation facilities and travel allowance for the official travel of Japanese experts within Fiji; and,
- (4) Suitably furnished accommodation for the Japanese experts and their families.

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

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

VII. ADMINISTRATION OF THE PROJECT

1. The Permanent Secretary of the Ministry of Primary Industries will bear overall responsibility for the implementation of the Project.
2. The Director of the Department of Agriculture, Ministry of Primary Industries, 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.
4. The Japanese experts will give necessary technical guidance and advice to the Fiji 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 the Annex.

VIII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of Fiji 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 Fiji 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.

A N N E X

I. MASTER PLAN

1. Objectives of the Project

The Project will be carried out for the purpose of improvement of rice cultivation technology with strengthening applied research and extension activities, thus contributing to the increase of rice production in Fiji.

2. Activities of Japanese Technical Cooperation

The activities of the Japanese Technical Cooperation are as follows.

- (1) To give technical guidance and advice for applied researches to further develop and improve the system of on-farm level rice cultivation technology including machinery utilization at Koronivia Research Station,
- (2) To give technical guidance and advice for trials and demonstrations based on the above-mentioned system of technology in the main rice cultivation areas,
- (3) To give technical guidance and advice for extension activities in the main rice cultivation areas, and;
- (4) To give technical guidance and advice for the implementation of training for extension personnel at Fiji College of Agriculture and Koronivia Research Station.

II. JAPANESE EXPERTS

<u>Category</u>	<u>Subject Matter</u>
(1) Expert	Agronomy Soil and Fertilizers Agricultural Extension and Training
(2) Coordinator	

- Note:
- (1) One of the experts will be nominated as a Team Leader.
 - (2) 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, materials and their spare parts
2. Books and teaching materials including audio-visual aids
3. Fertilizers, agricultural chemicals, and other materials
4. Vehicles
5. Office equipment
6. Other necessary machinery and equipment to be mutually agreed upon

IV. LIST OF FIJI COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. Head of the Project
2. Counterpart personnel in the fields of:
 - (1) Agronomy
 - (2) Soil and Fertilizers
 - (3) Agricultural Extension
 - (4) Training
3. Administrative personnel
 - (1) Administration
 - (2) Accounting
4. Other necessary supporting staff

V. LIST OF LAND, BUILDING AND FACILITIES

1. Land

- (1) Land for experimental fields at Koronivia Research Station
- (2) Several trial fields and demonstration plots in the main rice cultivation areas
- (3) Land for training fields at Koronivia Research Station

Note: The number and location of trial fields and demonstration plots will be decided by the Joint Committee.

2. Building and facilities

- (1) Koronivia Research Station
 - a. Office
 - b. Laboratory
 - c. Shed for agricultural machinery
 - d. Storehouse for farming materials
 - e. Workshop
 - f. Garage
- (2) Rooms for training at Fiji College of Agriculture
- (3) Accommodation for trainees
- (4) Other necessary buildings and facilities to be mutually agreed upon

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 programme 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 programme.

2. Composition

- (1) Chairman:
Permanent Secretary, M.P.I.
- (2) Co-chairman:
Director, D.A., M.P.I. (Head of the Project)
- (3) Fiji Side:
 - (a) Assistant Director, Research Division, D.A., M.P.I.
 - (b) Assistant Director, Drainage and Irrigation Division, D.A., M.P.I.
 - (c) Assistant Director, Extension Division, D.A., M.P.I.
 - (d) Principal, Fiji College of Agriculture, D.A., M.P.I.
 - (e) Principal Agricultural Officer, Training and Communication, D.A., M.P.I.
 - (f) Principal Research Officer (Agronomy), D.A., M.P.I.
- (4) Japanese Side:
 - (a) Team Leader
 - (b) Coordinator
 - (c) Other experts and personnel concerned to be dispatched by JICA, if necessary
 - (d) Resident Representative of Suva Office, JICA

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

Abbreviations: M.P.I. - Ministry of Primary Industries
D.A. - Department of Agriculture

TENTATIVE SCHEDULE OF IMPLEMENTATION
FOR
THE IMPROVEMENT OF RICE CULTIVATION TECHNOLOGY PROJECT IN FIJI

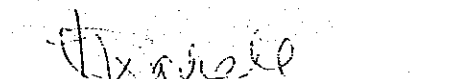
The Japanese Implementation Survey Team and the Fiji Authorities concerned have jointly formulated the Tentative Schedule of Implementation for the Improvement of Rice Cultivation Technology Project in Fiji (hereinafter referred to as "the Project") as annexed hereto.

This has been formulated on the basis of the Record of Discussions on the Japanese Technical Cooperation for the Project signed between the Japanese Implementation Survey Team and the Authorities concerned of the Ministry of Primary Industries of Fiji and on the conditions that necessary budget will be allocated for the implementation of the Project by both sides, and that the above-mentioned Schedule is subject to change within the framework of the Record of Discussions when necessity arises in the course of implementation of the Project.

Suva, April 18, 1985



Mr. Takashi Tauchi
Leader,
Implementation Survey Team,
Japan International Cooperation
Agency, JAPAN



Mr. James Makasiale
Permanent Secretary,
Ministry of Primary Industries,
FIJI

ANNEX 1. ACTIVITIES OF THE PROJECT

Item	Calendar Year	1985	1986	1987	1988	1989	1990
I. Research Activities							
1. Agronomy							
(1)	Planning of research and experiment activities	←→					
(2)	Selection of suitable varieties	←→					
(3)	Improvement of cultivation methods	←→					
2. Soil and Fertilizers							
(1)	Planning of research and experiment activities	←→					
(2)	Improvement of fertilizer application methods	←→					
II. Trial and Demonstration Activities							
1.	Formulation of developed techniques			←→			
2.	Demonstration of new technology				←→		
III. Extension Activities							
1.	Field Survey	←→					
2.	Development of extension materials		←→				
3.	Improvement of extension activities		←→				
IV. Training Activities							
1.	Development of curriculum and teaching materials	←→					
2.	Implementation of short-term training course		←→	←→	←→	←→	
3.	Implementation of long-term training course		←→	←→	←→	←→	

2. FIJI SIDE

Item	Calendar Year					
	1985	1986	1987	1988	1989	1990
<p>I. Assignment of Fiji Counterpart and Other Personnel</p> <p>1. Head of the Project</p> <p>2. Counterpart Personnel</p> <p> (1) Agronomy</p> <p> (2) Soil and Fertilizers</p> <p> (3) Agricultural Extension</p> <p> (4) Training</p> <p>3. Administrative Personnel</p> <p> (1) Administration</p> <p> (2) Accounting</p> <p>4. Other Necessary Supporting Staff</p>						
<p>II. Provision of Land, Buildings, and Other Necessary Facilities</p> <p>1. Land</p> <p> (1) Land for experimental fields</p> <p> (2) Trial fields</p> <p> (3) Demonstration plots</p> <p> (4) Land for training fields</p> <p>2. Buildings</p> <p> (1) Koronivia Research Station</p> <p> a. Office</p> <p> b. Laboratory</p> <p> c. Shed for agricultural machinery</p> <p> d. Storehouse for farming materials</p> <p> e. Workshop</p> <p> f. Garage</p> <p> (2) Rooms for training at Fiji College of Agriculture</p> <p> (3) Accommodation for trainees</p> <p> (4) Other necessary buildings and facilities</p>						
<p>III. Allocation of Running Expenses</p>						

SUPPLEMENTARY NOTE ON THE RECORD OF DISCUSSIONS
ON THE TECHNICAL COOPERATION FOR THE
IMPROVEMENT OF RICE CULTIVATION TECHNOLOGY PROJECT
IN FIJI

The Japanese Detailed Design Survey Team organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Yasuto Kikuoka and the authorities concerned of the Government of Fiji exchanged views on the special measures to supplement a portion of the local cost expenditures on the Technical Cooperation for the Improvement of Rice Cultivation Technology Project (herein after referred to as "the 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, in accordance with the laws and regulations in force in Japan, the Government of 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 farm with irrigation and drainage facilities in the Project site when necessity arises.

Suva, July 31, 1985

Yasuto KIKUOKA
Mr. Yasuto Kikuoka
Leader, the Japanese Detailed
Design Survey Team,
Japan International
Cooperation Agency, Japan.

James Makasiale
Mr. James Makasiale
Permanent Secretary, Ministry
of Primary Industries,
Fiji

28. バングラデシュ農業大学院計画・討議々事録及び了解事項

附1.

THE RECORD OF DISCUSSIONS
BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM
AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF
BANGLADESH
ON THE JAPANESE TECHNICAL COOPERATION FOR
THE INSTITUTE OF POSTGRADUATE STUDIES IN AGRICULTURE PROJECT IN
BANGLADESH

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 Professor. Dr. Hiroshi Miyajima, the Dean of Faculty of Agriculture, Kyushu University, visited Bangladesh from June 25 to July 5, 1985 for the purpose of working out the details of the technical cooperation program concerning the Institute of Postgraduate Studies in Agriculture Project in Bangladesh (hereinafter referred to as "the Project").

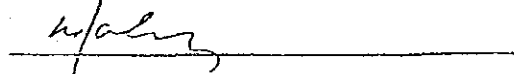
During its stay in Bangladesh, the Team exchanged views and had a series of discussions with the Bangladesh authorities concerned in respect of the desirable measures to be taken by both Governments for the successful implementation of the Project.

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

Dhaka, July 04, 1985



Professor, Dr. Hiroshi Miyajima
Leader,
Implementation Survey Team
Japan International Cooperation
Agency, JAPAN



Dr. M.M. Rahman
Director General,
Bangladesh Agricultural Research
Institute,
Ministry of Agriculture,
BANGLADESH

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of Bangladesh will cooperate with each other in implementing the Project for the purpose of strengthening postgraduate level education and research, thus contributing to the improvement of practical research system in agriculture in Bangladesh.

2. The Project will be carried out at Institute of Postgraduate Studies in Agriculture (hereinafter referred to as "IPSA") at Salna, Joydevpur, which was originally constructed as Bangladesh College of Agricultural Science by the Japanese grant aid under the Exchange of Note dated on June 22, 1981.

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

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 the Annex through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

*I.M.
JICA
Team Leader*

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

*2
1.12.1981*

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 the Annex through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

2. The Equipment will become the property of the Government of Bangladesh upon being delivered c.i.f. to the Bangladesh 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 the Annex.

IV. TRAINING OF BANGLADESH 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 Bangladesh personnel connected with the Project for technical training and/or study visit in Japan through the normal procedures under the Colombo Plan Technical Cooperation Scheme.

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

V. SPECIAL MEASURES TO BE TAKEN BY THE GOVERNMENT OF JAPAN

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 teaching/experimental farm.

H.M.
JICA
exam leader

2/20/71 BDR

VI. SERVICES OF BANGLADESH COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. In accordance with the laws and regulations in force in Bangladesh, the Government of Bangladesh will take necessary measures to secure at its own expense the necessary services of Bangladesh counterpart and administrative personnel as listed in IV of the Annex.

2. The Government of Bangladesh will allocate the necessary number of well qualified personnel corresponding to each Japanese expert to be dispatched by the Government of Japan as specified in II of the Annex for the effective and successful transfer of technology under the Project.

VII. MEASURES TO BE TAKEN BY THE GOVERNMENT OF BANGLADESH

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

- (1) Land, buildings and facilities as listed in V of the 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 Bangladesh;
- (4) Suitably furnished accommodations for the Japanese experts and their families.

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

- (1) Expenses necessary for the transportation of the Equipment within Bangladesh as well as for the installation, operation and maintenance thereof;
- (2) Customs duties, internal taxes and fees imposed

H.M.
JICA
Team Leader
D. G. 1
M. S. A. R. I.

on the Equipment which are not exempted from such payment in Bangladesh;
(3) Handling, clearing and any other charges imposed on the Equipment in Bangladesh;

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

VIII. ADMINISTRATION OF THE PROJECT

1. The Secretary of Agriculture and Forestry, the Ministry of Agriculture, will bear overall responsibility for the implementation of the Project.

2. The Director General of the Bangladesh Agricultural Research Institute, 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.

4. The Japanese experts will give necessary technical guidance and advice to the Bangladesh counterpart personnel on matters pertaining to the implementation of the Project.

5. For the effective and successful implementation of the Project, the Coordinating Committee will be established with the function and composition as referred to in VI of the Annex.

IX. CLAIMS AGAINST JAPANESE EXPERTS

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

*H.M.
JICA
Team Leader*

*M.
D. Sec, FORRI*

X. MUTUAL CONSULTATION

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

XI. 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 the Record of Discussions.

H.M.
JICA
Team leader

[Signature]
D. '90, BTR.

A N N E X

I. MASTER PLAN

1. Objectives of the Project

The project will be carried out for the purpose of strengthening postgraduate level agricultural studies through enhancing practical research activities and training junior level researchers and technical officers, and thus contributing to the improvement of agricultural research system in Bangladesh.

2. Activities of the Japanese Technical Cooperation

The activities of the Japanese Technical Cooperation are as follows:

(1) Education and Research Activities in the following fields

Agronomy
Genetics and Plant Breeding
Plant Pathology
Soil Science
Horticulture
Entomology

*H. M.
JICA
Team Leader*

(a) To give technical advice for survey, planning and implementation of practical research and experiment activities conducted by IPSA teaching staff.

(b) To give technical advice to IPSA teaching staff in order to improve the teaching and advising methods for student research and experiment activities.

*W.
D. 5/13/81*

(2) Training Activities

To give technical guidance and advice to IPSA teaching staff on training of junior level researchers and technical officers held at IPSA.

Note: Tentative Schedule of Implementation will be discussed and decided within one year from the implementation of the Project.

II. JAPANESE EXPERTS

1. Team Leader
2. Coordinator
3. Specialists (Professors, Associate Professors and Assistant Professors) in the fields of:
 - Agronomy
 - Genetics and Plant Breeding
 - Plant Pathology
 - Soil Science
 - Horticulture
 - Entomology

Note: (1) More than two long term specialists from the above mentioned fields will stay at IPSA at the same time.
(2) Short term specialists from the above mentioned fields and experts in other related area may be dispatched when necessity arises, for the smooth implementation of the Project.

III. LIST OF EQUIPMENT

1. Equipment, instruments, materials, and spare-parts for laboratory and field research activities.
2. Agricultural machineries and materials for the teaching/experimental farm.
3. Audio visual equipment.
4. Books and other printed matters.
5. Vehicles.
6. Other necessary minor equipment.

H.M.
JICA
Team Leader

2.2.1
ZAR1.

IV. LIST OF BANGLADESH COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. Head of the Project (Director General of Bangladesh Agricultural Research Institute)
2. Deputy Head of the Project (Director of IPSA)
3. Counterpart personnel (teaching staff) in the fields of:
 - Agronomy
 - Genetics and Plant Breeding
 - Plant Pathology
 - Soil Science
 - Horticulture
 - Entomology
4. Administrative personnel
 - (1) Administration
 - (2) Accounting
5. Supporting staff
 - (1) Teaching/experimental farm manager
 - (2) Other staff
6. Laborers

V. LIST OF LAND, BUILDING AND FACILITIES

1. Land
 - Land for Campus of IPSA including teaching/experimental farm.
2. Building and facilities
 - (1) Office(s) for Japanese Team Leader, Coordinator and Specialists
 - (2) Laboratories
 - (3) Class rooms and practice rooms
 - (4) Library
 - (5) Dormitory
 - (6) Other necessary buildings and facilities

H.M.
JICA
Team Leader
D. G. 1. 2011

VI. THE COORDINATING COMMITTEE

1. Functions

The Coordinating 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 the 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:

Secretary, Agriculture and Forestry, M. A.

(2) Bangladesh Side:

- (a) Director General, BARI, M. A.
- (b) Director, IPASA.
- (c) Director General, Bangladesh Rice Research Institute, M. A.
- (d) Chairman, Bangladesh Agricultural Research Council, M. A.
- (e) Chief, Agricultural Division, Planning Commission

(3) Japanese Side:

- (a) Team Leader
- (b) Coordinator
- (c) Specialists nominated by the Japanese Team Leader
- (d) Resident Representative of Dhaka Office, JICA
- (e) Personnel concerned to be dispatched by JICA

Note: (1) The US advisors nominated by the Japanese Team Leader and Representative of USAID Mission to Bangladesh will attend the Coordinating Committee as members.

H.M.
JICA
Team leader

W.
D. 62.1

(2) Officials of the Embassy of Japan in Bangladesh
may attend the Coordinating Committee as observers.

Abbreviations:

M. A. = Ministry of Agriculture
BARI = Bangladesh Agricultural Research Institute
USAID = United States Agency for International
Development

H.M.
JICA
Team Leader

W.
D. G. BARI.

Bangladesh 農業大学院技術協力計画に関する日本側実施
 協議チームと Bangladesh 政府関係当局との討議議事録

国際協力事業団（以下「JICA」という）が組織し、九州大学農学部長宮島 寛教授を団長とする日本側実施協議チーム（以下「チーム」という）は、「 Bangladesh 農業大学院技術協力計画」の詳細を策定するため、1985年6月25日より1985年7月5日までの日程をもって Bangladesh を訪問した。

Bangladesh 滞在期間中、チームは上記プロジェクトの有効な実施のため両国政府がとるべき必要な措置に関して Bangladesh 側当局と意見を交換し、一連の討議を行った。

討議の結果、チームと Bangladesh 政府側関係当局はそれぞれの政府に対し、ここに添付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。

ダッカ 1985年7月4日

宮 島 寛
 実施協議チーム団長
 国際協力事業団
 日 本 国

M. M. ラーマン
 Bangladesh 農業技術研究所長
 Bangladesh

附 属 文 書

I 両国政府の協力

1. 日本国政府とバングラデシュ政府は、大学院レベルの教育研究を強化し、もってバングラデシュにおける実地的な農業研究技術の改善に寄与するため、「バングラデシュ農業大学院プロジェクト」(以下「プロジェクト」という)の実施において相互に協力をを行う。
2. 「プロジェクト」は1981年7月22日付E/Nにより、日本の無償資金協力で建設されたバングラデシュ農業科学大学、現在のジョイデブプール・サルナの農業大学院大学(以下「IPSA」という)において実施される。
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、技術協力計画の通常手続により附表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、バングラデシュにおいて専門家活動に従事する第三国専門家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与えられる。

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、技術協力計画の通常手続により附表IIIに掲げる当該プロジェクト実施に必要な機械、器具、物品(以下「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項にいう機材は、陸揚の港あるいは空港にて、バングラデシュ側当局へCIF建てにて引渡される時、バングラデシュ政府の財産となる。そして、それらの機材は、附表II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 研 修 員 受 入

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、技術協力の通常手続により、日本における技術研修のため、当該プロジェクトに係るバングラデシュ人を自己の負担において受入れるため、JICAを通じて必要な措置をとる。
2. バングラデシュ政府は、バングラデシュ人が日本における技術研修から得た知識及び経験が当該プロジェクト実施のため有効に用いられることを保証するために、必要な措置をとる。

V 日本国政府による特別措置

円滑なプロジェクト運営を推進するため日本国政府は日本国において施行されている法律及び規則に従い、実習農場の建設等、プロジェクトのインフラの改善の実行にかかる費用の一部を補充するためJICAを通じて必要な措置をとる。

VI バングラデシュ人カウンターパート及び事務職員の役務

1. バングラデシュにおいて施行されている法律及び規則に従い、バングラデシュ政府は、自己の負担において附表Ⅳに掲げるバングラデシュ人カウンターパート及び事務職員の役務提供するため、必要な措置をとる。
2. バングラデシュ政府は、当該プロジェクトにおいて技術移転を効率的かつ成功裡に実施するため、附表Ⅱに特定された、日本国政府から派遣される個々の専門家に対応する適切な資格を有する職員を必要な数配置する。

VII バングラデシュ政府のとるべき措置

1. バングラデシュにおいて施行されている法律及び規則に従い、バングラデシュ政府は、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、建物及び附帯施設
 - (2) 上記Ⅲ条の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機械、器具、車輛、工具、予備部品等の調達もしくは取替
 - (3) バングラデシュ国内における公務出張にかかわる日本人専門家に対する交通の便宜及び旅費
 - (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. バングラデシュにおいて施行されている法律及び規則に従い、バングラデシュ政府は次の経費を負担するために必要な措置をとる。
 - (1) 「機材」のバングラデシュ国内における輸送、据付、操作及び維持に必要な経費
 - (2) 無税扱いとされない「機材」に対するバングラデシュ国内で課される関税、国内税及びその他の課徴金
 - (3) 「機材」に対する取り扱い設置費用
 - (4) 当該プロジェクトの実施に必要な全ての運営費

VIII プロジェクトの運営

1. バングラデシュ農業省農林部担当次官が当該プロジェクトの実施において、総括責任を負う。
2. バングラデシュ農業技術研究所所長は、プロジェクトの長として、当該プロジェクトの運営、管理の責任を負う。
3. 日本人チームリーダーは、プロジェクトの長に対して、当該プロジェクトの実施に関連

する技術、運営事項について必要な勧告、助言を行う。

4. 日本人専門家は、バングラデシュ人カウンターパートに対して当該プロジェクトの実施に関連して必要な技術指導、助言を行う。
5. 当該プロジェクトを効率的にかつ成功裡に実施するため、附表Ⅵに掲げる機能と構成で調整委員会が設置される。

Ⅸ 日本人専門家に対する請求（クレーム）

バングラデシュ政府は、日本人専門家のバングラデシュ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。

X 相互協議

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。

XI 協力期間

本附属文書に基づく当該プロジェクトの技術協力期間は本討議議事録に署名された日より5ケ年間とする。

附 表

I マスタープラン

1. プロジェクトの目的

本プロジェクトは実際的な研究活動の活性化及び若手の研究者、技術者の訓練を通して、大学院レベル農業研究を強化し、もってバングラデシュの農業研究システムの改善に寄与することを目的として行なわれるものである。

2. 日本の技術協力活動

日本の技術協力活動を以下に記す。

(1) 以下の分野における教育・研究活動

作物学

遺伝育種学

植物病理学

土壌学

園芸学

昆虫学

- (a) IPSA教授スタッフが行なり、実際的な研究・実験活動の調査、計画、実行に技術的

助言をすること。

(b) IPSAスタッフによる学生に対する教育方法の改善のためスタッフに対し、技術的助言をすること。

(2) 訓練活動

(a) IPSAにて開催される若手研究者と技術者の訓練に関し、IPSA教育スタッフにその技術的指導を助言すること。

(注) プロジェクト暫定実施計画はプロジェクト開始より1年以内に討議、決定される。

II 日本人専門家

1. チームリーダー
2. 調整員
3. 以下の分野における専門家（教授、助教授、助手）

作物学

遺伝育種学

植物病理学

土壌学

園芸学

昆虫学

(注)

(1) 上記分野からの2人以上の長期専門家が同時にIPSAに滞在する。

(2) 上記分野及び他の関連分野からの短期専門家は必要に応じ、プロジェクトのスムーズな実施のために派遣される。

III 機材リスト

1. 研究室と野外研究活動に必要な機材、機器、機具、資材及びスペアパーツ、予備部品
2. 農業機械及び実習農場用資材
3. 視聴覚機材
4. 書籍及び他の印刷物
5. 車両
6. その他必要小機材

IV バングラデシュ人カウンターパート及び管理職員リスト

1. プロジェクトヘッド（バングラデシュ農業技術研究所長）
2. ヘッド代理（IPSA所長）
3. 以下の分野におけるカウンターパート（教員スタッフ）

作物学

遺伝育種学

植物病理学

土 壤 学

園 芸 学

昆 虫 学

4. 管 理 職 員

(1) 管 理

(2) 会 計

5. 支 援 ス タ ッ プ

(1) 実習農場管理

(2) 他のスタッフ

6. 労 働 者

V 土地、建物及び施設リスト

1. 土 地

(1) 実習農場を含むIPSAキャンパスの土地

2. 建 物 及 び 施 設

(1) 日本人プロジェクトリーダー、調整員及び専門家用オフィス

(2) 実 験 室

(3) 教室及び実習室

(4) 図 書 館

(5) 寄 宿 舎

(6) 他の必要な建物及び附帯施設

VI 調 整 委 員 会

1. 機 能

調整委員会は少なくとも年1回または、必要があれば開催、運営される。

(1) 本実施協議の骨組みを基に決定されるべきプロジェクト暫定実施計画にそったプロジェクト年間運営計画を公式化すること。

(2) 上記の年間運営計画の達成だけでなく、技術協力問題の全体にわたる見直しを行なうこと。

(3) 技術協力問題の関連から生ずる大きな問題について検討、討議すること。

2. 構 成

(1) 委 員 長

農業省農林次官

(2) バングラデシュ側

- (a) バングラデシュ農業技術研究所所長
- (b) IPISA所長
- (c) バングラデシュ稲作研究所所長
- (d) バングラデシュ農業研究会議長
- (e) 企画省, 農業部

(3) 日本側

- (a) 団 長
- (b) 調 整 員
- (c) 日本チームのリーダーに指名された専門家
- (d) JICAダッカ事務所長
- (e) JICAより派遣される関係者

- (注) (1) 日本人チームリーダーに指名されたUSAID 専門家及び, AIDミッションの代表者はメンバーとして合同委員会に出席できる。
- (2) バングラデシュ日本大使館員はオブザーバーとして合同委員会に出席できる。

略語: M.A = Ministry of Agriculture 農業省

BARI = Bangladesh Agricultural Research Institute バングラデシュ農業技術研究所

USAID = United States Agency for International Development
米国国際開発庁

EXPLANATORY NOTES ON THE RECORD OF DISCUSSIONS FOR TECHNICAL COOPERATION TO IPSA BY THE GOVT. OF JAPAN

The Record of Discussions is in very general terms. The total size of the project in financial terms would be decided finally through discussions to be held with all concerned agencies/organizations/Ministries including the donor agencies and submitted as Project Proposal for clearance by PEC/ECNEC.

III. Provision of Machinery and Equipment

1. Regarding custom clearance of the equipment including vehicles provided by the Govt. of Japan for this project, Japanese Technical Cooperation Team and IPSA/BARI will cooperate to accelerate the process of such clearance. Such cooperation, however, will not entail financial involvement to the Japanese side for custom clearance.

IV. Training of Bangladesh Personnel in Japan

1. Since improvement of capability and performance of the teaching staff of IPSA in providing a high quality research base at the postgraduate level is of critical importance, it is suggested that JICA will propose to the Ministry of Education of the Govt. of Japan to reserve at least one Ph.D. scholarship offer per year for IPSA during the project period.

H.M.
JICA
Team Leader

VII. Measures to be taken by the Government of Bangladesh.

- 1(3). Transportation facilities to be provided for official travel of Japanese experts will, in most cases, be through the use of vehicles under this project. JICA will provide the travel allowances for Japanese experts wherever possible.

W.
D. G. BARI

Cont'd. - P/2

- 1(4). JICA also will assist in funding suitably furnished accommodation for the Japanese experts and their families.

VIII. Administration of the Project.

2. While the Director General, BARI will remain responsible for the administration and management functions of the project, the Director, IPSA as the administrative head of the Institute will act as Deputy Head of Project.
3. As the head of Institute, the Director IPSA will be consulted by the Japanese side on matters pertaining to the development, implementation and operation of the project, and he will hold the responsibility of Head of Project in absence of Director General, BARI or as and when entrusted with such responsibilities by appropriate authorities.

H.M.
JICA
Team Leader
D. Sr., BARI.

日本政府によるIPSAに対する技術協力のための
討議議事録に関する附属説明（サイドレター和文仮訳）

討議議事録は非常に一般的に書かれている。予算規模におけるプロジェクトの総規模は最終的に援助機関を含めたすべての関連当局、機関、省庁によって決定されPEO/ECNEC（プロジェクト評価委員会）による承認を受けるために提出される。

Ⅲ 機材の供与

1. 本プロジェクトに対して日本国政府から供与される車両を含む機材の通関については、日本の技術協力チームとIPSA/BARIは、通関の手順の即進に協力する。ただし、日本側において通関のために財政的負担を行なうものではない。

Ⅳ バングラデシュ人の日本における研修

1. 大学院レベルの高度な研究基盤を提供するIPSAの教官の能力及び、成績の向上が非常に重要であるので、JICAから日本政府の文部省に対して、プロジェクト期間中少なくとも毎年1人の博士過程留学生枠を確保することを依頼するように示唆された。

Ⅴ バングラデシュ政府のとるべき措置

1. 日本人専門家の公用旅行のために供与される輸送用機器は原則として本プロジェクトにおいて使用される。JICAは可能な限り日本人専門家の旅費を負担する。
2. JICAは専門家及びその家族に対して適当な住宅に入居するため、財政的な援助を行なう。

Ⅵ プロジェクトの運営管理

1. D.G. BARIがプロジェクトの運営管理の責任を持つ一方、IPSA所長は、大学の責任者として、プロジェクトヘッド代理となる。
2. 大学の責任者として、IPSA所長は、プロジェクトの発展、実施、運営に関する事項について日本側より協議を受け、D.G. BARI不在の際は、さらには、しかるべき機関からその責任を付託された際にはプロジェクトヘッドとしての責任を担う。

附 3.

JICA DHAKA OFFICE
(JAPAN INTERNATIONAL COOPERATION AGENCY)
DIT PLOT NO. 70, BLOCK-B
ROAD NO. 21, BANANI, DHAKA-13
BANGLADESH
PHONE : 604285, 600062.

GEN-257/85

11th July, 1985

Dr. H. P. Peterson
Acting Director
USAID Mission to Bangladesh
Dhaka

Dear Dr. Peterson,

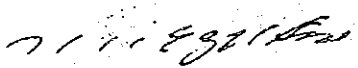
This is to confirm our discussion, which was held at the Embassy of Japan, Dhaka, on July 2, 1985, on the Technical Cooperation Project for the Institute of Post Graduate Studies in Agriculture (IPSA).

For the implementation of the project, Japanese activities will be based on the Record of Discussions signed on July 4, 1985. The U.S. activities will be based on the Memorandum of the project, dated May 22, 1985, which was agreed to in principle by the Government of Bangladesh, as indicated in the ERD letter No. ERD/AMERICAS-1(TA)-4/85/97 dated July 10, 1985.

The relations between USAID and JICA specialists/experts concerning their activities for the project were principally agreed to as enclosed herewith.

I heartily hope that the project will be successfully completed through our cooperation and will contribute to raising the standard of postgraduate level education and research in agriculture in Bangladesh.

Sincerely,


M. Ezaki

Resident Representative

Enclosure :

"Understanding Between USAID and JICA
For Joint Technical Cooperation for IPSA."

Understanding Between USAID and JICA
For Joint Technical Cooperation for IPSA

1. As part of USAID/JICA technical team, USAID experts will conduct their activities under Japanese leadership. All team members will obtain the signature of the Japanese team leader before submitting reports or documents to Bangladesh authorities.
2. The USAID and JICA experts will be working closely as a single team. In working toward common project objectives, USAID and JICA team members will also be observing reporting procedures as per regulations of their respective agencies.
3. Each member of the USAID/JICA team will put forth their best effort to resolve any problem that may arise.
4. All overseas participant training proposals and candidates will be submitted through the Japanese team leader.
5. Use of official vehicles, provided by the Japanese Government, will be approved by the Japanese team leader in close consultation with USAID, JICA and IPSA.
6. Project commodities to support the IPSA Project will be identified in close coordination with USAID, JICA and IPSA members concerned.
7. For the effective and successful implementation of the Project, USAID, JICA and concerned Bangladesh authorities will establish the Coordinating Committee and meet at least once a year and whenever necessity arises, and work :
 - (1) to formulate the Annual Work Plan,
 - (2) to review the overall progress of the technical cooperation program, and
 - (3) to review and exchange views on major issues.

USAIDダッカ事務所

所長代理 H.P. ピーターソン殿

これは、1985年7月2日、ダッカ日本大使館に於いて行なわれたIPSAに関する技術協力プロジェクトについての(我々の)会議の(内容の)確認である。

このプロジェクトの推進にあたって、日本側の活動は、1985年7月4日に正式調印された議事録に基づくものであり、合衆国側の活動は、バングラディッシュ政府により、7月10日付文書ERD/AMERICAS-I(TA)-4/85/97に提示されているとおり原則として承認されている5月2日付の(この)プロジェクトに関する覚書に基づくものである。

(この)プロジェクト活動に於けるUSAIDとJICAの専門家(両者)の関係は、別紙内容の通りに、おお旨了解されている。

(私は、)(この)プロジェクトが、我々の協力を通して、成功裡のうちに遂行され、且つバングラディッシュの農業に於ける大学院の教育及び調査研究の水準の向上に寄与する事を心より希望する次第である。

1985年7月11日

国際協力事業団ダッカ事務所

所長 江崎政久

IPSAに関する技術協力に対するUSAIDとJICA

相方の了解事項

1. USAID/JICAの技術チームの一員としてUSAIDの専門家は、日本側のチームリーダーの指揮(導)の下に活動を行う。
チームのメンバー全員が、バングラデシュ政府当局に報告書あるいは書類を提出する際、事前に日本側のチームリーダーの署名を必要とする。
2. USAIDとJICA双方の専門家はひとつのチームとして密接に作業を行う。
共通のプロジェクト目標達成のためUSAIDとJICAのチームメンバーは、各自の(所属)機関の規約に従って行動をする。
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6. IPSAプロジェクトを維持する為のプロジェクトの消耗品は、USAID、JICA及びIPSAメンバー関係者により、綿密な調整を行う。
7. プロジェクトを効果的かつ成功裡に実施するために、USAID、JICA及びバングラデシュ政府当局関係者は、調整委員会を設立し、少なくとも年一回及び必要に応じて会合し、活動すること。
 - (1) 一年間の活動計画を作成する事
 - (2) 技術協力計画の全体的な進捗状況を見直す事
 - (3) 主要な問題点を明確にし、かつ意見交換を行う事

UNITED STATES OF AMERICA
AGENCY FOR INTERNATIONAL DEVELOPMENT
Dhaka, Bangladesh

July 11, 1985

Mr. Masahisa Ezaki
Resident Representative
Japan International Cooperation Agency
Dhaka

Dear Mr. Ezaki:

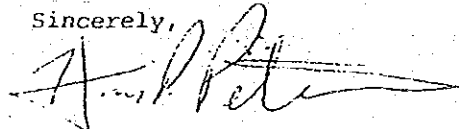
This is to confirm our discussion, which was held at the Embassy of Japan, Dhaka, on July 2, 1985, on the Technical Cooperation Project for the Institute of Post graduate Studies in Agriculture (IPSA).

For the implementation of the project, Japanese activities will be based on the Record of Discussions signed on July 4, 1985. The U.S. activities will be based on the Memorandum of the project, dated May 22, 1985, which was agreed to in principle by the Government of Bangladesh, as indicated in the ERD letter No. ERD/AMERICAS-1(TA)-4/85/97 dated July 10, 1985.

The relations between USAID and JICA specialists/experts concerning their activities for the project were principally agreed to as enclosed herewith.

I heartily hope that the project will be successfully completed through our cooperation and will contribute to raising the standard of postgraduate level education and research in agriculture in Bangladesh.

Sincerely,



H.P. Peterson
Acting Director

Enclosure:
"Understanding Between JICA and USAID for
Joint Technical Cooperation for IPSA"

Understanding Between JICA and USAID
For Joint Technical Cooperation for IPSA

1. As part of JICA/USAID technical team, USAID experts will conduct their activities under Japanese leadership. All team members will obtain the signature of the Japanese team leader before submitting reports or documents to Bangladesh authorities.
2. The JICA and USAID experts will be working closely as a single team. In working toward common project objectives, JICA and USAID team members will also be observing reporting procedures as per regulations of their respective agencies.
3. Each member of the JICA/USAID team will put forth their best effort to resolve any problem that may arise.
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 - (1) to formulate the Annual Work Plan,
 - (2) to review the overall progress of the technical cooperation program, and
 - (3) to review and exchange views on major issues.



From : M. Akhtar Ali,
Joint Secretary

48937

Ministry of Finance
General Services Division
Sector-1, Dhaka-7
Dacca-7

G.O. No. HD/Agri/1(TL)-4/85/197

Date July 10, 1985

Subject: Technical Assistance to Institute of Postgraduate Studies in Agriculture (IPSA)

Dear Dr. Westley,

You may be aware that the Agriculture and Forests Division of Ministry of Agriculture has undertaken a project for strengthening of the Institute of Postgraduate Studies in Agriculture (IPSA) at Salna, Gazipur. Japan is providing technical assistance to this project. We understand that USAID is also interested to assist IPSA jointly with the Japanese in the form of expertise and would support building up of library facilities with books, Journals etc. and scholarships.

Accordingly, USAID may like to consider providing the following assistance to IPSA :-

- (a) Expertise in curriculum.
- (b) Books, Journals, & prints etc.
- (c) Scholarships (Ph.D. levels)

The details may be worked out in consultation with Agriculture and Forest Division/BARI/IPSA.

Awaiting your response,

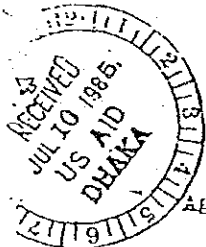
Sincerely,

(M. Akhtar Ali)

John R. Westley,
Director
USAID
C/O BARI
Dhaka

PRO

ACTION TO:	
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国際協力事業団ダッカ事務所長

江崎政久 殿

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USAIDダッカ事務所

所長代理 H.P. ピーターソン

IPSAに関する技術協力に対するJICAとUSAID相方の了解事項

1. JICA/USAIDの技術チームの一員として、USAIDの専門家は、日本側のチームリーダーの指揮(導)の下に活動を行う。
チームのメンバー全員が、バングラデシュ政府当局に報告書あるいは書類を提出する際、事前に日本側のチームリーダーの署名を必要とする。
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附 4. AID コンサルタント Dr. Eisgruber のレポート

UNITED STATES GOVERNMENT

memorandum

DATE May 22, 1985
REPLY TO ATTENTION Pat Peterson, DD(A) *RP*
SUBJECT: Dr. L.M. Eisgruber's Report on IPSA
TO: See Distribution

Enclosed for your information is Dr. Eisgruber's Consultancy Report of IPSA.

Distribution:

Mr. W.R. Joslin, DIR(A)
Dr. Satoshi Wakimoto, Kyushu University
~~Mr. Nobuo Miyashita, JICA/Tokyo~~
Mr. M. Ezaki, JICA/Dhaka Office
Mr. T. Ohashi, Embassy of Japan
Dr. Ekramul Ahsan, Chairman, BARC
Dr. M.M. Rahman, BARI/Joydebpur
Dr. S.H. Khan, IPSA
Dr. Gerry Gill, ADC/BARC
Dr. L.M. Eisgruber, Oregon State University
Dr. David Daugherty, IADS

PRELIMINARY REVIEW AND RECOMMENDATIONS
RELATING TO JICA/AID TECHNICAL COOPERATION WITH THE
INSTITUTE FOR POST-GRADUATE STUDIES IN AGRICULTURE
WITHIN THE SYSTEM OF
HIGHER EDUCATION IN AGRICULTURE
IN
BANGLADESH

BY

Ludwig M. Eisgruber, Ph.D.

under contract with

International Agricultural Development Service

for

U.S. Agency for International Development/Bangladesh

April - 1985

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REFERENCES

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ACKNOWLEDGEMENT

This report would not have been possible were it not for the generosity and willingness of so many people in AID, JICA, the Japanese Embassy, BAI, BARC, BARI, BAI, IPSA, IADS/Dhaka and elsewhere who gave freely of their time, knowledge, and ideas. Their cooperation and assistance is greatly appreciated. The kindness shown not only made the preparation of this report possible but made it an enjoyable undertaking.

ABBREVIATIONS

ADC	Agricultural Development Council
AID	Agency for International Development (USA)
BARC	Bangladesh Agricultural Research Council
BARI	Bangladesh Agricultural Research Institute
BAI	Bangladesh Agricultural Institute
BAU	Bangladesh Agricultural University
BRRI	Bangladesh Rice Research Institute
CDSS	Country Development Strategy Statement
GOB	Government of Bangladesh
IADS	International Agricultural Development Service
IPSA	Institute for Postgraduate Studies in Agriculture
JICA	Japan International Cooperation Agency
MOA	Ministry of Agriculture
MOE	Ministry of Education

EXECUTIVE SUMMARY

The capacity of higher education in agriculture in Bangladesh for granting degrees has progressed steadily. It began with the establishment of an agricultural faculty at the University of Dhaka in 1938, advanced to a new phase with the establishment of the Bangladesh Agricultural University (BAU) in 1961, continued with the founding of the Patuakhali College of a few years ago, and moved into its latest stage beginning with the operation of the institute for Postgraduate Studies in Agriculture (IPSA).

By some measures, the Bangladesh system of higher education in agriculture can point to successes: The capacity to train agriculturalists has increased significantly over the past 45 years; degree opportunities exist at the graduate and postgraduate level; while perhaps lacking in some respects, a nevertheless commendable physical plant exists; and a substantial number of teachers in the system have postgraduate degrees, many of them Ph.D.'s. By some other measures, however, higher education in agriculture has not progressed, and may have regressed. Included in these areas is an inadequate capacity to train high quality postgraduates, particularly at the Ph.D. level, and a stagnated curriculum.

Recognizing the above shortcomings, the Japanese Government has indicated an interest in continuing and assisting IPSA in a project which has as its objective to impart training to postgraduate students leading to M.S. and Ph.D. degrees through basic and applied research in the various disciplines of agriculture. The technical assistance phase follows one during which the Japanese Government provided physical facilities to the newly established IPSA.

Additional technical assistance is required in the areas of curriculum development, extension, social sciences, and general administrative support. This additional need for technical assistance has been expressed to AID through discussion with leadership in the MOA, BARI, and BARC. In turn, AID and JICA reviewed the possibility of technical assistance to IPSA through cooperative efforts between the governments of Bangladesh, Japan, and the United States. Favorable responses from the various concerned and affected parties and AID's own favorable assessment led to the conclusion that AID should participate in a well targeted, albeit modest, cooperative technical assistance project at IPSA.

It is proposed that AID provide two long-term advisors for a period of three(3) years each. These long-term advisors will be part of a larger technical assistance team operating under the leadership of a Japanese long-term advisor. The two long-term advisors will have major responsibilities in curriculum development and in extension. It is further proposed that the AID technical assistance component include provisions for some participant trainees, for up to seven PM short-term consultancies, and for commodities for improvement of the library.

The proposed technical assistance effort contains an implicit dimension which is unique and which can have attractive long-term benefits for IPSA in particular and Bangladesh higher education in agriculture in general. If, as is recommended, the U.S. and Japanese long-term advisors are (senior) members of U.S. and Japanese universities, it is to be

expected that long-term relationships will develop between these three universities which will be beneficial long beyond the duration of the technical assistance projects. Benefits will not only accrue to IPISA, but also to the U.S. and Japanese universities involved.

The proposed technical assistance is consistent with the AID/Bangladesh Country Development Strategy Statement.

PRELIMINARY REVIEW AND RECOMMENDATIONS
relating to JICA/AID Technical Cooperation with the
INSTITUTE FOR POST-GRADUATE STUDIES IN AGRICULTURE
within the system of
HIGHER EDUCATION IN AGRICULTURE
in
BANGLADESH

I. PROJECT OBJECTIVES

This report describes activities and findings of a consultancy which had the following objectives:

1. To conduct a preliminary review of the curricula of institutes involved in higher agricultural education in the light of GOB's agricultural development objectives.
2. To develop two sets of terms of reference for the following effort:
 - a) an in-depth review and assessment of the relevance of existing curricula of IPSA, BAU, and BAI in terms of the nation's needs for agricultural professionals, and development of recommendations for strengthening curricula which will more effectively satisfy these national needs.
 - b) six person years of USAID-financed assistance at IPSA to address the institute's needs in the areas of curriculum development, social science, and agricultural extension as part of the coordinated effort under the proposed IPSA-JICA Phase II effort. Identification of the specific composition of the six person-year level of effort in terms of the exact number of professionals, disciplines, duration and phasing.

II. BACKGROUND

The capacity of higher education in agriculture in Bangladesh for granting degrees has progressed steadily. It began with the establishment of an agricultural faculty at the University of Dhaka in 1938, advanced to a new phase with the establishment of the Bangladesh Agricultural University (BAU) in 1961, continued with the founding of the Patuakhali College a few years ago, and moved into its latest phase with the beginning of operations of the Institute for Postgraduate Studies (IPSA) in 1984.

The physical facilities for the new IPSA campus have been provided with assistance from JICA. According to a masterplan developed by JICA, there is still need for additional facilities and land purchases. But the basic structure is in place, and the first class of M.Sc. students is in session.

The campus is ideally located within the Agricultural Research and Training complex of BARI, BRRI, and CERDI. As a result, it offers excellent potential for integrating academic training with applied research and extension. No institutional model for such an integration currently exists in Bangladesh. Therefore, technical assistance to develop an integrated approach to education, research, and extension has been requested. Japan, through JICA, has indicated commitment to continue to finance needed physical plant development and technical assistance, particularly as it relates to start-up activities in the research area. Additional technical assistance is required in areas of curriculum development, social sciences, extension, and general administrative support. This additional need for technical assistance has been expressed to AID through discussion with leadership in the MOA, BARI, and BARC. In turn, AID and JICA reviewed the possibility of technical assistance to IPSA through cooperative efforts between the governments of Bangladesh, Japan, and the United States. AID's own assessment of the likely significant benefits to the agricultural sector, along with favorable responses from JICA, BARI, BARC, and the MOA has led to the request for a preliminary review of the curriculum for higher education in agriculture in Bangladesh and recommendations for appropriate technical assistance. This report provides such a preliminary review and recommendations.

III. THE SITUATION

1. General

The Bangladesh higher education system for agriculture includes four institutions, namely, the Bangladesh Agricultural Institute (BAI), the Bangladesh Agricultural University (BAU), the Patuakhali College and the Institute for Post-graduate Studies in Agriculture (IPSA). Until recently, BAU was under the MOE. This was changed, and all agricultural colleges, universities, and technical institutes now report to the MOA. The BAU reports directly to the MOA, whereas the BAI, IPSA, and the Patuakhali College do so through BARI.

There are discussions regarding potential additional faculties of agriculture in the universities of Rajshahi and Chittagong. A proposal to establish an agricultural faculty at Dhaka University has apparently been rejected.

The existing agricultural institutions of higher learning are to varying degrees linked. BAI and Patuakhali are affiliated institutions to BAU, and IPSA has a conditionally affiliated status. The basic linkage is that currently all agricultural institutions of higher learning are obligated to offer the curriculum developed and offered by BAU. Additionally, the admission of students to IPSA is through the respective Departments and the Committee for Advanced Studies at BAU. Similarly, all Post-graduate examinations are to be held at and by BAU. This arrangement with IPSA goes beyond "linkage", but effectively usurps essentially all academic authority from the faculty at IPSA. This is not in the best long run interest of either the students or either of the faculties.

Until recently, students wishing to attend BAI applied directly to BAI, where decisions regarding admission were made. In February of 1985, BAI was informed by BAU that the latter is seeking a ruling to the effect that admission of students to BAI should be through BAU. A decision regarding such a ruling is pending before the Ministry of Agriculture. BAI was recently affected by another ruling which prevents it from being a residential campus for post-graduate studies. Consequently, BAU remains as the only institute of higher education in agriculture which offers both graduate as well as post-graduate degrees. BAI and Patuakhali offer only graduate (baccaloureate) degrees, and IPSA will, at least in the near future, offer only post-graduate degrees.

Largely because of disruptive student strikes and university closings, the number of students admitted and graduated fluctuates substantially from year to year. Approximate average numbers of B.Sc. degrees conferred are 500 for BAU, 100 for BAI, and 50 for Patuakhali. A recent study has shown that approximately 85 percent of these graduates have employment when they graduate, and the remainder has no great difficulty finding employment within a reasonable period after graduation. However, this differs between the various areas of specialization. Graduates with specialization in fisheries, animal husbandry, and agricultural economics seem to have considerably more difficulties finding employment than graduates from other

faculties. Throughout the information collection process concern was expressed about employment opportunities for agricultural graduates in the future. Apparently, the job market has tightened up considerably during the past two years, and many expect this trend to continue. Therefore, previously developed manpower assessments must be updated.

Various reports and interviews with employers of graduates from the agricultural institutions of higher learning indicate that graduates are not well prepared to enter the job market. Two major factors seem to be responsible for this: First, the largely urban background of the students, and second, the de facto nature of the curriculum (to be discussed below).

Prior to the ruling that BAI will no longer qualify as a resident campus for post-graduate studies, BAI granted about 100 post-graduate (M.Sc.) degrees. None of these were passed out during the past several years. Since its establishment in 1961, BAU has granted well over 1,000 M.Sc. Degrees. Post-graduates do not appear to have difficulties obtaining employment. However, the pay differential between holders of B.Sc. and M.Sc. degrees seems to be so small as to discourage graduates from entering post-graduate studies or they drop out before completing the requirements for the M.Sc.

BAU, so far the only institutions authorized to offer Doctorate degrees, has granted four such degrees, all of them between 1973 and 1980. About 15 doctoral candidates are currently enrolled. Employment prospects are judged to be good, particularly as scholarships for pursuit of doctoral studies abroad diminish.

2. The Curriculum

Establishment of a college, university, or system of higher education is an undertaking not only of substantial magnitude but also one that requires much attention, scrutiny, and modification over time. To expect quick results is unrealistic, and to be satisfied with the status quo leads to a deterioration in quality of education. Viewed from this prospective, the Bangladesh system of higher education in agriculture can point to successes by some measures: The capacity to train agriculturalists has increased significantly over the past 45 years; degree opportunities exist at the graduate and post-graduate level; while perhaps lacking in some respects, a nevertheless commendable physical plant exists; and a substantial number of teachers in the system have post-graduate degrees, many of them Ph.D.'s. By some other measures, however, higher education in agriculture has not kept pace, and may have regressed. Thus, for progress to continue and for the clearly existing promises of the future to come to fruition, some major challenges must be met. One of these challenges is a thorough evaluation and subsequent modification of the curriculum.

This consultancy made possible only a very preliminary assessment of the curriculum for institutions of higher education in agriculture. This assessment was accomplished through interviews with administrators of educational institutions, faculty, and employers of graduates. Written documents on curriculum requirements, course syllabi, and previous reports on curricula were also reviewed. Needless to say, such an approach coupled with limited time prevents an in-depth analysis of the curriculum course by

course or even discipline by discipline. However, a number of observations and conclusions can be offered.

As indicated above, there is only one curriculum for all institutions of higher education in agriculture. Each course in the curriculum is supported by a syllabus. The curriculum and concomittant syllabi are developed and are controlled by BAU. The rationale for having only one curriculum appears to be the goal to achieve quality and uniformity. The goal to achieve quality education and perhaps even uniformity is commendable, and in theory this might be achieved by way of a single curriculum which is developed and controlled by one institution. In reality, however, neither uniformity nor quality are assured by this approach. As regards quality of education, it is determined by a number of variables other than, and in addition to a tightly structured and controlled curriculum. Such factors include quality of faculty, teacher evaluation by students and peers, support libraries and other facilities, relevance of course content to students' future careers, etc. It was neither possible nor within the intended scope of this assignment to evaluate all of these variables. But relevant available information suggests that attention to these variables is significantly less than attention to a highly structured and uniform curriculum.

As regards uniformity, it is-in fact-considerably less than a uniform curriculum would suggest at first glance. First, many of the syllabi are overly ambitious. This forces the professors to pick and choose what should be emphasized. Different professors will make different decisions on what should be emphasized. Second, due to frequent and often prolonged university closings and other disruptions of the orderly teaching process, professors simply are unable to cover all the materials specified in the syllabi. Once again, decisions will differ from professor to professor as to what should be covered and what should be omitted. Third, no matter how a syllabus is written, it leaves room for a certain amount - often a considerable amount of interpretation. Unless there is a significant amount of faculty interaction, interpretation of syllabi may differ greatly from institution to institution. Such faculty interaction does not exist.

Our own evaluation as well as reports of previous evaluators with experience in different disciplines suggest that the curriculum and syllabi tend to be on the ambitious, perhaps unrealistic, side in terms of the breadth of topics which can be covered as well as the level at which they can be covered. The result will be that the student will obtain a superficial knowledge of many subjects but will not master any of them - a condition which was conformed by employers of graduates. While this situation is not desirable at any degree level, it becomes particularly undesirable at the post graduate level, where specialists with in-depth knowledge in their disciplines are expected.

The curriculum is highly and tightly structured to prevent the student from exploring areas of particular interest in his own field in more depth, to become acquainted with subject matter outside his own field of specialization, or to tailor a program to his own career interest. To be sure, departmental, faculty, and disciplinary boundaries are crossed to some extension courses (taught outside these faculties). Other faculties (e.g. Agricultural Economics and Rural Sociology) require their students to take some course work in more than one other faculty. But by any measure such

cross fertilization is very limited. And to the extent it does take place it is still highly structured, i.e., it is required and other or additional choices are not possible.

A curriculum should be designed so as to best prepare the student for the professional career he embarks upon after graduation. As career requirements change over time, so must a curriculum if it is to remain relevant. When we inquired as to what changes had been made in the curriculum during the past decade or so, we were again and again informed and without exception - that no significant changes were made in the curriculum since its initial establishment some 20 years ago. This statement must be tempered somewhat, as some syllabi were officially modified and as some possibility exists for professors to modify course content within existing syllabi and course structure. Nevertheless, a curriculum that does not undergo any significant changes in over 20 years is not likely to provide for the best possible education of students.

The difficulty of the process of getting significant curriculum changes approved and implemented appears to be the main deterrent to changes in the curriculum. Curriculum changes have to be approved by, among other bodies, the Academic Council. Rightly or wrongly, the perception is that the Academic Council would not have come to an agreement on significant changes in the curriculum in the past, and there is doubt that it is ready to do so now. Nevertheless, there is considerable sentiment towards the need for a major overhaul of the curriculum, perhaps even some of its conceptual foundations. According to Vice-Chancellor Dr. A.K.M.A. Haque, a task force is currently evaluating post-graduate curricula at various universities in other countries in order to provide a background for potential changes in post-graduate study requirements at BAU; at least two faculties at BAU are reported to be in the process of preparing proposals for significant changes in their curricula; the newly established IPISA has great interest in developing and implementing an improved post-graduate curriculum; and major employers of graduates have expressed a keen interest in assisting the institutes of higher education in agriculture in the development of improved curricula (indeed, one such employer has recently provided funds to enable a conference for formal discussion of the present state of and future possibilities for curricula). Thus, the time appears right for a major review and subsequent modifications of the agricultural education effort in Bangladesh. While the agricultural education system has served Bangladesh well in the past, it is necessary that major steps be taken to keep the system current so as to assure its continued relevance and effectiveness.

IPISA is in a unique position to contribute to progress with respect to relevance and effectiveness of the curriculum of higher education in agriculture. Firstly, it is located within "working distance" of BARI, BRRI, and CERDI, thus affording opportunities for participation of students in these institutes (as part of their formal training), and in turn, offering opportunities for staff from these institutes to participate in the education process. Second, the IPISA is new, and therefore not locked into a traditional sequence of educational offerings. Opportunities clearly exist to develop an imaginative and effective program, a program which will focus on IPISA but is likely to have much broader benefits. This proposal for technical assistance is designed to assist IPISA in capitalizing on its unique opportunity.

IV. TECHNICAL ASSISTANCE TO IMPROVE HIGHER EDUCATION IN AGRICULTURE

1. Japanese Technical Assistance to IPSA

IPSA has been established in place of the previously contemplated Bangladesh College of Agricultural Sciences (BCAS). The physical facilities of BCAS, now IPSA, were provided by the Japanese Government. Further technical and financial assistance to IPSA is being contemplated by the Japanese Government. Negotiations between the Japanese and Bangladesh Governments are nearly complete with respect to the IPSA/JICA-Phase II project. Upon completion of the agreement, the Japanese Government, through JICA, will assist IPSA in a project which has as its objectives to impart training to post-graduate students leading to M.S. and Ph.D. degrees through fundamental and applied research in the various disciplines of agriculture, organize short courses for research scientists and extension personnel and conduct basic research to the extent required for backstopping applied research of various crop research institutes. To assist IPSA in achieving this objective, the Japanese Government is prepared to provide technical assistance in form of expert services.

2. Proposed U.S. Technical Assistance to IPSA

a. Relationship to IPSA/JICA-Phase II: The proposed U.S. technical assistance to IPSA is intended to be in support of and complementary to the IPSA/JICA-Phase II effort. Its purpose is to provide a limited amount of resources and expertise. These will be in areas where JICA has supported the Bangladesh officials' request that AID provide resources to augment the JICA/Bangladesh program to achieve the objective of imparting improved training at the post-graduate level.

The proposed U.S. long-term advisors will work as members of a larger technical assistance team, with one of the Japanese long term advisors serving as the team leader. The Japanese and U.S. experts will conduct their activities in a cooperative manner in accordance with the relevant records of discussion and/or scopes of work. Nevertheless, all team members shall conduct their activities under Japanese leadership. This means that, among other things, a signature of approval from the Japanese team leader is required before submission of any official reports or documents to Bangladesh authorities.

It is recommended that prior to, or immediately after, the arrival of the Japanese and U.S. long-term advisors a letter of understanding be exchanged at the appropriate levels of authority to state the understanding between all parties concerned (Bangladesh, Japan, U.S.) regarding use of official vehicles (provided by the Japanese Government), periodic report preparation, selection of short-term consultants, resolution of conflicts, selection of candidates for fellowships, etc.

b. General Description of Proposed U.S. Technical Assistance to IPSA: The proposed technical assistance is modest (and small relative to the Japanese effort), but is expected to have a significant impact on the development of IPSA along and in conjunction with support from IPSA/JICA-Phase II and from the GOB. USAID assistance is expected to have four

components: (a) Long-term advisors (2, for 3 years each), (b) short-term consultants (up to 7 PM), (c) participant training (2), and (d) commodities.

c. Scope of Work: Curriculum Planner: The curriculum planner's primary responsibility will be to assist the Director of IPSA in the development of an up-to-date curriculum for post-graduate studies in those subject matter areas where IPSA is authorized to grant degrees. While the curriculum planner's responsibilities are focused on IPSA, any curriculum development must be closely coordinated and carried out in concordance with BAU. Similarly, while the focus is on the development of curricula for post-graduate studies, the nature of existing and potential future undergraduate curricula must be taken into account.

As part of the curriculum planning effort, the curriculum planner will be responsible for organizing two major activities. One of these is a review of different university systems in 3-4 other countries (i.e. India, Japan, England, United States) to assess the merits and possible relevance of their curricula for Bangladesh. This review should include site visits by the curriculum planner along with 2-4 representatives of higher education in Bangladesh and a Japanese long-term advisor. Another major activity to be organized by the curriculum planner is the in-depth assessment of educational needs for agriculture in Bangladesh (see below: IV. 3. In-Depth Assessment of Educational Needs).

A secondary responsibility of the curriculum planner is to assist the Director of IPSA in all aspects of development of an effective and efficient administrative structure. The curriculum planner will, to the extent other time commitments permit, also assist the faculty in teaching in his area of specialty. Finally, he will work with the extension specialist (see below), the Japanese counterparts, and the IPSA faculty in the development of library holdings and an administrative as well as research computing capability.

The director of IPSA shall be the counterpart to the curriculum advisor, whose assignment to IPSA will be for a duration of 36 months.

d. Qualifications: Curriculum Planner: The curriculum planner must have a Ph.D. degree in an agricultural discipline. Formal training in agricultural economics or rural sociology is desirable. The curriculum planner must have extensive experience in university administration. Experience as departmental administrator with varied and broad university-wide involvement is essential; college/school level administrative experience is preferred. The incumbent must have some experience in developing countries, and should be able to communicate at the professional level with a wide range of disciplines and academic activities, including agronomy, agricultural economics, horticulture, genetics and breeding, plant pathology, animal husbandry, entomology, soil science, agricultural engineering, research, extension, and others. He should be a senior member of an agricultural college/university.

e. Scope of Work: Extension Specialist: The extension specialist's primary responsibility will be to assist the faculty in IPSA's Department of Extension in the development of an effective program. This will include the development of a curriculum, writing of course syllabi, preparation of teaching materials for the class room and field, and conducting research to

Identify the most effective extension methods for Bangladesh conditions. The extension specialist will work with students, staff, extension agents and others to develop and teach proper extension methods, including use of demonstration sites, state of the art visual aids, various communications technologies, farmer field days, among others.

As a secondary activity, the incumbent will work with the Director to establish appropriate linkages to extension, and will work with the curriculum planner (see above), the Japanese counterparts, and the IPSA faculty in the development of the library holdings and an administrative as well as research computing capability.

f. Qualifications: Extension Specialist: The extension specialist must have at least an M.S. degree in one of the agricultural disciplines. He must have experience as extension agent/specialist in the field, and should have significant administrative experience. He should be a senior member of an agricultural college/university. Some experience as extension specialist in a developing country is required. The incumbent must be able to communicate at the professional level with a wide range of disciplines and academic activities, including agronomy, agricultural economics, horticulture, genetics and breeding, plant pathology, animal husbandry, entomology, soil science, agricultural engineering, research, teaching, and others. The extension specialist's counterpart shall be the Head of the Department of Agricultural Extension.

g. Short-Term Consultants: Curriculum planning, extension program planning, as well as library and computing capacity development cover and require a wide range of expertise of often specialized nature. It cannot be expected that all of this expertise can be provided by the two resident U.S. advisors, and it may not be available from either the IPSA faculty or the Japanese counterparts. Therefore, this proposal for technical assistance provides for up to seven (7) PM of short-term technical consultancies. The nature of these consultancies is further described below (Section "IV.3: In-Depth Assessment of Educational Needs.")

h. Participant Training: Advanced degree training for two (future) faculty members is recommended. The nature and discipline of training is to be decided in coordination with the consent with the Director and the Japanese team leader. These decisions must be made during the first year so that participant training can, at least to a major extent, take place during the life of the activity.

i. Commodities: Provisions are made for commodity procurement for the development of IPSA. Such procurement is confined to the development of the library and extension capability (and does not include any construction).

j. Scheduling: The two U.S. long term advisors should arrive in Dhaka during the first month of the fall semester 1985. If this is not possible, the persons identified as long-term advisors should come to Bangladesh on a short-term assignment prior to starting their long-term assignment. Enroute to Bangladesh the long-term advisors should visit JICA/Japan and Kyushu University for briefings. Short term consultants should be scheduled by the long term advisors (and their Bangladesh and Japanese counterparts) as needed throughout the subsequent 3-year period.

3. In-Depth Assessment of Educational Need

This activity is an integral part of and fundamentally important to the technical assistance effort to IPISA. However, implications and results are very likely to be much broader. Because of this, this activity is discussed separately.

a. Purpose: It is the purpose of this assessment to identify the nation's needs for agricultural professionals, to assess the adequacy of existing educational institutions to meet these needs, and to design a program (or alternative programs) of assistance to remove existing constraints.

b. Approach and Scope: The assessment will have four distinct phases: (1) a projection of manpower needs in agriculture; (2) a review and assessment of the capabilities of existing institutions of higher education in agriculture, as well as related institutions (i.e., extension, research, and certain private institutions); (3) identification of constraints which prevent existing institutions from meeting projected manpower needs; and (4) design of a program of specific activities which will remove the constraints identified in (3) above.

This approach will pay considerable attention to the nature and relevance of existing curricula. But to accomplish the purpose, a number of additional issues and policies will have to be evaluated. These issues and policies include faculty policies (incentives, promotion, professional improvement plans and opportunities, work loads); administrative structure of institutions of higher education in agriculture; relationships between research, teaching, and extension; student policies (admission, grading, scholarships, tuition); physical facilities (libraries, laboratories); and national policies (agricultural price and support policies, research, extension, education).

c. Output: The above approach is expected to provide the following outputs:

1. Manpower needs projections,
2. A descriptive and analytical assessment of the existing institutions' capabilities to meet the needs,
3. A strategy statement for improving the capacity of the Bangladesh system of higher education in agriculture to train high level technical manpower, and
4. A program of specific activities and a schedule for implementation which will permit realization of the objectives within the recommended strategy.

d. Level of Effort: Successful completion of the assessment described above will require inputs from the GOB, JICA, and AID. The estimated requirements for each are as follows:

1. GOB

- a. Team co-leader
- b. Team of experts to function as counterparts to AID inter-disciplinary team (see below),
- c. Support staff (typist, administrative assistant),
- d. Support budget for travel, subsistence, supplies, etc., for Bangladesh members of team.

2. AID

a. Interdisciplinary team

Agricultural university administration and management, Team co-leader (same as curriculum planner - see above) 4 PM

Agricultural extension specialist/administrator (same as extension specialist - see above) 2

Other short-term consultants as needed (up to 7 PM) 7

13(7)

- b. Support budget (travel, subsistence, report reproduction, communications, local personnel services) for short-term consultants.

3. JICA

- a. Team co-leader (a long-term advisor)
- b. Plant scientist (possibly a long-term advisor)
- c. Support budget for travel, subsistence, supplies, etc. for Japanese members of the team.

e. Scheduling: This assessment could commence within six months of arrival of the two long term U.S. consultants in Bangladesh and should be completed within 4-6 months after its initiation.

4. Building a Three-Way Institutional Relationship

The proposed technical assistance effort contains an implicit dimension which is unique and which can have attractive long-term benefits for IPSA in particular and Bangladesh higher education in agriculture in general. If, as is recommended, the U.S. and Japanese long-term advisors are (senior) members of U.S. and Japanese universities, it is to be expected that long-term relationships will develop between these three universities which will be beneficial long beyond the duration of the technical assistance projects. Benefits will not only accrue to IPSA, but also to the U.S. and Japanese universities involved.

5. Relationship of Technical Assistance to Country Development Strategy Statement (CDSS)

The Mission's CDSS recognizes that increasing agricultural productivity is a principal component of the development strategy. Bangladesh is favorably endowed with agricultural resources. Nevertheless, the country is not producing sufficient food to feed itself, nor is it producing surplus necessary for sustained overall economic growth. This is in part a reflection of a severe lack of trained manpower necessary to exploit the agricultural potential of the country. Scientists are needed in large numbers to generate and adapt the new crop varieties and management practices which can transform traditional agriculture. Extension agents are needed to bring the new technology to farmers. Administrators, economists, and social scientists are required to design, plan, and implement policies and projects needed to increase the pace of agricultural modernization. The proposed technical assistance is directed at strengthening the major educational and related institutions in Bangladesh which are responsible for meeting the manpower requirements needed in line with the Mission's CDSS.